



18F | U.S. General Services Administration
<https://18f.gsa.gov>

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Mr. Pedro Nava, Chairman
Little Hoover Commission
925 L Street, Suite 805
Sacramento, CA 95814

Mr. Chairman and members of the Commission, thank you for the opportunity to speak with you today as you continue to investigate the interactions between California state government and the people of this great state. It's an honor to be able to tell you about the incredible adventure I've been on over the last 24 months with the U.S. government, beginning in June of 2013 as a Presidential Innovation Fellow up to my current role as Deputy Executive Director of a new team inside the U.S. General Services Administration called 18F.

The initial idea was simple: Attract talented technologists to the civil service, enticing them with meaty problems and an opportunity for huge impact. The pilot project was the Presidential Innovation Fellowship, which proved you could get people to give up (or take a break from) their jobs in the private sector to come serve a tour of duty in the federal government. The next step was to convince people to serve longer than a six-to-12-month fellowship and join a product delivery team. The results have been astounding and it's been an incredible journey.

The Presidential Innovation Fellows

In 2012, the White House established the [Presidential Innovation Fellows](#)¹ (PIF) program to bring the principles, values, and practices of the innovation economy into government through the most effective agents of change we know: our people. This highly competitive program pairs talented, diverse technologists and innovators with top civil servants and change-makers working at the highest levels of the federal government to tackle some of our nation's biggest challenges. These teams of government experts and private-sector doers take a user-centric approach to issues at the intersection of people, processes, products, and policy to achieve lasting impact.

The PIF program is administered as a partnership between the White House Office of Science and Technology Policy (OSTP), the White House Office of Management and Budget (OMB), and the General Services Administration (GSA). In 2013, the PIF program established a permanent home and program office within GSA, and this is when my part of the story begins.

¹ <https://whitehouse.gov/innovationfellows>

As a Presidential Innovation Fellow stationed in the GSA to work on a project called [MyUSA](#)² (an [ambitious attempt at single sign-on](#)³ for the federal government), I began my “tour of duty” to help make government services more usable, more efficient, and more customer-centric. At the end of 2013, with about half of our cohort wrapping up six-month fellowships, there was growing discussion at the White House and inside GSA about how to bring technologists into the government for longer than six-12 months. GSA was committed to the idea of building a team to foster the innovations begun by the PIFs, and there were several of us who felt we weren’t quite done with our time in government. As a result, 18F was born.

18F — a Civic Consultancy

Built in the spirit of America's top tech startups, [18F](#)⁴ is a team of top-notch designers, developers, and product specialists inside the General Services Administration, headquartered at 18th and F streets NW, Washington, DC. 18F is a digital consultancy *for* the U.S. government *inside* the U.S. government, working with federal agencies to rapidly deploy tools and online services that are reusable, cut costs, and are easier for people and businesses to use.

We've embarked on a mission to transform the way the U.S. government builds and buys digital services. We're currently working with more than a dozen different teams across the federal government to help each deliver on their agency's mission in a user-centered way. We are accomplishing this by:

- putting the needs of the public first;
- being design-centric, agile, open, and data-driven;
- working in the open to make our products stronger; and
- deploying our tools and services early and often.

We're transforming government from the inside out, creating cultural change by working with teams inside government agencies who want to create great services for the American people. We work in partnership with agencies across government on a reimbursable basis, delivering public-facing services via web applications, data and service Application Programming Interfaces (APIs), and platforms. 18F operates using three basic models:

For You: Building solutions for an agency
With You: Integrating with an agency team to provide additional expertise or core capacity
By You: Advising an agency on how to build or buy user-centric digital services most effectively

Background & History

- GSA launched 18F on March 19, 2014. The name is an abbreviation for the intersection of 18th and F Streets in Washington, D.C. where GSA headquarters is located.
- In March 2014, the 18F team had 15 full-time staff. Staffing has grown to over 120 as of May 2015, as 18F's product and client work has increased. This number includes the current cohort of Presidential Innovation Fellows.

² <https://my.usa.gov>

³ <https://18f.gsa.gov/2015/05/18/myusa/>

⁴ <https://18f.gsa.gov>

- GSA funds 18F through the Acquisition Services Fund (ASF), which allows for investment in the development and delivery of products and tools that will be used by other agencies on a reimbursable basis. The cost of 18F’s client services work is being recovered through Economy Act transfers from our partner agencies and teams.
- [18F is an open source team](#)⁵. We use open source development to transparently promote the security, quality, and modularity of our code and to invite review, participation, and free and simple reuse of our efforts by government agencies, the business community, and developers.

