Fielding Accessible Web Surveys

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RTI INTERNATIONAL

Federal Computer Assisted Survey Information Collection

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What is Section 508?

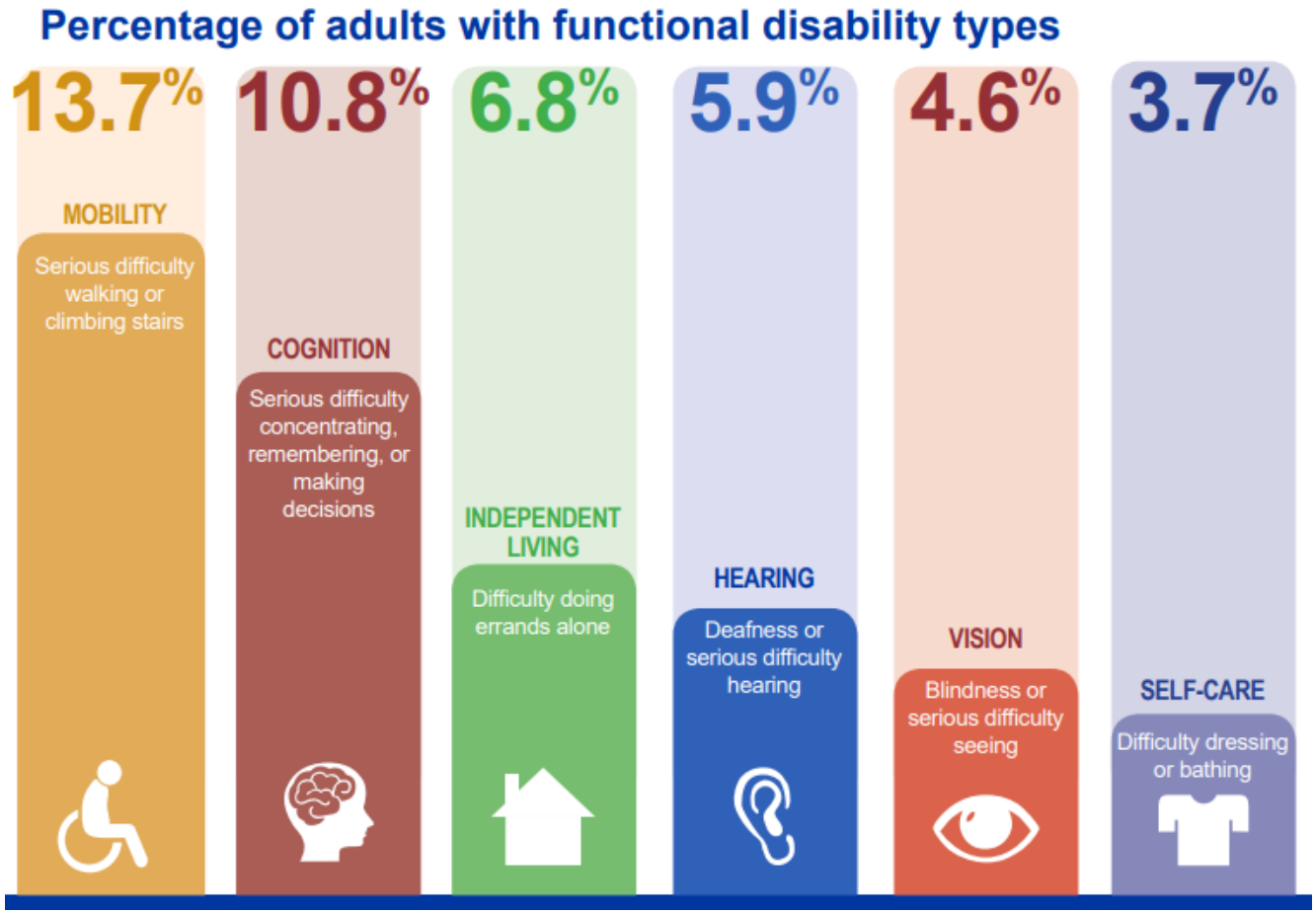
An amendment of the US Rehabilitation Act of 1973, and a federal law mandating that all electronic and information technology developed and used by the federal government are equally accessible to the general public, those with and without disabilities.

Who is Impacted?

