Government of Canada

Website Case Study

James Alafriz | UX designer

Roles

UX Research (with Danni Liang)

UX Design

UI Design

Art Direction & Design

Tools

Links

Government of Canada Website

Desktop Prototype

Mobile Prototype

Figma Working File

Project Folder | Group Research
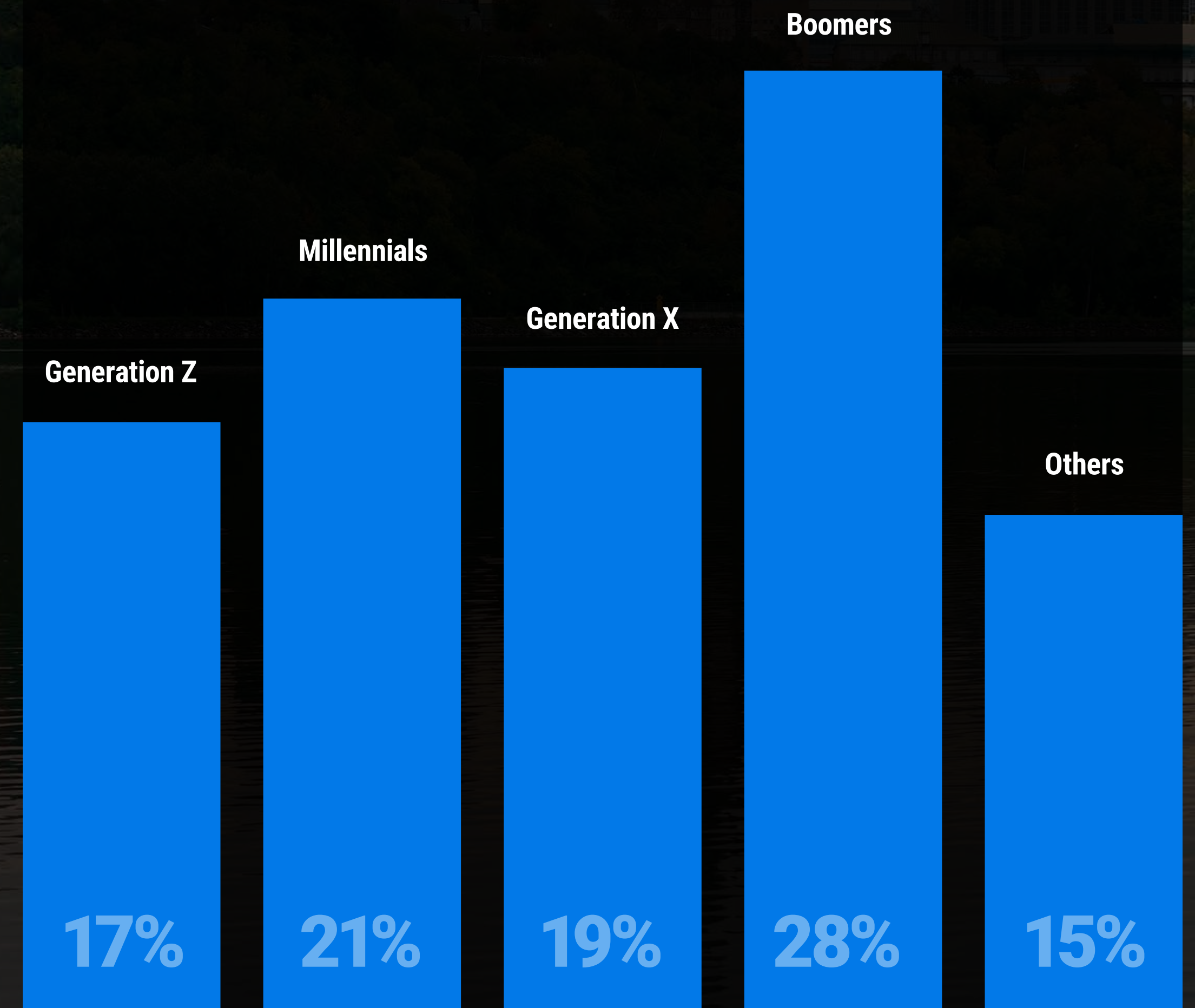
Project Folder | Individual

Previous Case Study Deck

Project Overview

The Government of Canada website (Canada.ca) is an essential resource for Canadians looking for government-related information and services.

In 2023, we want to provide users with a website that resonates with the modern Canadian from a usability lens.

Target Audience

As of 2022 the distribution of population within Canada is fairly evenly distributed. Therefore, an array of our user's needs and limitations will be considered.

Source: https://www.statista.com/

Boomers

Millennials

Generation X

Generation Z

Others

17%   21%   19%   28%   15%

Project Scope

Originally tasked with analyzing the Canada Revenue Agency website with a focus on improvements to the Information Architecture and general usability of the website.

But over the course of this project, the UX problem solving process unearthed a larger underlying problem that required a solution.
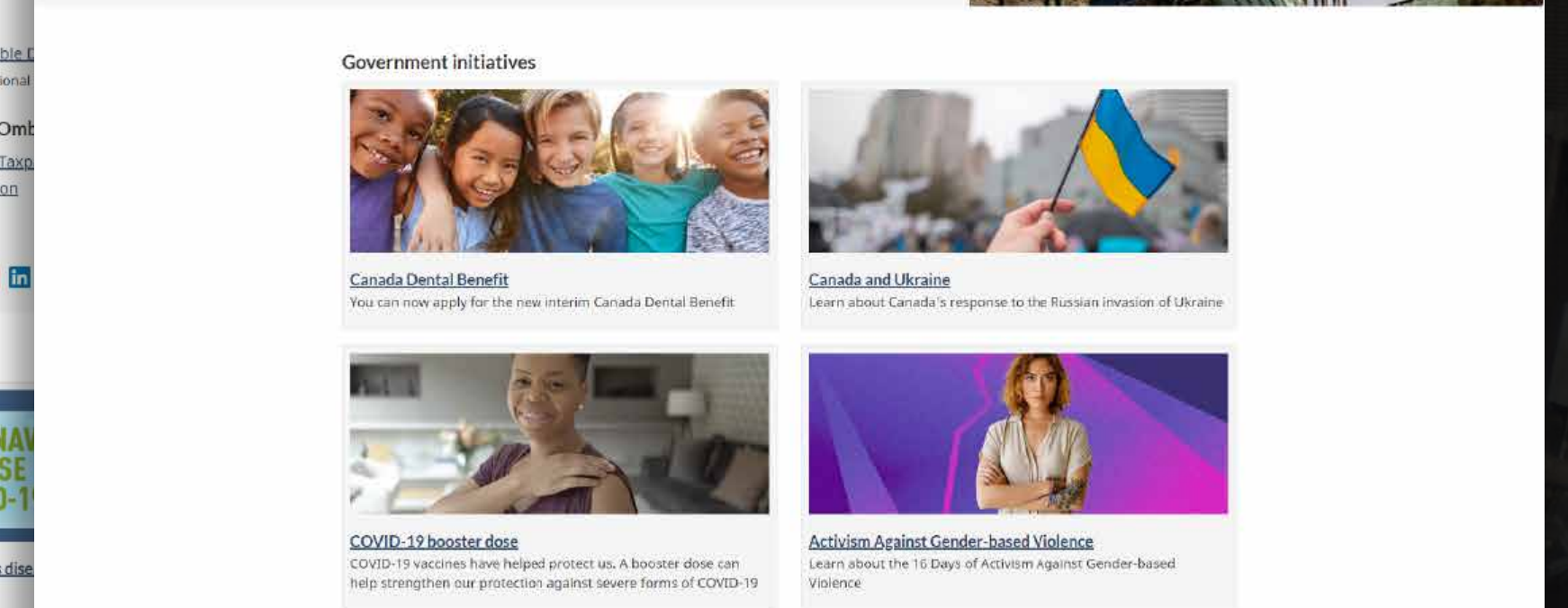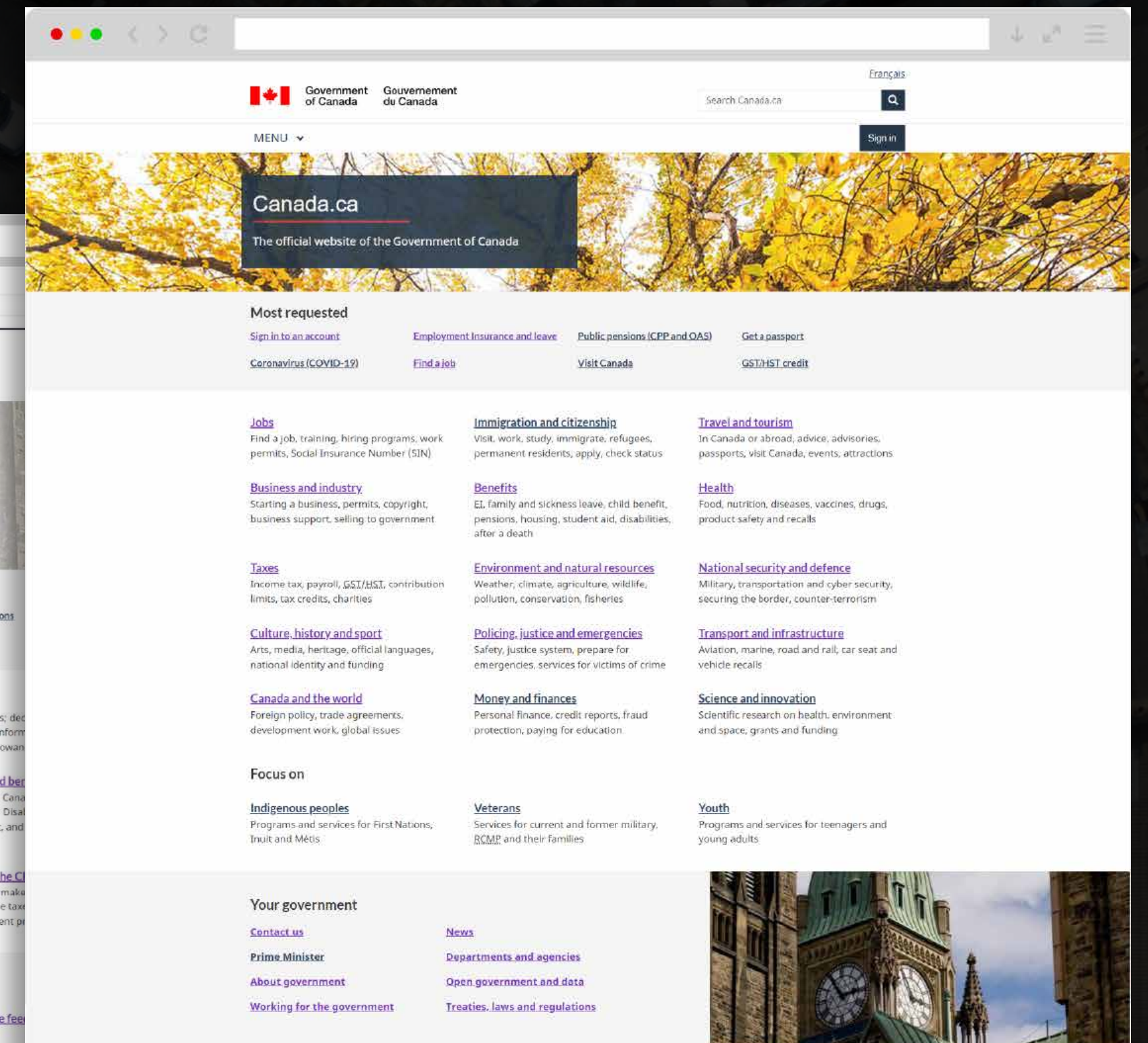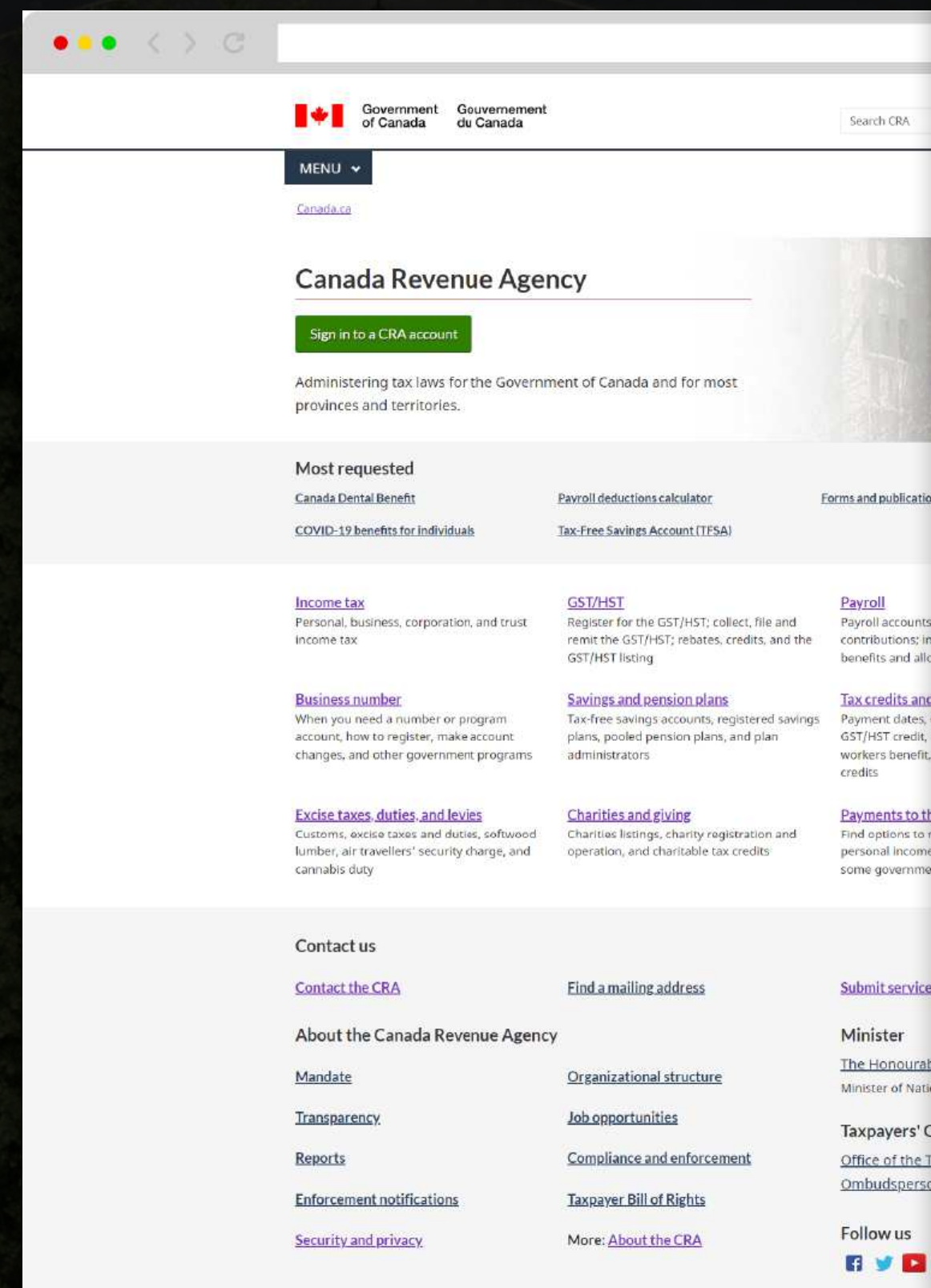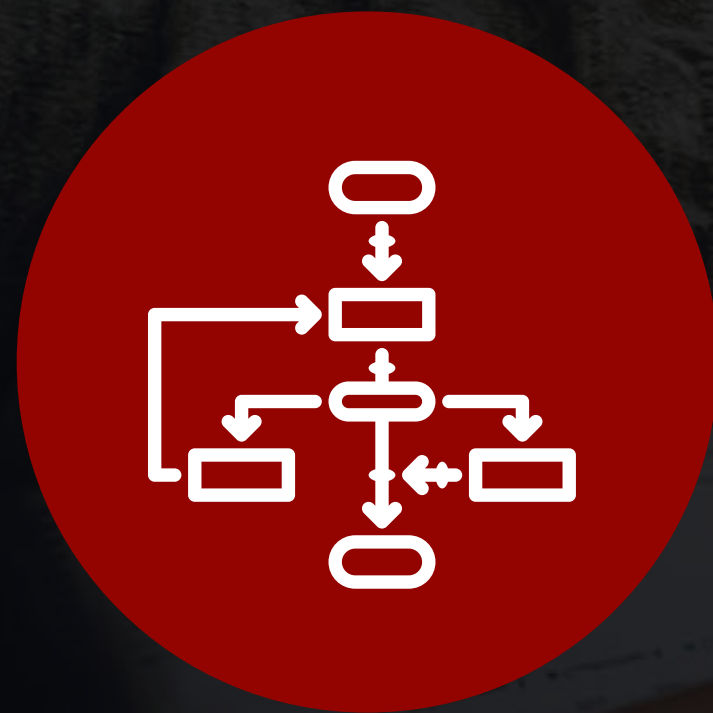
Exploring the problem

Evaluation and testing was critical when discovering key insights. User tasks, wire flows and heuristic evaluations provided a foundation for analysis.