Delivery is the Strategy

A little more than year ago we said, “Hello, World!” and launched not only a new team, but also the promise of a new way of working with and for the federal government. The first 15 of us committed to making government services simpler and easier to use — a mission that continues to guide us. We set out to do this by drawing on principles of user-centered design, developing in the open, and incorporating agile and lean development practices.

Our mission and approach established, we rolled up our sleeves and got to work. With each new project that we take on, we know the long tail of our impact will be the education and empowerment we share with our partner agencies. Following in the footsteps of the UK’s Government Digital Service, we’ve been capturing, [documenting](#)⁶, and [blogging](#)⁷ about our process as much as possible — not simply for the purpose of recording our history, but so we can share our process and progress with the public.

“Just Start” was our mantra in the early days of 18F, and we did. Sometimes we stumbled, but each time we practiced what we preach — [build, measure, learn](#)⁸, and do it again.

Core Principles

Like Lean Startup, we favor experimentation, customer feedback and analytics, and iterative design over a sequential “waterfall” model. ([Read more about “Why the Lean Start-Up Changes Everything” in Harvard Business Review](#).⁹) If startups and companies like General Electric can do it, why not the U.S. government? Our goal with this approach is twofold: Build user-centered digital services; and prove that building technology in an agile manner is possible in government at scale.

In order to transform how the U.S. government builds and buys digital services, there are several core principles that provide a framework for our team.

Be the change.

We intend to lead by example, by instruction, and with hands-on assistance.

⁵ <https://18f.gsa.gov/2014/07/29/18f-an-open-source-team/>

⁶ <https://pages.18f.gov/>

⁷ <https://18f.gsa.gov/news>

⁸ <http://theleanstartup.com/principles>

⁹ <http://steveblank.com/2013/05/06/free-reprints-of-why-the-lean-startup-changes-everything/>

Think like a designer.

We believe that user-centered design can fundamentally change the experience the public has with government. We build only what people really need, nothing more. User needs are the driver for all decisions — not stakeholder or government needs.

Data-driven.

We use metrics and analytics to augment our user research. We measure everything, including ourselves. 18F does more than make websites; we enable the discovery of information. Whenever possible, we think “API first” and lead with data.

Agile practices.

Agile and lean methodologies drive our work. We believe in delivering early and often. We build something small; learn by validating with real people; and “rinse and repeat.” Quick feedback loops with stakeholders mean big failures never happen.

Open by default.

We are open by default — both what we make and how we work. We’re [coding and designing in the open](#)¹⁰; we use and build open source code by default; and we’re evangelizing our methods and practices across the federal government.

These principles guide us in everything from how we work to what projects we choose.

Hacking Bureaucracy

When asked what it is we do, one quick answer is, “We’re hacking bureaucracy.” While it may sound provocative, it isn’t.

In the movies, hackers are often dangerous criminals who break into large systems, but in the software development community, “hacker” describes the way someone thinks and works rather than a malicious activity — *hackers are problem solvers*. We consider ourselves hackers in that positive sense: productively disruptive and curious. (See [“What is a Hacker?”](#)¹¹ by Bruce Schneier for a wonderful definition.)

It’s not enough for us to just build software inside the federal government. Such an approach may bring short term gains, but it won’t drive long term positive change. At 18F we’re integrating our style of software development with the many departments and employees of the federal bureaucracy. This is the human platform on which we build our software platforms.

When the founding team first started work, we decided to start with two initial big and challenging projects: improving the efficiency and agility of (1) the hiring process and (2) the software deployment process. Building our “startup” inside the federal bureaucracy meant first integrating with the federal bureaucracy.

