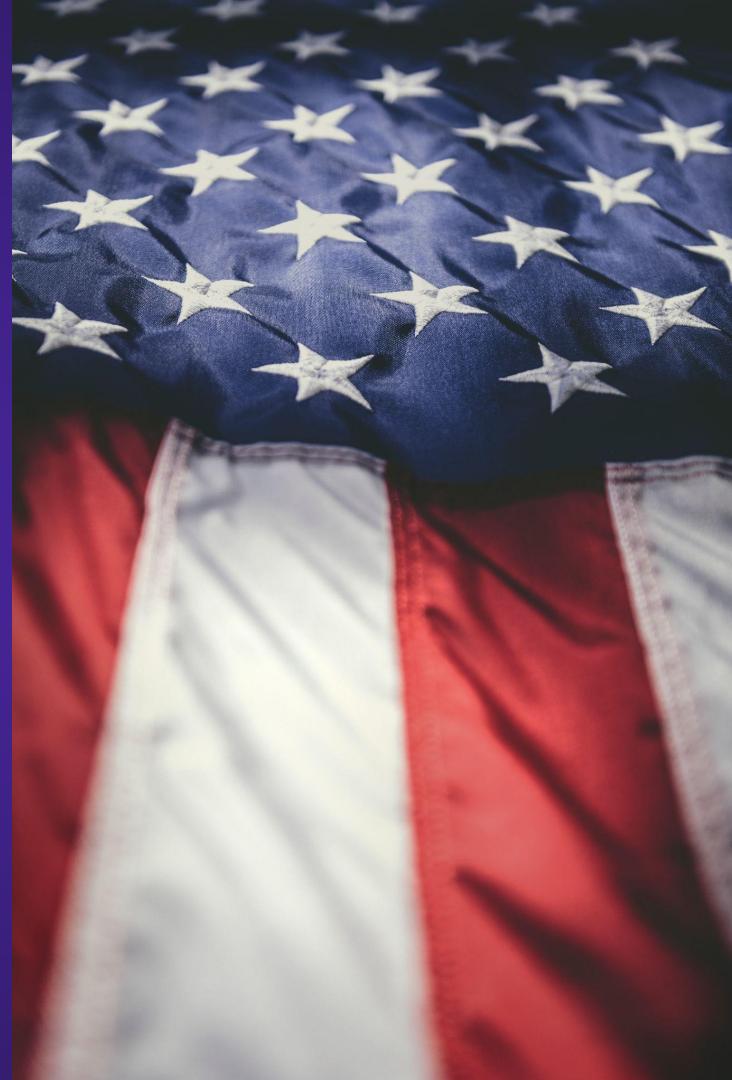


Responsive Redesign

Of the U.S. Department of
Homeland Security
Website

Nathan Friedman, UX/UI Researcher and Designer



Project Overview



Problem

The current website design frustrates the experience of foreign residents looking to work in the U.S. by presenting inefficient navigation, a bloated layout, and a poor style.



Solution

Analyze the website's UI structure, then transform the site's design using a streamlined navigation system, a user-centered layout, and a relevant style.

Redesign Process



**Government
UI Design
Analysis**

**IA and UI
Navigation
Prototype**

**Homepage UI
Design and
Testing**

**Government
Agency
Redesign**

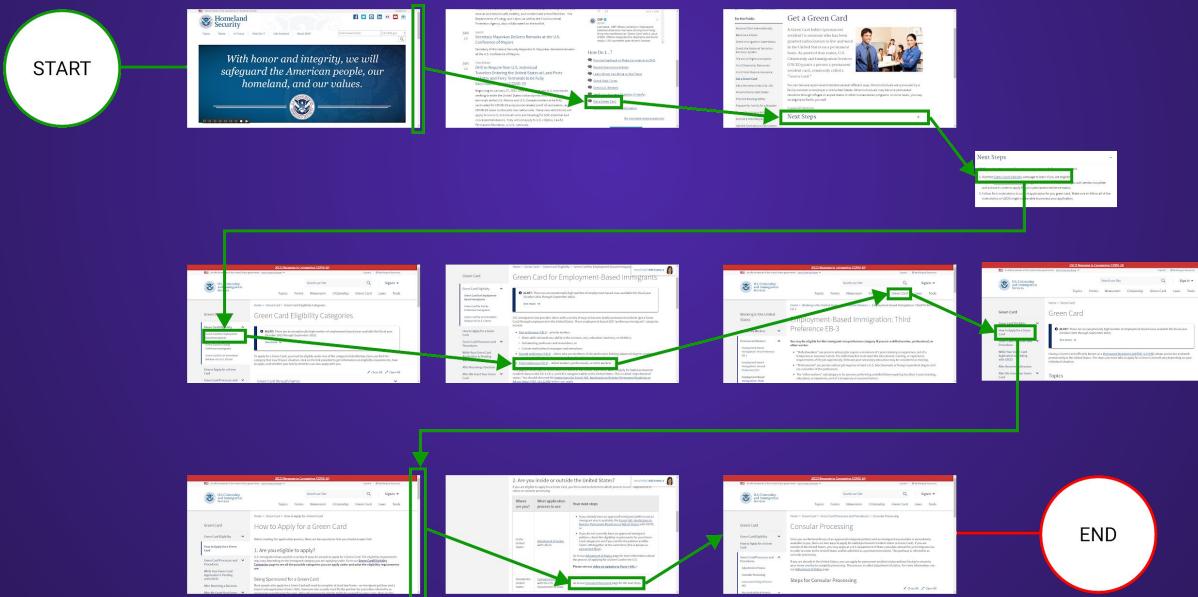
Access the project artifacts [here!](#)

