



RCMP's Journey Toward Accessible Learning

An Accessible Canada Act - Bill C-81 - Awareness Session

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Canada

Who Are We & Why Are We Here



- RCMP Learning & Development's National Learning Services Unit
 - Instructional Designers (ID)
 - Multimedia (MM) Developers
 - Learning Management Systems Analysts
- Raise awareness to designing for accessibility
- Demystify myths on accessibility
- Recognize Bill C-81 and its importance
- Emphasize WCAG guidelines and common failures
- Highlight best practices
- Provide tips and tricks, tools and resources to start you off

What Are WE Doing?



RCMP – General

- RCMP Disability and Accessibility Action Group & Network
- RCMP Accessibility Strategy and Work Plan
- Accessibility Passport – In Progress
- Procurement Accessibility Criteria
- Public Service Recruitment Tools for Hiring People with Disabilities

Upskilling Learning Designers

- Accessibility Awareness Sessions
 - Accessible Design – Part 1 (Theory)
 - Accessible Design – Part 2 (Practical)
 - 3-part series with Guest speakers
 - ESDC Journey Towards Accessibility
 - FABLE Presentation
 - Assistive Technology User Experience (A day in the life of AT user)
- Digital Accessibility Training
 - David Berman Communications – Basic Training
- University of Guelph Accessibility Conference
- eLearning Guild – Accessibility & Inclusion
- Installation of the Accessibility Ribbon in Office Suite
- Inclusive Design – Job-Aids and Checklists

Upskilling Developers

- Creating Standards
 - PPT templates (Job-aids and Checklists)
 - eLearning standards
 - Alt-text
 - Closed Captioning/Transcripts
- Frameworks
 - eLearning Development
- Training
 - Deque University
 - International Association of Accessibility Professionals Certification
 - Web Accessibility Specialist (Web)
- General Accessibility Seminars and Webinars

The Government of Canada's Approach



“Nothing Without Us” ***Accessibility Strategy for the Public Service of Canada***

Yazmine Laroche
Deputy Minister of Public Service Accessibility

Myths



- Accessibility only affects a small group of users.
- Disabled users don't access my course or use my website.
- Accessibility makes the course boring.
- We can quickly add accessibility before the release.
- Accessibility is only about adding alternative text to images.
- Web accessibility is just a developer's responsibility.
- Accessibility only helps people with disabilities.
- Accessibility can only be tested by disabled people.
- Accessibility is optional.



Why Do We Have Bill C-81?



1. Encourages inclusivity
2. Promotes usability
3. Provides equal opportunities to all Canadians
4. Allows all Canadians to actively and fully participate in our society



Standards & Compliance



**World Wide Web Consortium
(W3C)**

**Web Content Accessibility Guidelines
(WCAG 2.1)**

**THE POWER OF THE WEB IS IN
ITS UNIVERSALITY. ACCESS BY
EVERYONE REGARDLESS OF
DISABILITY IS AN ESSENTIAL
ASPECT.**

- TIM BERNERS-LEE -

LIBQUOTES.COM



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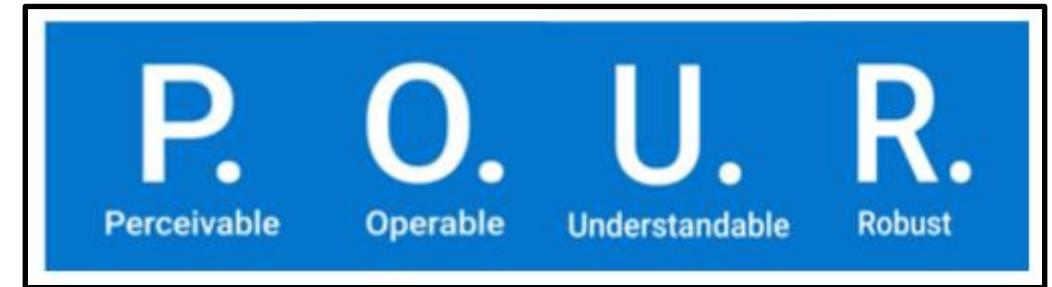


WCAG Principles



WCAG principles provide guidelines to make websites and web content more:

- Perceivable
- Operable
- Understandable
- Robust



Perceivable



Guidelines

1. Text Alternatives
2. Time Based Media
3. Adaptable
4. Distinguishable

- Web content is made available to the senses: sight, hearing, and/or touch.
- Information and user interface components must be presentable to users in ways they can perceive / comprehend / identify.
- All visitors have a similar experience regardless of ability.



