



Case study | Nava PBC

How to use design practices to shape policy

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This case study is for anyone drafting, implementing, or changing policy to better serve people's needs.

Esteemed designer and educator Liz Danzico calls interaction design “the exploration of recently possible futures.” In government, you could say service design is the illumination of policy futures.

Because policy change is a long, winding, and often circuitous route from written law to the implementation of that law, it's not always easy to see what it will look like in practice. Laws and policies shouldn't, in the words of UK's Government Digital Service co-founder Tom Loosemore, be "500 pages of untested assumptions." We should be able to see, test, and evolve the policy to best meet the needs of people.

As Code for America's founder, Jennifer Pahlka says, "in the digital age, we have the ability to give the 'pilots' of our government programs the necessary instrumentation to see where they're headed and course-correct along the way."

"Necessary instrumentation" -- or modern practices like [aligning on clear outcomes](#) with your stakeholders, user research, prototyping, testing, and mapping are tools that can help shape policies to better match the needs of those they aim to serve. They're especially useful when the goal is unclear or undefined because they help illuminate a variety of possibilities and build a case for the best one.

In this case study, we'll share how United States Digital Service (U.S. Digital Service), the U.S. Department of Veterans Affairs (VA), Nava Public Benefit Corporation, and TISTA Science & Technology Corporation (TISTA) used design practices to influence policy changes. The result? Timely and transparent experiences for Veterans and the civil servants who process their appeals for benefits.

But first, some background on the U.S. Department of Veterans Affairs

The U.S. Department of Veterans Affairs employs nearly 380,000 people who provide care and administer benefits to 21 million Veterans. The Board of Veterans' Appeals (or The Board for short) and its appeals process were created in 1933 so Veterans could appeal decisions made about their benefits, such as healthcare, financial assistance for education, etc.

In the 85 years since, policies and technologies have changed, yet the tools civil servants have to complete digital and manual processes are not often integrated or seamless, making the system large and complicated. It's worth noting that The Board is not alone; [for many reasons](#), government agencies struggle to adapt to the digital age.

Today, attorneys and judges at The Board decide whether to grant benefits appeals from Veterans from all U.S. States and territories. The process can be straightforward, but if any changes are made to a case along the way, errors exacerbated by manual data entry and inflexible, disconnected legacy technology systems, have the potential to derail and delay a case, creating a poor experience for the Veteran.

As a result, [400,000 Veterans face years-long delays](#) to receive a decision on their appeal. About 7.5 percent wait up to ten years. And three percent of Veterans die while awaiting a decision on their disability claim appeal.

Determined to change this, the U.S. Department of Veterans Affairs and United States Digital Service began a project with Nava and TISTA: to design a set of digital tools called [Caseflow](#). Together, we're known as the Caseflow team. The tools we've built have made it possible for attorneys, judges, and administrative staff to improve how they process appeals across Veterans Affairs.

Tech modernization can be a Trojan horse

Technology modernization can be a Trojan horse for systemic change. While our team was tasked with reshaping the information systems and digital tools that powered the appeals process, we saw that the problems that needed to be solved weren't solely technical. Before Nava joined the project, our colleagues from U.S. Digital Service aligned with the VA Board partners and stakeholders to collectively draft a mission statement with three clear, agreed upon outcomes:



Empower Board employees with technology to **increase timely, accurate appeals decisions** and **improve the Veteran experience**.

Agreeing on these outcomes gave us room to step away from approaches that updated technology but did not improve Veteran or VA employee outcomes. It gave us space and permission to research, prototype, and iterate our way to services which were both human-centered *and* built with the best technical practices.

Using a prototype to update an 85-year-old policy

The Caseflow team began with a research phase during which we observed significant instances of delays and inaccurate data in the appeals process: the points where paperwork was transferred from one VA organization to another. For example, we found that 41 percent of cases arriving at the Board of Veteran Appeals from the regional offices had missing documents. And about 30 percent of cases had data discrepancies that caused delays. Upon looking more closely, we found that to transfer cases between the two organizations, VA staff had to manually fill out a form, "[Form 8](#)," to verify that the case had been reviewed as it passed from one organization to another.