Proto-Persona

| | |
|---|---|
| <p>Name</p> <ul style="list-style-type: none">Pierre Thompson  | <p>Behavioral Demographics</p> <ul style="list-style-type: none">Age: 45Born: Vancouver, BC, CanadaLocation: Toronto, ON, CanadaOccupation: Floor Manager at a retail storeRelationship Status: divorcedEducation: high school diplomaHas 3 adult children: 2 living in Canada, 1 living in Rochester, NYGrew up in a poor, rural family with low access to contemporary gadgetsBuys older, cheap electronics that are used or refurbishedOften works overtime |
| <p>Needs and Wants</p> <ul style="list-style-type: none">Wants a Green Card to live and work in the United States of AmericaNeeds to make a change in his lifeWants to be closer to his oldest child living in NYWants to feel like part of the modern world | <p>Pain Points and Frustrations</p> <ul style="list-style-type: none">Annoyed by blandness of DHS siteA solution is to paint the DHS site in vibrant colors with exciting visualsFrustrated by having to read so much text on DHS siteA solution is to use icons next to text to help users recognize important informationFrustrated by having to click on so many links to find information on DHS siteA solution is to simplify research by showing some links as modals on a single page |

Defined User Path

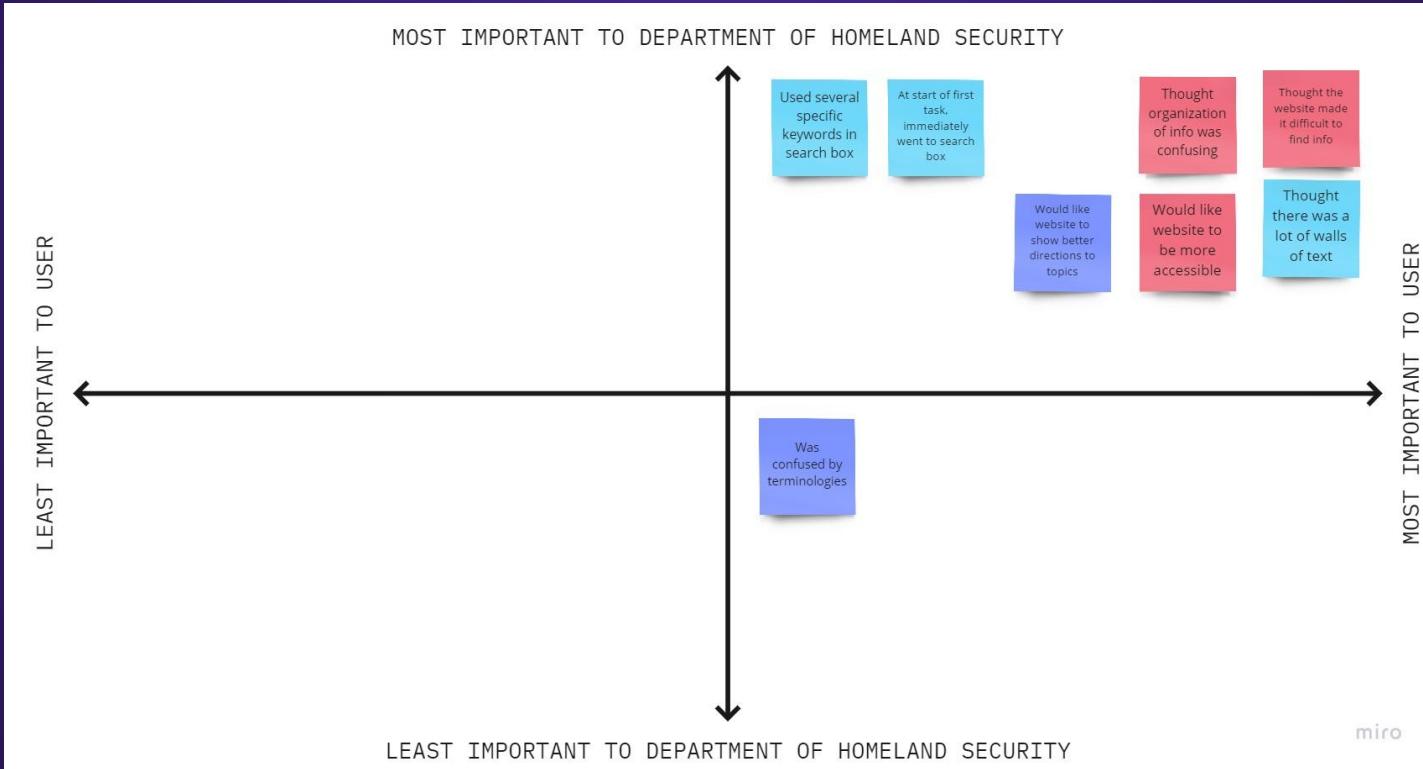
User Task: find out how to obtain a Green Card.