The plan

Empathize

User & Wire flows

Initial User Testing

Heuristic Evaluation

Prototyping, Testing & Iterating

LISA WANG

BIO

Lisa lives downtown Toronto. While she enjoys the freedom of controlling her own time a busy single mother and entrepreneur, there are many administration items that require her time and attention. Lisa needs to manage her taxes carefully, making sure she understands the tax implications and deadlines that pertain to her business.

NEEDS

- Informed of all tax requirements and regulations.
- Knowledge of first-hand information from government websites to fully understand how taxes affect her business.
- Have resources that can answer her tax questions.

PAIN POINTS

- Struggles to find information on the website efficiently.
- Often gets lost navigating the CRA website.
- Can't keep track of all the tax requirements.

LIFE IS BUSY AND I NEED TO EFFICIENTLY MANAGE MY TAXES.

AGE: 46

LOCATION: TORONTO, ON

EDUCATION: BA COMMUNICATIONS

JOB: ENTREPRENEUR

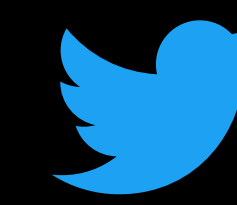**FAMILY:** SEPARATED WITH 2 KIDS

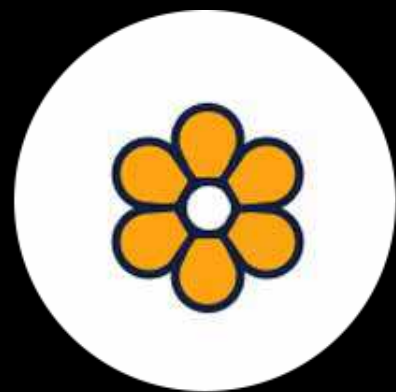## PERSONALITY TRAITS

PATIENCE

FLEXIBILITY

PROBLEM SOLVING

SOCIAL

TRUSTED BRANDS

Apple
fitbit
Google
Aritzia
Uber
TESLA

Website Analysis
Heuristic Evaluation

Aesthetic & Minimalist Design

ISSUE
While the design is minimalist, it sufferers from being copy heavy with few visual breaks for the user resulting in user fatigue.

RECOMMENDATION
Content segmentation with cards and colour blocking.

SEVERITY
🔴
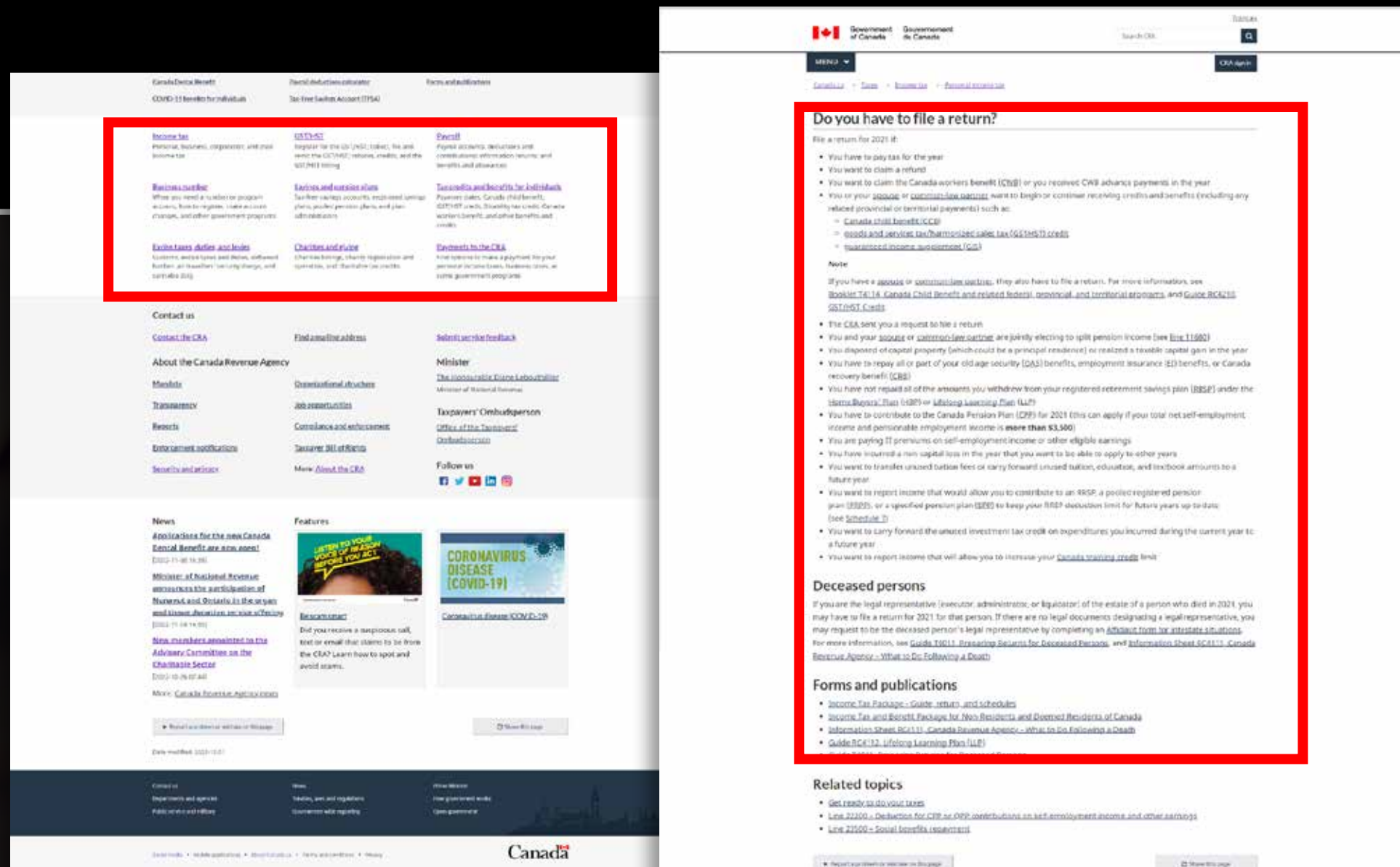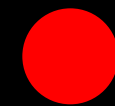
Consistency & Standards

ISSUE
The CRA "website" is not an individual website, rather part of the larger Government site. Additionally, the landing page can't be found in the main menu revealing a high-level Information Architecture problem.

RECOMMENDATION
Revising the navigation system to make the CRA site easier to find.

SEVERITY
🔴
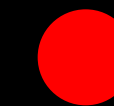
Website Analysis
Heuristic Evaluation

User Control & Freedom

ISSUE
The search feature yields poor results which limits user control, flexibility and efficiency when looking to complete tasks.
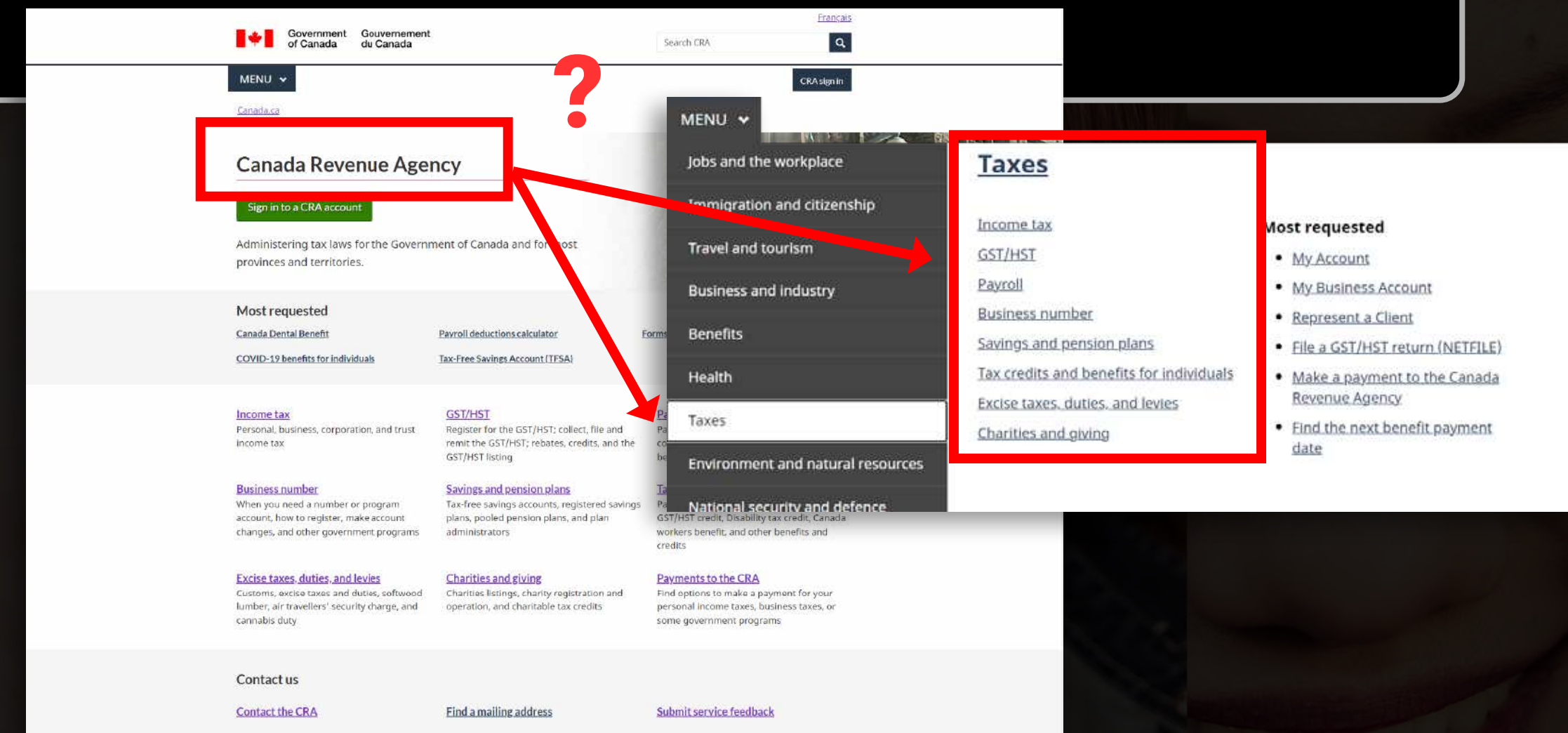
RECOMMENDATION
UX copy writing for all headings with keyword considerations.
Note: Likely outside of the scope of this project.

SEVERITY ⬤
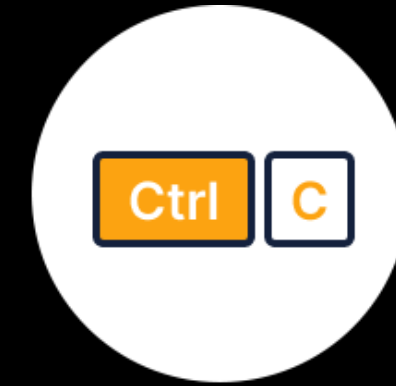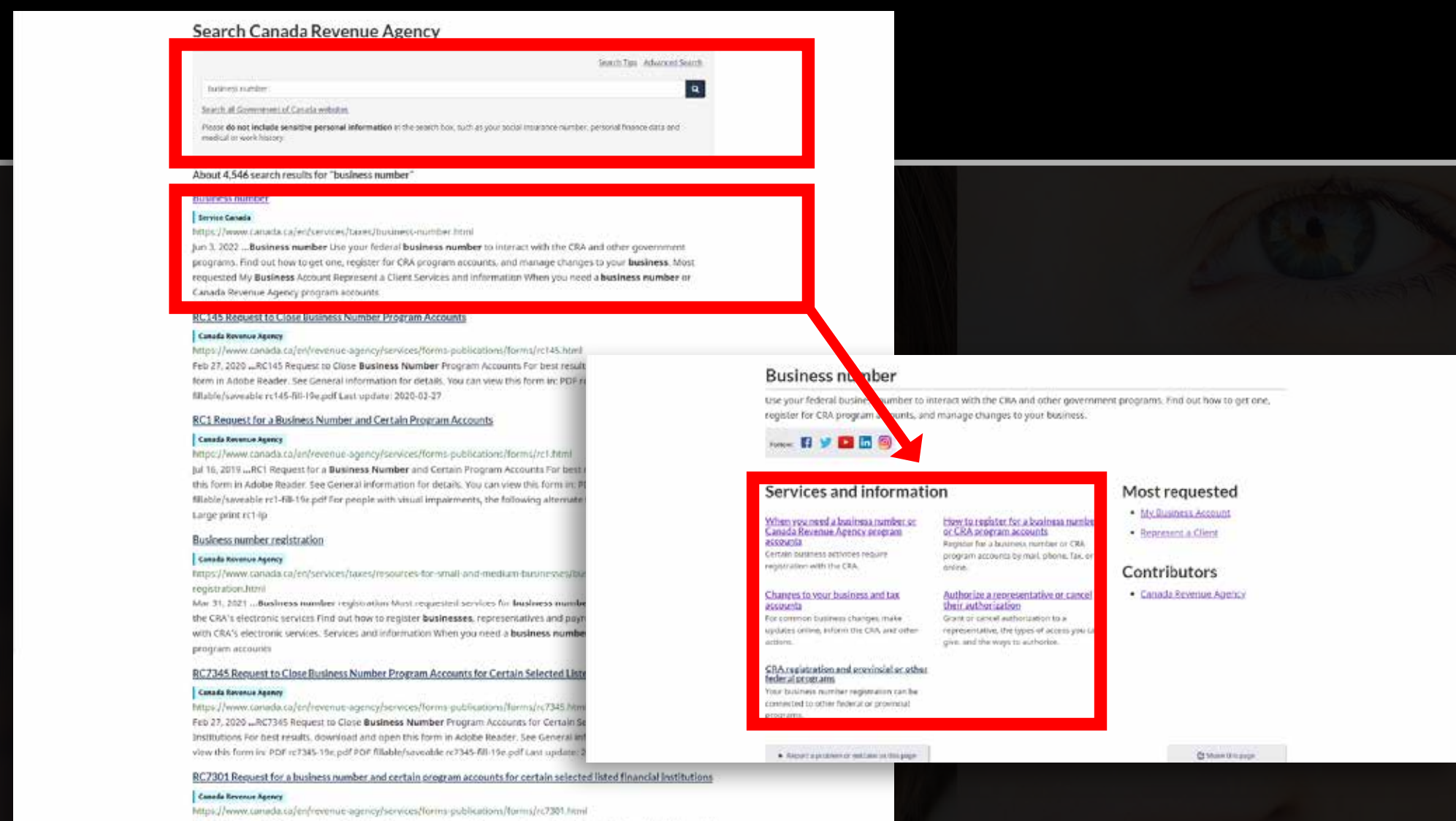
Flexibility & Efficiency of Use

ISSUE
Content sections on the website all look similar forcing the user to read a large amount of text with a confusing hierarchy.