Form 8, first created in 1933, was then a simple three-step form to document that a case had been reviewed. But after 85 years of patching on additional data points and checkboxes, the form had expanded to multiple pages and required a significant amount of time to fill out.

Department of Veterans Affairs		CERTIFICATION OF APPEAL	
1A. NAME OF APPELLANT (If other than veteran)		1B. RELATIONSHIP TO VETERAN	
2. FILE NO.		3. LAST NAME - FIRST NAME - MIDDLE NAME OF VETERAN	
4. INSURANCE FILE NO. OR LOAN NO. (If required)		5. DATE OF NOTIFICATION OF ACTION APPEALED	
THE APPEAL IS FOR (State the question(s) at issue clearly and concisely.)			
6A. SERVICE CONNECTION FOR		6B. DATE OF NOTIFICATION OF ACTION APPEALED	
6A. INCREASED RATING FOR		6B. DATE OF NOTIFICATION OF ACTION APPEALED	
7A. OTHER		7B. DATE OF NOTIFICATION OF ACTION APPEALED	
8A. APPELLANT REPRESENTED IN THIS APPEAL BY (Name of organization, attorney or agent)			
8B. ONE OF THE FOLLOWING IS CHECKED AS AUTHORITY FOR RECOGNIZING SUCH REPRESENTATIVE IN THIS APPEAL			
<input type="checkbox"/> POWER OF ATTORNEY (WHEN SERVICE ORGANIZATION OR AGENT IS REPRESENTATIVE, OR WHEN AN INDIVIDUAL IS RECOGNIZED PURSUANT TO 38 U.S.C. 5605)			
<input type="checkbox"/> CERTIFICATION THAT VALID POWER OF ATTORNEY OR DECLARATION OF REPRESENTATION IS IN ANOTHER VA FILE (28 U.S.C. 5605)			
<input type="checkbox"/> DECLARATION OF REPRESENTATIVE (WHEN ATTORNEY IS REPRESENTATIVE)			
9C. CHECK IF APPLICABLE			
<input type="checkbox"/> THERE IS ONLY AN UNREVOKED POWER OF ATTORNEY AND A DECLARATION OF REPRESENTATION BY AN ATTORNEY. CONSEQUENTLY, THE FILE CONTAINS A STATEMENT SIGNED BY THE APPELLANT WHICH CAN BE CONSIDERED AS AUTHORIZING THE REPRESENTATIVE NAMED IN 8A ABOVE TO REQUEST APPEAL IN THE APPEAL			
9D. IF AGENT DESIGNATED, IS HE/SH SHE ON ACCREDITED LIST? <input type="checkbox"/> YES <input type="checkbox"/> NO			
9E. IF VA FORM 646 IS NOT OF RECORD, EXPLAIN			
10A. WERE HEARINGS REQUESTED? <input type="checkbox"/> YES <input type="checkbox"/> NO			
10B. IF HELD, IS TRANSCRIPT IN FILE? <input type="checkbox"/> YES <input type="checkbox"/> NO			
10C. IF REQUESTED BUT NOT HELD, EXPLAIN			
11A. ARE CONTESTED CLAIMS PROCEDURES APPLICABLE IN THIS CASE? <input type="checkbox"/> YES <input type="checkbox"/> NO (If "YES," complete item 11B.)			
11B. HAVE THE REQUIREMENTS OF 38 U.S.C. 7105A BEEN FOLLOWED? <input type="checkbox"/> YES <input type="checkbox"/> NO			
12A. DATE STATEMENT OF THE CASE FURNISHED <input type="checkbox"/> REQUIRED AND FURNISHED <input type="checkbox"/> NOT REQUIRED			
12B. SUPPLEMENTAL STATEMENT OF THE CASE <input type="checkbox"/> REQUIRED AND FURNISHED <input type="checkbox"/> NOT REQUIRED			
13. RECORDS TO BE FORWARDED TO BOARD OF VETERANS APPEALS			
<input type="checkbox"/> CF OR XCF <input type="checkbox"/> RAE F <input type="checkbox"/> LOAN GUAR. F <input type="checkbox"/> OUTPATIENT F <input type="checkbox"/> X-RAYS			
<input type="checkbox"/> INACTIVE CF <input type="checkbox"/> TRAINING SUB F <input type="checkbox"/> INSURANCE F <input type="checkbox"/> HOSPITAL CORP. <input type="checkbox"/> BUDGET			
<input type="checkbox"/> OTHER (Specify) <input type="checkbox"/> DEP. ED. F (CR 33) <input type="checkbox"/> DENTAL F <input type="checkbox"/> CLINICAL REC. <input type="checkbox"/> TISSUE BLOCKS			
14. REMARKS (Number references)			
15. NAME AND LOCATION OF CERTIFYING OFFICE			
16. ORGANIZATIONAL ELEMENT CERTIFYING APPEAL			
17A. SIGNATURE OF CERTIFYING OFFICIAL		17B. TITLE	17C. DATE
18A. SIGNATURE OF MEDICAL MEMBER (If available and valid)		18B. TITLE	18C. DATE