Guerilla Usability Testing Results

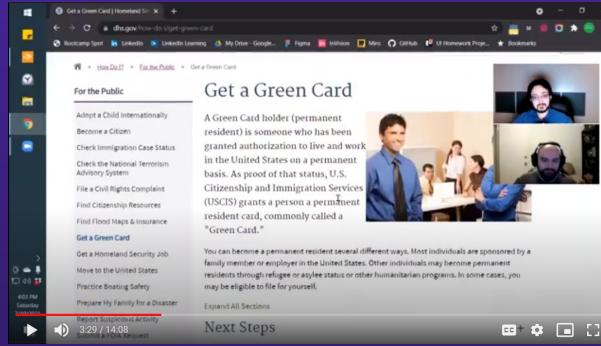
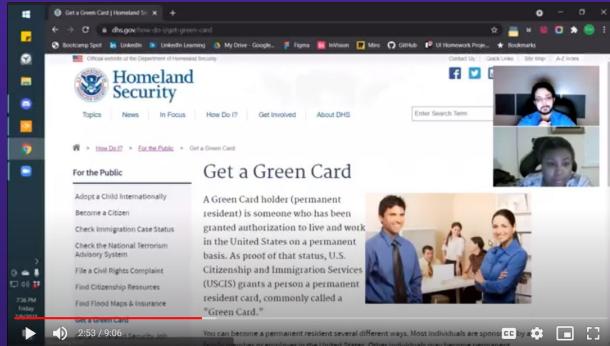
| | | | | | | | | | | | | |
|---|-----------------------------------|---|--|--|---|--|-------------------------------------|---|---|--|--|--|
| At start of first task, immediately went to search box and typed in "US Green Card" | thought site was easy to navigate | At start of first task, immediately went to How Do I? link in nav bar | On Get a Green Card page, mentioned that they were looking for a bulleted list | At start of first task, immediately went to search box | Appeared to ignore anything at or below fold | Pressed back button several times | Went to search box to complete task | Used several specific keywords in search box | Thought the website made it difficult to find info | Felt the info search got more complicated the longer they searched | Was confused by terminologies | Thought the website could take a user spend hours looking through text |
| thought search box helped quickly access info | | Looking for info on Get a Green Card page expressed delight upon seeing "Next Step" drop down section | Confused on last task, having trouble finding my saw solution earlier in path | Confused. New Steps section in Get a Green Card page looks like it has more steps needed to get a Green Card | Thought there was a lot of walls of text | Used several specific keywords in search box | | Found virtual assistant creepy | Felt website is such that they seem not want people to find info | Eventually went to search box | Thought using search box was more productive than manually searching through website | |
| | | On last task, when looking for earlier page, pressed back button and found nothing on site itself | | Thought text blocks could intimidate users | Thinks walls of text make it hard to find specific info | | | Became more exasperated by website's complexity as time went on | Thought website could be more explanatory | Thought website tests users' willpower | Website has a depressing effect on user | |
| | | | | Thought lots of text could be a deterrent | Thought search function worked fairly well | | | Thought info was hard to find | Thought people with low tech understanding would give up on info search | Would like website to reduce jargon and language | Would like website to show better directions to topics | |
| | | | | Thought finding info was simple if you know where to look | Suggested adding quick, directional links in boxes | | | Would like website to be more accessible | Thought organization of info was confusing | Thought info searching was difficult and frustrating | | miro |

Usability Testing Prioritization Matrix





Usability Test Interviews

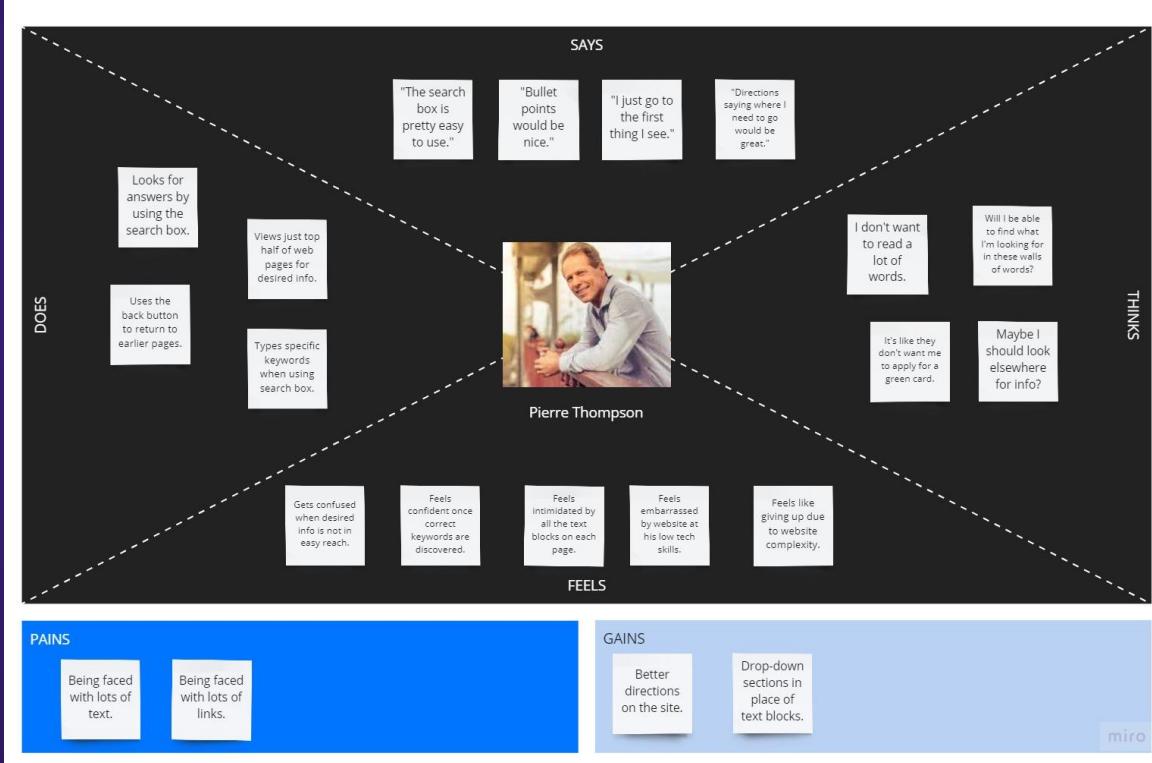


“Very easy to navigate, I was able to quickly get to where I needed to be just by putting what I needed in the search box.”

