

# ACF OPRE MAPS

## 18F Mid-Point

# Agenda

1. What we've been up to
2. Preliminary findings
  - a. Product evaluation & strategy
  - b. Tech evaluation & strategy
  - c. Contract evaluation & acquisitions strategy
3. Questions we're still pursuing
4. Opportunities for coordination with KITS team
5. Discussion

**What we've been up to**

# We are...

## ...here because:

MAPS is at a  
crossroads,

with mounting  
concerns about its  
sustainability,

and OPRE's current  
vendor contract  
expiring on 3/31/22

## ...hoping to achieve:

## ...working on:

# We are...

## ...here because:

MAPS is at a crossroads,  
with mounting concerns about its sustainability,  
and OPRE's current vendor contract expiring on 3/31/22

## ...hoping to achieve:

- Increased capability for OPRE to own the product, avoid vendor lock-in, and effectively select and manage a quality vendor.
- A system that will be easier to modify and maintain as needs change and won't be reliant on a single point of failure.
- A system that will make it easier for the team to do their jobs, with a simpler interface, flexible and streamlined processes, and more automation.

## ...working on:

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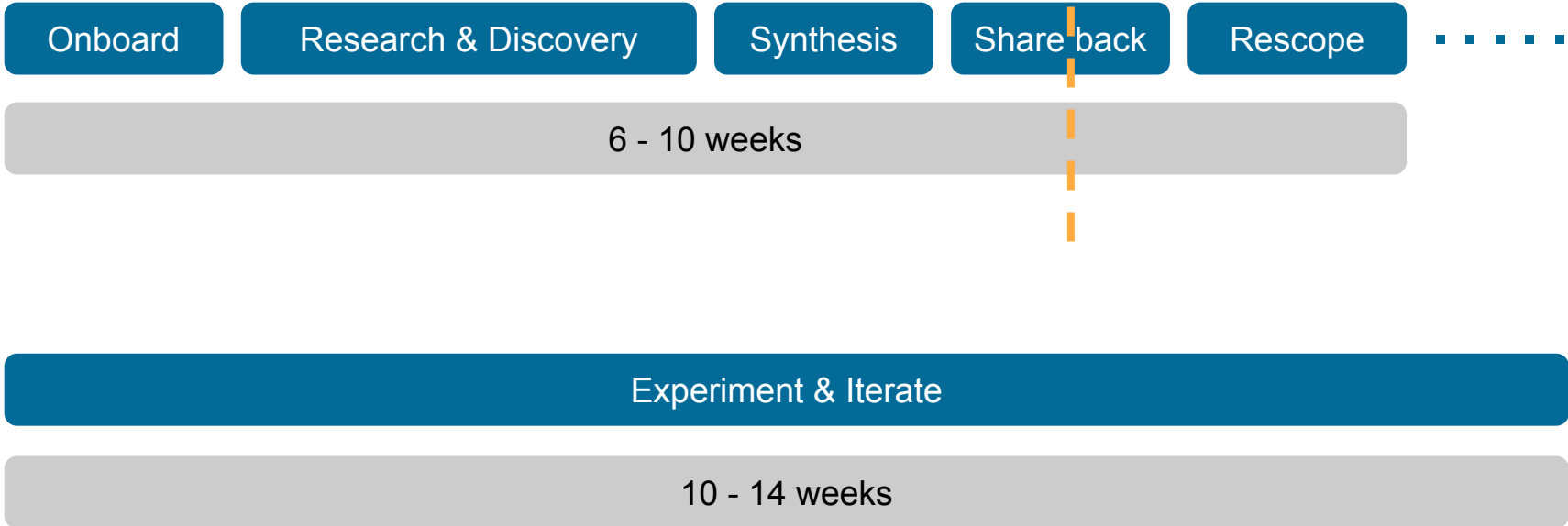
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- A system that will be easier to modify and maintain as needs change and won't be reliant on a single point of failure.
- A system that will make it easier for the team to do their jobs, with a simpler interface, flexible and streamlined processes, and more automation.