Perceivable – Text Alternatives



Alternative (Alt) Text

- Alt-text conveys the “why” of the image as it relates to the content of a document or webpage.
- It is read aloud to users by screen reader software, and it is indexed by search engines.
- It also displays on the page if the image fails to load.

“A person walking through a puddle in the rain”



Perceivable – Text Alternatives (cont'd)



Adding Alt-Text in PowerPoint

1. Right-click on the image
2. Select **Format Picture**
3. Choose **Size & Properties**
4. Select **Alt Text**
5. Enter a title and description



Alt-Text for Images on the Web

```
e" tabindex="-1" role="option" aria-describedby="slick-slide02" style="width: 150px; position: relative; left: -1500px; top: 0px; z-index: 999; opacity: 1;">

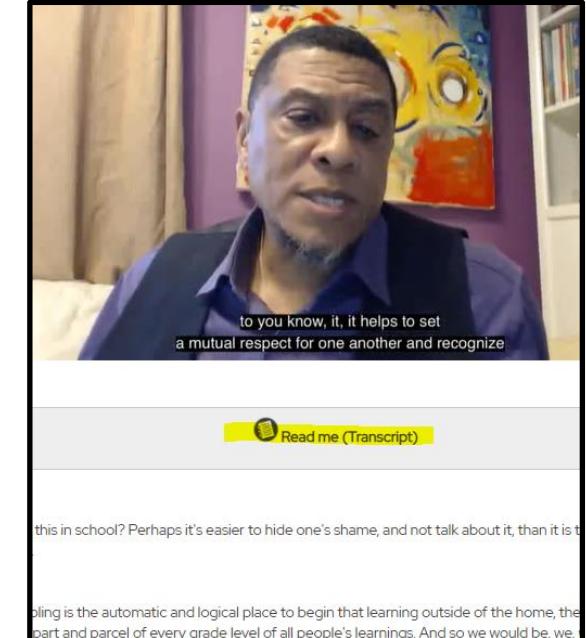
== $0
```

Perceivable - Time Based Media



Closed Caption and Transcript for Video

- Key players in video accessibility
- Better retention of video content
- Improves viewers' comprehension, attention, and experience



Before you begin the course, let's listen to a message from the CPI Centre regarding PSP.

0:00 / 0:53

Transcript

In 1997, the speech from the Throne of the Government of Canada committed to integrate information systems of all Canadian criminal justice partners. This decision was made after systemic failures had been noted relating to a lack of sharing crucial investigational information between law enforcement agencies.

The Police Information Portal (PIP) became available in 2007 & the PSP system in 2009. In 2010, PIP and PSP were brought under the stewardship of the Canadian Police Information (CPI) Centre. In 2020, the PIP system was rebuilt under the PSP name and the PSP web application and the PIP web application were amalgamated into a single interface.