“There’s a lot of walls of text, and that can be a daunting thing to deal with. [...] Whenever I see you’re throwing a whole wall of text at me, I’m trying to find one specific thing but there’s so much stuff here I can’t find it, you know? [...] That can be a deterrent right there.”



Usability Testing Empathy Map



Agency Navigation Redlining & Annotations



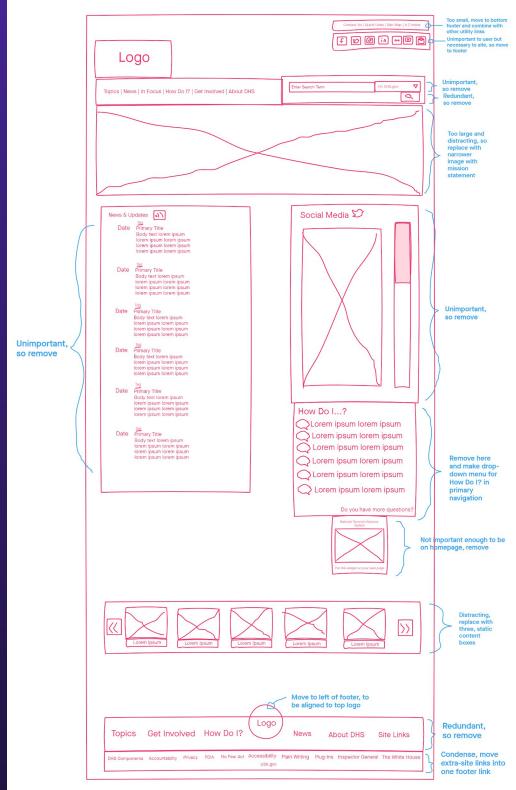
Redline Annotations include:

- 4. Extra-Site Navigation: user can go to related websites outside the DHS website's scope.
- 6. Secondary Navigation: user can click anywhere in hero section to be taken to pages within the website's main topics.

Organizing Principle Annotations include:

- Category: primary navigation bar ordered by topic.

I.A. Analysis and Intervention

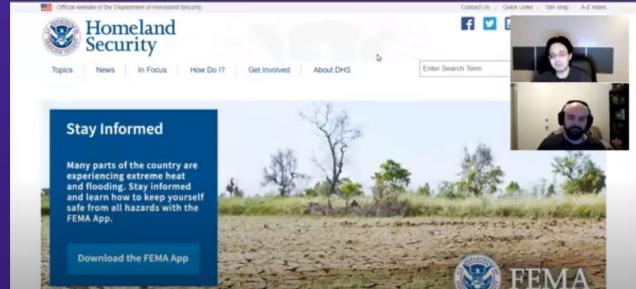


Redesign recommendations include:

- **Social Media Channels:** unimportant to user but necessary to site, so move to footer
- **Hero Section:** too large and distracting, so replace with narrower image with mission statement

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Website Navigation Usability Tests



“When you’re looking for a specific thing, it doesn’t make any sense to click on anything else other than the search box when you know exactly what you’re looking for.”

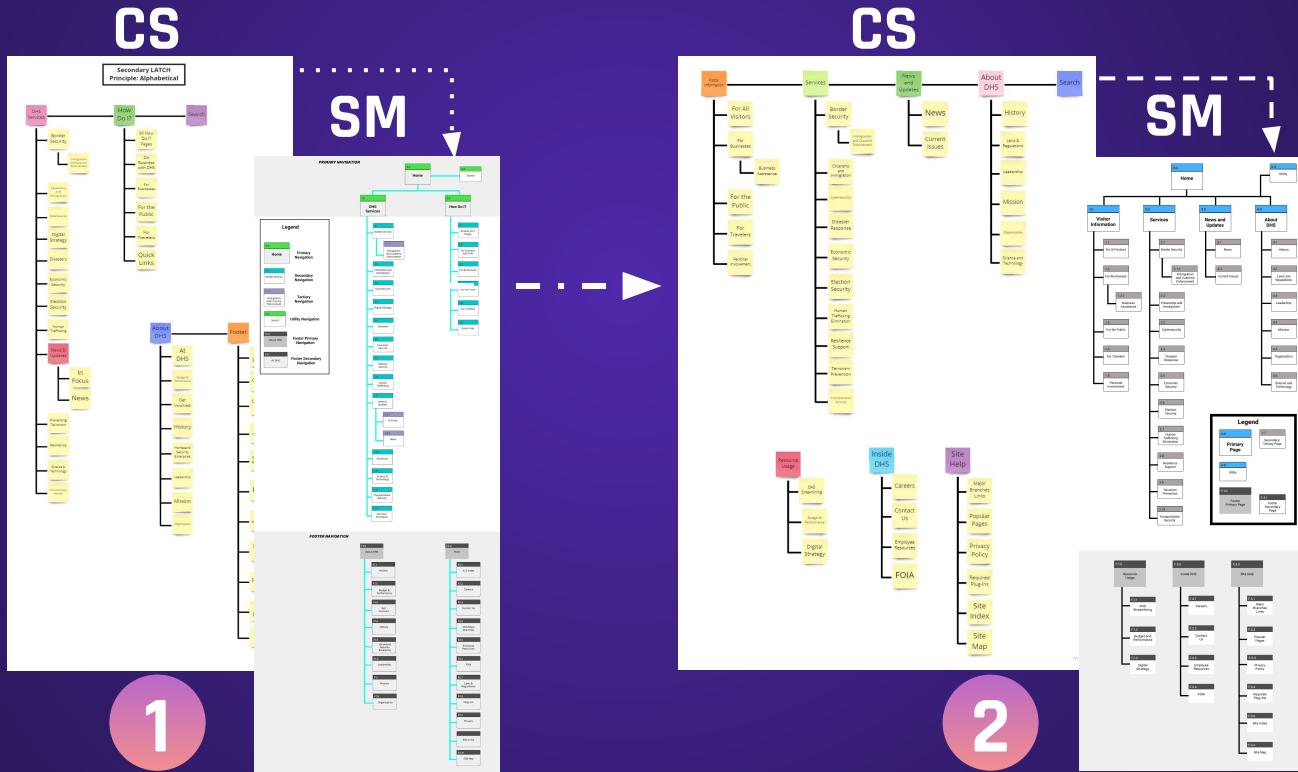
“I was searching for a specific thing, and I didn’t see any immediate links available on the homepage that specifically referenced green cards, at least not right off the bat.”

