

# Ontario Design System

Federal-Provincial-Territorial working group meeting

March 30, 2021

# Agenda

1. Why a design system?
2. Ontario Design System: where we are today
3. Evaluation and future goals
4. Questions

# Why a design system?



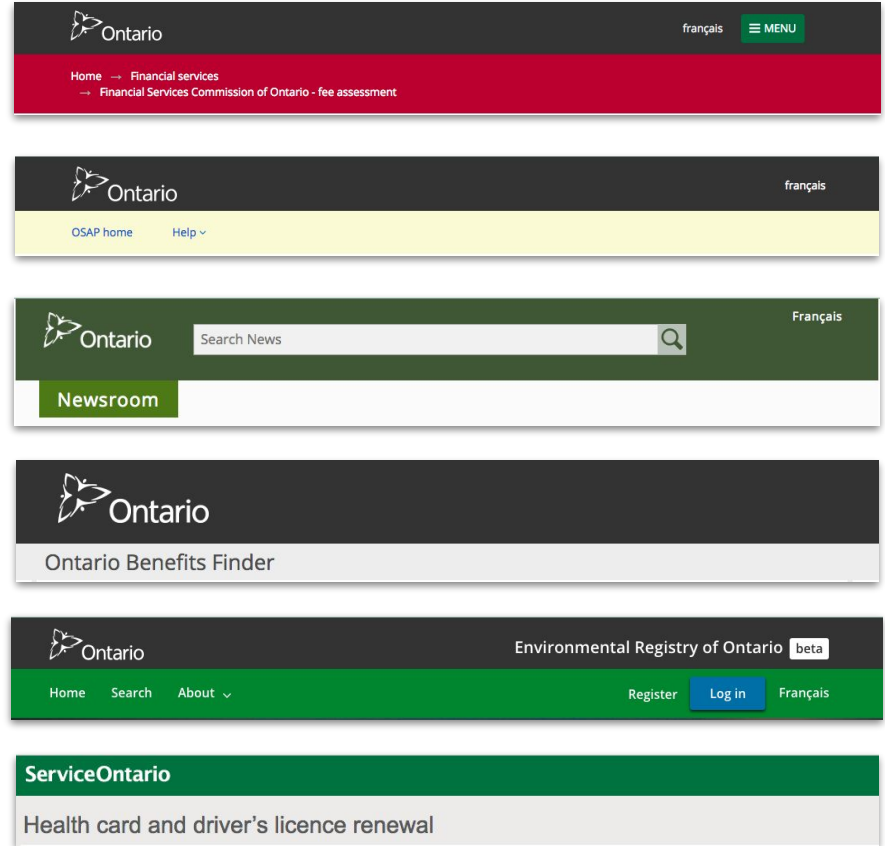
We've made a law, and it's great, but it simply sets up a high-level framework for digital and user-centered government. We now need to fill in that framework with **tools that will empower and enable ministries to actually work in the way we've legislated.**

We must continue to create and implement **standards, guidance, practices, and rules** that teams across government can apply in their daily work.

— David Eaves, *"The Simple, Faster, Better Services Act: Solidifying Ontario's Digital Government Standards"*

# Status quo

- Existing guidance is platform-specific
- Components and guidance are non-modular and difficult to scale
- Styles are not portable from ontario.ca
- Teams lack clear guidelines and patterns for application based sites