VA FORM 8 OCT 1985 (REV) 8 JAF/01

Left: Form 8, as it originally appeared in 1933. Right: Form 8, circa 2017. Images of forms from VA.

After learning from the research, the Caseflow team [prototyped and built Caseflow Certification](#), a tool that checks for missing documents and fills out a digital Form 8 to save staff time. After it launched, the missing document rate dropped from 40 percent to 2 percent, but the data discrepancy rate remained just as high as before. We had more work to do!

Complete Electronic Form 8

Caseflow pre-fills a Form 8 using data from VACOLS and VBMS. Review the form below and answer the remaining questions. Once you've completed the form, click continue.

*** Required**

1A Name of appellant (if other than the veteran)

Joe Snuffy

1B Relationship to veteran

Veteran

2* File number

11111111111

3* Full Veteran Name

Joe Snuffy

Form 8 as it appeared on an early version Caseflow Certification, circa 2017.
Screencap by Sneha Pai.

We went back to interview the VA staff at the regional offices and The Board to better understand their workflow, where we heard repeatedly that while filling out Form 8 was a required step, information gathered in this form existed elsewhere, and no one relied on the form to do their work. Instead, VA staff manually corroborated data discrepancies between two legacy systems that contained Veteran information and documents, each silo-ed within its respective VA organization.

On learning this, we quickly designed a prototype that demonstrated to our stakeholders:

- Removing Form 8 would ease the manual burden of data corroboration. We learned this was feasible in our research, which revealed no one needed the information on the form.
- What we build could automatically surface data discrepancies to the staff, allowing them to focus their time on remedying errors rather than scouring all line items on Form 8. In other words, The Board was able to meet regulation and policy requirements by filling out the fields of the Form in the background, but staff at regional offices didn't need to spend time filling it out.

In addition to helping align within the organization, the prototypes did well in our user research with staff. These were necessary steps towards achieving the two-pronged outcome that we collectively sought: reducing the missing document rate AND the data discrepancies. And it did. **Now, fewer than 5 percent of cases processed with Caseflow Certification have data problems, and the Board approved a phasing-out of the nearly century-old Form 8.**

The screenshot shows the 'Caseflow Certification' interface. At the top, it says 'WASHINGTON, MARTIN, A' and 'VETERAN ID 111223333S'. Below this is a progress bar with four steps: '1. Check Documents', '2. Confirm Case Details' (which is the active step), '3. Confirm Hearing', and '4. Sign and Certify'. The 'Confirm Case Details' section has a title 'Confirm Case Details' and a subtitle 'Review information about the appellant's representative from VBMS and VACOLS.' It then displays two columns of information: 'From VBMS' with 'Clarence Darrow Attorney' and 'From VACOLS' with 'The American Legion Service Organization'. Below this, it asks 'Does the representative information from VBMS and VACOLS match? Required' with radio buttons for 'Yes' (selected) and 'No'. At the bottom, there are 'Cancel Certification' and 'Continue' buttons. The footer includes 'Built with ❤ by the Digital Service at VA' and a 'Send feedback' link.