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Navigation Tests Findings

| Desktop User 1 | Desktop User 2 | Pain Point |
|---|---|---|
| Went to search box at start Likes that text is clean and large Likes layout | Thought search box was best place to go to when looking for specific information Likes sidebar Likes that search box is easily findable | Looked around page but missed link to complete task Looked around page but went to search box Thought specifics in text were better than general descriptions |
| | Went to search box because they couldn't immediately find their specific info Thought sidebar with FAQ would be helpful | Thought it was decent to be presented with lots of info Didn't immediately see How Do I? link before going to search box Likes pictures on secondary page |
| | Thought pictures next to text were good way of presenting topics without using just text blocks | Likes specific info on sidebar |

Card Sorting and Sitemap Iterations



New Agency Navigation Iterations

Seal and Department Name

DHS Services

How Do I?

Search

With honor and integrity, we will safeguard America's borders.

Content Headline Goes Here

Content text goes here.

About DHS

LOGO

Search

Visitor Information

Services

News and Updates

About DHS

Border Security

- Immigration and Customs Enforcement
- Citizenship and Immigration
- Cybersecurity

LOGO

Search

Visitor Information

Services

News and Updates

About DHS

Border Security

- Immigration and Customs Enforcement
- Citizenship and Immigration
- Cybersecurity
- Disaster Response
- Economic Security

LOGO

Resource Usage

Inside DHS

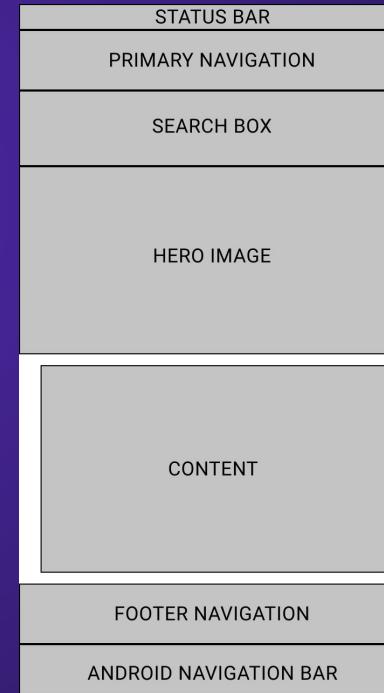
Site Help

Redesigned Homepage Structures

Desktop



Mobile



Five-Second User Tests



“Having everything parsed out into little boxes does help a little bit; that way, you can navigate to something real quick instead of having to go through a wall of text.”



“The descriptions, I wasn’t sure if they were buttons or drop-down menus or if they, how exactly you would select them.”



“I was immediately gravitated towards the top where you had all these labels, and then kind of like gravitating towards the center where there was this huge space with text and information.”



“I know it’s a prototype, but seeing something so simple, so basic, it doesn’t really draw your attention; you don’t want to stay on the page.”

Desktop Homepage Wireframe Iterations

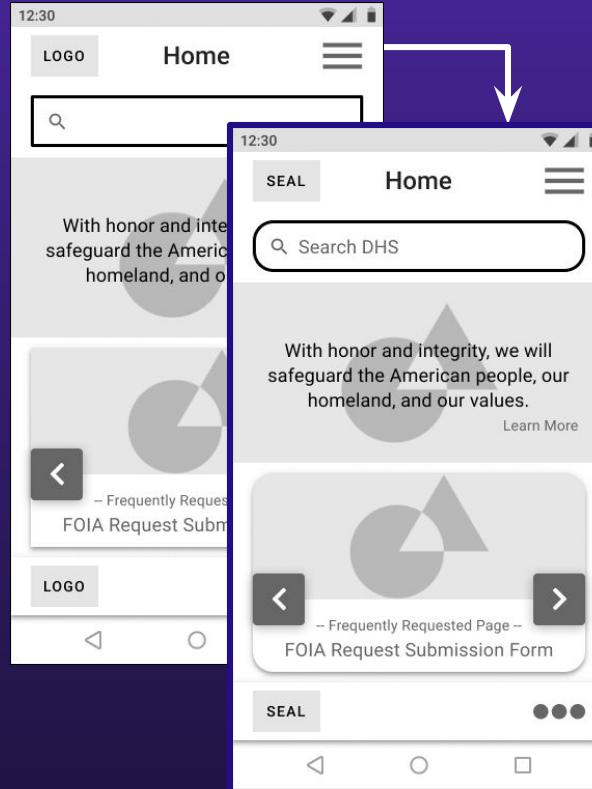
The image displays three wireframe iterations of a desktop homepage, illustrating design evolution through three distinct stages.