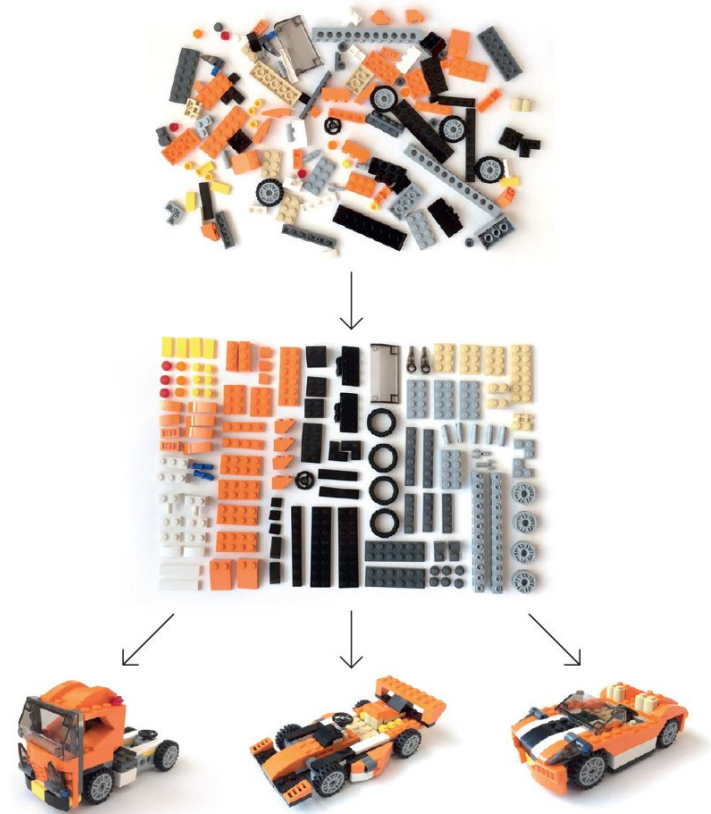
**We still don't have that  
big overarching thing  
that everybody  
follows...somebody  
needs to say: this is it,  
you need to follow this.**

— Business Analyst, Ministry of Government and  
Consumer Services

# Building with LEGO Blocks

A design system is a set of interconnected *patterns* and *shared practices* coherently organized to achieve the purpose of digital products.

*Design Systems: A practical guide to creating design languages for digital products* by Alla Kholmatova



# Value of a Design System

## For government:

- Make components once to increase **efficiency** and **cost-savings**
- Give teams time to focus on **bigger challenges**
- Create components that are **high-quality**
- Give teams confidence that their designs are **consistent** with government standards

## For the public:

- Through consistent design, make it **easier to recognize** legitimate government sites
- Improve usability by making designs **consistent** and **predictable**



**Where we are today**

# Technology platform: Fractal

- A free, open source tool specifically for building and documenting design systems: <https://fractal.build>
- Used by the U.S. Design System, City of Boston, the City of Ghent, and others
- Hosted in cloud infrastructure (AWS) managed by the Ontario Digital Service
- Provides the public-facing interface where Design System users access code and documentation

# Example component

## Buttons

Use buttons to help the user carry out an important action such as starting a transaction or agreeing to a purchase.

[Skip to main guidance](#)

### Default

Primary - default

### Secondary button

Secondary - default

### HTML

### SCSS

### Compiled CSS

```
<!-- Default -->
<a class="ontario-button ontario-button--primary" href="#">
  Primary - default
</a>

<!-- Secondary button -->
<a class="ontario-button ontario-button--secondary" href="#">
  Secondary - default
</a>

<!-- Tertiary button -->
<a class="ontario-button ontario-button--tertiary" href="#">
```

## When to use this component

Use buttons when you want the user to do something (often called a "call to action"), for example:

- start an application process or a transaction
- agree to make a payment
- download a PDF

Don't use a button when you're not encouraging an action. Buttons should not be used the same way as links, which usually send the user to another page or to a different part of the same page.

## Types of buttons


Use a **primary button** to draw attention to the main action you want to help the user take. Avoid using multiple primary buttons on one page unless the page has equally important calls to action.

Use a **secondary button** for a **less important** call to action on a page. Avoid using multiple secondary buttons so the user is not confused about what they should do next. Instead, ask the writer to simplify or break up the content so that it doesn't need multiple secondary buttons.

Use **tertiary buttons** for links that should function like a button, such as "edit" or "cancel" in applications. It's okay to use more than one tertiary button on a page.