RECOMMENDATION
Create different sections that will help the user differentiate and create associations with a hierarchy.

SEVERITY ⬤
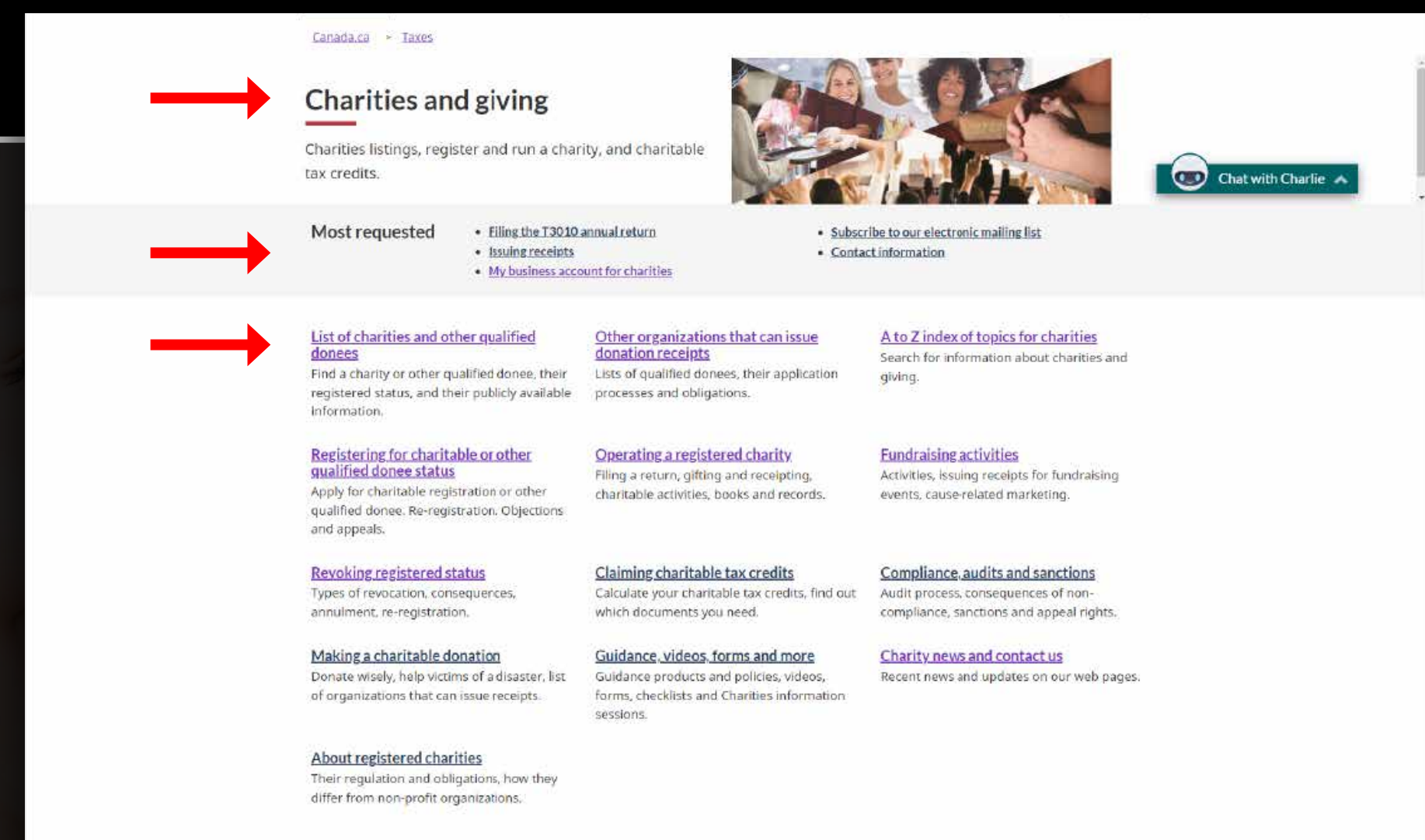
Website Analysis
Heuristic Evaluation Takeaways

Strengths

- The CRA site showcases a minimalist design.

- There is an enormous amount of content on the site which makes it a valuable resource for Canadians looking for tax-related information

- Fast loading and no real issues with color accessibility

- Highly accessible for people with impairments

Opportunities

- The minimalist sufferers from being too copy heavy with few visual breaks for the user.

- The search feature yields poor results which limits user control, flexibility and efficiency when looking to complete tasks.

- Help is not helpful, although there is a beta chat bot available for users.

- Information architecture is a high-level problem.

Full evaluation   Annotated Screenshots   Colour Accessibility Test

Website Analysis
User Tasks & Wire flows

A series of tasks that a typical user might undertake as an individual, business & charity:

1 | **Finding personal income tax filing dates**

2 | **Finding forms of acceptable payments by the CRA**

3 | **Researching requirements for obtaining a business number**

4 | **Researching requirements for operating a charity in Canada**
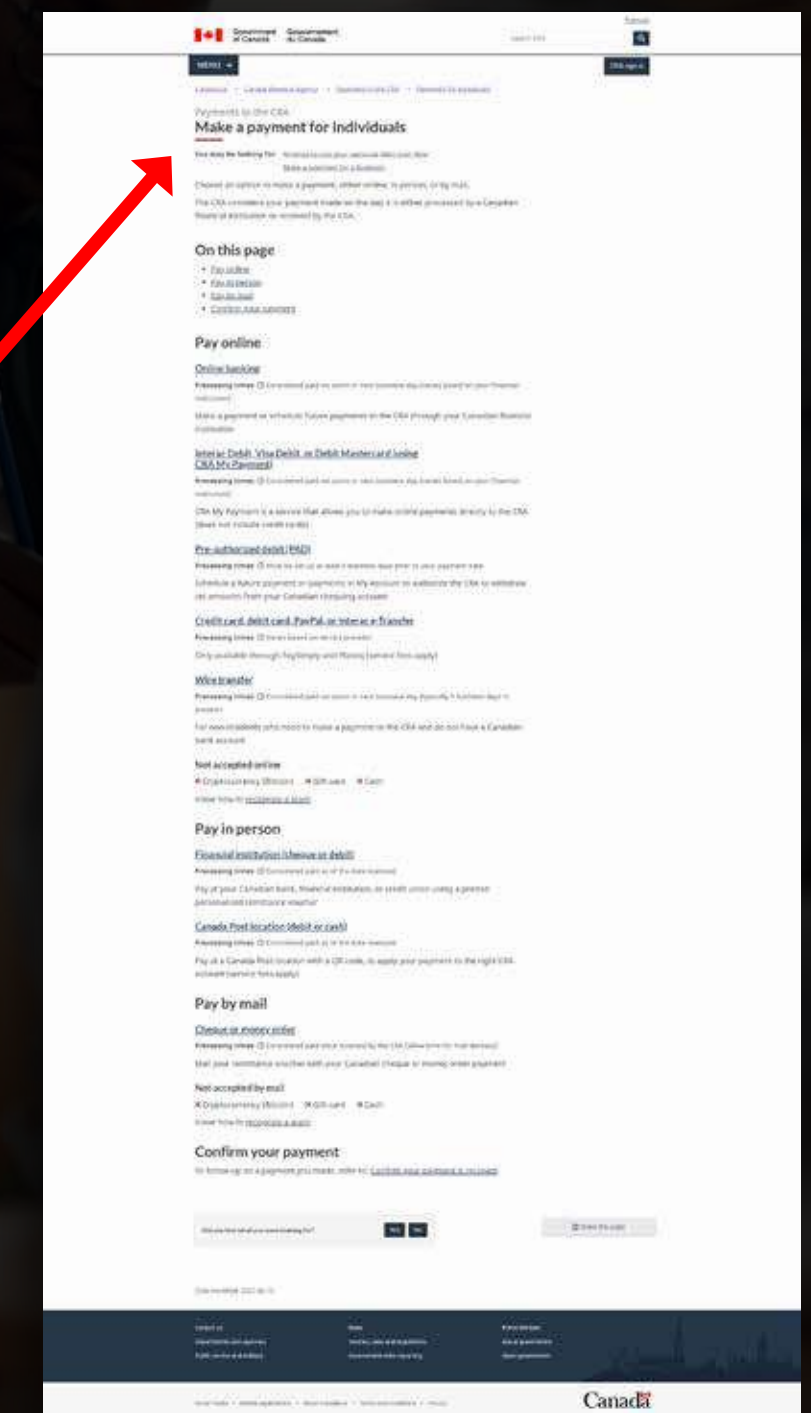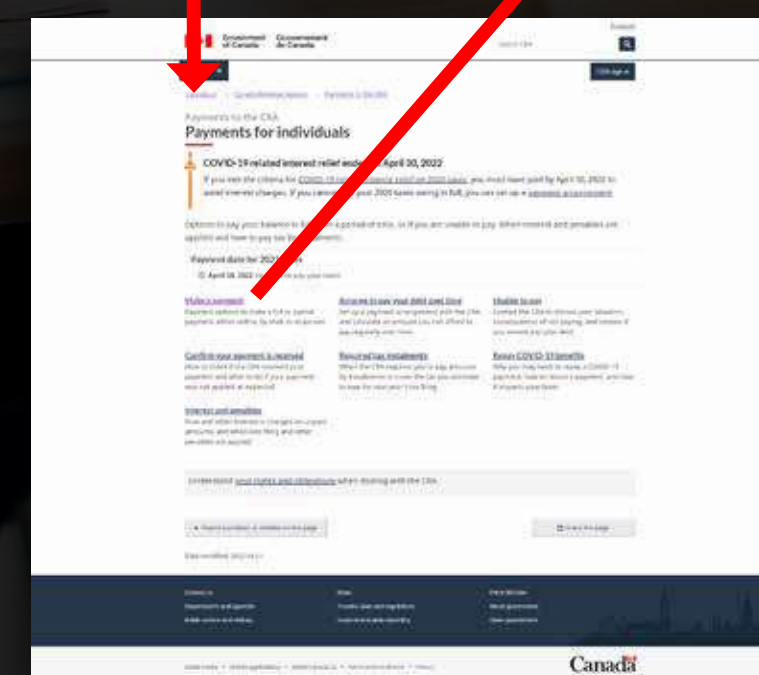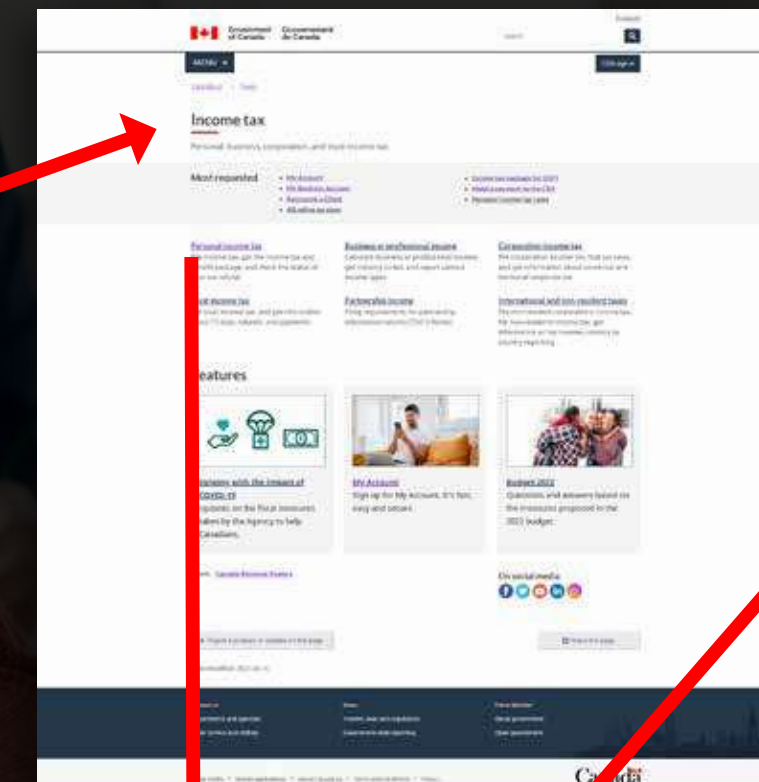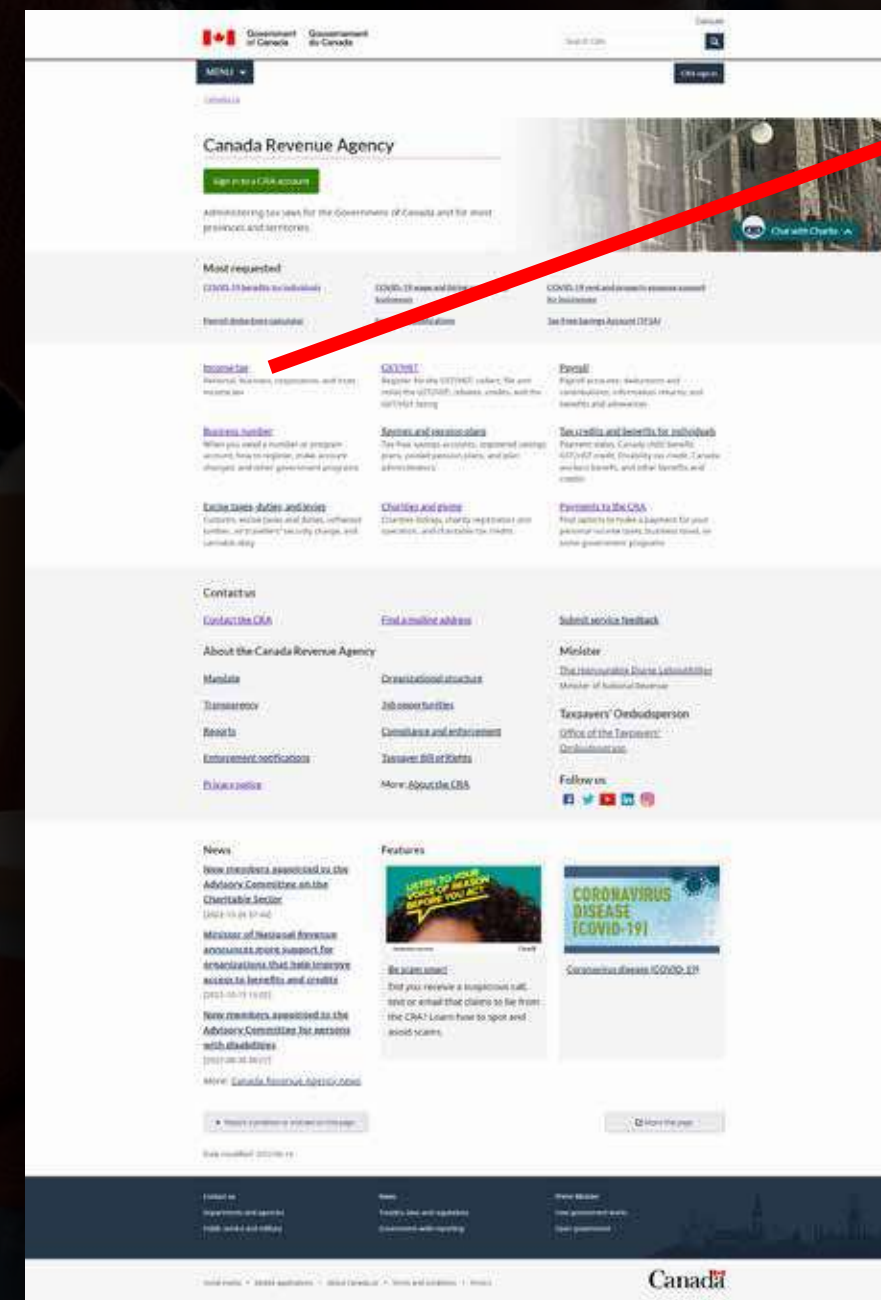
Post-Test Analysis
Navigation Heuristics | Desktop