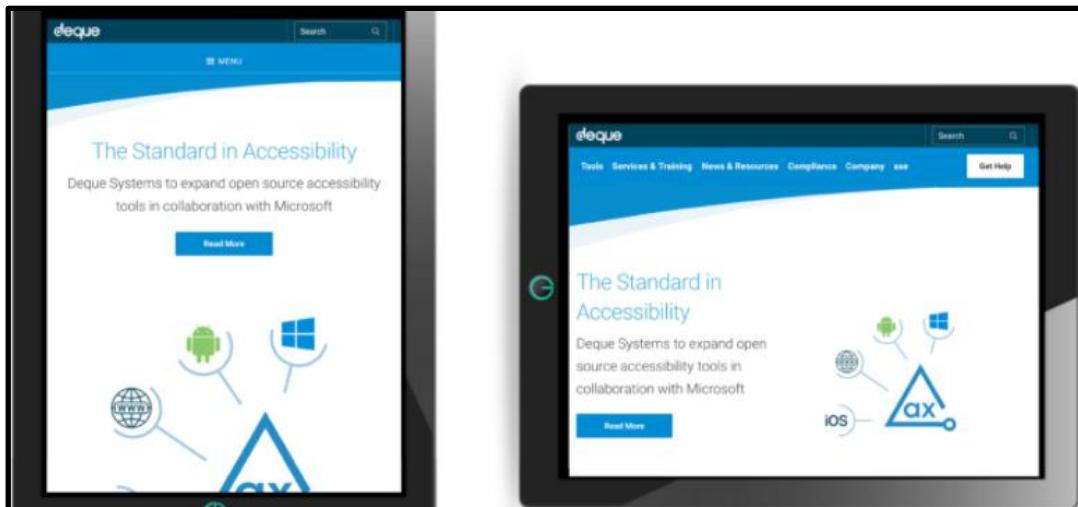
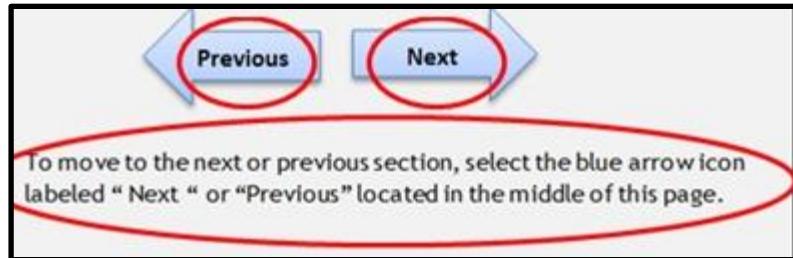
This course demonstrates the benefits of the PSP System as an important investigative tool, a key element in information sharing, and a way to get a complete picture, as well as understand the course of events during an investigation.

All the best to you on this course and in the use of PSP in your every day work!

Perceivable – Adaptable & Distinguishable



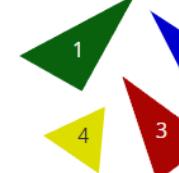
Adaptable: Format



Distinguishable: Colour

Colour is not used as the only visual means to convey your information.

Example: Refer to something using color alone

<input checked="" type="checkbox"/> Color only	Which is the right-angled triangle?	<input checked="" type="checkbox"/> Color and number	Which is the right-angled triangle?
	<ul style="list-style-type: none"><input type="radio"/> Green<input type="radio"/> Blue<input type="radio"/> Red<input type="radio"/> Yellow<input type="radio"/> Don't know		<ul style="list-style-type: none"><input checked="" type="radio"/> Green (1)<input type="radio"/> Blue (2)<input type="radio"/> Red (3)<input type="radio"/> Yellow (4)<input type="radio"/> Don't know

Perceivable - Distinguishable



Distinguishable - Use of Colour, Font Size

Bad Contrast

Good Contrast

Sample Font sizes

Size 14 – known as clear print

Size 16 – known as large print

Size 18 – known as giant print.

Giant print is also used for font sizes above 18

Size 20

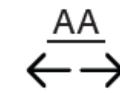
Size 24 – sized of most giant print books

Distinguishable - Text Accessibility

Characters Requirements



Line spacing should be **at least 1.0** for good readability.



Always make sure the space between characters is adequate and is not condensed.

Fonts

 **Readable font**

 *Decorative font*

Decorative fonts are not accessible, as they are hard to read and can also create eye-fatigue for learners.

Operable



Operable

1. Keyboard Accessible
2. Enough Time
3. Seizures
4. Navigable

All controls and interactive elements are usable.

For example, interface forms, controls, and navigation are operable

Operable – Keyboard Accessible & Timing



Keyboard Navigation

The screenshot shows the 'Keyboard accessibility' page of the University of Washington's Accessible Technology website. The page includes a sidebar with 'Applies to' (Websites), 'Overview' (a brief description of keyboard users), and 'Techniques' (a link to keyboard accessibility on websites). The main content area features a large image of the university campus and a sidebar with the 'IT Accessibility Checklist' (ARIA, Audio and video, Auto-updating content, Code validation, Color contrast, Enlarged text, Finding content, Flashing and flickering content, Forms, Headings).