- Visual preview of the component
- Code (HTML, SCSS, compiled CSS)
- Guidance
  - Technical specifications
  - When to use
  - Examples
  - Dos and don'ts

# For developers

× **Ontario** 

**Design System** | Français

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[Overview](#)  
[Help and feedback](#)  
Documentation

- [For designers](#)
- [For developers](#)**
- [Design principles](#)
- [Release notes](#)
- [Statuses and testing](#)

Basics

- [Colours](#) ●
- [Fonts and typography](#) ●
- [Grid](#) ●
- [Images](#) ○
- [Links](#) ●
- [Spacing](#) ●

Components

- [Alerts and highlights](#)

## Get started with the design system (for developers)

If you're a **developer**, you can start here to make sure you have everything you need to use the design system.

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### Install the distribution package

In the distribution package, you will find all the necessary files (HTML, CSS/SCSS, JS) to build into your development projects. The package also includes font files and the favicon. You can find SCSS variables and usage in each component section.


[↓ Download latest version \(0.10.5\)](#)

[Release notes and past versions](#)

We recommend you create a folder where you can put all your files to keep them consistent and separate from other project files. When a new version is released, you can easily replace this folder with the new version.

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# For designers

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- Overview
- Help and feedback
- Documentation
  - For designers**
  - For developers
  - Design principles
  - Release notes
  - Statuses and testing
- Basics
  - Colours ●
  - Fonts and typography ●
  - Grid ●
  - Images ○
  - Links ●
  - Spacing ●
- Components
  - Alerts and highlights
    - Blockquote ○
    - Callouts and asides ○

## Get started with the design system (for designers)

If you're a **designer**, you can start here to make sure you have everything you need to start using the design system and our **UI** prototyping kit.

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### Built-in visual identity

The visual style of components in the design system offers a clean, flexible and modern aesthetic that meets high standards of usability and accessibility while promoting credibility and trust.

The design system contains HTML examples of common **UI** components designed to follow Ontario's visual identity. Most components will have design properties available for you to use in your prototyping tools. You can also use your browser's developer tools to view the specs of each example (for example, padding, margins, stroke weight, line-height and so on).

