

10x Year in Review

FISCAL YEAR 2017



10x is the Office of Investments in GSA's Office of Products and Programs (OPP).

This annual report looks back at the expected and actual number of projects funded in FY 2017. It covers lessons learned, results yielded, and insights derived from these projects. It also looks ahead at plans and expectations for FY 2018.

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LETTER FROM THE TEAM

Welcome to the first ever 10x annual report! Whether you are a public servant who has pursued 10x funding for your idea, or you are simply curious to learn about our successes and challenges, this report will offer visibility into our methods, metrics, and a model of investing in technology products and services. We strongly believe this model delivers at least ten times (10x!) the value of traditional government approaches to technology budgeting and investment.

Fiscal year 2017 marked our first full year of operations under the 10x program. We established the program as a fiscally-sound means of helping nurture and develop innovative ideas that can change the way the federal government implements and scales new products and services. Over the course of our first year, we've learned valuable lessons about how to structure and support the mechanics of an incremental investment fund. We are applying these lessons to help inform how we operate going forward. Read on to learn more about where we've been and where we're planning to go next.

Regards,
Lane Becker, Nico Papafil, Will Cahoe
The 10x team



INTRODUCTION

WHAT IS 10x?

10x is an incremental investment pipeline that lives in GSA's Technology Transformation Services' (TTS) Office of Products and Programs (OPP). We fund products and services that possess groundbreaking ideas or technology with the potential for significant return on investment. Our approach is based on modern venture capital practices and is designed to spend fewer taxpayer dollars while also ensuring that the best products and services get funded.

10x funds internally developed products and services that can scale widely or affect a significant portion of the US population, whether or not the projects are cost-recoverable. We're aiming for 10 times the value of the initial investment to the federal government or the American public, measured through cost savings, improved efficiencies, or scale of impact.

HOW DOES 10x WORK?

10x is the management vehicle for the Digital Services Fund (DSF), a portion of the Federal Citizen Services Fund designated for new, good-for-government products and services. 10x invests these appropriated funds into new ideas with the potential for significant impact across the government. OPP manages these products and services until they are placed in a permanent location, in GSA or elsewhere.

10x is an incremental investment fund inside the federal government, which is a fancy way of saying that we start by giving you a smaller amount of money, with an expectation about what the output of spending that money should be. We use your results from that investment to determine whether or not to give you an additional, larger amount of funding for the next phase of work.

HOW IS 10x DIFFERENT?

The traditional way the government budgets for new technology is to specify a lump sum of money for a project to be spent over a period of months or years. This approach sometimes results in continuing to spend money even after an agency or project lead determines that the project should not continue, simply because the budget already exists.

In contrast, 10x attempts to spend the smallest amount of funding necessary at each stage of a project to determine whether or not it's worth pursuing. Only one or two of every ten projects selected for funding will make their way into design and development work. This iterative approach to investing allows us to save money while ensuring that the products and services we fund meet a real, verifiable need in the federal marketplace.

FY 2017 IN REVIEW

At the onset of FY 2017, the total amount of funding available in the DSF, including the year's appropriation and the budget carryforward from prior years, was **\$13,830,532**.

Over the course of FY 2017, **\$7,517,274** of DSF funds were obligated, including **\$6,162,274** for non 10x-backed projects and **\$1,355,000** for 10x projects.

This resulted in **\$6,313,258** of FY 2017 funds remaining at the end of the year.

These numbers are further detailed in the figures to the right.

10x works with a “no-year” budget, which means the DSF funds that we use are able to carry over from the previous year into the next fiscal year, rather than requiring that these funds be spend in the same fiscal year or fiscal years they were appropriated. This allows 10x-backed projects the flexibility to cross over fiscal years without any disruption, and means the total budget available to use in any given year is the combination of the funding appropriated for that fiscal year plus the funds that carried over from the previous fiscal year.

In FY 2017, a significant portion of the DSF was used for the 10x process; however, as indicated, funds were also allocated to other projects outside of the process.

Total FY17 carryforward <i>(includes funds for login.gov)</i>	\$6,830,532
+ Total FY17 appropriation	\$7,000,000
TOTAL FY17 FUNDING	\$13,830,532
- FY17 amount obligated	\$7,517,274
AMOUNT REMAINING	\$6,313,258