Heuristic Annotations | Desktop

A navigation redesign could be a helpful as users consistently have trouble finding specific information. Key Insights:

Taxes vs. CRA categories
- Users arrive at different pages depending if they used the Gov of Canada home page, navigation or internal search engine vs. a Google search.

Tertiary content under Taxes
- People seem to have difficulty finding specific information within each of the third tier subcategories.

💡 **IA needs to be streamlined and aligned with nav**

💡 **Rewrite navigation names and categories to be more concise**
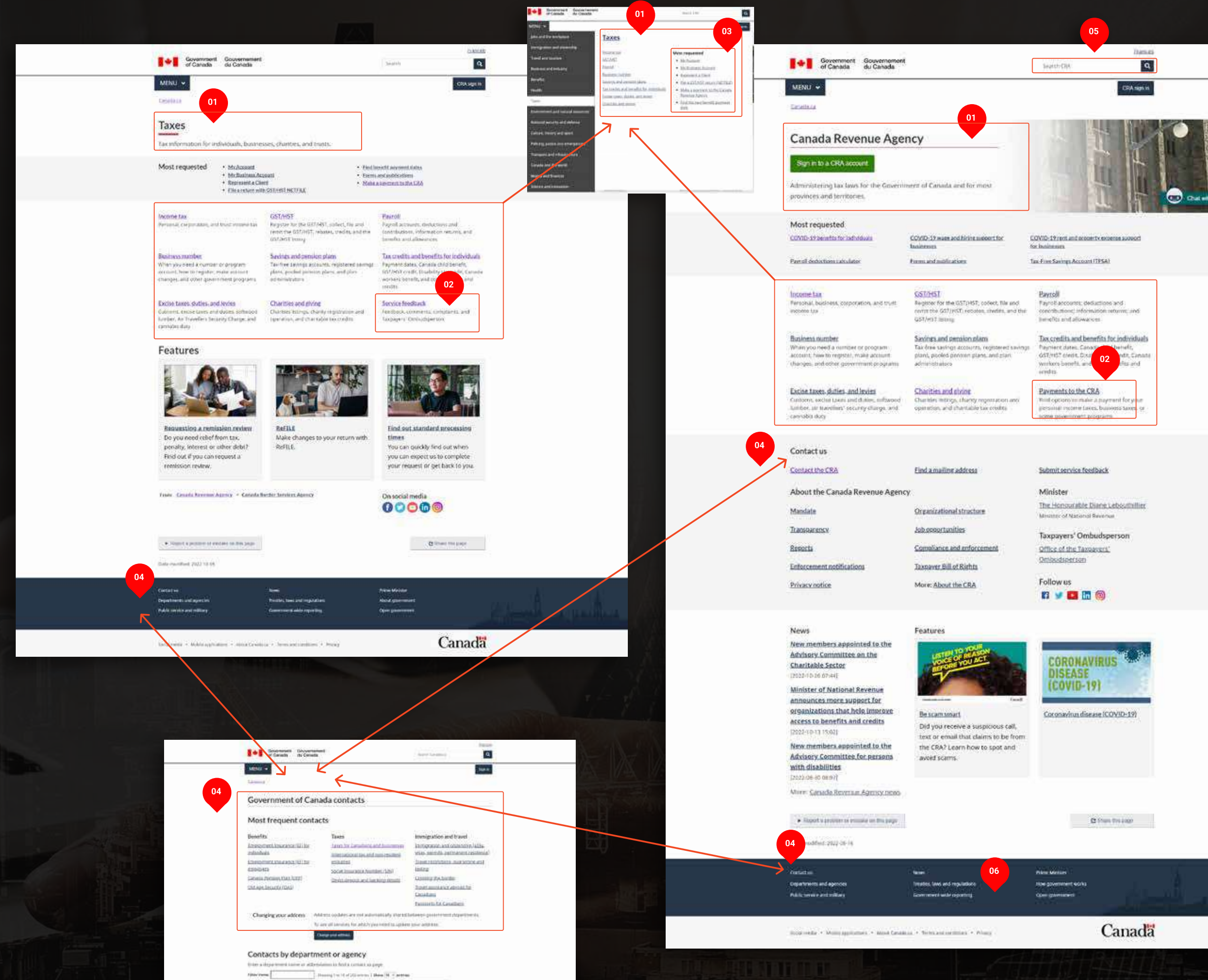
Post-Test Analysis
Navigation Heuristics | Mobile

Discovery options are limited as the menu pertains to Government of Canada's top-level departments. Key Insights:

Taxes vs. CRA categories

- Users find it confusing to differentiate between the "Taxes" and "CRA" landing pages.

- Once on the Taxes landing page, users find it difficult to find content related to the subcategory

💡 **IA needs to be streamlined and aligned with nav**

💡 **Rewrite navigation names and categories to be more concise**
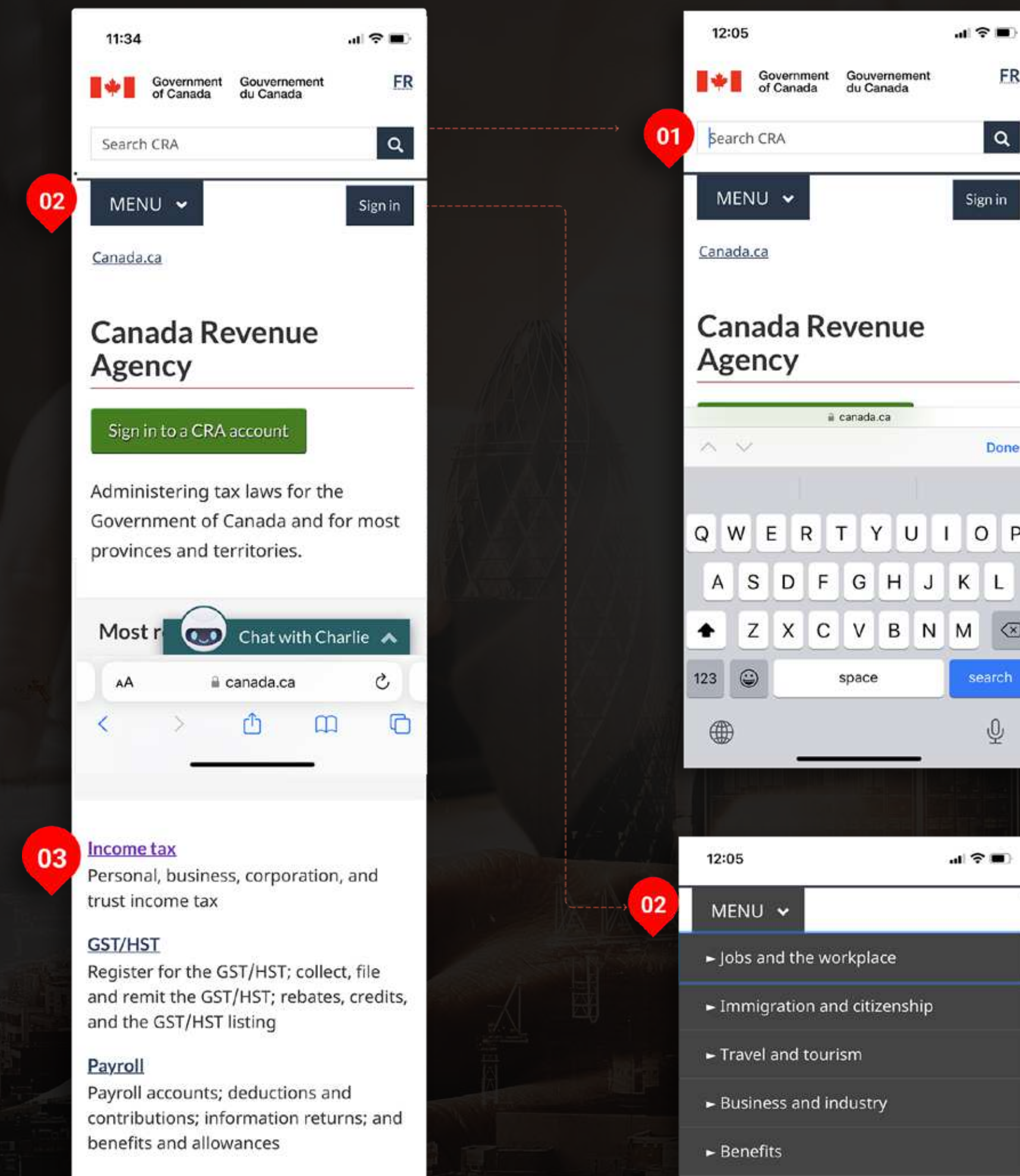
Sitemap Analysis

Problem

The CRA landing page can't be found under taxes or under the main menu. This is a big area of confusion.

[View current Sitemap](#)

Government of Canada
0.0

0.1 Français / English
0.2 Search
0.3 Sign In

Taxes

01.0 Jobs and the Workplace
02.0 Immigration and citizenship
03.0 Travel and tourism
04.0 Business and industry
05.0 Benefits
06.0 Health
07.0 Taxes
08.0 Environmnet and natural resources
09.0 National Security and defence
10.0 Culture, history and sport
11.0 Policing, justice and emergencies
12.0 Transport and infrastructure
13.0 Canada and the world
14.0 Money and finances
15.0 Science and innovation
16.0 Indigenous Peoples
17.0 Veterans
18.0 Youth

07.0.1 Most requested
07.0.0 CRA Sign in

19.0 CRA
19.0.1 Most requested

07.1 Income Tax
07.2 GST/HST
07.3 Payroll
07.4 Business Number
07.5 Savings and pension plans
07.6 Tax credits and benefits for individuals
07.7 Excise taxes, duties and levies
07.8 Charities and giving
07.9 Service feedback

All pages

07.1.1 - 07.9.1 Most requested

19.1.1 Payments to CRA (Individuals / business)
19.1.2 Contacts specifict to CRA

07.1.1 Personal, business, corporation, and trust income tax
07.2.1 When to register for and start charging the GST/ HST
Steps for payroll
Services and information
Services and information
07.6.1 Canada child benefit (CCB)
Services and information
07.8.1 List of charities and other qualified donees
07.9.1 Submit service feedback

07.3.1 1. Find out if you need to make payroll deductions
07.4.1 When you need a business number or Canada Revenue Agency program accounts
07.5.1 Registered retirement savings plan
07.7.1 Excise duties

07.1.2 Business or professional income
07.2.2 Open or manage an account
07.3.2 2. Set up a new
07.5.2
07.6.2 GST/HST credit
07.7.2 Excise taxes
07.8.2 Other organizations that can issue donation receipts

Sitemap Analysis

Solution

Nest CRA category under taxes and give the user multiple ways to navigate through associated content.