## ...working on:

- An updated vision for MAPS, based on user input and needs
- A plan for modernizing and securing MAPS, including a recommendation about how much of the current MAPS can be salvaged
- A plan for competing a new RFP, including a timeline to execute and the scope of work and skill sets to request
- An estimate of costs

# Where we are in our 20-week engagement

*We are here  
Week 6*



# Preliminary findings



# Product evaluation & strategy

# Mapping MAPS

## MAPS in a nutshell

How MAPS received and tracks spending in the UK and abroad in 2016/17. Prepared by Susan Greig, 2017

14/01/2018 11:30 AM

## "Things" that move money in government that need to be managed

Managing MAPS budget	How is MAPS managed and	How is MAPS managed and
Climate	At least 20% of MAPS budget is spent on climate	Climate map
Gender	At least 20% of MAPS budget is spent on gender	1%
EU	At least 20% of MAPS budget is spent on EU	2%
Small Business	At least 20% of MAPS budget is spent on small business	2%
Other	At least 20% of MAPS budget is spent on other	2%

MAPS is the framework for what the UK Government spends on in the UK and abroad in 2016/17. Prepared by Susan Greig, 2017

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## Users Responsibilities

Users	Responsibilities
MapS	MapS is the framework for what the UK Government spends on in the UK and abroad in 2016/17. Prepared by Susan Greig, 2017
Climate	At least 20% of MAPS budget is spent on climate
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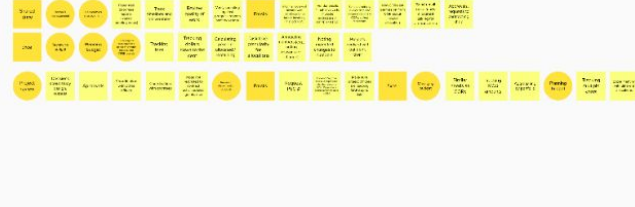
## Work done in MAPS



## Time in MAPS



## Work done outside MAPS



## Usage statistics

- 80% of users who used MAPS for the first time in 2016/17
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## Why MAPS exists

MAPS allows OPRE to **record and track its spending** in a centralized system so it can **balance its checkbook** and **plan its budget every year**.

MAPS **replaces paper-based processes** and **reduces the number of systems** that analysts need to access for budget management.

# What and who MAPS currently supports



✓ Contracts

✓ IAAs

✗ Assisted  
Acquisitions

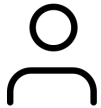
✗ IDDAAs

✓ Grants

✓ Direct Obligations

✗ IPAs

✗ JFAs



✓ CORS (Project Officers)

✓ Budget Officers

✗ Vendors

✓ Non-CORs / Contractors

✓ System Administrators

✗ Grant recipients

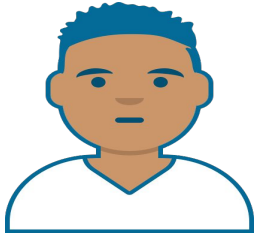
✓ Team Leaders

✗ Other offices

✓ Division Directors

✗ COs

# MAPS users



## Non-CORs

Coordinate & oversee vendor's work

Write SOWs, process mods

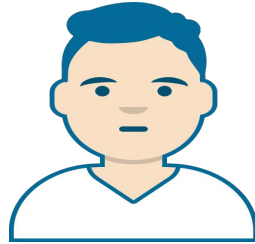
Track budget, input and allocate invoices



## CORs

Same as non-CORs

Authorize invoices



## Team Leads

Plan research activities for a topic area

Manage budget for multiple projects

Can also be Project Officer



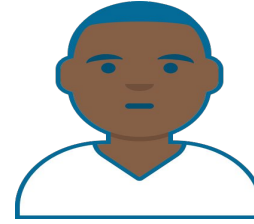
## Division Dirs

Supervise team

Oversee overall portfolio

Approve new contracts, requisitions, mods

Manage and forecast budgets



## Budget officers

Change financial amounts

Input grants, IAAs, direct obligations

Forecast spending

Report on office-wide spending



## Sys Admins

Manage list of vendors, agencies, CANS, grid profiles, etc

Manage project list and contract/grant names

Roles and permissions

# MAPS Usage

**76** active users (158 registered)

**70%** use MAPS daily or weekly, some monthly

**49** active users are CORs or non-CORs

# Pain points and opportunities



# What works well



## So much better than the alternative.

“This is light years ahead of usability and functionality compared to what we were doing before”