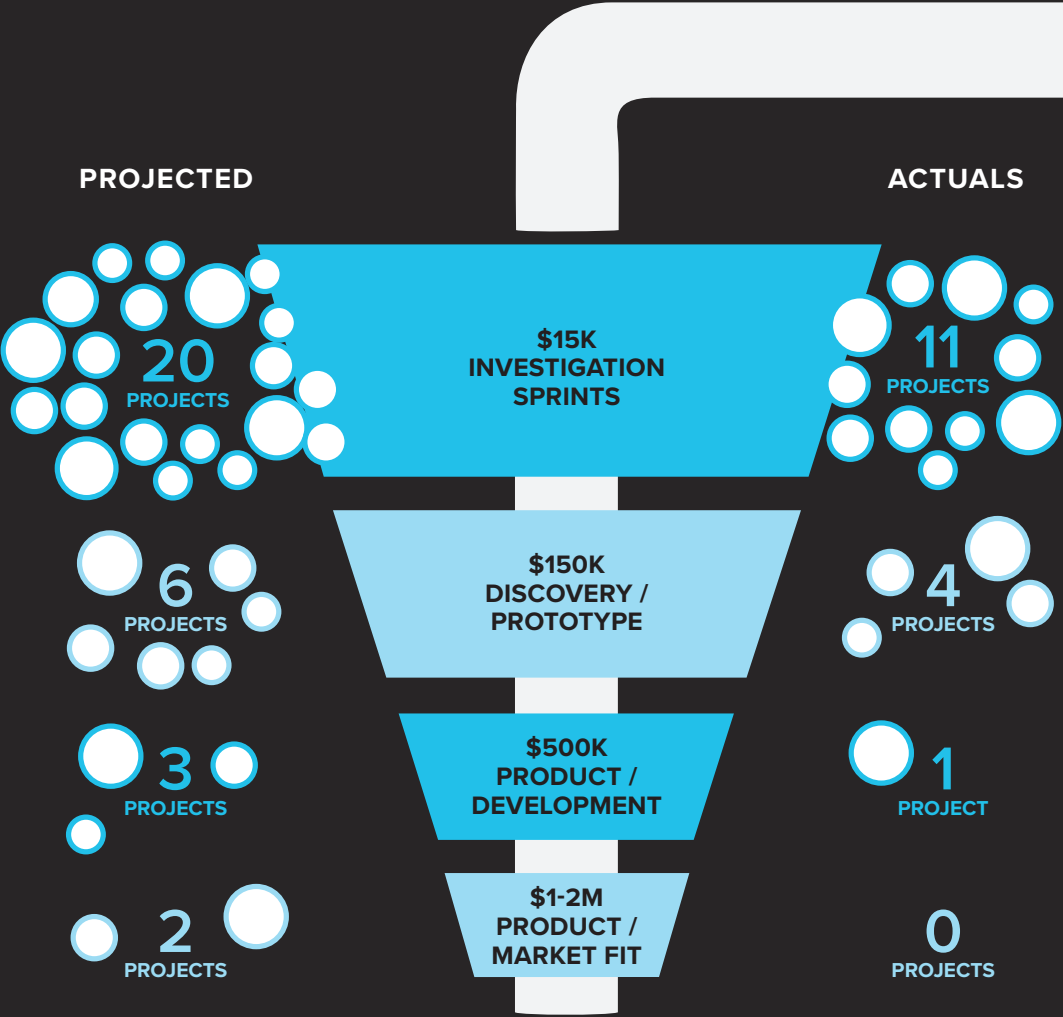
Non 10x-backed projects = \$6.16m	Government-wide Research User Library Foundation Engagement	\$19,444
	SSN Replacement Foundation Engagement	\$37,498
	Login.gov	\$5,605,332
	FOIA Front-End Development MOU (DOJ)	\$500,000
10x-backed projects = \$1.36m	± 10x Incubator (18F MOU)	\$190,000
	± 10x Incubator (Acq MOU)	\$50,000
	Team Integration System	\$150,000
	Plainlanguage.gov 2.0	\$150,000
	Project Boise	\$165,000
	Cloud Marketplace	\$650,000
TOTAL AMOUNT		\$7,517,274

* see appendix for full list of project descriptions
± each 10x Incubator MOU funded multiple Phase 1 Investigation Sprints

10x funded 16 projects in FY 2017 using DSF funds, and supported an additional five projects that were funded using non-DSF funding sources. Non-DSF funding sources included funding from the White House Office of American Innovation (OAI), the Federal Citizen Services Fund (FCSF) and the GSA Office of Governmentwide Policy (OGP).