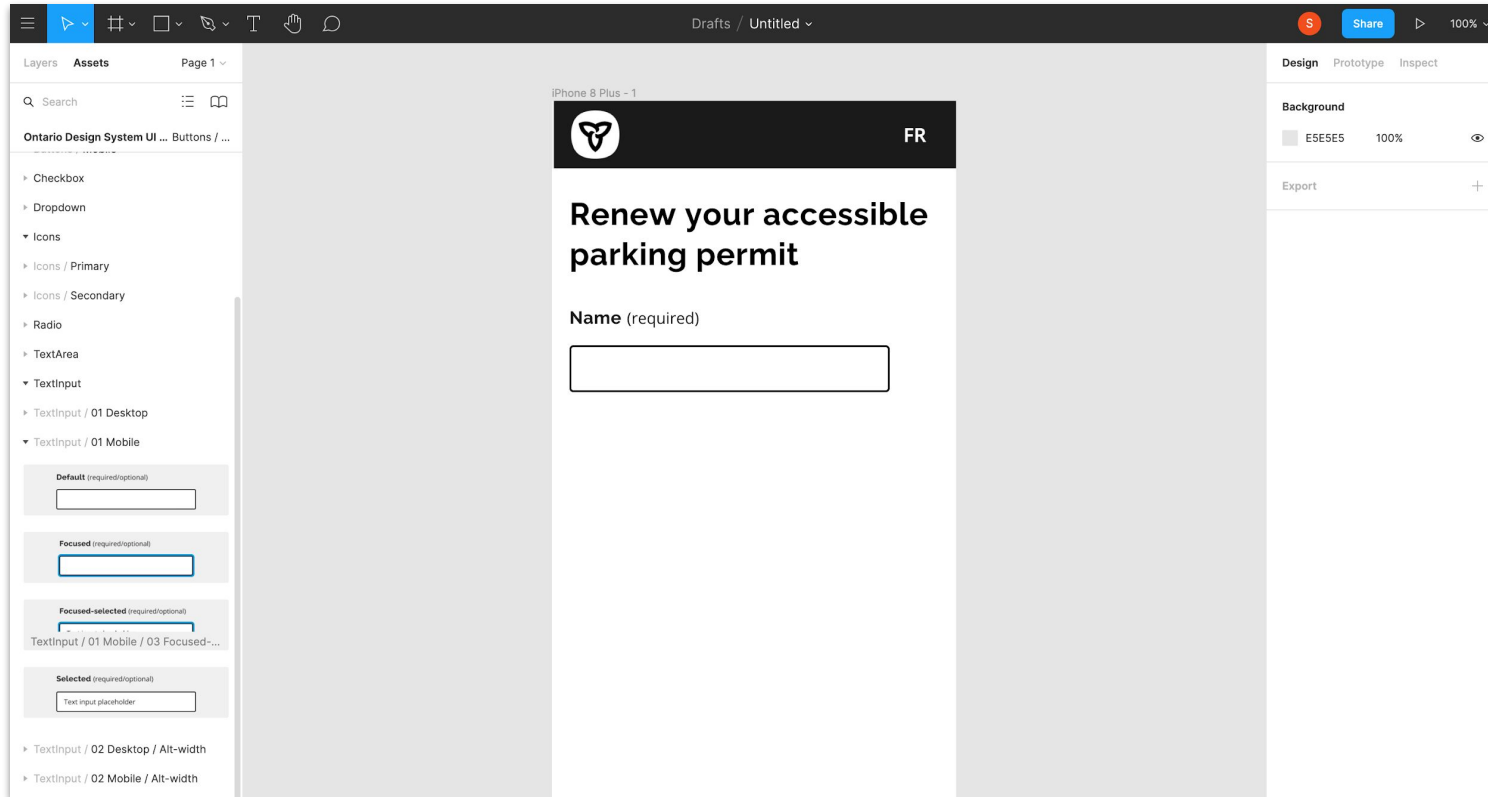
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### UI prototyping kit


The prototyping kit makes it easy for you to build mockups or prototypes of your product using Design System components and styles.

In the prototyping kit, you'll find:

# Prototyping kit



# Component statuses

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[Overview](#)  
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Basics

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- [Spacing](#)



Components

## Component statuses and testing

The status indicator on each component lets you know what stage it's at in the development and testing process.

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## Component statuses

Status	Status tag	Description
	<b>Ready</b>	Component has passed full technical and accessibility testing and has been usability tested.
	<b>In progress</b>	Component has passed basic technical and accessibility testing.