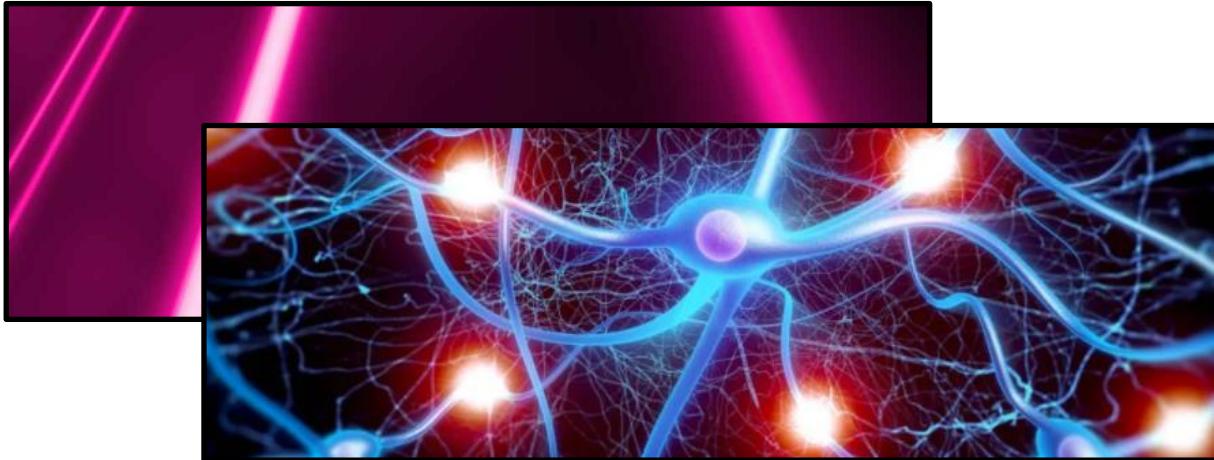
Timing Warning

The screenshot shows a 'Session expiration' dialog box. It displays the message: 'Your session will expire in 32 seconds. Do you want to stay signed in?'. It includes two buttons: 'Yes, keep me signed in' (gray background) and 'No, log me out' (blue background).

Timing Warning

The screenshot shows a 'Timing Warning' dialog box with the message: '2 minutes remaining. You only have 2 minutes remaining to complete this transaction. Do you need more time?'. It features two buttons: 'Extend Time Limit' (circled in red) and 'OK'.

Operable - Seizures



Avoid seizure triggering
flashing images or videos

WARNING Seizure Inducing
Video - YouTube



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Operable - Navigation



Navigation Made Easy

GREENSTREET
COFFEE CO.

SHOP COFFEE OVERVIEW PHILOSOPHY CLASSES BREW GUIDES

Home > Our Team > About Us > Why Greenstreet

Shop Coffee

OVERVIEW

About Us

Our Team

Why Greenstreet

Media

PHILOSOPHY

Sustainability

Why Greenstreet

We are hard workers dedicated to our craft. This is evident by our constant attention to the coffee industry.

We involve ourselves with every piece of the supply chain. You can find us chatting with a Barista about extracting the perfect shot, cupping coffees with an importer or traveling to meet growers. At GreenStreet we know how complex and large coffee can be and approach every interaction ready to learn and improve. We constantly are navigating this sea of complexities to find the best beans we can.

As a local-roaster in the Philadelphia area we are available round the clock, 7 days a week. This is how we started and is what we will continue to do for you.

It would be our pleasure to serve you.

Understandable



Understandable

1. Readable
2. Predictable
3. Input Assistance

- Information and the operation of user interface must be understandable.
- Content is clear, mitigating confusion and ambiguity.



Understandable – Readable & Predictable



Readable

☒ Unnecessarily complex

CPP: In the event of a vehicular collision, a company assigned representative will seek to ascertain the extent and cause of damages to involved. Once our representative allows us to understand the claim, we will assign appropriate monies. A decision may be made to approve a claim if it is not approved and the status of the claim is an information before further action is partially approved and issued, or claim is fully approved and issued. A claim is assigned and issued.