Iteration 1: The top wireframe shows a header with "LOGO" and a search bar. Below the header is a large circular graphic containing the text "With honor and safeguard the A our homeland,". The main content area features two cards: "FOIA Request Submission Form" and "Blue Campaign". The footer includes "LOGO", a "SEAL & NAME" button, and a "Search DHS" button.

Iteration 2: The middle wireframe shows a header with "SEAL & NAME" and a search bar. Below the header is a large circular graphic containing the text "With honor and safeguard the A our homeland,". The main content area features two cards: "FOIA Request Submission Form" and "Blue Campaign". The footer includes "Visitor Resources", "Operations", "Bulletins", and "About" buttons.

Iteration 3: The bottom wireframe shows a header with "SEAL & NAME" and a search bar. Below the header is a large circular graphic containing the text "With honor and integrity, we will safeguard the American people, our homeland, and our values.". The main content area features three cards: "FOIA Request Submission Form", "Blue Campaign", and "If You See Something, Say Something®". The footer includes "Our Mission", "Search DHS", "Efficiency", "Connections", and "Site Help" buttons.

Mobile Homepage Wireframe Iterations



UI Style Tile and Style Guide Iterations

Style Tile

UI STYLE TILE: U.S. Department of Homeland Security Homepage

UI STYLE DIRECTION

The DHS UI style is intended to clearly reflect the values of the department: safety, security, reliability, and patriotism. Being a government website, it needs to be professional and consistent overall, but can allow a few flourishes to show its modernity. It should be approachable and easy to use.

UI Style Objectives

| | |
|------------|---------------|
| Dependable | Helpful |
| Innovative | Authoritative |

TYPGRAPHY

Typefaces is based on the font used in the Department of Homeland Security logo. The primary font is Helvetica. Poppins is a secondary font. Arial is chosen to be the same as pairing.

H1 - Headline

(Large Headline)

H2 - Subhead

(Large Subhead)

H1 - Headline

(Medium Headline)

H2 - Subhead

(Medium Subhead)

"With honor and integrity, we will safeguard the American people, our homeland, and our values." - DHS mission

(Large Bold Headline)

TYPGRAPHY BODY COPY

Small text for body copy, footer, and other descriptive text.

Footer text can be smaller than body copy if needed.

Section headers like "About Us" or "Contact Us" should be the same size as body copy.

Text for links and buttons should be the same size as body copy.

BRAND LOGO

- LOGO ON WHITE
- LOGO ON DARK




ICONOGRAPHY



BUTTON STATES

Normal

Hover

Focused

Pressed

Disabled

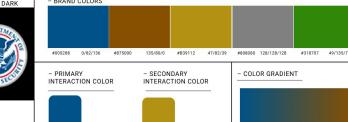
COLOR PALETTE

- BRAND COLORS

- PRIMARY INTERACTION COLOR

- SECONDARY INTERACTION COLOR

- COLOR GRADIENT



GRAPHIC PATTERNS



IMAGE SAMPLES



BUTTON STYLES

Normal

Dropdown ▾

Dropdown ▾

Normal



Style Guide

The screenshot displays a design system interface with several components:

- Dropdown**: Two examples, one active (orange) and one disabled (grey).
- Tabs**: Four tabs labeled "Active", "Disabled", "Focused", and "Hover".
- Dropdown Menu**: Two examples, each with a list of items:
 - Menu Item 1
 - Menu Item 2
 - Menu Item 3
 - Menu Item 4
 - Menu Item 5
- Cards**: Two card components, each containing a circular graphic.

Prototype Testing



“They [the designs] were very similar; very intuitive going from one to the other.”