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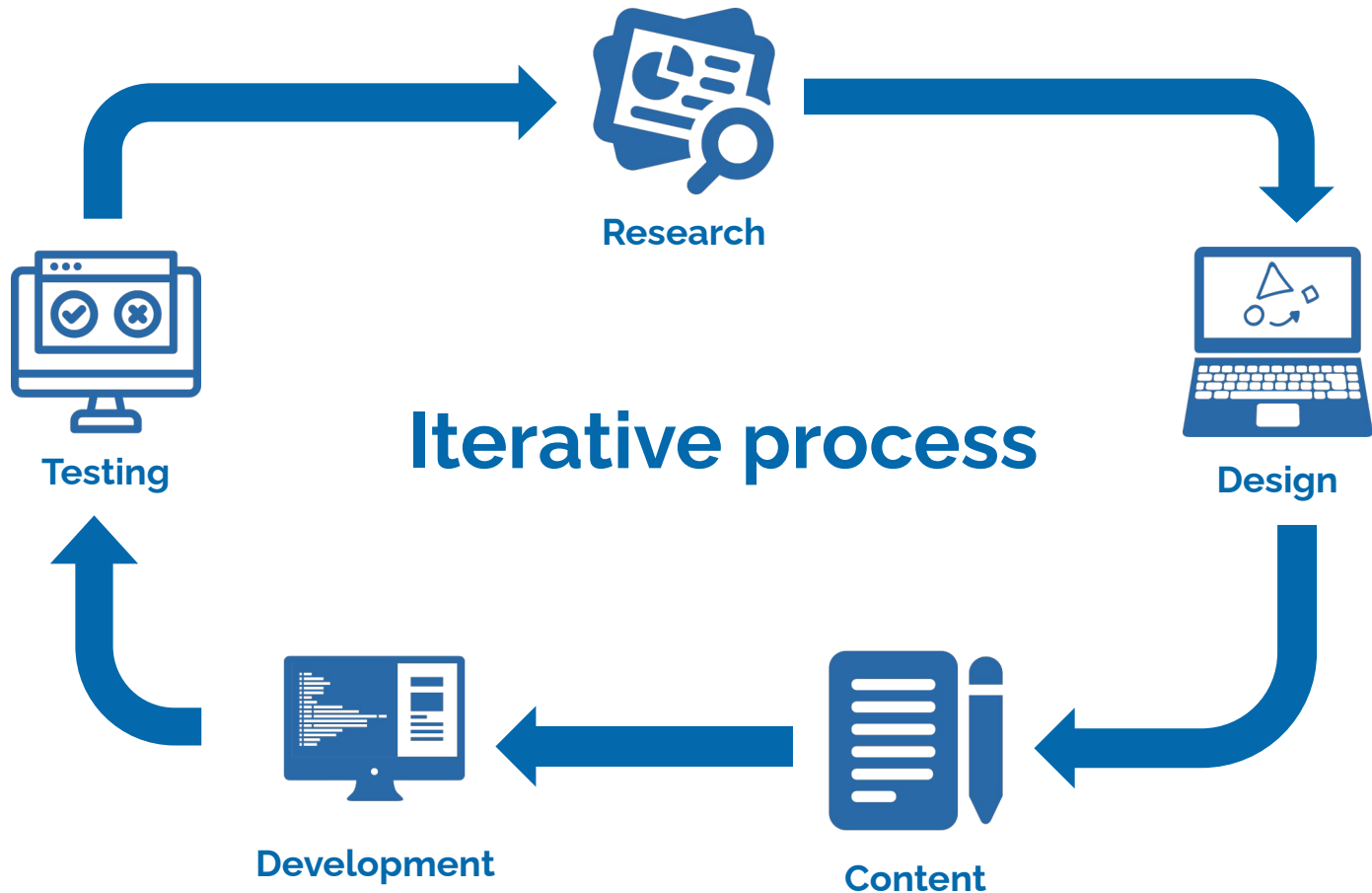
## How we test

The design system team carries out extensive testing on each component to ensure it follows our