☒ Easier to understand

Claims Processing Procedure (CPP): If you have a car accident, our agent will investigate. Findings will determine any claim payment. This could result in:

- Approved claim - full payment
- Partially approved claim - reduced payment
- Undetermined claim - more information needed
- Rejected claim - no payment



Predictable – Consistency is Key

Action	Normal Result	Should Not
Pressing the TAB key	Should jump from one control to another	Initiate a search
Pressing the ARROW key while in a drop-down menu	Should move up and down the menu choices	Open a new window
Clicking into an EDIT field	Allow to edit text	Not open a popup window



Understandable – Input Assistance



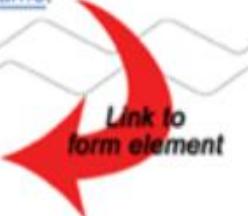
Input Assistance - Error detected and correction suggested to the user

Assistance AFTER submission

There were 2 errors found in the information you submitted.

1. Please [enter a valid credit card number.](#)
2. Please [enter your first name.](#)

First Name (required)



Link to form element

Assistance AFTER submission

The form could not be submitted for the following reasons:

Email Address must be a valid email address.

Language

Language of Service (required)*

English

Applicant Contact Information

First Name (required)*

Max

Last Name (required)*

Smith

Primary Telephone Number (required)*

test

Email Address (recommended) *

sample

An email containing your Confirmation Number and information about your appointment will be sent to the email specified.

Assistance AT INPUT ENTRY (Contextual)

Personal information

*Employee name

Last name, first name

Mark Smith

*HRMIS

000

Invalid length

Is the employee essential or non-essential?*

Robust

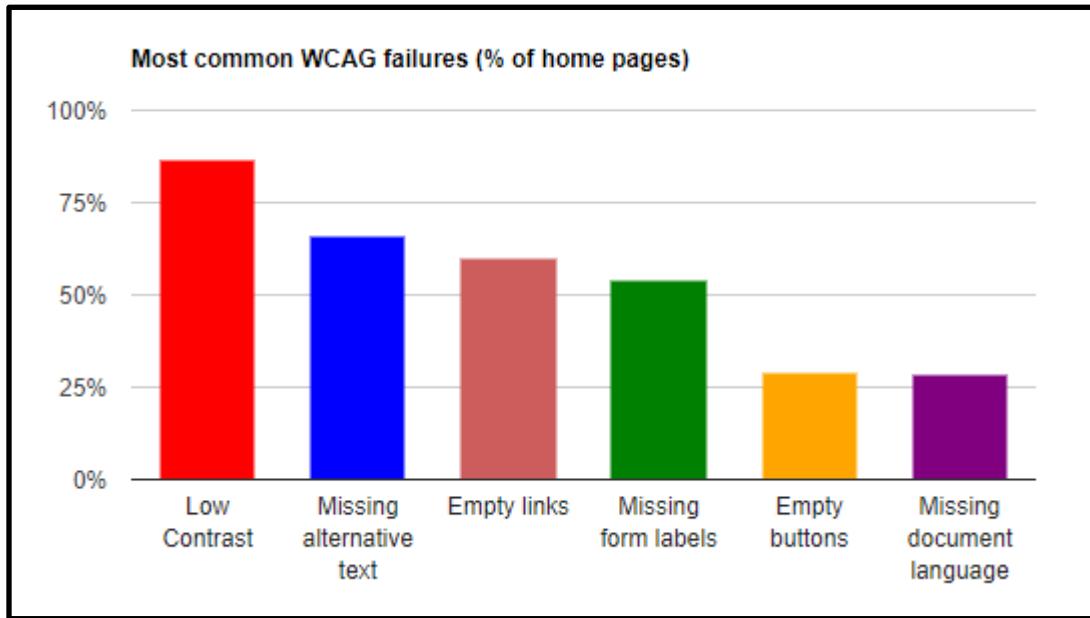


Robust

- Parsing - content is compatible and Valid (w3c Validation Checkers)
- Name, Role, Value - providing role, state, and value information on all user interface components enables compatibility with assistive technologies.
- Status Messages - make users aware of important changes in content

Content must be robust enough that it can be interpreted by a wide variety of user agents, including assistive technologies.

Failures & Simple Fixes



1. Provide sufficient contrast between foreground and background
2. Don't use colour alone to convey information
3. Follow the requirements for text sizes and font
4. Ensure that interactive elements are easy to identify
5. Provide clear and consistent navigation options
6. Ensure that form elements include clearly associated labels
7. Provide easily identifiable feedback
8. Use headings and spacing to group related content
9. Include image alternatives (alt-text) and media alternatives in your design
10. Provide controls for content that starts automatically

Small Steps – Course Pilot Experience



Keyboard

Make it easier to type and use keyboard shortcuts.