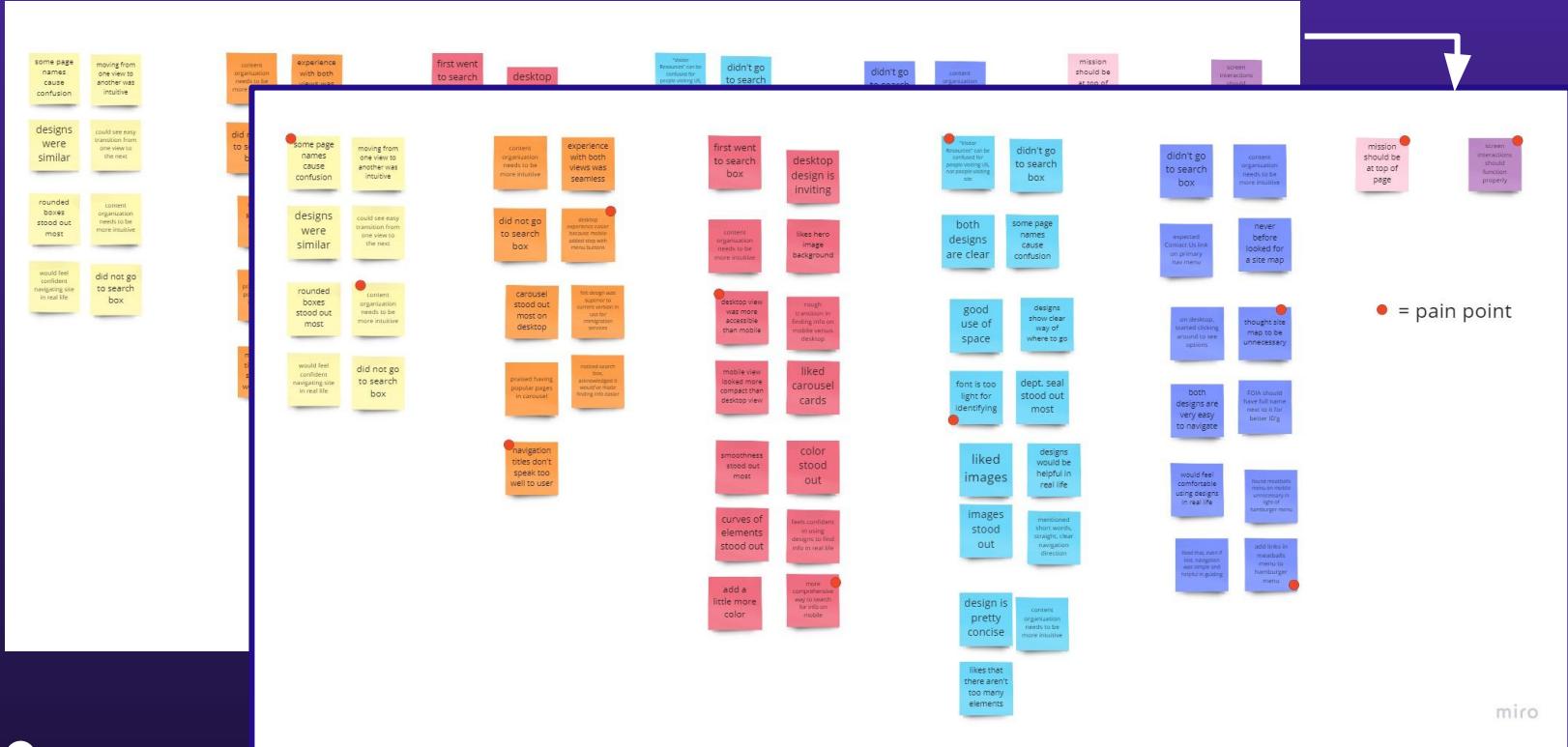


“[The designs] would be much better than what we have out there, right, for the current department and immigration services.”

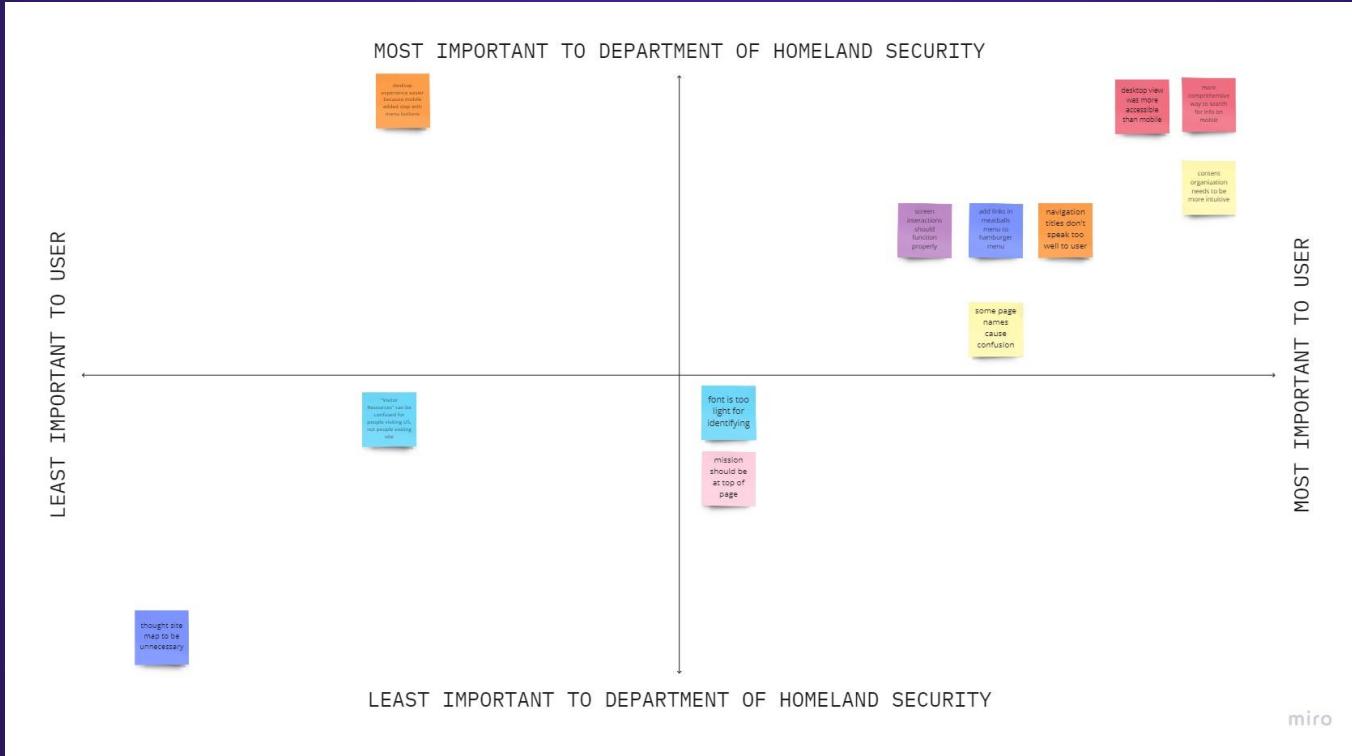


“Even if you don't know where to go, it [the designs] made it very simple to navigate and find where you need to be.”