💡 **Sorting via sitemap proved more fruitful vs an attempted card sort**

[Redesigned Sitemap](#)

[CRA Website Inventory | Current](#)

[Card sorting Attempt](#)
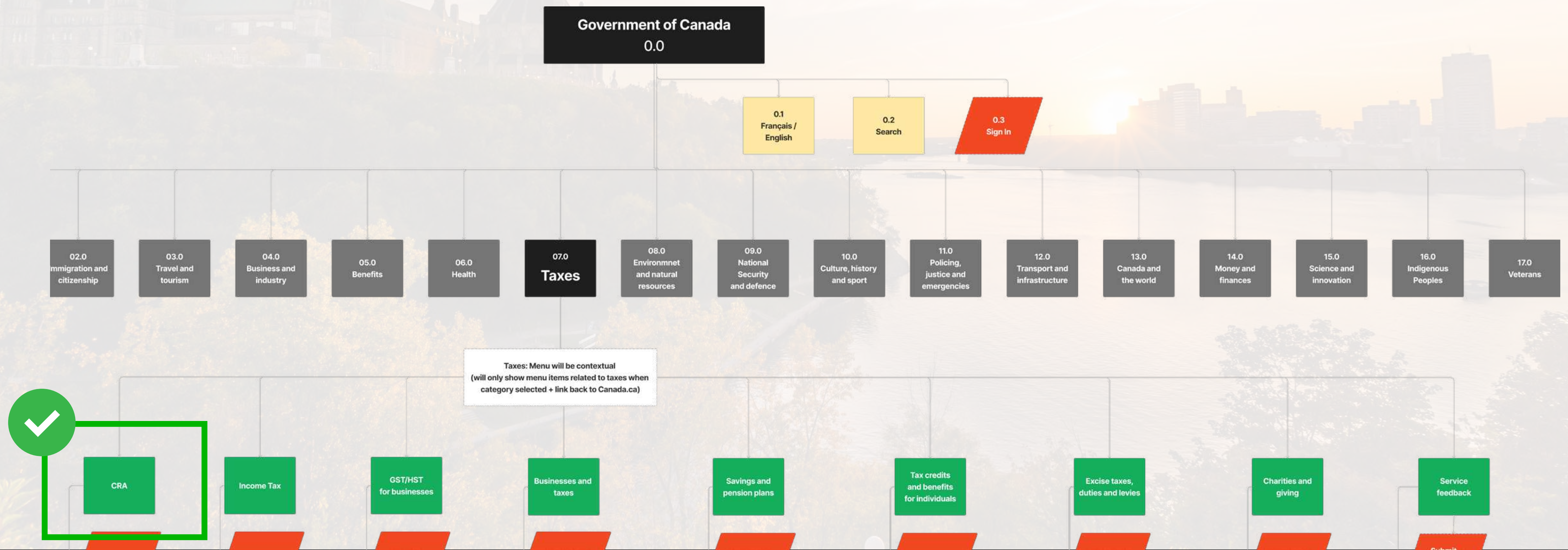
Proposed Solutions

💡 **Rethinking of the IA will be key to improving the user experience.**

01
Redesign Navigation

- Improve discoverability

02
Cards and enhanced banner

- Improve hierarchy
- Reduce user fatigue

03
Improve sign in access

- Improve recognition over recall

01 Navigation
Desktop | Initial Redesign

Before

• The menu only allows the user to see the top-level content for each department

• CRA is inaccessible from the menu
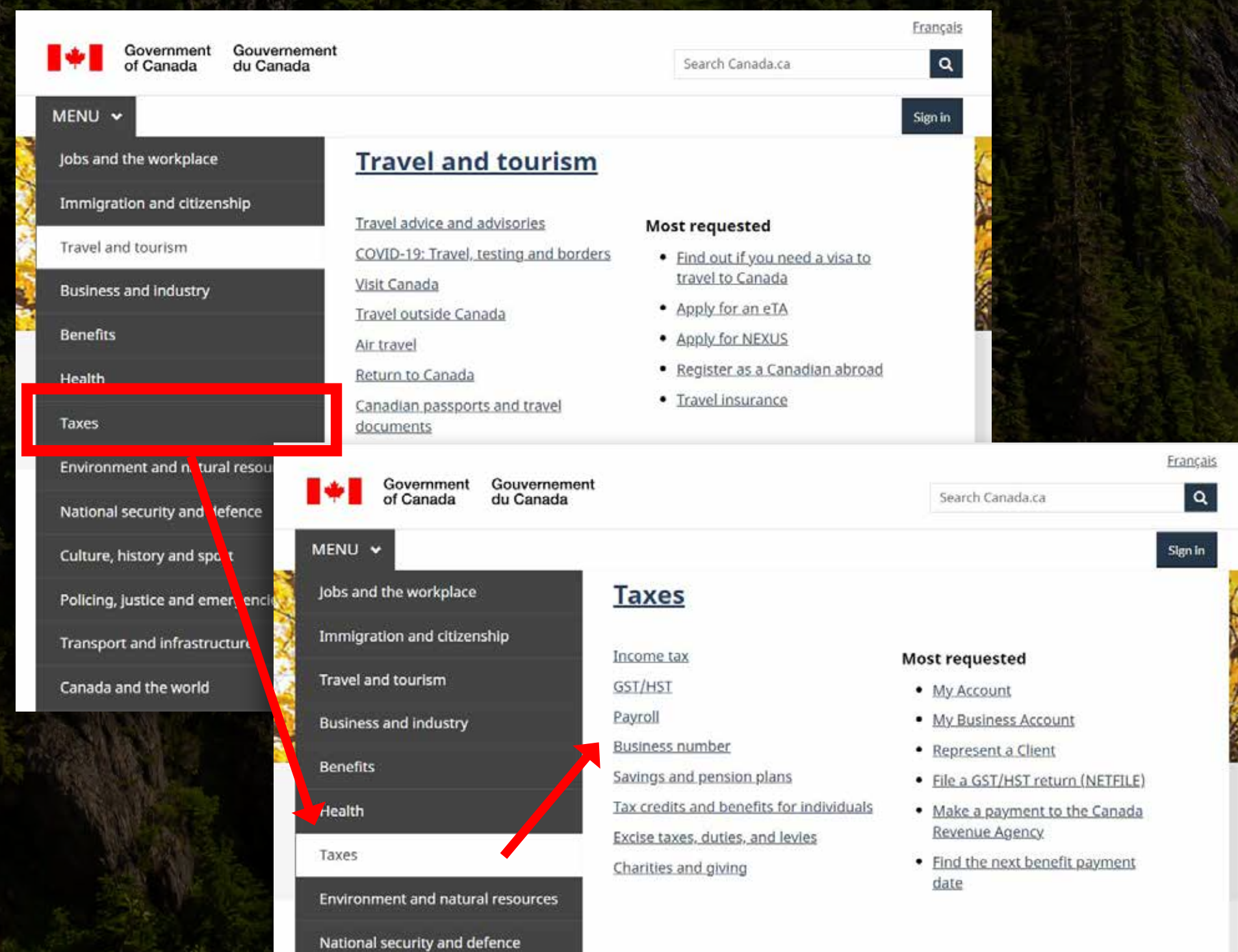
After

• Adjusted the mega nav to allow the user to view more of the content, including CRA.

• Each department's menu will be contextual with categories specific to that department appearing in the horizontal menu.

• A drop down menu for each department now gives the user access to additional content.
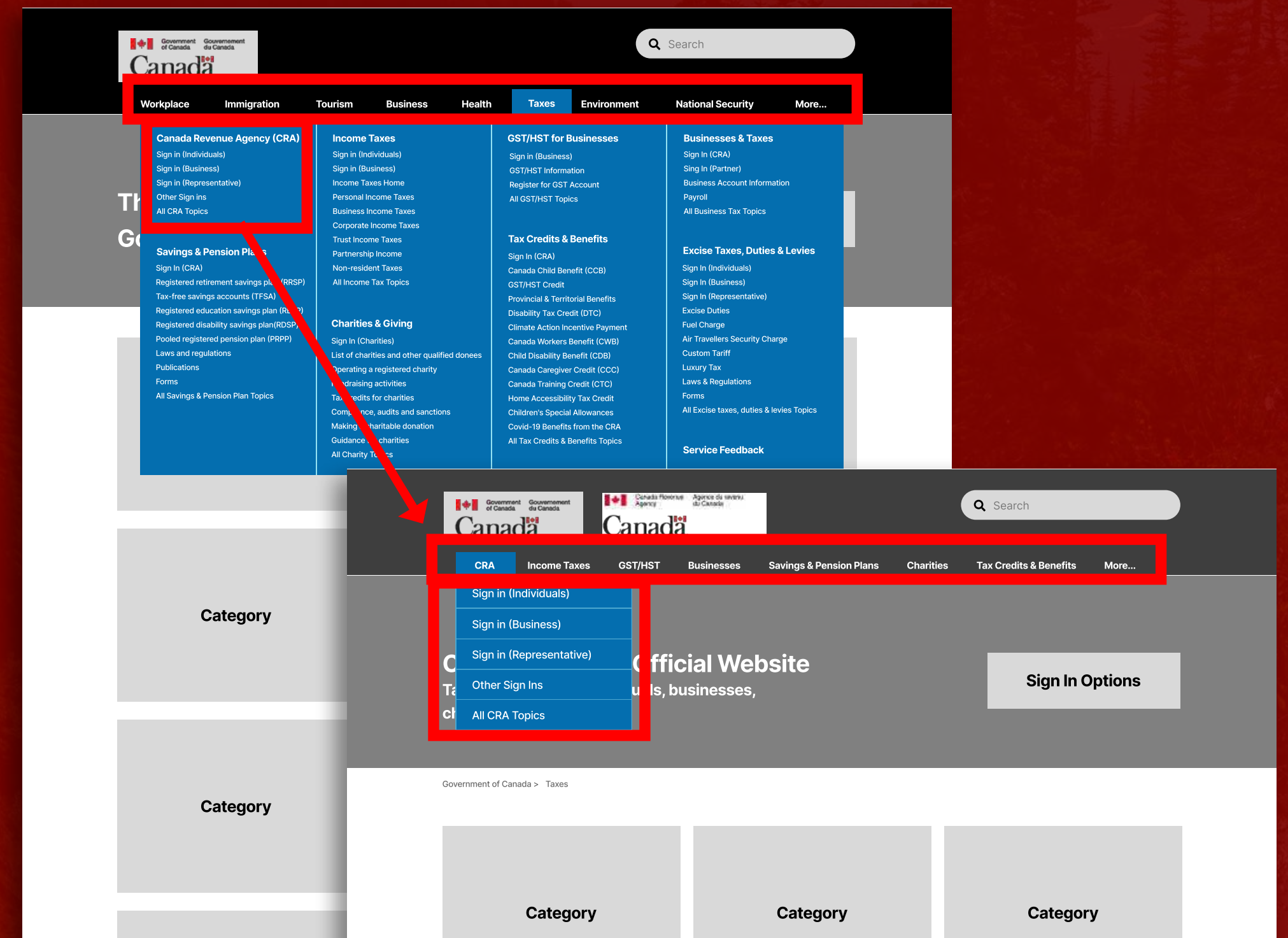
01 Navigation
Mobile | Initial Redesign

Before

- The menu only allows the user to see the top-level content for each department

- CRA is inaccessible from the menu
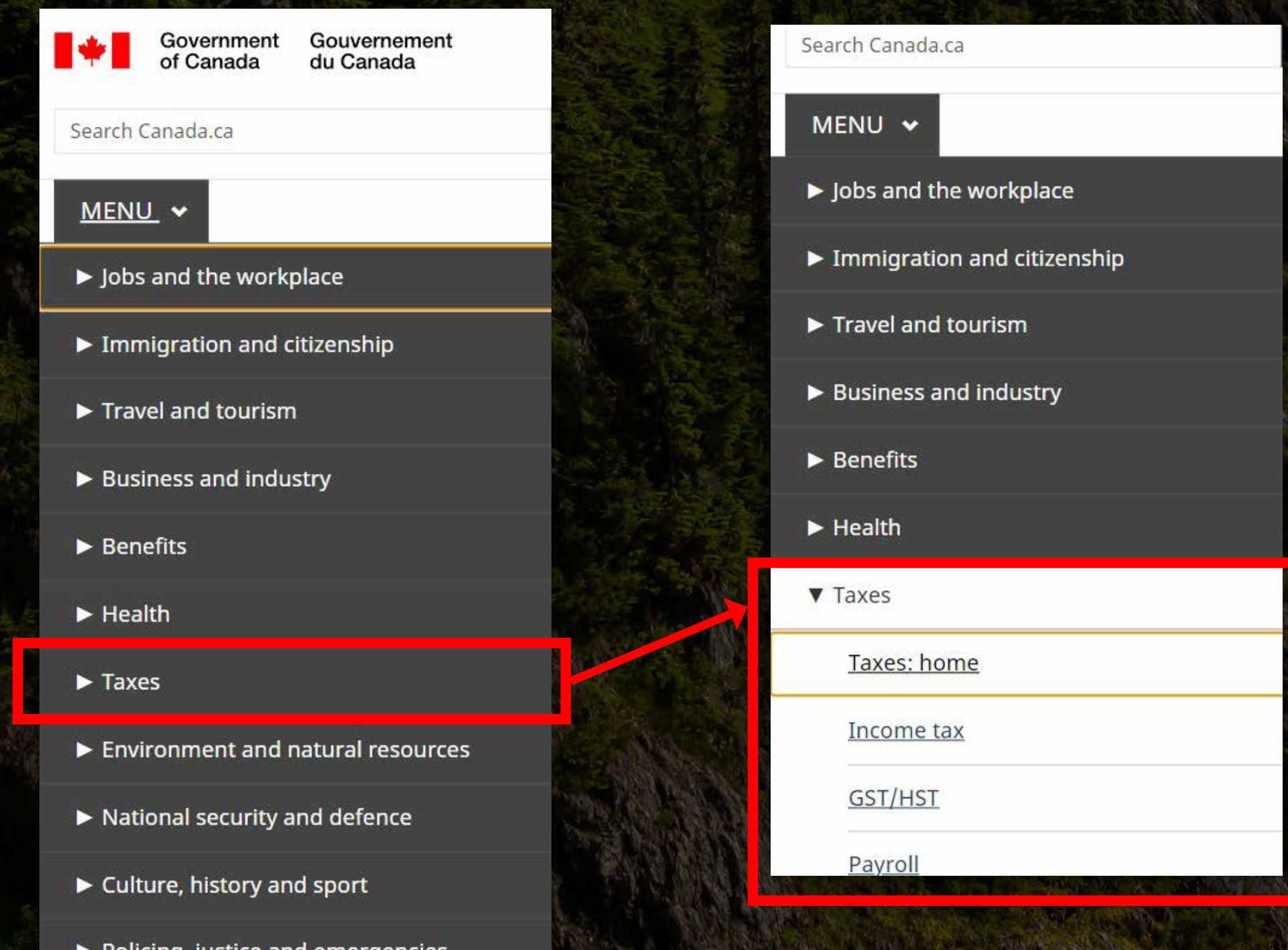
After

- CRA has now been added to the menu.