We launched changes to Caseflow Certification that reduced data issues, by surfacing to VA employees when there was a data mismatch between two important VA databases.

Talk to people before a new policy is set in stone

In the fall of 2017, while we were one year into improving the appeals process, Congress passed a major law, the [Veterans Appeals Improvement and Modernization Act \(AMA\)](#), which would fundamentally change the ways in which Veterans appeal for benefits by giving them new/additional choices when they disagree with a VA decision.

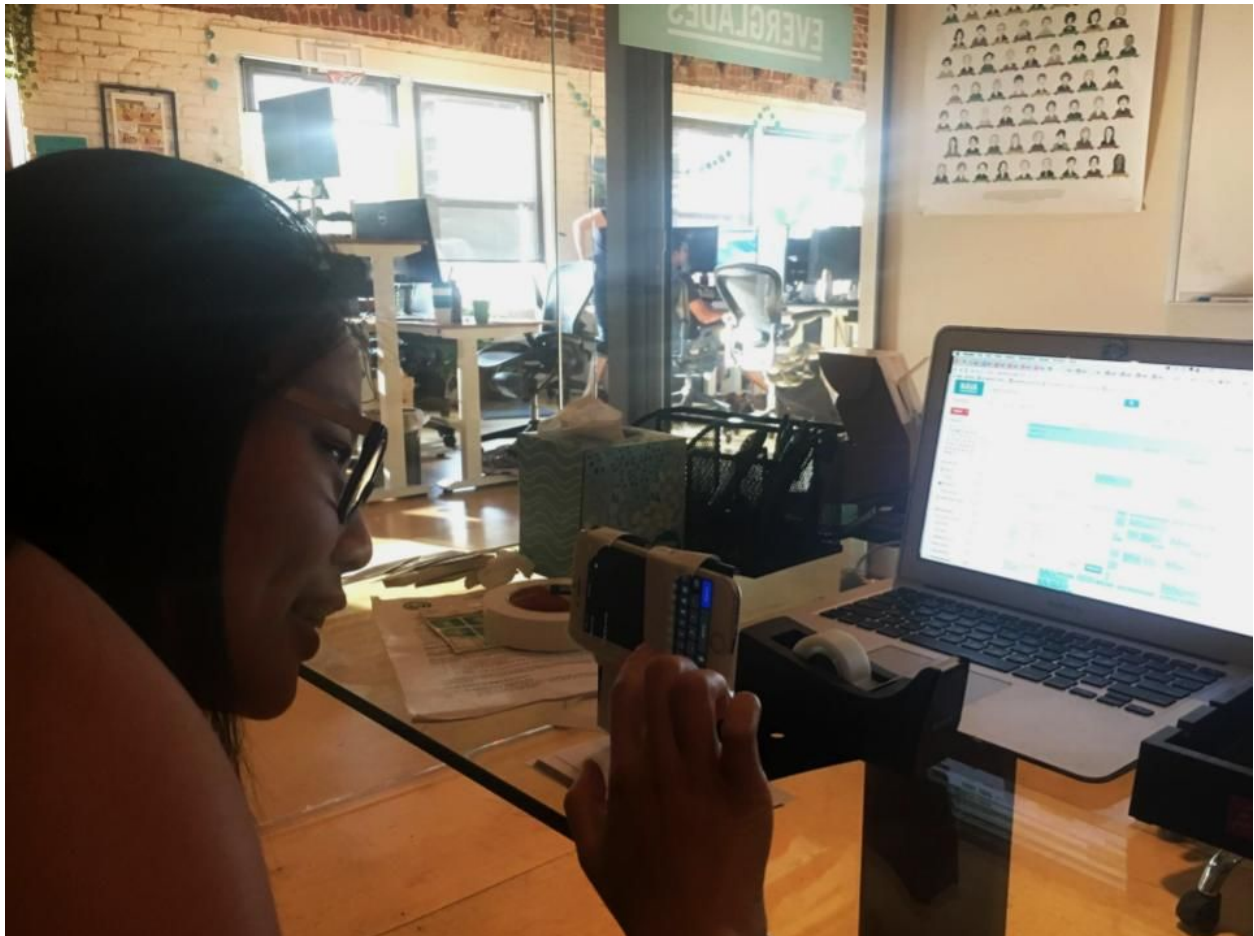
Congress gave VA 18 months—until February 19, 2019—to come up with a plan to implement these changes, so The Board had to speed up the original system of processing legacy appeals (in which more than 400,000 of Veterans were already waiting for a decision) while incorporating new appeal option types mandated by the AMA. When a massive law such as the AMA is passed, implementation details¹ can be ambiguous and open to interpretation. As our government partners work diligently to translate legislation into process, we've found many opportunities to prototype and explore a variety of ideas that help our partners nimbly arrive at more informed implementation proposals.