PROJECT	FUNDING LEVEL	FUNDING SOURCE	STATUS
Demographic Map of the United States	\$15k	DSF	Cancelled
Friendly FAR	\$15k	DSF	Cancelled
Expanding Prize Authority	\$15k	DSF	Cancelled
Generic Data Validation Platform	\$15k	DSF	Discontinued
Improving Gov. Findability: 301 Redirects	\$15k	DSF	Phase 1 ongoing
Checklistomania	\$15k	DSF	Completed phase 1; additional funds not requested
Fraud and Risk Management	\$15k	DSF	Completed phase 1; additional funds not requested
Web Search Outreach	\$15k	DSF	Completed phase 1; additional funds not requested
Behavioral Buying	\$15k	DSF	Completed phase 1; additional funds not requested
Eligibility and Enrollment	\$15k	DSF	Completed phase 1; advanced to phase 2, FY 2018 start pending
Notification Services	\$15k	DSF	Completed phase 1; advanced to phase 2, FY 2018 start pending
Federal Grantee Reporting	\$15k	DSF	Completed phase 1; advanced to phase 2, FY 2018 start pending
Plainlanguage.gov 2.0	\$15k → \$150k	DSF	Completed phase 1 and 2; additional funds not requested
Project Boise: Improving the Authority-to-Operate (ATO) Process	\$15k → \$150k	DSF	Completed phase 1 and 2; did not advance to next funding level
Team Integration System	\$150k	DSF	Completed phase 2; did not advance to next funding level
Cloud Marketplace	\$150k → \$500k	DSF	Completed phase 2; phase 3 ongoing
FedRAMP Funding Model	\$15k	FCSF	Completed phase 1; additional funds not requested
Automating the ATO Process	\$15k	OAI/FCSF	Completed phase 1; additional funds not requested
Sharing ATOs Beyond Cloud Services	\$15k	OAI/FCSF	Completed phase 1; additional funds not requested
CIO Council Artificial Intelligence Machine Learning	\$15k	OCIO Council/OGP	Completed phase 1; additional funds not requested
CIO Council Artificial Intelligence Help Desk Automation	\$15k	OCIO Council/OGP	Completed phase 1; additional funds not requested

*see appendix for full list of project descriptions

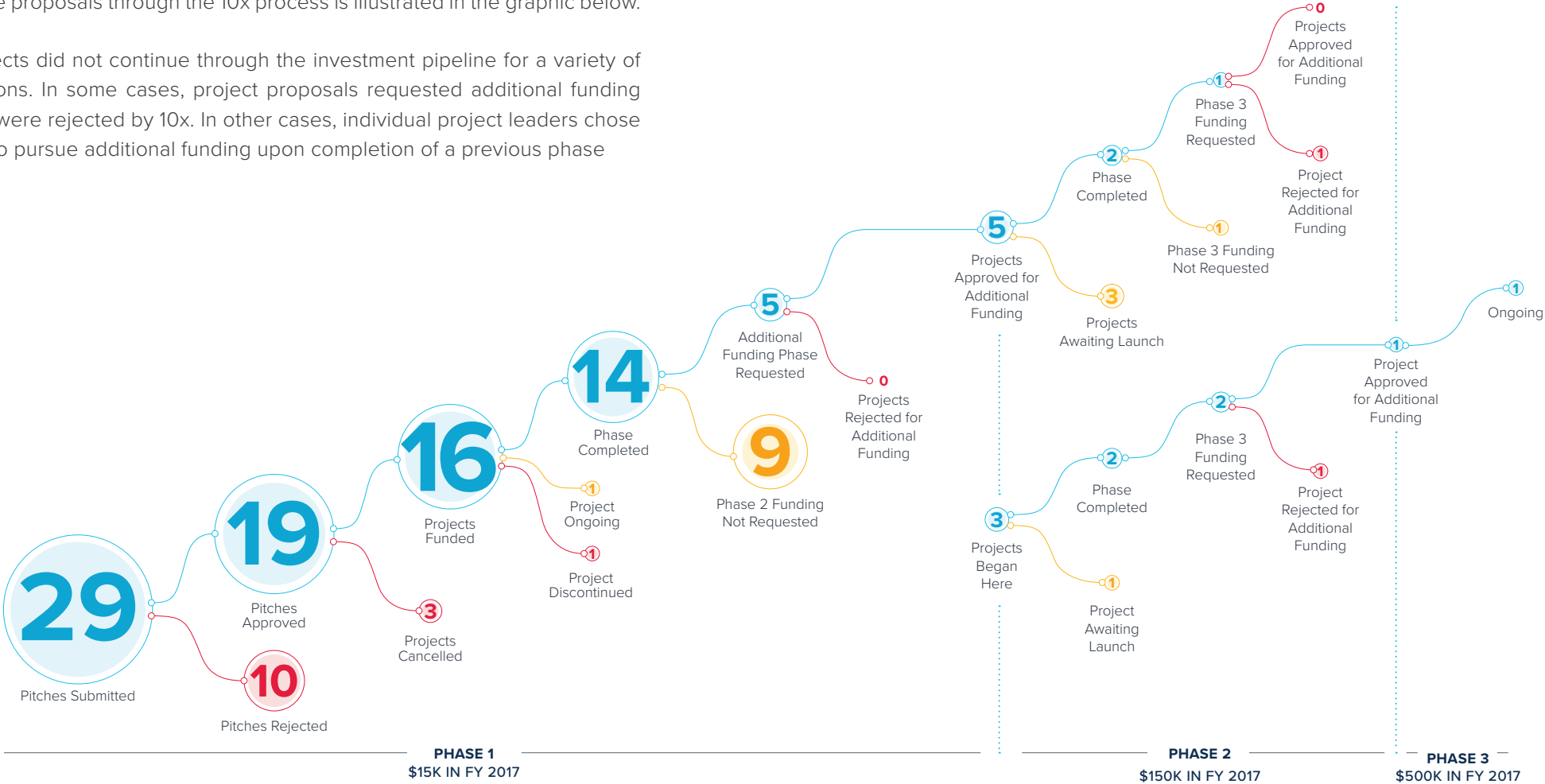


FY 2017 INSIGHTS

HOW DID PROJECTS ADVANCE THROUGH THE FUNDING PHASE?