- Each department's menu will be contextual with categories specific to that department appearing in the hamburger menu.
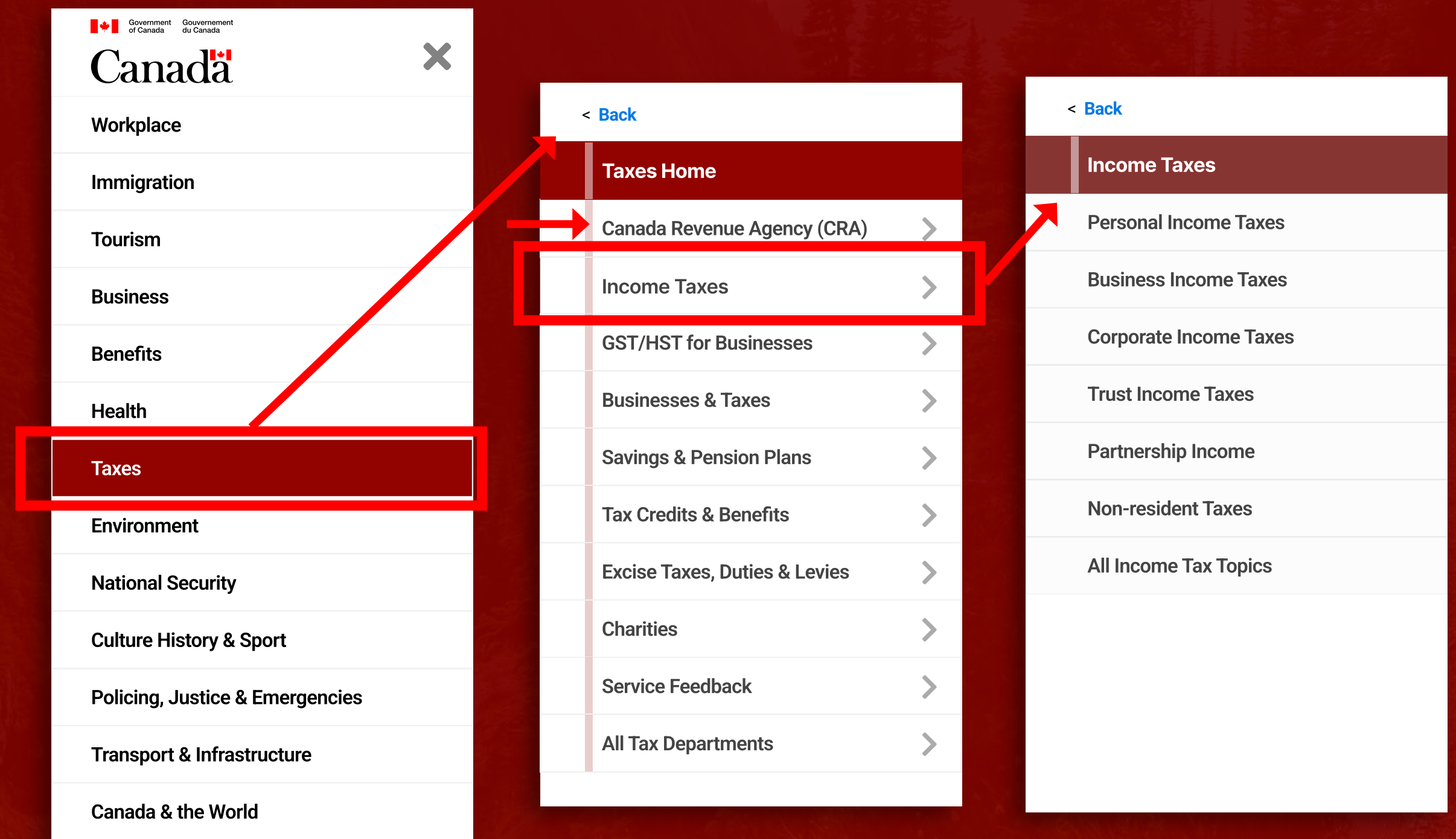
02 Cards & Banner
Desktop | Initial Redesign

Before

• Department categories are set in as text only making them difficult to differentiate.

• The banner could be better utilized and more consistent across the site.
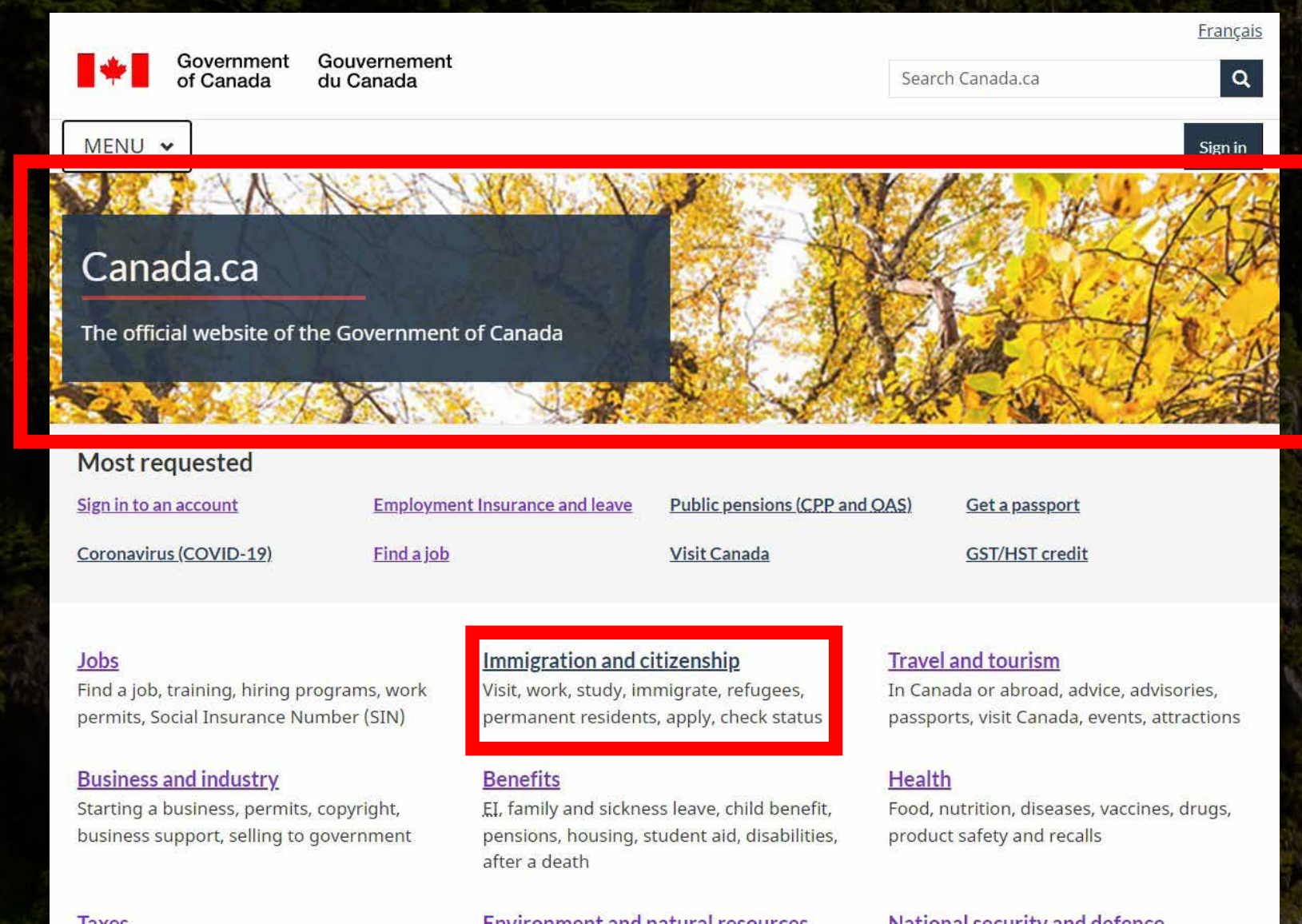
After

• Utilized cards for departments with CTAs to help block the content and create visual separation.

• Housing the sign in button in the banner for prominence & keep the style consistent across the site.
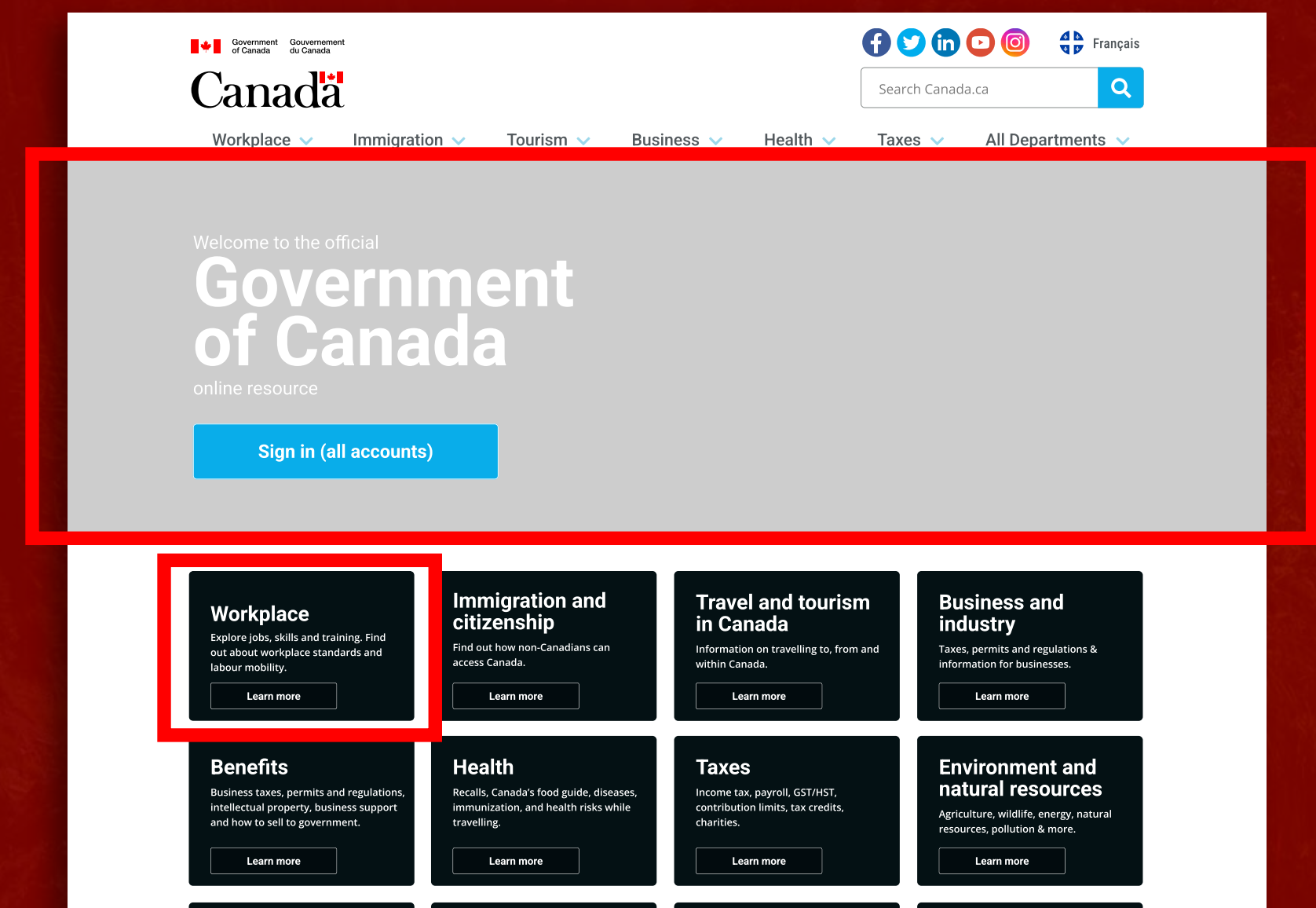
03 Sign in
Desktop | Initial Redesign

Before

• There are multiple sign in options for most departments.

• Sign in buttons are inconsistently found in multiple areas but don't stand out.
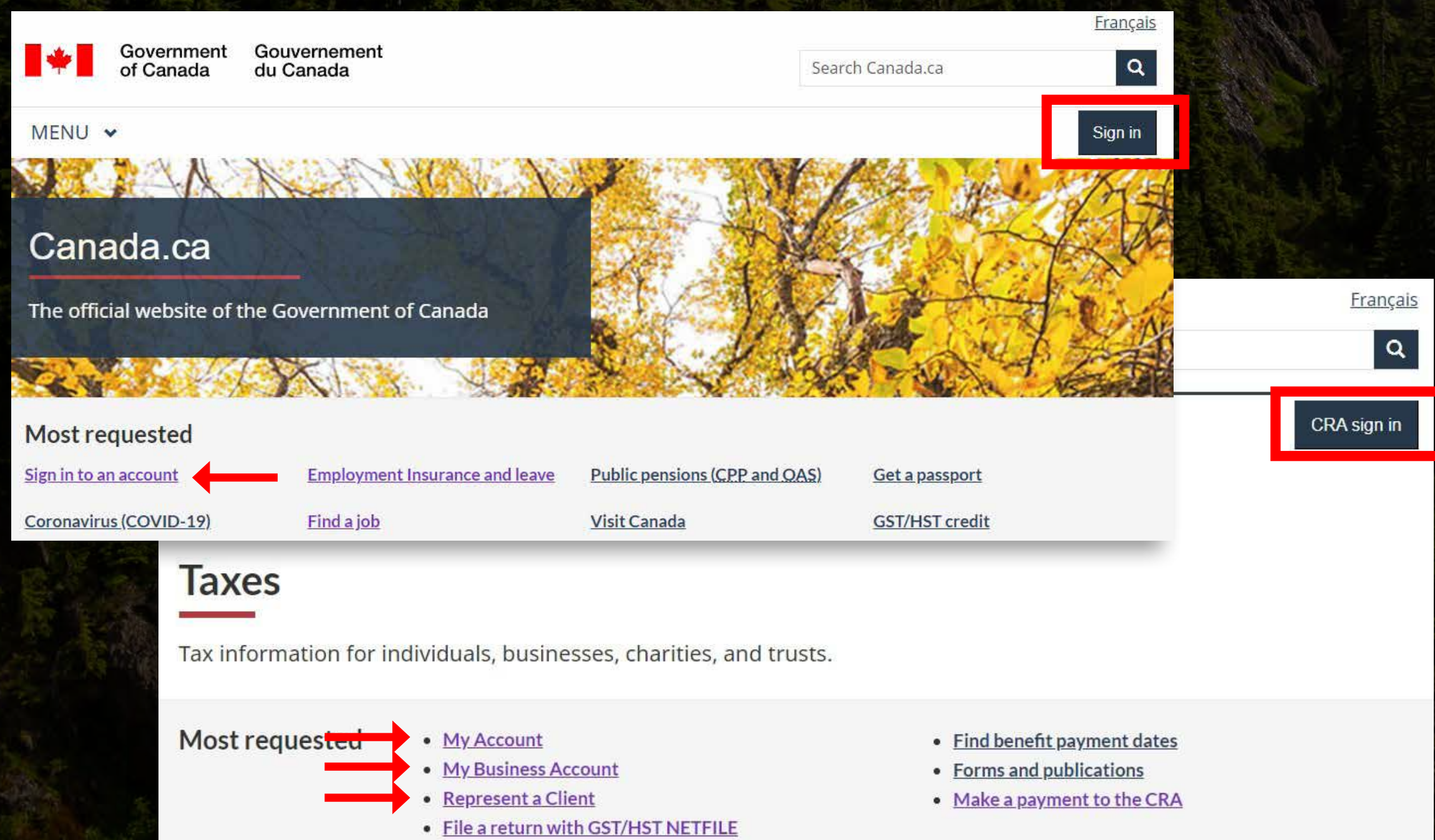
After

• Make sign in options more clear for users who are looking for the different sign in options.

• For each department, it should be more clear what specific sign in options are available.

User Testing
Navigation

Insights

- Users appeared to have better navigation success with the redesign for both desktop and mobile.

- The combination of direct and indirect success rates means that the strategy of giving users multiple pathways to content was a good choice.

- Comments overall pointed to good comprehension of the IA.

Next Steps

- Refinements to the navigation include better colour contrast to improve readability and recognition.