Use your device without a physical keyboard

Use the On-Screen Keyboard

Off

Press the Windows logo key $\text{Win} + \text{C}$ to turn the On-Screen Keyboard on or off.

Use Sticky Keys

Press one key at a time for keyboard shortcuts

On

Allow the shortcut key to start Sticky Keys

Press the Shift key five times to turn Sticky Keys on or off

Show the Sticky Keys icon on the taskbar

Lock the modifier key when pressed twice in a row

Turn off Sticky Keys when two keys are pressed at the same time

Play a sound when a modifier key is pressed and released

Use Toggle Keys

Play a sound whenever you press Caps Lock, Num Lock, or Scroll Lock

On

Allow the shortcut key to start Toggle Keys

Press and hold the Num Lock key for five seconds to turn on Toggle Keys

Display

Make your display easier to see.

Make text bigger

Sample text

Drag the slider until the sample text is easy to read, then click Apply

A  A

Mouse

Make it easier to see and control the mouse cursor.

Control your mouse with a keypad

Turn on Mouse Keys to use the numeric keypad to move the mouse pointer

On

Only use Mouse Keys when Num Lock is on

Show the Mouse Keys icon on the taskbar

Hold the Ctrl key to speed up and the Shift key to slow down

Pointer speed

Slow  Fast

Pointer acceleration

Slow  Fast



Post-pilot changes

- Navigation
- Usability Changes
- Storyline System
- Demo Upgrades

System customizations...



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Where to Begin?



Accessible from the Start



“Accessibility is like a blueberry muffin—you can’t push the berries in there afterward.”

Cordelia McGee-Tubb

Accessibility Plan

1. Develop an accessibility strategy and/or policy
2. Educate and train content creators
3. Conduct accessibility audits
4. Prioritize user experience
5. Collaborate with accessibility experts
6. Test with real users
7. Stay informed and evolve

Resources



Digital Accessibility - [What is Digital Accessibility?](#)

World Wide Web Consortium (W3C) - <https://www.w3.org/>

Web Accessibility Evaluation Tools List

<https://www.w3.org/WAI/ER/tools/>

WCAG 2.1

www.w3.org/TR/2018/REC-WCAG21-20180605/#glossary

Assistive Technology Glossary

[Assistive Technology Glossary | Fable \(makeitfable.com\)](#)

Community Groups / Articles / Blogs (Keyword search:
accessible, accessibility)

[eLearning Industry](#)

[The eLearning coach](#)

[Institute for Performance and Learning](#)

Microsoft Accessibility Resources

[Accessibility Resources & Training | Microsoft Accessibility](#)

Microsoft Accessibility Tips

[Disability Answer Desk Support | Microsoft Accessibility](#)

How to Make Documents and MTeams Accessible

- <https://www.youtube.com/watch?v=91ddtUyhS5k>
- <https://www.aka.ms/Inclusive-teams-meetings>
- <https://www.youtube.com/watch?v=ohNYGg79U-Q>

WebAIM Contrast Checker - [WebAIM: Contrast Checker](#)

Provincial Resources



- <https://www.ontario.ca/page/how-create-accessibility-plan-and-policy>
- [Accessibility | Government of Saskatchewan](#)
- [Accessibility Act - Children, Seniors and Social Development \(gov.nl.ca\)](#)
- [Accessible Library Services | Government of Prince Edward Island](#)
- [Accessibility \(calgary.ca\)](#)
- [Accessibility | Alberta.ca](#)

Courses & Certifications



Deque University

[Online Self-Paced Web Accessibility Classes](#)

DavidBerman Communications

[Accessibility for Instructional Design and eLearning](#)

Fable - [Fable Upskill](#)

Eliquo Training - [Accessibility Training](#)

Priority Management

- [Creating accessible documents in Word, Excel, PowerPoint](#)
- [Creating accessible documents in Word](#)
- [Creating accessible documents in Visio](#)

[Professional Development for eLearning and Multimedia Developers & Technical Advisors](#)