Historically, hiring and software deployment practices inside the federal government have posed significant challenges for agile and user-centered software development practices. These processes need to take weeks, not months. 18F is approaching hiring and software deployment in the same agile, open, user-centered way that we approach all of our projects:

¹⁰ <https://github.com/18f>

¹¹ https://www.schneier.com/blog/archives/2006/09/what_is_a_hacke.html

- Find innovators inside government who have solved similar problems
- Engage stakeholders and users early and often
- Set up a minimum viable product (MVP) to get started quickly
- Give real users the process/solution from the beginning
- Learn and iterate our approach
- Stay aligned with the rules of the bureaucracy
- Formalize the process/solution for reuse

Those first few bullets are very much in line with lean and agile development methodologies. For successful product development, you need a stakeholder, a client, or a prototypical user for which you can: create an MVP¹²; get real people using it; gather feedback; and iterate the next version. The last two bullets are somewhat unique to being lean inside a very large organization. We've learned two things that helped us get traction fast: (1) It's ok to hack your way around the rules, but you must stay aligned with them. (2) As soon as something works, formalize it and memorialize it for reuse.

Collaboratively, we've significantly improved turnaround times for hiring and secure deployments. We've reduced the time to hire by 70%, and the time to deploy software by 80%, and many of our products are now in continuous deployment. Despite the constraints of the federal bureaucracy, continuous iterative improvement is possible. These processes and policies are now being formalized and we intend to make them repeatable and useful to the rest of the federal government.

Working With 18F

18F is currently working on more than 15 projects with agencies across the federal government. You can read about our team's projects and on our [Dashboard](#)¹³. The projects we take on are decided by asking ourselves the following questions:

- Is there an opportunity to improve the interaction between government and the people it serves?
- Does it align with the 18F core principles of staying focused on user needs while being agile, open, and data-driven?
- Is the partner agency motivated to modernize how they research and build services?
- Does it fit within our project focus areas?
- Does it contain an opportunity to build a cross-government shared platform, service, or module?

During our first year, 18F projects focused on:

- Providing cross-functional teams to government agencies, with a focus on user-centered agile product development (Agency Modernization)
- Making government more transparent and accessible to the American people (Open Government)
- Saving government time and money by optimizing internal purchasing processes (Procurement)
- Creating shared tools and platforms to be used by multiple government agencies (Shared Services)

¹² <http://www.startuplessonslearned.com/2009/08/minimum-viable-product-guide.html>

¹³ <https://18f.gsa.gov/dashboard>

Project Highlights

Open Government at 18F

Supporting the government-wide push for open data and transparency, 18F is building a suite of products that will help citizens more easily access information. With partners at the **Federal Elections Commission**, designers and developers are making [FEC datasets more accessible](#)¹⁴ via open APIs and a new website. Making this data, and other parts of the FEC site, easier to use will help the American people better understand what is going on with how elections work. 18F is also working with a number of agencies to explore new tools that make [Freedom of Information Act \(FOIA\) requests easier](#)¹⁵ and more streamlined.

U.S. Citizenship and Immigration Services

To help the **U.S. Citizenship and Immigration Services (USCIS)** modernize immigration and visa processes, we're building tools that improve the applicant process, providing clear and simple information to the public, and creating new tools that make the processing of immigration forms faster and more efficient. Every year, hundreds of thousands of individuals travel to the United States in pursuit of work, education, leisure, or with the hope of becoming a U.S. resident or citizen. This spring, myUSCIS — a [new customer-facing website](#)¹⁶ — launched to help immigrants and citizens more easily navigate processes such as applying for visas and Green Cards.

Digital Analytics Program Dashboard

In just three weeks, working with the [Digital Analytics Program](#)¹⁷, the [U.S. Digital Service](#) HQ¹⁸, and the [White House Office of Science and Technology Policy](#)¹⁹, the 18F team created a public dashboard — [analytics.usa.gov](#)²⁰ — to show where people are spending their time on government websites. The data-driven tool allows individuals to view how many people are using a federal government website, what pages are most popular, and what devices, browsers, and operating systems people are using. The dashboard was built completely open source, and has already been repurposed by the [City of Philadelphia](#)²¹ to report on their own web traffic.

Peace Corps Redesign

Each year, Peace Corps Volunteers who have been in the field for more than 18 months have the opportunity to raise money to partially fund a project in their local communities. The **Peace Corps** engaged 18F in an effort to redesign the experience of [collecting these online donations](#)²² to make the process easier and more responsive to user needs. Our work with the Peace Corps follows on other technological

¹⁴ <https://github.com/18F/openFEC>

¹⁵ <https://github.com/18F/foia-hub>

¹⁶ <https://my.uscis.gov/>

¹⁷ <https://www.digitalgov.gov/services/dap/>

¹⁸ <https://www.whitehouse.gov/usds>

¹⁹ <https://www.whitehouse.gov/administration/eop/ostp>

²⁰ <https://analytics.usa.gov/>

²¹ <http://analytics.phila.gov/>

²² <https://donate.peacecorps.gov/>

enhancements the organization has taken on like exposing a public API of information about host countries and a digital application process.