View testing results

Desktop Sample results

| Direct Success	44.44%	Indirect Success	33.33%	Give-up / Bounce	22.22%
Testers who completed the mission via the expected path(s).	4	Testers who completed the mission via unexpected paths.	3	Testers who left or gave up the mission.	2
Direct Success	66.67%	Indirect Success	22.22%	Give-up / Bounce	11.11%
Testers who completed the mission via the expected path(s).	6	Testers who completed the mission via unexpected paths.	2	Testers who left or gave up the mission.	1
Direct Success	66.67%	Indirect Success	11.11%	Give-up / Bounce	22.22%
Testers who completed the mission via the expected path(s).	6	Testers who completed the mission via unexpected paths.	1	Testers who left or gave up the mission.	2

Mobile Sample results

Direct Success	28.57%	Indirect Success	71.43%	Give-up / Bounce	0%
Testers who completed the mission via the expected path(s).	2	Testers who completed the mission via unexpected paths.	5	Testers who left or gave up the mission.	0
Direct Success	85.71%	Indirect Success	14.29%	Give-up / Bounce	0%
Testers who completed the mission via the expected path(s).	6	Testers who completed the mission via unexpected paths.	1	Testers who left or gave up the mission.	0
Direct Success	71.43%	Indirect Success	28.57%	Give-up / Bounce	0%
Testers who completed the mission via the expected path(s).	5	Testers who completed the mission via unexpected paths.	2	Testers who left or gave up the mission.	0

Style Guide

- Brand tone is decidedly Canadian featuring landscapes from sea to sky & and representative of all provinces and territories.

- Indigenous peoples and a multi-ethnic are the subject images that are inclusive.

- Clean flexible elements help establish content hierarchy and improve scannability.

Note: Guide will continue to evolve

[View style guide](#)

[View mood board](#)
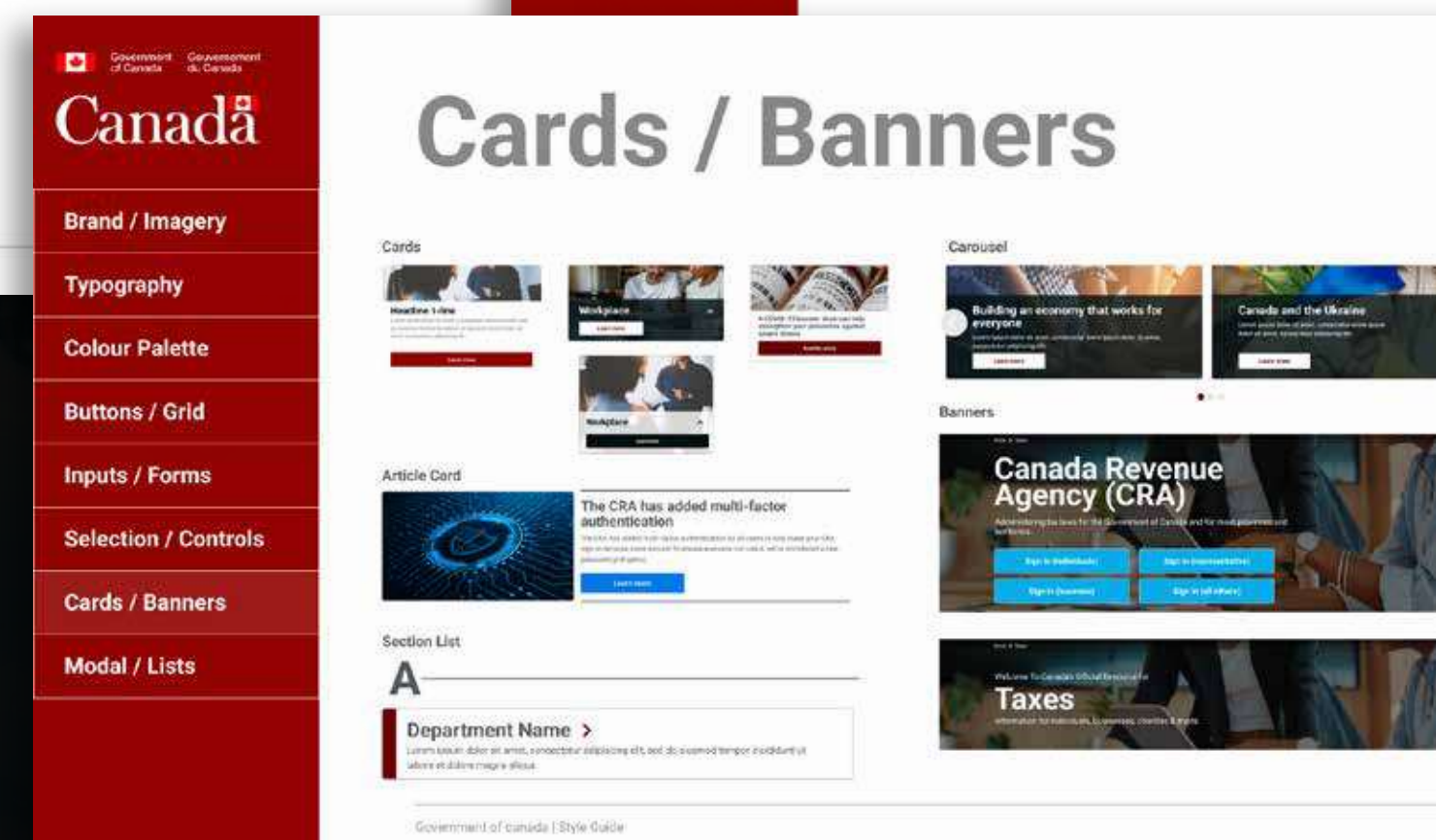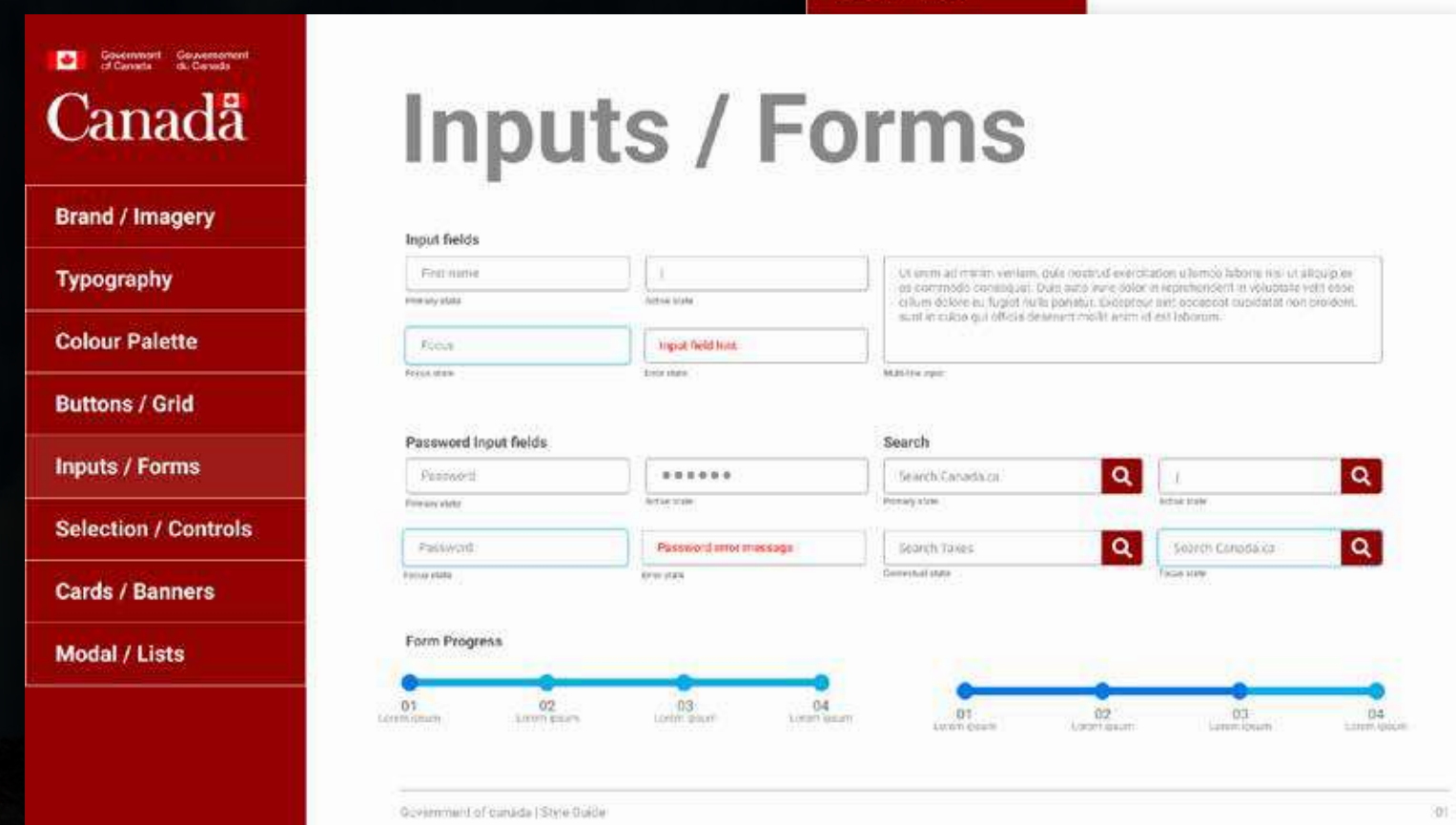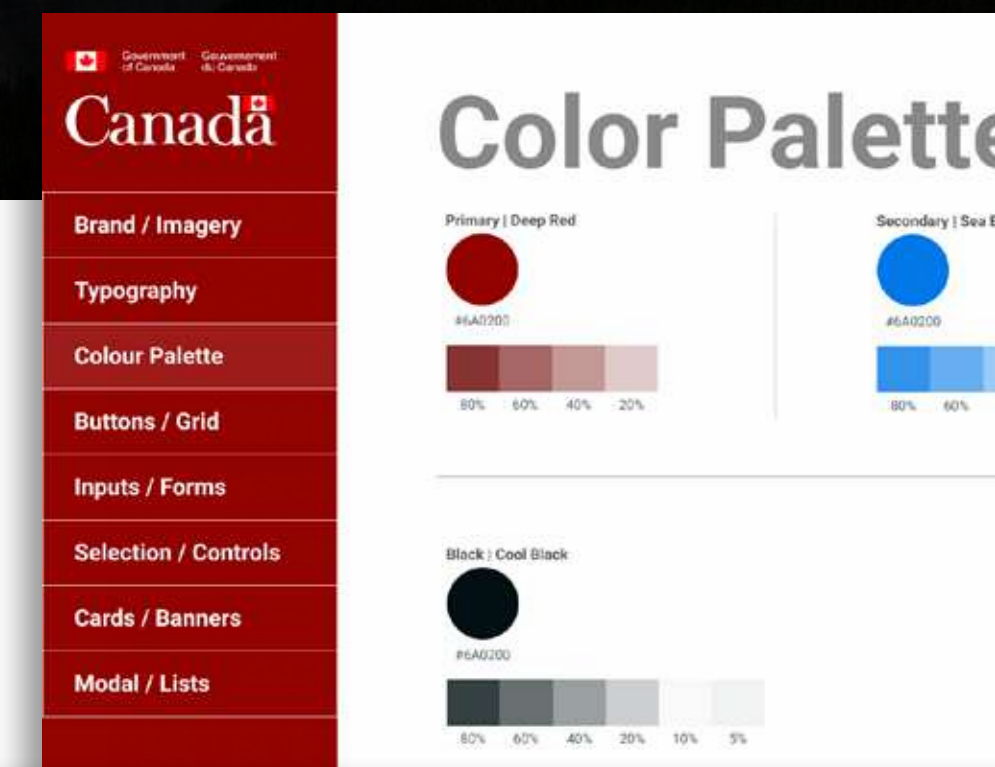
Prototype