During FY 2017, 10x accepted project proposals for both phase 1 (Investigation Sprints) and phase 2 (Discovery/Prototype). The journey of these proposals through the 10x process is illustrated in the graphic below.

Projects did not continue through the investment pipeline for a variety of reasons. In some cases, project proposals requested additional funding and were rejected by 10x. In other cases, individual project leaders chose not to pursue additional funding upon completion of a previous phase



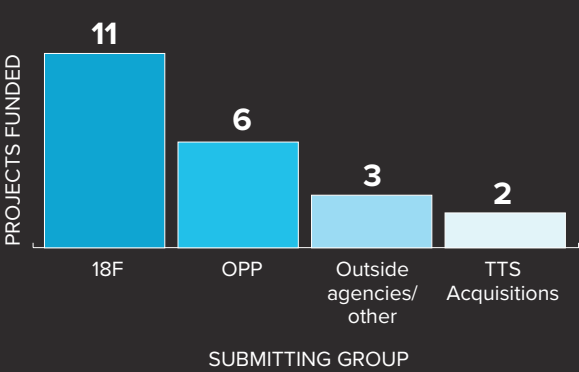
HOW MUCH WAS SPENT AT EACH PHASE OF FUNDING?

While 10x projects receive a flat sum per phase, the funding amount obligated to each project in the 10x process represents the maximum amount available that can be spent on each project. The amount spent per project in FY 2017 suggests that project leads, on average, sought to keep their expenses in check.

Phase	Funding amount	Average spent per project (DSF)	Total expensed (DSF)
1	\$15,000	\$11,430	\$102,874
2	\$150,000	\$140,597	\$562,389

WHAT WERE THE SOURCES OF 10x PITCHES?

10x pitches came from a variety of sources, both within and outside of FAS/TTS. The chart below details the sources of 10x pitches, including non-DSF-funded projects.



*see appendix for full list of project descriptions

FY 2017 CASE STUDIES

A number of projects advanced through the 10x process, yielding valuable insights and outcomes. In some cases, these projects advanced to the next phase of funding. In others, they learned lessons that could help inform future work in their focus area. Universally, they all returned value to the 10x program.

Take a look at some examples of 10x projects from FY 2017 and the outcomes they achieved.

■ FRAUD/RISK MANAGEMENT

Funded for phase 1 (Investigation Sprints); recommended not to pursue additional funding for phase 2 (Discovery/Prototype).

This project's goal was to determine if there is demand for Fraud and Risk Management (FRM) technology within the federal government, and if so, how it could be implemented.

To determine demand, the project lead reached out to agencies to find out if they felt the need for FRM technology, collected and analyzed government reports about FRM technology, sought agencies looking for a similar technology solution, and analyzed the private sector's view about the market opportunity within government.

As a result, the project lead concluded that most agencies are still approaching fraud examination manually, and while many agencies are transitioning to an automated approach and some see the potential for advanced FRM technology, it's not a near-term priority. The project lead recommended against pursuing the FRM line of business at this time and revisiting the idea in the future.

■ NOTIFICATION SERVICES

Funded for phase 1 (Investigation Sprints); approved for additional funding for phase 2 (Discovery/Prototype); ongoing as of the beginning of FY 2018.

This project sought to determine if there is demand across government for services that utilize SMS and/or email for public notifications, and if so, how it could be done.

To determine demand, the project lead interviewed individuals from a number of agencies that regularly interact with the public, including GSA, USCIS, IRS, SSA, and VA. There was clear interest in the service from every individual interviewed, especially if it addressed the usual government IT security and privacy concerns and was competitively priced.

The project lead recommended moving forward to phase 2 (Discovery/Prototype) in order to develop a better understanding of market need. 10x concurred that this kind of shared service is an ideal example of a tool that GSA is positioned to offer to other government agencies. As part of the next phase, the project lead will explore ideas for building and testing a platform.

■ CLOUD MARKETPLACE

Funded for phase 2 (Discovery/Prototype); approved for additional phase 3 funding (Product/Development), currently ongoing.

The Cloud Marketplace project aims to simplify the process for buying commercial, off-the-shelf software for the government. The vision for the project is to find policy and legal solutions that will allow a centralized marketplace to buy software as a service (SaaS) products and similar software from the industry, in addition to reselling and provisioning that software across the government. The Cloud Marketplace will also reduce need for justification by leadership, consolidate and reduce procurement labor, ensure compliance of product offerings, and make license management easy.