# Component backlog

Order	Item	Component or pattern	Description	Raw notes	Guidance	Design	Coded in Fractal	Testing
1	Colours	Style		Done	Done	Done	Done	
2	Grid	Style		Done	Done	N/A	Done	
3	Spacing	Style		Done	Done	N/A	Done	
4	Typography	Style		Done	Done	Done	Done	
5	Icons	Style		Done	Done	Done	Done	
6	Images and photography	Style		Done	Done	Done	Done	
7	Links	Style		Done	Done	Done	Done	
8	Buttons	Component		Done	Done	Done	Done	
9	Text inputs	Component		Done	Done	Done	Done	
10	Text areas	Component		Done	Done	Done	Done	
11	Checkboxes	Component		Done	Done	Done	Done	
12	Radio buttons	Component		Done	Done	Done	Done	
13	Select (dropdowns)	Component		Done	Done	Done	Done	
14	Intro page	Other	Introduction to the design system	N/A	Done	N/A	Done	
15	Headers	Component	Will need to think about search box, menu button, sub-logo branding	Done	Done	Done	Done	In progress
16	Subsite headers	Component	AKA extended header	In progress	Not started	In progress	Not started	
17	Footers	Component		Done	Done	Done	Done	In progress
18	Focus state	Component		N/A	N/A	Done	Done	
19	Hint text	Component		Done	Done	Done	Done	
20	CC payment	Pattern	Requested as part of top 10	Done	N/A	Done	Done	
21	Alerts/Callouts	Component		Done	Done	Done	Done	In progress
22	Errors (in-line)	Component	Includes inline and summary	Done	In progress	In progress	Not started	
23	Accordion	Component		In progress	In progress	In progress	Not started	
24	Hint expander	Component	How to handle long hint text on forms	In progress	In progress	Done	In progress	In progress
25	Cookie consent banner	Component						
26	Progress indicator	Pattern	Labelling as pattern very context-dependent					





# Evaluation and future goals

# Testing



The design system requires two different testing approaches:

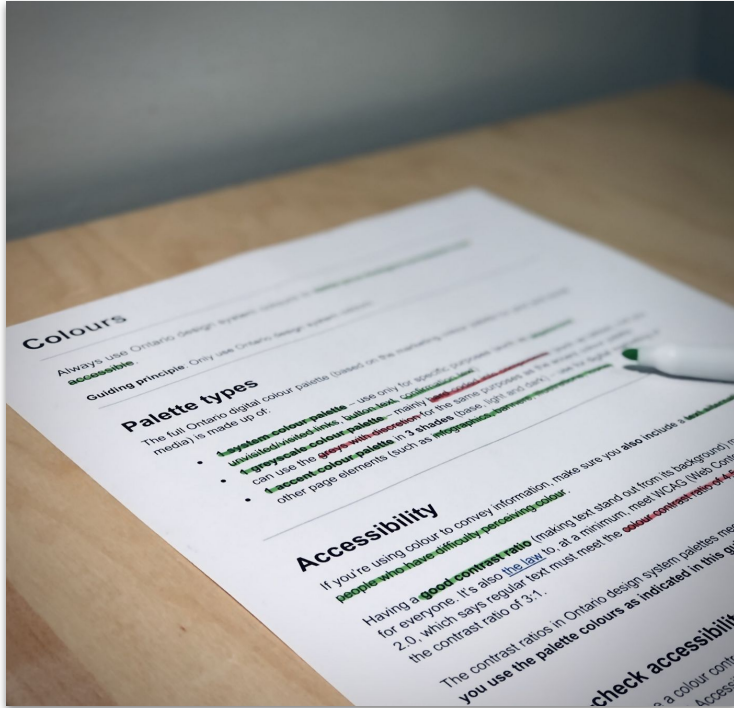
- **Component testing:** the components and elements that make up the design system need to be tested and iterated on to ensure they are accessible and usable
- **Design system site testing:** the design system itself needs to be tested with its target users (developers and designers) to ensure it meets their needs

# Testing the Design System site



- Participants: OPS designers and developers
- Findings included:
  - Real examples preferred over generic “lorem ipsum” content
  - Information architecture could be improved (e.g. create grouping for form elements)
  - User want quick access to colour palette (move descriptive info below)
  - Site search would be helpful as the amount of content grows