“It's a nightmare to think about working without MAPS”



## Helps people do their jobs.

“MAPS is an extremely useful tool”

“The functions it provides makes my job a lot easier”

“It's the truth for our budget”



## Useful functionality.

“The kind of information you can get from the girds is really helpful”

“It's relatively easy to pull up the invoicing form”

“I like that I can check how much money is left or when the contract ends without bugging my COR”



## Appreciated investment.

“I love that OPRE invests a lot of time, energy, and money into these kinds of resources that support us”

“The budget team has done a lot to improve this over time”



# What could be better



## **More intuitive UI / UX / Visual Design.**

Users find MAPS hard to learn, not self-explanatory, confusing, and cluttered



## **Added functionality.**

Users want more automation, centralization of additional contract-related actions, more granular budget tracking, and support for all agreement types



## **Improved workflows.**

Users find MAPS clunky. It's difficult to use key features, such as milestones, grids, sorts, the project list, and the dashboard, leading to workarounds



## **More user engagement & product oversight.**

Users do not have a reliable way to offer feedback, provide input, or learn what improvements are on the way. System owners aren't able to validate the quality of back end work

What could be better

## More intuitive UI / UX / Visual Design

Not obvious how to do things

Confusing, inconsistent terminology & UX

Need better help docs so people aren't asking colleagues about basics

UI is dated, not modern

Unimportant information takes up premium real estate

“It’s hard to know what a lot of things are or how to use them”

“I can’t figure out how to do things on my own”

“MAPS is intimidating when you first start”

“I have no idea what this is and I don’t ever really use it”

“It took over a year to feel comfortable using MAPS”

What could be better

## Improved workflows

Overall too many clicks, too much friction

Project Officers may not keep MAPS up to date

Lack of useful sorting makes data feel disorganized

Finding project info can be difficult due to naming conventions or lack of access

Permissions can feel overly restrictive

MAPS can be slow

“A lot of clicks” “It’s just clunky”

“There’s so many steps and it can get confusing”

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“CLINs don’t sort in a useful way”

“Feels like a data push and then I have to do a bunch of additional work on it”

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“I forget what we called projects, so I can’t find them and need to email someone”

“Projects that are co-funded aren’t visible to me, even though they’re part of my budget”

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“I’d like more ability to do things myself rather than have to ask Catherine and Sheila do it”

What could be better

# Improved workflows: Mods & AAPs & Milestones

The screenshot displays a web-based procurement system interface. At the top, there are navigation links for 'ome > Project > Contract' and 'Security Help'. The main content is divided into several sections:

- Acquisition Planning:** This section contains various input fields for contract details. Fields include 'AAP Information' (with a note 'marks required fields'), 'AAP (OPRE)' (value: 2100), 'AAPs (PSC)' (value: 21-ACF-OPRE-000), 'Acquisition Vehicle' (value: GSA Schedule), 'Contract/Task Order Number' (value: HHSFP233201500030B+HHSFP23337001), 'Type of Award' (value: Admin-MOD), 'PSC Fee (%)' (value: 1.25), 'Total AAP Amount' (value: \$0.00), 'Total Contract Value Published' (value: \$433,773.10), 'Needed By Date' (value: 06/01/2021), 'Desired Number Of Days on the Street' (value: 30), and 'Requisition Deadline' (value: 06/01/2021). A 'Save AAP' button is located at the bottom of this section.
- Select Requisition Type:** A dropdown menu with options: 'Initial Amount/Admin (\$0)', 'Supplemental (\$)', and 'Final Replacement/AS IS (\$)'. A 'Subnet Requisition' button is below.
- Add Requisition Support Document:** A form with 'File Name' and 'Description' fields, a 'Choose File' button, and an 'Add Document' button.
- Add Non-OPRE Approvers:** A form with a 'New Approver' field and an 'Add New' button.
- Table:** A table with columns: 'Type', 'Requisition #', 'Requisition Date', 'Support Document', and 'Approvers'. It contains one row with values: 'F', 'ACF273050', '02/22/2021', 'TANF Homeless HHSFP23...', and buttons for 'RequAmtd' and 'Delete'.
- Procurement Milestone Tracking:** A section with 'Days at PSC: 42', 'Needed By Date: 06/01/2021', and a 'Milestone Plan Document' field with a 'Choose File' button and an 'Add Document' button.
- Progress & Milestones:** A section with tabs for 'Success', 'Milestone', 'In Progress', and 'Not in Progress'. It includes a 'View All' button and a table with columns: 'Milestone Description', 'PSC Planned Date', 'OPRE Projected Date', and 'Actual Date'. A row shows: 'PSC sends modification to contractor for signature', '04/15/2021', '04/13/2021', and a 'Save' button. A 'Comments' box on the right contains the text: '3/31 - Heard from contract specialist. planned award date is 4/14'.
- Post Award - Contract Mod Information Tracking:** A section at the bottom of the interface.