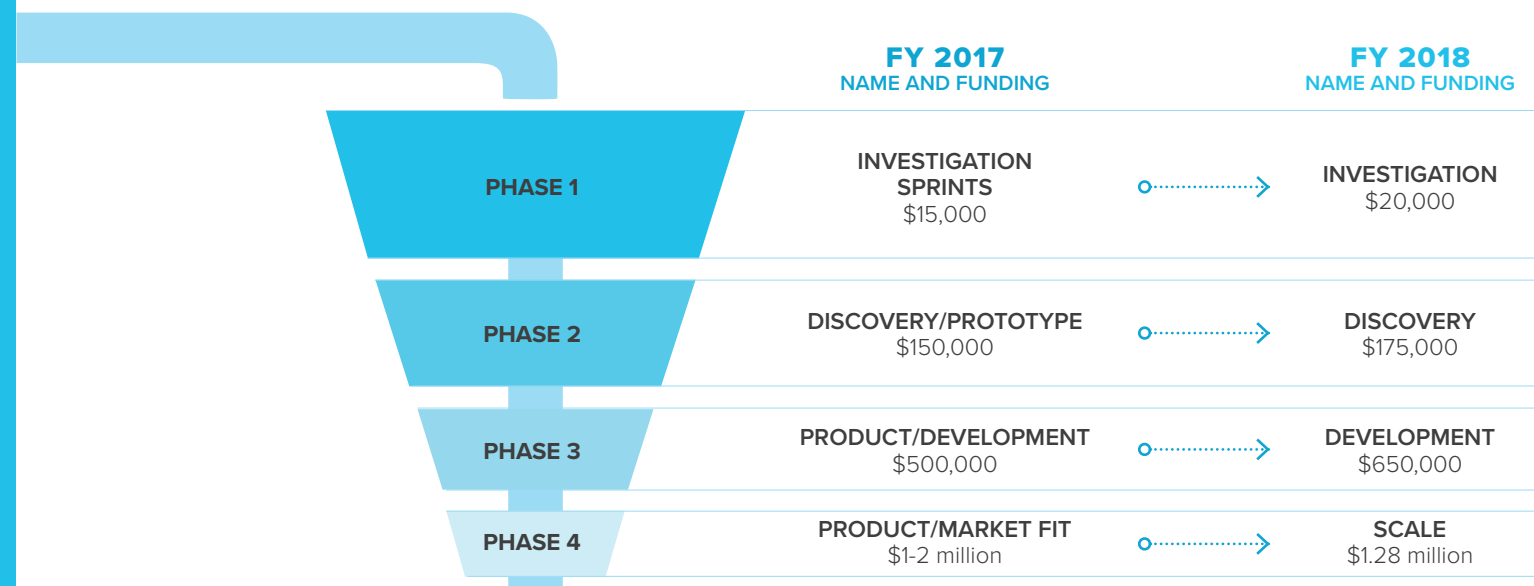
In phase 2, the project lead identified parameters for choosing a product to test as well as customers to test the offering with. The project lead also outlined the technical and regulatory obstacles the team believed they would face.

After presenting their findings to the full TTS Program Advisory Board (PAB), the decision was made to continue funding this project for phase 3 (Product/Development). While the PAB and 10x acknowledged that significant market and regulatory barriers remain, the existing team had succeeded in comprehensively outlining those challenges as well as ideas about how to address them. It was determined that the benefit to the federal government of successfully launching this product was valuable enough to continue the investment.

LESSONS LEARNED

While FY 2017 yielded many valuable project outcomes, equally important were the lessons learned that the 10x team will use to improve the process for FY 2018 and beyond.

Based on experiences from FY 2017, the **10x team has adjusted the names and funding levels for each phase to better reflect the work necessary to complete each stage.** This change is reflected in the diagram below:



The 10x team also decided to **alter the pitch process for 2018**. In FY 2017, the 10x team accepted direct pitches for both phases 1 and 2. In FY 2018, projects will only be pitched at phase 1. In order to obtain phase 2 funding, projects must have completed phase 1 and demonstrated potential value or impact. Implementing this change will ensure more rigorous project management.

The 10x team has also identified **strategies for better preparing project leads for their pitch** at each funding stage by creating a **phased set of expected deliverables**. These changes will be reflected in the FY 2018 10x process, which also features a decision-making process aligned with the new TTS strategy. This new decision-making process includes a clear set of steps and criteria for how projects advance to the next phase of funding.