Caseflow team members analyzing feedback from VA employees after a round of research in August 2017. Photo by Xena Ni.

¹ While the AMA passed and is implemented February 19, 2019, legacy appeals will continue to be processed by the Board of Appeals in parallel to newer appeals.

As part of rolling out the new legislation, VA wanted to test the receptiveness to the new options and planned a pilot to invite a group of Veterans to opt into new, uncharted appeals options. The VA planned on sending letters to about 350,000 Veterans with existing legacy appeals to describe how they could optionally switch over to new ways of requesting a review on a previous VA decision about their benefits. They could also choose not to take any action, and continue in the legacy appeals system. Our team proposed that we test these letter drafts with real Veterans, before mailing them out. **Getting feedback from Veterans would help policymakers understand how letter content affects a Veteran's understanding of the new options, and therefore their choices that they will make.** In fewer than 10 days, we'd spoken to Veterans and documented improvements to the letter based on their feedback. Our scrappy research and testing sprint, and the resulting insights were well received and implemented by our government partners.



Xena Ni sets up a bespoke screen-sharing configuration for a remote usability session, October 2017. Photo by Caseflow team member Annie Nguyen.

Prototype to show possibilities

As part of modernizing the appeals process, our team is building a service that will help Board staff view, manage, and transfer their cases in an easy way. We started to integrate the new law's intended guidelines into our early prototypes so judges and attorneys at the Board could see and react to how working appeals from both systems at the same time would feel like in practice. This gave them the early opportunity to comment on what made sense and what didn't. By taking their feedback into consideration, we were able to explore a variety of ideas and arrive at an experience that matched both their needs *and* the legislation's needs. This fed well into our agile process because engineers were able to do accurate sprint planning on the well-vetted design that they'd been observing in use and iterating with us.

The image shows a whiteboarded prototype of a case management system. The central element is a browser window displaying a 'Your queue' page with several tables of case data. Surrounding the prototype are numerous handwritten annotations and sticky notes, many with colored markers (yellow, blue, green, orange) pointing to specific UI elements.

Annotations and Feedback:

- Hearings related tasks:** Check hearings once or twice a month. Hearings don't have to show up in Queue for her (Karpans).
- Notifications:** Wants to be updated about new available cases to assign as soon as they come in (Karpans).
- Completed cases:** Carolyn is experienced wanting to see cases they've signed, or a list for completed cases. This is a HIGG system number for the judges AND their chief team (Carolyn, Tanya).
- Table columns:** Local docket number, days in queue, type for prioritizing work (Karpans). Days in queue is ok (Tanya). Cases number was missing, for some judges (Matthew, Carolyn). Received from + Document ID have redundant information (when judges are familiar with their attorney's ID codes) (Carolyn).
- Number of Issues:** Wants to see number of issues (helps her prioritized decisions, Tanya). Issues (if all would have helped judges understand completely quickly (Matthew, Mike, Carolyn, Tanya)).
- Docket sorting:** If there are different rules/regulations for each docket, good to see them again (Karpans). To be candid, dockets varied like this means less to me since I know the rules - I still have to sign and I need to know the order in which I should sign. It would be helpful if that order were calculated for me. (perfect that Carolyn, Tanya) was confused by titles of AMA dockets (could we come up with clearer names?) (Mike).
- Attorney Queue:** Don't notice / hard to be directed many times to find Attorney Queues. This element needs familiarity building to be successfully utilized. (Carolyn, Matthew).
- Attorney Queue:** Sorting would be helpful (Karpans).
- Appeal Label:** Wants to see if it was a Decision or Remand, but remarks are harder to do (Karpans). Didn't take for the redundancy of seeing "Decision for" - instead wanted Veterans (Claims ID) (Carolyn, Matthew).
- Actions:** This element required familiarization (after one discovery attempt, the user was able to understand its purpose) (Carolyn, Matthew).
- Assign a task:** "Assigned" "Assign a task" meant assigning. Decision back to Attorney for review, which happens often with new attorney (Mike). Some users drew a blank when trying to understand "assign a task". Judges sometimes assign admin actions, but not as often as attorneys. They'd rather have a way to send this back to their attorney (Carolyn, Matthew).
- Reader documents:** Want to save this unless this would take time (Mike). This element needs familiarity building to be successfully utilized.

Prototype Data Tables:

Your queue

Document ID	Type	Docket number	Days in queue	Received from	Reader Queue File	Actions
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign

Legis - Hearing docket (4 cases)

Document ID	Type	Docket number	Days in queue	Received from	Reader Queue File	Actions
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign

Legis - Hearing docket (3 cases)

Document ID	Type	Docket number	Days in queue	Received from	Reader Queue File	Actions
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign

AMA - No Evidence docket (2 cases)

Document ID	Type	Docket number	Days in queue	Received from	Reader Queue File	Actions
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign

AMA - Hearing docket (2 cases)

Document ID	Type	Docket number	Days in queue	Received from	Reader Queue File	Actions
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign

AMA - Direct review (4 cases)

Document ID	Type	Docket number	Days in queue	Received from	Reader Queue File	Actions
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign
Decision for New Medical	NOI	11-0000	0	A. Tanya	NOI	Assign

Exploring and evaluating how judges may want to view mixed dockets of cases through prototyping, usability testing, and post-usability synthesis. This is a screenshot of a whiteboarding tool showing a page from a prototype and synthesized feedback.

Designers as policy-shapers and policy-makers

The practices we've outlined—aligning on a product vision, doing user research, and delivering early prototypes—should help anyone drafting, implementing, or changing policy to respond faster to the needs of people affected, and lead to better outcomes that deliver on an agency's mission. In our continued work, we show our teammates and our government partners possible implementations and consequences of policy decisions. We prototype and test ideas with Veterans who tell us what's working and what's not. This makes regulations and procedures tangible, giving voice to thousands of VA staff and millions of Veterans so that they can help shape the services and tools created on their behalf.

What if policy implementation made systems more whole, instead of more fragmented and silo-ed? What if it was standard practice to prototype the consequences of the policies as they're written by policymakers? What if every public service could be thoughtfully and quickly tested before being launched? What if policymakers were versed in prototyping and testing, or came from design backgrounds? The more clearly and vividly you can imagine possible futures, the easier you can plan for them.

Resources that helped us:

- [Delivery-Driven Government](#) by Jennifer Pahlka
- [Taking the Guesswork out of Policy](#) by Tom Loosemore
- [Hundreds of Thousands of Veterans' Appeals Dragged Out by Huge Backlog](#) by Ben Kesling
- [Product management in government: why it's essential when the stakes are high](#) by Ivana Ng

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