“I have to remind myself every single time what I’m supposed to do”

“I’m not sure what to put in for some of these fields, so I just put this in every time”

“The actual useful information [about milestones] is in the Comments box”



What could be better

# Improved workflows: Dashboard

The dashboard interface includes a navigation bar with 'Home', 'Security', and 'Help' links. On the left, there is a 'Filter Project' section with a search box and a 'Request New Project' button. Below this is a 'Project List' table with entries for 'AI Ethics And Biases' and 'PARIS'. The main area is titled 'Dashboard' and contains a search box for 'Find contract(s)'. Below the search box are five numbered sections: 1. Budget Line Actions Pending within 30 days (status=OPRE/PSG), 2. Committed Budget Line Needing Award within 10 days (status=COM), 3. Invoices Entered - Not Allocated, 4. Invoices Payments Allocated - Not Authorized, and 5. Invoices Payments Authorized - Not Received. Section 6, 'Invoices Received - No Payments Scheduled', contains a table with columns for Project Title, Contract Name, Invoice Number, Amount, Date Invoice To PO, Amount Received, Payment Authorized By, Date Received, and Days Pending. A circular callout highlights the 'Invoices' and 'Amount' columns in this table.

Project Title	CG Name	Budget Status	Date Needed	Days Past Due
PARIS(Contract)	PARIS Conference - FY19	OPRE	09/01/2020	-203

Project Title	Contract Name	Invoice Number	Amount	Date Invoice To PO	Amount Received	Payment Authorized By	Date Received	Days Pending
AI Ethics And Biases		13928	\$32,475.40	03/01/2021	\$33,475.40	Williams	03/08/2021	22
AI Ethics And Biases		13963	\$24,151.46	03/16/2021	\$24,151.46	Williams	03/22/2021	7

“It takes up most of the page and tells me very little”

“I don’t find the dashboard very helpful because I don’t know what I’m supposed to do with it”

“I ignore this [dashboard] basically”

What could be better

## Added functionality

**More automation:** automated emails, alerts, notifications, reminders

**Cover more of the contract management lifecycle:** approval actions, records maintenance, close out

**Additional agreement types:** Assisted acquisitions, IPAs, IDDA, JFAs, and multiple procurement shops

**More granular budget tracking:** fees, spending by task, new vs existing budget lines, applied vs evaluative research

“It’s probably not an optimal solution that they submit the requisition in MAPS, which sends them an email, which then they forward to me. The system doesn’t notify me, things can get lost in email. I will cc them when I approve via email and forward it on to Sheila and Catherine”

“That has to happen for every single requisition. Supervisors get like 8 million emails a day. If there was something that could lessen the burden of having so many steps for that kind of thing, like clicking a button in MAPS to register your approval”

“One of the biggest things I struggle with is that the reports are missing fees”

What could be better

## User engagement & Product oversight

Users have no established process for submitting feedback or feature requests

Users and stakeholders have nowhere to see what improvements are being planned or their status

System owners have difficulty validating the quality of back end changes, which are largely invisible

“I probably just wouldn’t say anything”

“I’d email or talk to the MAPS team”

“I don’t know”

“Previously it was easy to validate changes, but with privacy and security it was harder because we didn’t have the knowledge to know if those things were done correctly.”