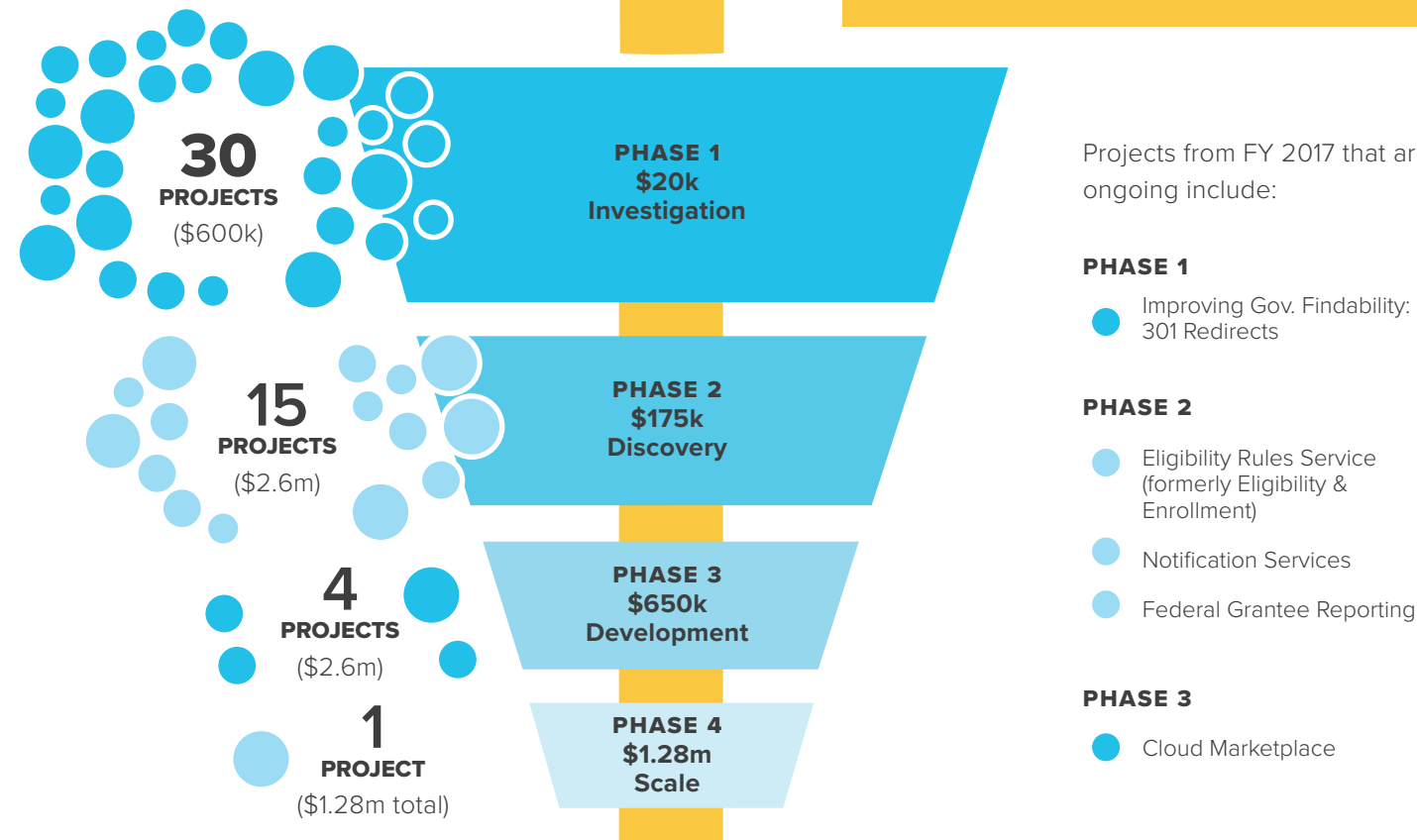
Throughout FY 2017, the 10x team also identified **opportunities to make the 10x process more efficient**. The team streamlined the MOU process to expedite the time for legal review and to consolidate phase 1 projects into a single MOU for each service provider. Additionally, the team has determined the proper time frame and staff makeup to allow projects to continue from phase 2 to phase 3 without a pause between phases. This kind of pause had previously caused challenges with maintaining the same staff throughout a project's lifecycle.

LOOK AHEAD TO 2018

As the 10x team looks ahead to FY 2018, we can see that there is a lot is on the horizon.

Several FY 2017 projects are continuing their maturation, with some advancing to the next stage of funding and others continuing ongoing work. The 10x team expects that a number of projects will advance from phase 2 to phase 3, furthering their development and expansion. We also expect to have our first ever 10x phase 4 (Scale) project.

The 10x FY 2018 proposed appropriation anticipates a total of \$5.9 million (not including prior year carryforward) across all stages of investment. This figure illustrates the breakdown of how many projects 10x anticipates to execute per funding phase.



The 10x team has also been looking at how to **expand the program's reach to a broader set of stakeholders**. The team is expanding its submission process in order to allow us to work more closely with other agencies to invest in products and service concepts developed across the federal government. Opening up the 10x process to agency partners will bring in a broader range of experiences, ideas, and subject matter expertise to inform the development of 10x products and services.

In tandem with this program expansion, the 10x team has also been **developing web content and marketing materials**. This work will help us increase awareness of the 10x program and spur interest for new applications.

Finally, the team recognizes that there is a need to develop more **comprehensive success metrics** to indicate the value that 10x projects bring to the federal government. Developing these metrics will be an ongoing, iterative process, and we are committed to beginning this process beginning in FY 2018.

The 10x team is excited to continue our growth into FY 2018, and we look forward to aligning 10x projects with the priorities of the new TTS leadership. We are excited to consider even more ideas from federal employees, and to develop them into better products and services that serve agencies and the public, in the next year and beyond.