Before
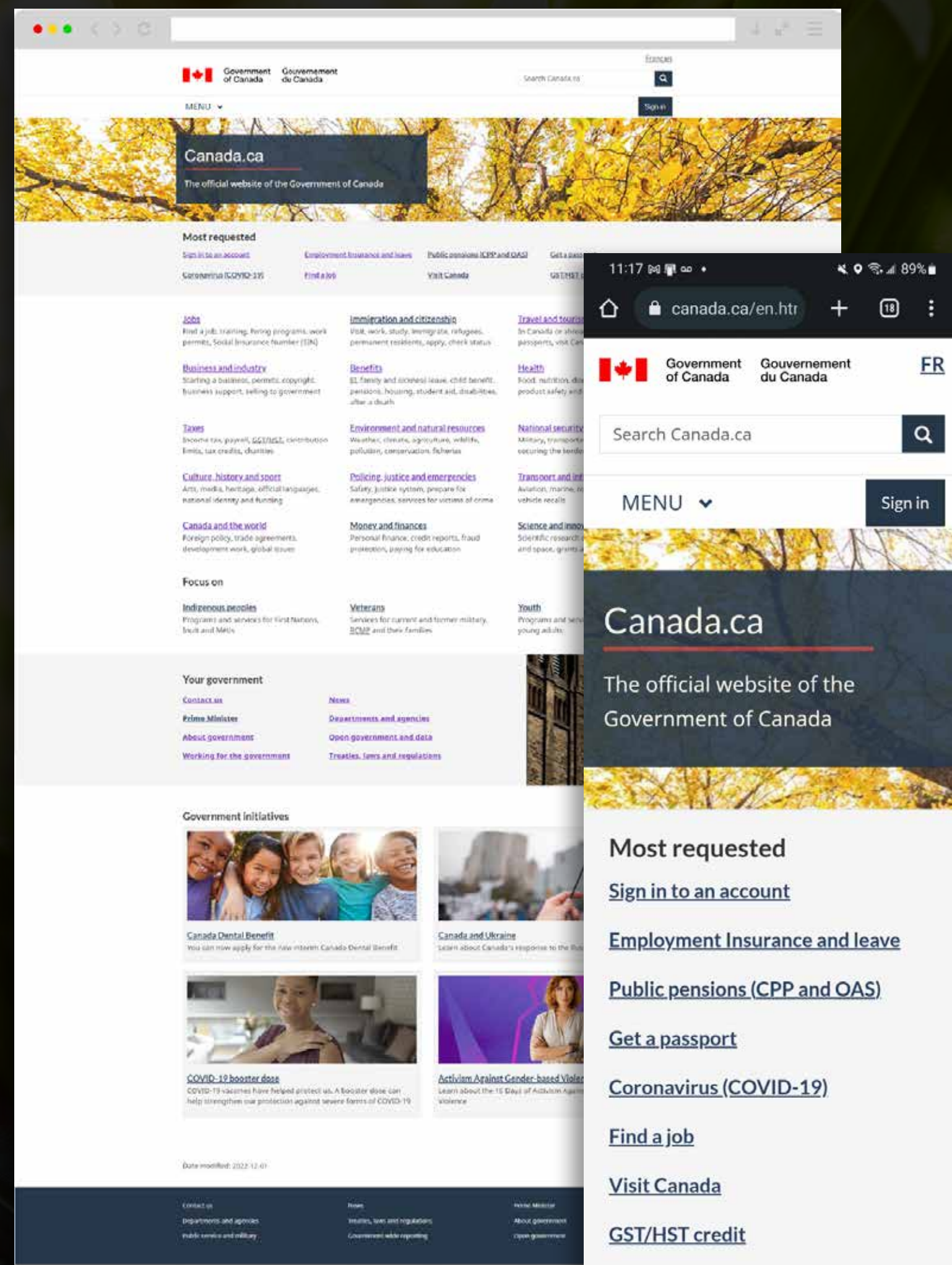
After

Prototype
Key UI Elements
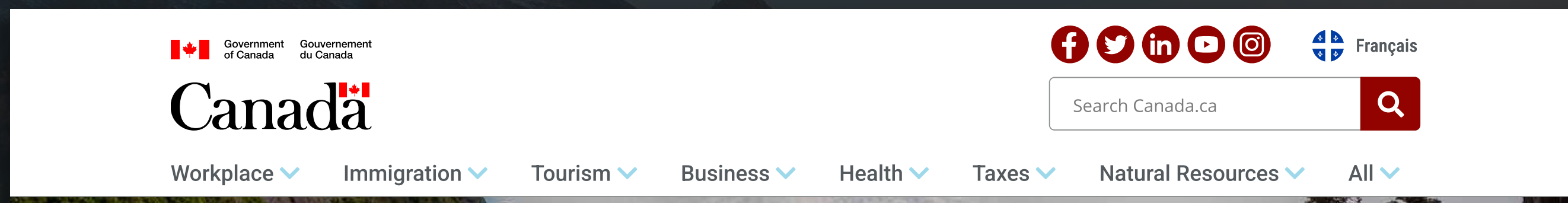
Horizontal Banner
- Improves user recognition & discovery
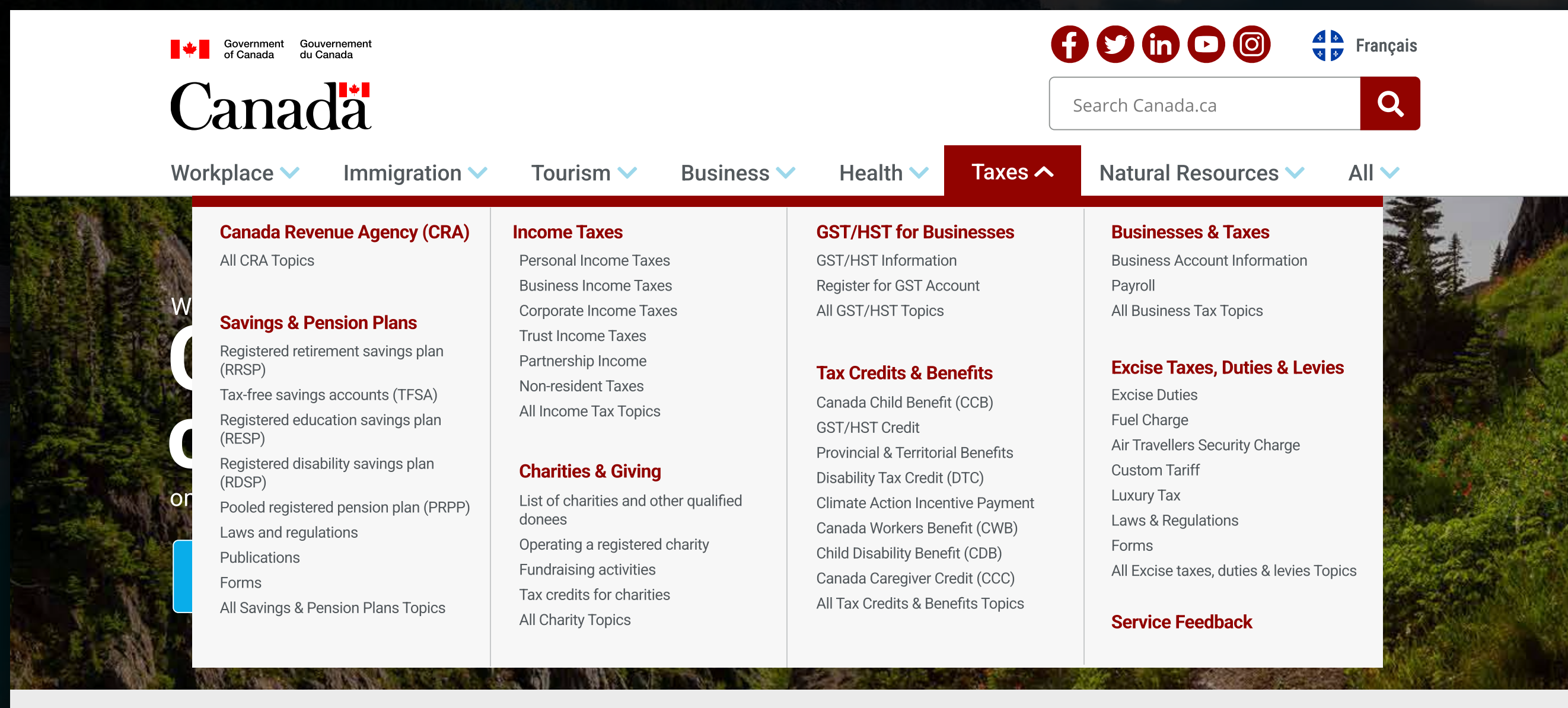
Mega Navigation
- Improved recognition & content scannability

Prototype
Key UI Elements

Canada Revenue Agency (CRA)

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore dolor sit amet, consectetur adipiscing eli.

Learn more

A COVID-19 booster dose can help strengthen your protection against severe illness

Read the article

Indigenous peoples

Learn more

Building an economy that works for everyone

Lorem ipsum dolor sit amet, consectetur orem ipsum dolor sit amet, consectetur adipiscing elit.

Learn more

Building an economy that works for everyone

Lorem ipsum dolor sit amet, consectetur orem ipsum dolor sit amet, consectetur adipiscing elit.

Learn more

Canada and the Ukraine

Lorem ipsum dolor sit amet, consectetur orem ipsum dolor sit amet, consectetur adipiscing elit.

Learn more

Cards

- Improved scannability, aesthetics.

- Different style cards for visual hierarchy.

Carousels

- Provides access to additional content in a smaller vertical footprint.

Prototype
Key UI Elements

Sign in micro interactions
• Enhances recognition, reduces clutter

View banner micro interactions

Government of Canada Departments

Workplace
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Citizenship
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Tourism
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Business In Canada
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Benefits
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Health
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Taxes
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Natural Resources
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

National Security
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Canadian Culture
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Justice System
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

All Departments
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Learn more

Popular topics

Sign in to an account
Employment Insurance
Pensions (CPP) and (OAS)
How to get a passport

Coronavirus (COVID-19)
Find employment
Pensions (CPP) and (OAS)

Focus On

Indigenous peoples
Learn more

Veterans
Learn more
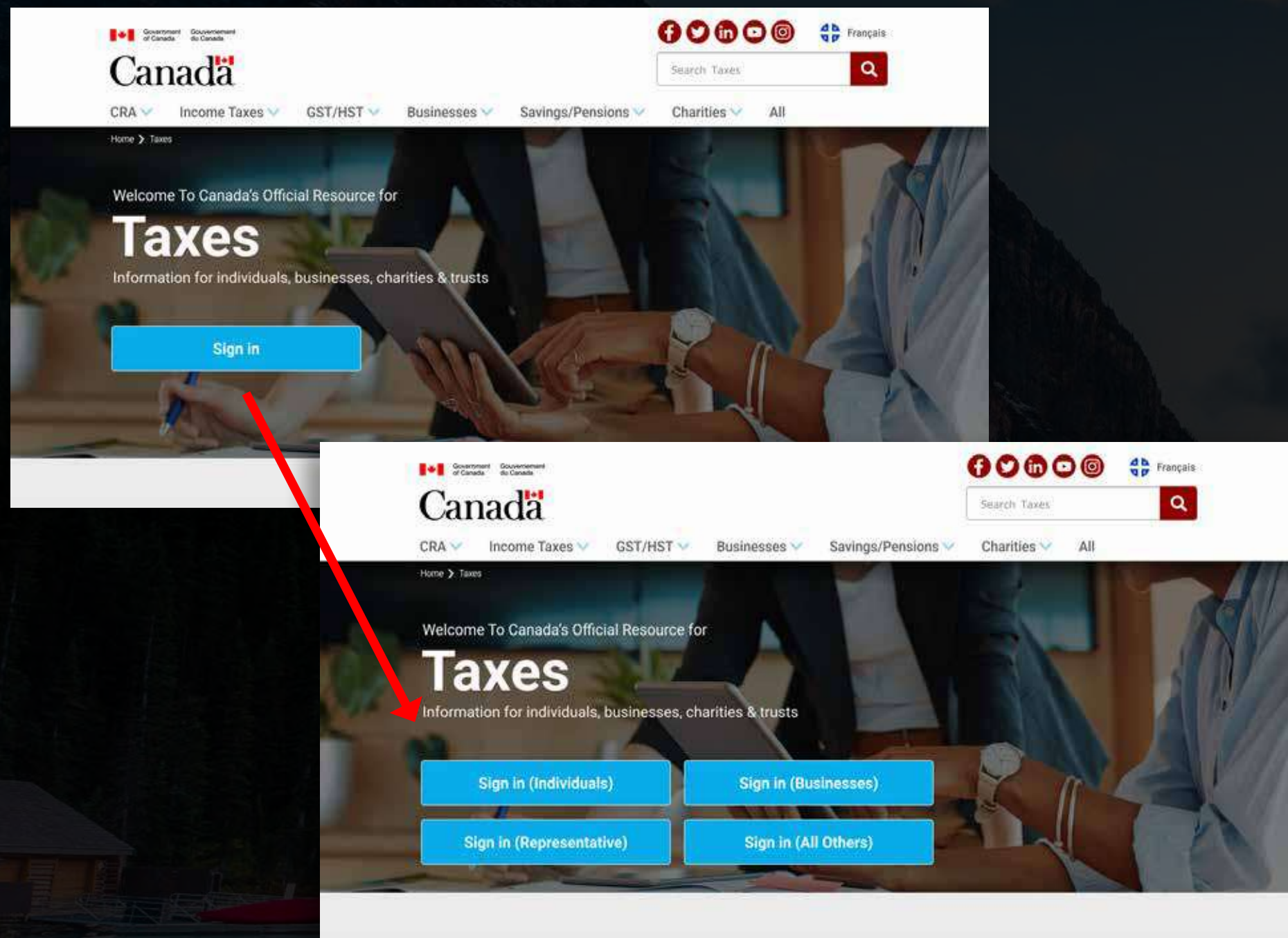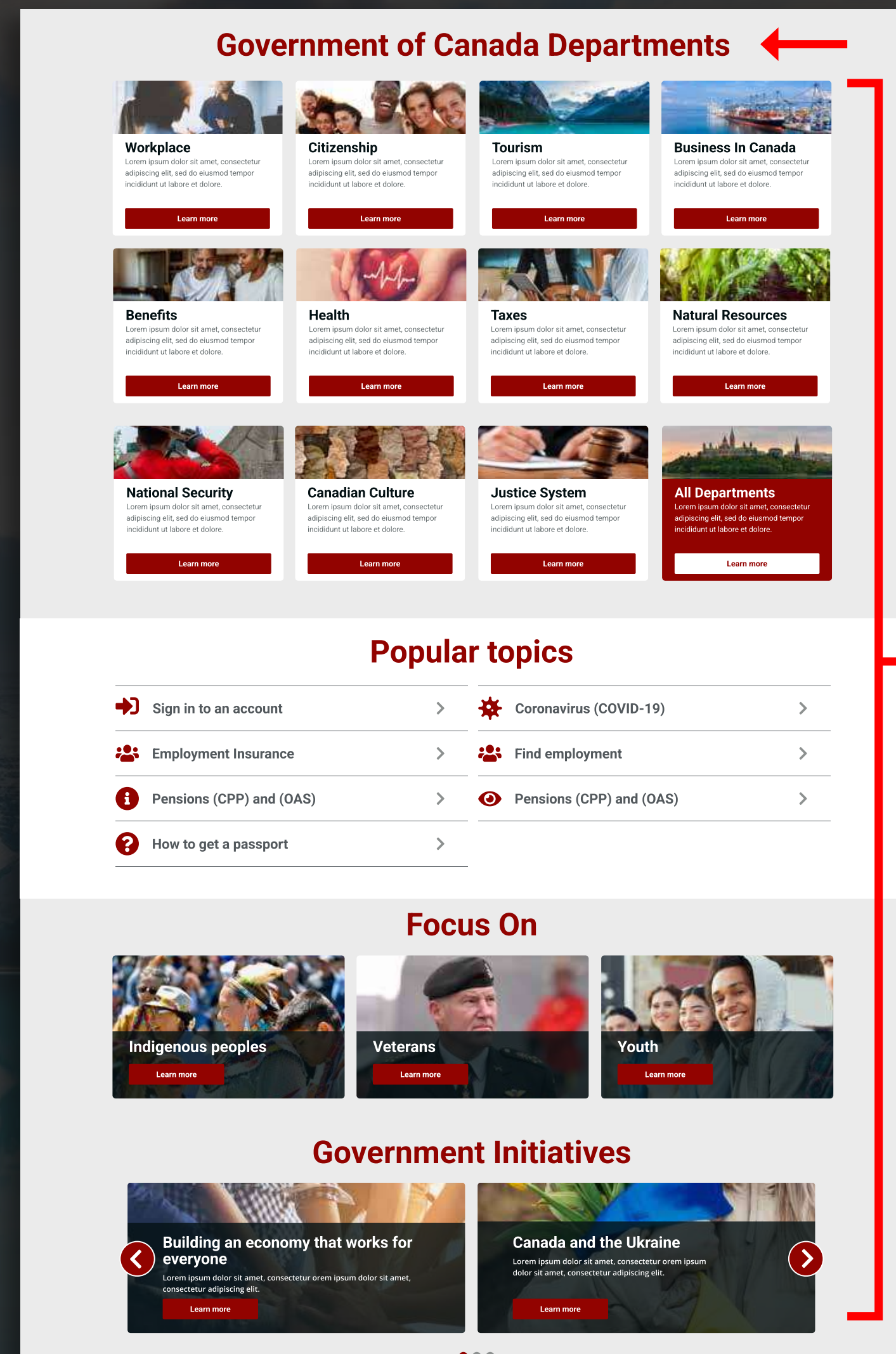
Youth
Learn more

Government Initiatives

Building an economy that works for everyone
Lorem ipsum dolor sit amet, consectetur orem ipsum dolor sit amet, consectetur adipiscing elit.

Learn more

Canada and the Ukraine
Lorem ipsum dolor sit amet, consectetur orem ipsum dolor sit amet, consectetur adipiscing elit.

Learn more

Section Labels
• Improved recognition & visual separation

Content Variation
• Reduces user fatigue

• Establishes hierarchy

Summary

The power of Information Architecture is invaluable.

It provides a foundation for platforms with a large amount of content and is a compass for growth and guiding users.

The research, testing, analysis and prototype iteration cycle led to powerful rapid prototyping and resulted in a number of potential solutions.

Looking Forward

It might be worth exploring the treatment of each department like more of a micro site and, in turn enabling them to develop their own personality and optimized IA.

By doing that, the umbrella Government of Canada website could be treated as more of a portal and optimize its own unique IA.

Future exploration may include overhauling the search engine and keyword application to offer users more useful search results.