# Possible next steps



Prioritize potential improvements



Identify candidates for initial improvements



Investigate technical feasibility of high priority items




Investigate value of broadening MAPS' scope

# Tech evaluation & strategy

## Current state: vendor lock-in

- Code deployed from vendor's GitHub
- Code deployed to vendor's AWS environment
- Vendor is the only one with the domain knowledge to change the code
- General opacity around how the application is developed
- Complex and costly tech stack

# Where we're headed

- Secure MAPS under HHS ownership
  - Move code into HHS GH 
  - Deploy code to government-controlled cloud environment
    - HHS AWS Cloud?
    - ACF AWS Cloud?
    - Cloud.gov?
- Rebuild MAPS?
  - How much can be reused?

# Options & Tradeoffs

**Rebuild:** Leave current MAPS as is, rebuild MAPS on desired government-owned infrastructure

**Replatform then Reuse:** Move current MAPS to desired government-owned infrastructure and then improve the current codebase and get it in a good working state

**Replatform then Rebuild:** Move current MAPS to desired government-owned infrastructure and then rebuild

# **Contract evaluation and acquisitions strategy**

# Current state

## **OPRE is disempowered as gov't owners**

- Contract, work, and invoices are opaque
- Change requests require extensive effort and it's unclear what's in budget
- Lack of alignment on how to plan, prioritize, and visualize vendor's work
- Difficult to validate estimates and evaluate the quality of work

## **ACF has unlimited rights to all data, including software code**

# Recommended state

- OPRE has flexibility to add or change vendors and owns its software (avoid lock in)
- Contractor understands software is never “finished” and needs to continuously evolve (Statement of Objectives vs Statement of Work)
- Work is scoped collaboratively based on desired outcomes and prioritized by OPRE (Product ownership)
- System is expected to be built with continuous input and feedback from users (Agile, human-centered design)
- Developers work in the open and are aware of quality control requirements (QASP)
- Delivery is transparent and continuous, with security baked in (DevSecOps)



# New contract strategy: Proposal

Use the Agile contract format to procure Agile software development services ([link](#))

- Define the “vision” for MAPS
- Make key technical decisions and transitions
- Identify required skill sets

Sept 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022
Draft RFP	Feedback		Issue RFP		Award Contract			
			Vendor selection		Transition vendors (if needed)			
					Post-award management			

# Existing contract strategy: TBD

## Decisions

- Should Option 3 (10/1/21 - 3/31/22) be exercised?
  - If not, who will own O&M during this period?
- Who will own O&M of the existing system if there is a rebuild?

## Determining Factors

- Can the system be transitioned into HHS control before 10/1?
- Can someone else take over O&M (e.g., 18F)?
- Can the vendor hired for a rebuild be expected to also cover O&M? Will recruiting for this skillset decrease the quality of vendors?

**Questions we're still  
pursuing**

# To prepare for a new solicitation...

## **What will the product become?**

- What will be the product vision for MAPS?
- How much of MAPS can be reused?

## **Where will the product live?**

- Which cloud platform to move MAPS to?
- What will the ATO process involve?

## **How should OPRE get there?**

- Re-design or re-platform first?
- What would be helpful to prototype or de-risk?

**Opportunities to  
coordinate with KITS team**

# To gain efficiencies & align strategically...

- Choice of cloud environment
- Choice of tech stack
- Tech Lead role
- O&M approach
- ATO process improvements
- MAPS product strategy (automations and connections)

# Discussion

# Thanks!

Carly Jugler: [carly.jugler@gsa.gov](mailto:carly.jugler@gsa.gov)

Nina Mak: [nina.mak@gsa.gov](mailto:nina.mak@gsa.gov)

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

Elie Berkowitz: [elie.berkowitz@gsa.gov](mailto:elie.berkowitz@gsa.gov)

Elizabeth Ayer: [elizabeth.ayer@gsa.gov](mailto:elizabeth.ayer@gsa.gov)