FY 2017 PROJECT APPENDIX

Below is a list of all projects approved for the 10x process in FY 2017, the ongoing or final status of the project, the reasoning behind the decision whether or not to continue the project.

Project Name	Project Description	Outcome
PHASE 1, \$15K		
Friendly FAR	TTS will investigate the viability of publishing the Federal Acquisition Regulations in a user-friendly way online, accessible to anyone. This will allow federal users to more efficiently interact with the FAR, saving money across the government and making it easier to interpret and understand regulations.	Cancelled
Expanding Prize Authority	A recent update to the American Innovation and Competitiveness Act expanded the government’s authority to conduct crowdsourcing and citizen science projects, partner broadly with the private sector and other government entities, and use appropriated funds and solicit outside funds and in-kind services to implement challenges. During this investment sprint, we will investigate how we might 1) engage our existing community of practice and solver communities to determine an improved platform and 2) create a cadre of challenge and prizes “consultants” to spur the further growth and engagement on the platform, operationalizing the newly launched Challenges and Prize Toolkit.	Cancelled
Demographic Map of the United States	The goal of this project is to conduct a discovery sprint to better understand the demographic map of the United States so we can proof individuals to provide online access to government services/benefits.	Cancelled
Automating the ATO Process	TTS will focus on two distinct areas around automating ATOs. The first will be to research the landscape of what automation capabilities exist. The second will be to then determine which options agencies would actually use and/or need.	Decision was made that the information gathered was valuable and no additional funding is needed from 10x. The FedRAMP team will continue to pursue the project internally, in response to the suggested steps that the project team provided in their report.
Sharing ATOs Beyond Cloud Services	TTS will focus on two distinct areas around sharing ATOs. The first will be to identify the types of ATOs that could be reused and rank them in terms of impact. The second will be to collect ATO's that match the top 3 most impactful and analyze how impactful and well done the ATOs are.	Decision was made that the information gathered was valuable and no additional funding is needed from 10x. The FedRAMP team will continue to pursue the project internally, in response to the suggested steps that the project team provided in their report.

Project Name	Project Description	Outcome
Generic Data Validation Platform	TTS will explore creating a generic, customizable data upload platform that agencies can rapidly adapt for their own data collection needs. It will be based on 18F's work on the DATA Act platform prototype, which is used to submit data, validate it, and correct errors. Generalizing the existing DATA Act code into a well-documented, flexible starting point for similar efforts could magnify its impact across government.	Decision was made to potentially move forward if a project lead can be located.
Behavioral Buying	The current government contracting processes and procedures, as organized and divided into different parts of the FAR as well as additional agency supplemental policies, is designed without any empirical evidence. There is hardly any actual study by social scientists into these acquisition procedures and processes in order to determine what is the most beneficial not only to achieving the stated goals of these processes and procedures but what is the best way to increase competition, reduce costs, and maximize enjoyment of the process.	Decision was made that the information gathered was valuable and no additional funding is needed from 10x. The Office of Acquisitions will continue to pursue the project internally, in response to the suggested steps that the project team provided in their deck.
Project Boise: Improving the Authority-to-Operate (ATO) Process	TTS will explore the opportunity to develop a set of tooling and products designed to support federal application compliance needs.	Decision was made to continue this project at the \$150k Discovery/Prototype phase. The project will reduce manual effort around compliance, have compliance processes better evaluate the security of systems, provide paths and remove barriers to increasing the security of systems, and improve the visibility of and confidence in the security of systems.
Federal Grantee Reporting	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.	Decision was made to continue this project at the \$150k Discovery/Prototype phase. The project will identify opportunities to improve the federal grant reporting process — by eliminating redundancies and creating efficiencies through improved technology. Question to be answered: How many agencies would this serve?
Web Search Outreach	TTS will develop programming libraries to improve citizens' eGov experience where it starts; with search engine results. We've received feedback that government online materials can be hard to find and hard to distinguish from non-authoritative sources. To solve this, TTS will investigate and compare schema.org implementations in a common language like Python and AI/type-based, such as Prolog or Haskell.	Decision was made not to continue this development due to personnel issues.
FedRAMP Funding Model	TTS will explore creative alternative funding sources for the FedRAMP program. Proposals can identify funding sources, a new business model, or both. A well-articulated research proposal and the resulting guidance should be able to benefit not just FedRAMP but other OPP programs that face similar funding challenges.	Decision was made that the information gathered was valuable and will be published out for others. No follow-up work for this project is necessary; however, an adjacent project was uncovered, doing deeper analysis of each type of funding authority and how they can be applied to future service offerings for OPP and the federal government that might mix appropriated and cost-recoverable models. That project will most likely be submitted as a separate \$15k investigation sprint.
Checklistomania	Checklistomania is a web application currently used internally at 18F to help newly hired employees manage their onboarding tasks when they join the team. Based on inbound inquiries, TTS has reason to believe there might be value in offering this service to other agencies. This investigation will focus on whether or not making Checklistomania more widely available is a viable option for TTS.	Decision was made to not continue active development of this service without a clear organizational mandate to do so. Exploring adoption of the product by an outside party.