# Content testing



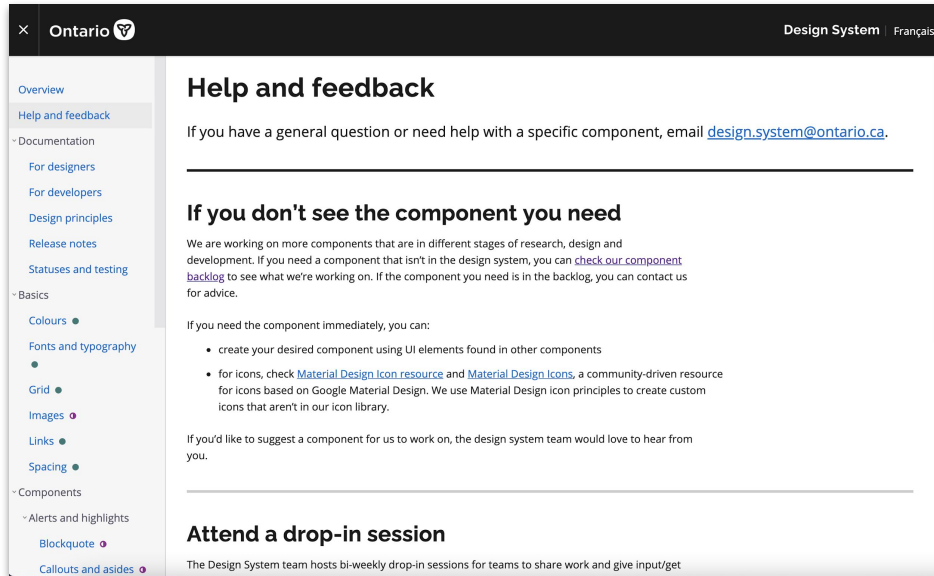
- Participants: OPS developers
- Users were asked to highlight parts of the content that did and didn't make sense to them
- Content was revised based on feedback
- This process helped the team establish a standard template for guidance content

# Accessibility evaluation

	Automated Tests		
	Light house	Axe	WAVE accessibility
<b>Component</b>			
Grid	✓	✓	✓
Colours	✓	✓	✓
Focus & Active States			
Fonts & Typography	✓	✓	✓
Links		✓	✓
Spacing	✓		
Buttons	✓	✓	✓
Text Inputs	✓	✓	✓
Dropdowns	✓	Element's background color could not be determined due to a background image	✓
Textareas	✓	✓	✓
Labels	✓	✓	✓
Radio Buttons	✓	✓	✓
Checkboxes	✓	✓	✓
Hint text	✓	✓	✓
Fieldsets	✓	✓	✓

- Automated testing of components using standard tools (Lighthouse, WAVE)
- Manual testing of components using assistive technologies (JAWS, ZoomText, VoiceOver, etc.)
- Third-party review of the design system site by the Accessibility Centre of Excellence

# Feedback mechanisms



The screenshot shows the 'Help and feedback' page of the Ontario Design System. The page has a dark header with the Ontario logo and 'Design System Français'. A left sidebar contains a navigation menu with categories like 'Overview', 'Documentation', 'Basics', and 'Components'. The main content area is titled 'Help and feedback' and includes the following sections:

- Help and feedback**: A paragraph stating that users can email [design.system@ontario.ca](mailto:design.system@ontario.ca) for general questions or help with specific components.
- If you don't see the component you need**: A section explaining that the team is working on more components in various stages. It provides instructions on how to check the [component backlog](#) and offers advice on what to do if a component is needed immediately, such as using UI elements from other components or checking [Material Design icon resource](#) and [Material Design Icons](#) for icons.
- Attend a drop-in session**: A section stating that the Design System team hosts bi-weekly drop-in sessions for teams to share work and give input/get feedback.

- Bi-weekly review sessions open to other teams
- Feedback page (linked at bottom of all design system pages) includes:
  - Email address for contacting the design system team
  - Link to survey
- Presentations to key user groups
- Meetups for OPS staff

# Short-term goals

- Continue to work through component development backlog
- Enhance the design system platform
  - Apply the design system to the design system site
- Do more user research and testing
- Continue building community and adoption



# Longer-term goals

- Establish standards and a process for contributions from other teams
- Enhance the design system platform
  - Content management
  - Site search
- New technical approaches
  - JavaScript component library?
  - CDN?

# Questions?