Testing Feedback



Feature Prioritization



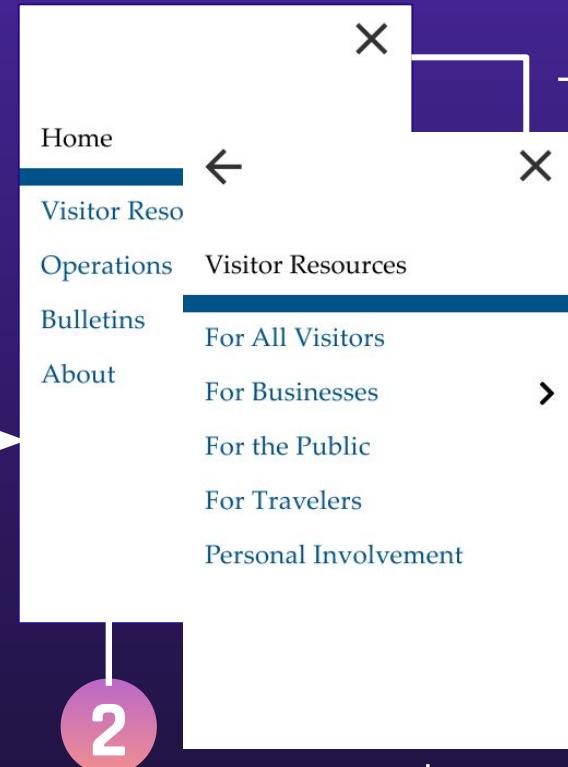
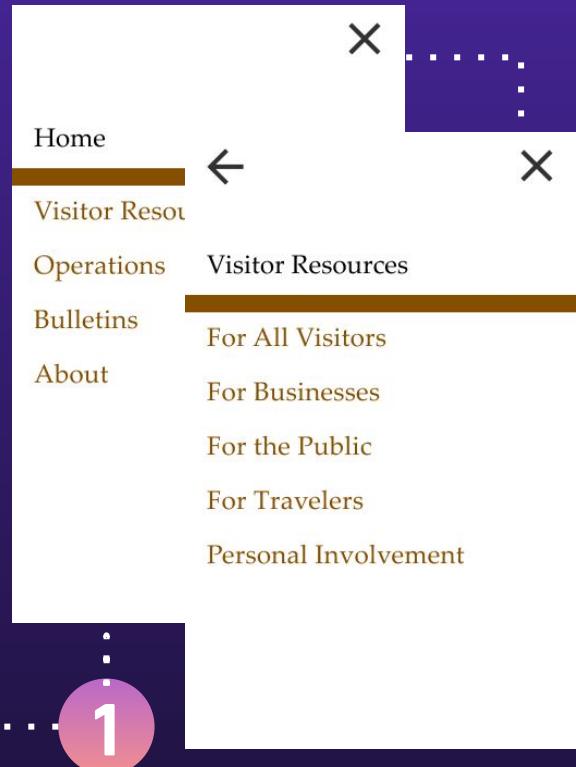
Applied Visual Design Desktop Iterations

The image displays three versions of a website for the Department of Homeland Security (DHS) side-by-side, illustrating iterative visual design changes. Each version features a large background image of Mount Rushmore and a central headline.

- Version 1:** The headline reads "With honor and integrity, we will safeguard the American people, our homeland, and our values." Below the headline is a call-to-action button labeled "Our Mission". A blue navigation bar at the top includes links for "Visitor Resources", "Operations", "Bulletins", and "About".
- Version 2:** The headline is identical to Version 1. The "Our Mission" button has been replaced by a larger, orange "Search DHS" button. The navigation bar remains the same.
- Version 3:** The headline is identical to Version 1. The "Search DHS" button has been moved to the right side of the page, below the navigation bar. The navigation bar remains the same.

Common Elements: All three versions feature the DHS logo in the top left corner and a search bar with the placeholder "Search DHS" in the top right corner. The main content area includes a "FOIA Request Submission Form" section with a "Frequently Requested Page" link and a "Blue Campaign" section with a "Frequently Requested Page" link. The bottom of the page includes a footer with the DHS logo, links for "Efficiency", "Connections", and "Site Help", and a "If You See Something, Say Something®" campaign banner.

Applied Visual Design Mobile Iterations



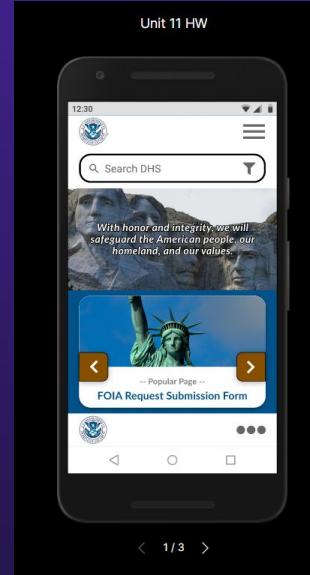
High-Fidelity Prototypes

Desktop



[Link](#)

Mobile



[Link](#)

Final Thoughts

In deconstructing the present design of a website, a designer gains appreciation for the value of user-centered design by observing the faults and errors that sour the experience of a website that did not follow such an approach. They are therefore given an incentive to build from the ashes their best interpretation of the website's design that is both relevant to the site owners' wishes for their creation, and allows for the best possible experience for the users. This is no small task, as multiple cycles of testing and iterating designs demonstrate the delicate interconnectivity between the surface and subsurface layers in a design, and even one light change at any level can affect the entire structure. It is evident that only a thorough understanding of all the elements involved can provide the desired effect.

However, when this goal is eventually achieved; when a user says, "This was easy to use," there is a great sense of accomplishment, and the designer is reminded why they do what they do. I hope to experience this feeling over and over throughout my career.

Attributions

- Presentation template was created by Slidesgo, including icons by Flaticon, infographics and images by Freepik, and illustrations by Storyset
- American flag photo by Tim Mossholder on Unsplash
- Icons also by Freepik, Creaticca Creative Agency, and DinosoftLabs