Project Name	Project Description	Outcome
Fraud and Risk Management	TTS will investigate the opportunity to use machine learning to scan financial transactions and identify risky data points. TTS has heard the need for better use of machine learning in scanning transactions and other data for red flags, and additional research will help us understand federal needs and present usable findings.	Decision was made to not pursue product development activity in this area at this time, as the government market does not appear to be mature enough in this area yet to support FRM products as a TTS line of business.
Notification Services	TTS will investigate the opportunity to providing a common solution for government notifications to citizens via email, text message, and other contact methods. Many of the tools that TTS and other agencies build require a notification component, and this project will help TTS understand whether consolidating the ability to send notifications into a shared service available to all agencies would be effective.	Decision was made to continue this project at the \$150k Discovery/Prototype phase. This is the type of shared service that GSA is positioned to offer to other government agencies. There is clear interest from every individual interviewed in such a service, especially if it addressed the usual government IT security and privacy concerns and is competitively priced.
Plainlanguage.gov 2.0	To explore what it would take to host http://www.plainlanguage.gov/ , rearchitct the content, implement the U.S. Web Design Standards so the site is accessible and mobile-friendly, and create connections between this community of practice and other content people working in the federal space.	Decision was made to continue this project at the \$150k Discovery/Prototype phase. The project will expand the reach of an OMB-mandated resource aligned with GSA's mission, open source the guidelines, allows TTS to pilot a new model of GSA partnership with gov-wide communities of practice, and build trust with the plain language community
Eligibility and Enrollment	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.	Decision was made to continue this project at the \$150k Discovery/Prototype phase. There are an abundance of opportunities for TTS to contribute in the benefits eligibility & enrollment space, and the next phase of discovery will focus on narrowing down those options to the most appropriate one or ones to pursue.
CIO Council Artificial Intelligence Machine Learning	TTS will identify potential services or automated processes for Agencies to better detect spear phishing attempts and avoid ransomware incidents.	...
CIO Council Artificial Intelligence Help Desk Automation	TTS will leverage AI for automated Help Desk applications, identify tools and methods for triaging service requests and inquiries, and explore the possibility of using AI to manage first level/first tier help desk tickets.	...
Improving Gov Findability: 301 Redirects	TTS will investigate the feasibility of offering to other agencies an affordable, high-quality, hosted-301 redirects solution leveraging recent developments in cloud infrastructure. A possible extension of this investigation would be the feasibility of offering a gov-powered CDN solution.	Currently ongoing

Project Name	Project Description	Outcome
PHASE 2, \$150K		
Plainlanguage.gov 2.0	TTS will audit, update, and re-architect the plainlanguage.gov website to ensure links work, navigation makes sense to users, and the most useful content is easily accessible.	Currently ongoing
Team Integration System	The purpose of the Team Integration System is to create a system that will support the needs of government agencies who are trying to match, deploy, and manage hybrid cross-functional teams.	Decision was made not to continue this project at the \$500k Product/Development phase. TIS is attempting to tackle a significant technology issue around automating and managing teams, including taking a new approach to staff augmentation, allowing for a more efficient, effective method for hiring, embedding, and managing contractors with existing teams of federal employees. While this is clearly a pressing concern inside the federal government, and we admire the team for taking on such a significant issue, we are choosing not to continue funding this project.
Cloud Marketplace	TTS will provide agencies with the ability to seamlessly acquire software at a discount. TTS will also provide suppliers with a consolidated, simple way to sell their products to government.	Decision was made to continue this project at the \$500k Product/Development phase. The project will simplify the buying process by finding policy and legal solutions that will allow a centralized marketplace to buy SaaS products and similar software from industry and resell/provision that software across government. It will also reduce need for justification by leadership, consolidate and reduce procurement labor, ensure compliance of product offerings, and make license management easy.
Project Boise: Improving the Authority-to-Operate (ATO) Process	TTS will explore the opportunity to develop a set of tooling and products designed to support federal application compliance needs.	Decision was made not to continue this project at the \$500k Product/Development phase. We applaud the discovery effort to this point. Making ATOs easier, cheaper, and faster is important, and this is a good idea for doing just that, one that warranted the exploration to this point. But the question now is not whether the idea is good, it's whether the benefits are enough and the project is ready enough to warrant this size of investment from a limited pool of money. Unfortunately it's not clear that this approach has benefits in line with the costs.
PHASE 3, \$500K		
Cloud Marketplace	TTS will provide agencies with the ability to seamlessly acquire software at a discount. TTS will also provide suppliers with a consolidated, simple way to sell their products to government.	Currently ongoing

“Give me six hours to chop down a tree
and I will spend the first four sharpening
the axe.”

—*Abraham Lincoln*



10x 10x is the Office
of Investments
in GSA's Office
of Products and
Programs (OPP).