When the U.S. Strikes Oil, Taxpayers Win

The U.S. is home to a wealth of natural resources, and to ensure that taxpayers are receiving every dollar due for extracting them, the U.S. recently became a part of the [Extractive Industries Transparency Initiative \(EITI\)](#)²³ — a global coalition of governments, companies and civil society working together to improve openness and accountable management of revenues from natural resources. Our team both [curated content and pulled raw data](#)²⁴ that will inform the national and international conversation around extractive industries revenue. It will provide a valuable resource for data and information analysis and visualizations that can be readily understood and accessed by the public for reuse through other media and applications.

Fostering Interagency Collaboration

[Midas](#)²⁵ is a platform that facilitates collaborative work worldwide. The goal is to foster innovation across team boundaries by connecting individuals who identify challenges and needed expertise, and then work collaboratively to implement solutions. Individuals can create projects, propose working groups, or assemble "tiger teams" to act on their ideas. Anyone can also post tasks online and people with the requisite skills can respond and complete the task. Midas is currently powering GSA's successful Open Opportunities program — a [marketplace for federal employees to share and collaborate on ideas](#)²⁶ to improve government or citizen experiences.

Speeding Up Federal Procurement

Almost two months ago, we released a new beta procurement tool, **Discovery**, that is designed to allow federal acquisition personnel to [conduct initial market research](#)²⁷ quickly and easily and allows users to discover and research vendors offering work across a number of professional service categories. This [release](#) was geared for use with GSA's newly released [OASIS vehicle](#)²⁸. Eventually, we hope to make additional vehicles and resources available through Discovery, as well.

Another project we are working on is a tool for contracting personnel to estimate their per-hour labor costs for a contract, based on historical pricing information. Known as **CALC (Contract Awarded Labor Category)**, this powerful new [labor category and pricing research tool](#)²⁹ will help the federal contracting community make smarter, faster buying decisions by searching awarded prices on several of GSA's professional services schedules.

²³ <https://eiti.org/>

²⁴ <https://useiti.doi.gov/>

²⁵ <https://18f.gsa.gov/dashboard/project/midas/>

²⁶ <https://midas.18f.us/>

²⁷ <https://discovery.gsa.gov/>

²⁸ <http://bit.ly/FedTimes-OASIS-GSA>

²⁹ <https://calc.gsa.gov/>

We're Just Getting Started

It is the goal of 18F and GSA to become the place that helps agencies build, buy, innovate, learn, and share technology on a government-wide scale. During the next year you'll see the expansion of several projects and lines of business:

- 18F Consulting, to provide design thinking and technical acumen on a short-term, as-needed basis, helping agencies acquire better software.
- 18F Talent, to help agencies identify and recruit cutting-edge technical talent.
- FISMA Ready, a toolkit that provides Federal information security compliance for open-source software.
- [Agile Delivery Services BPA](#)³⁰, a micro-market blanket purchase agreement to help [agencies acquire better professional services](#)³¹.
- A partnership with the U.S. Digital Service to help hire and start digital service teams like ours at many other agencies.

It has been an honor to work alongside passionate people who are wholeheartedly committed to both making our team better and our government better. Our colleagues, who have been innovating within the government for years, have been excellent teachers. These results are not possible without the strong partnerships and leadership provided by multiple teams inside GSA: the Administrator's Office, Human Resources Management, Office of the CIO, Office of the Senior Information Security Officer, and many other technologists throughout the federal government. We also owe immeasurable thanks to our partners — program leaders at 16 agencies who jumped in with both feet in our first year, taking a leap of faith that with great talent come great possibility.

Finally, **thank you** for taking on this work as it has the potential to have a huge impact on California and its people. 18F is proof that the kernel of an idea, if given the room to grow, can make a difference. Thank you very much for your consideration, and I look forward to answering your questions.

Best regards,

Hillary Hartley
Deputy Executive Director
18F | U.S. General Services Administration

³⁰ <https://18f.gsa.gov/2015/01/08/creating-a-federal-marketplace-for-agile-delivery-services/>

³¹ <https://18f.gsa.gov/2015/02/12/highlights-from-the-agile-delivery-services-industry-day-events/>