Visual	Blindness, low vision, color-blindness
Hearing	Deafness, Hard of hearing
Motor	Inability to use a mouse, slow response time, limited fine motor control
Cognitive	Learning disabilities, distractibility, Difficulty remembering/focusing on large amounts of information

Some stats:

- 61 million American adults live with a disability
- 26% of Americans have some disability (1 in 4)



Source: https://www.cdc.gov/ncbddd/disabilityandhealth/documents/disabilities_impacts_all_of_us.pdf

Some 508 Compliance Requirements

Total of 61 success criteria's (requirements)

- Keyboard access
- Resize text
- Non-text content
- Web form elements
- Error identification and suggestion

Keyboard Access

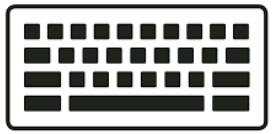
WCAG 2.0 Requirement 2.1.1

All functionality and all information that is essential or required to complete an activity can be accessed and/or executed using **only** the keyboard.

Who is impacted?

Motor

Vision



Keyboard Access - Why is it important?

Every user **must** be able to

- select responses,
- enter data,
- navigate the survey

by using **only** the keyboard to complete the survey.

Keyboard Access – Non-Compliant

Q 22

Please rate your language skills.

	Language skill			Native Language?		Years of exprience
	Speak	Read	Write	Yes	No	
Spanish	☑	☑	☑	○	●	
Arabic	☐	☐	☐	○	○	
French	☐	☐	☐	○	○	
Korean	☐	☐	☐	○	○	

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Keyboard Access – Compliant

Q 22

Please rate your language skills.

	Language skill			Native Language?		Years of exprience
	Speak	Read	Write	Yes	No	
Spanish	☑	☑	☑	○	●	More than 10 years
Arabic	☐	☐	☐	○	○	
French	☐	☐	☐	○	○	
Korean	☐	☐	☐	○	○	

Less than 1 year
More than 1 year
Between 2 and 5 years
Between 6 and 10 years
More than 10 years

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Resize Text

WCAG 2.0 Requirement 1.4.4

There is a mechanism to resize, scale, or zoom in on the text to at least 200% of its original size without loss of content or functionality.

Who is impacted?

Vision

Resize Text - Why is it important?

Every user **must** be able to

- enlarge text to at least 200%
- zoom without loss of content or functionality
- increase text size for readability

Resize Text – Non-Compliant

SDLC methodologies provide a systematic framework to design, develop and deliver software applications, from beginning to end.

Which SDLC methodology is being followed in your software development process?

- Agile
- Waterfall
- V Model
- DevOps

Resize Text – Compliant

Q11 SDLC methodologies provide a systematic framework to design, develop and deliver software applications, from beginning to end.

Which SDLC methodology is being followed in your software development process?

- ○ Agile
- ○ Waterfall
- ○ V Model
- ○ DevOps

Non-Text Content

WCAG 2.0 Requirement 1.1.1

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose

Who is most impacted?

Visual

Motor

Cognitive

Non-Text Content - Why is it important?

Non-text content

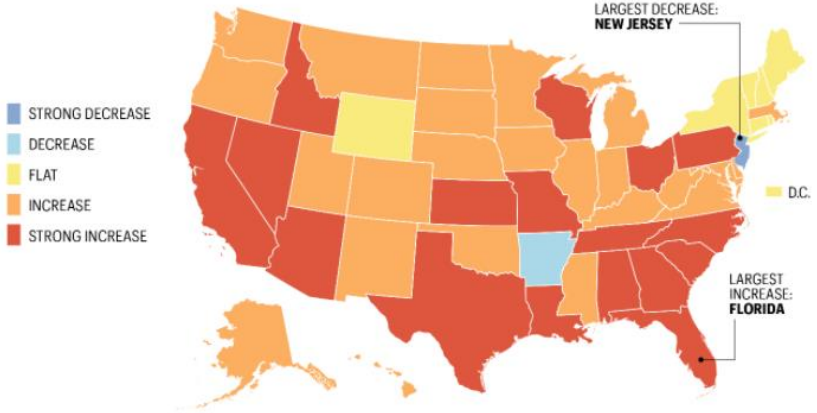
- cannot be conveyed to all users
- will not be read aloud by screen readers
- makes images not searchable by search engine

Non-Text Content – Non-Compliant

Q15

Based on the COVID cases as shown in the US map, it is now safe to travel without a mask in your state?

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree



Non-Text Content – Compliant

Q15

Based on the COVID cases as shown in the US map, it is now safe to travel without a mask in your state?

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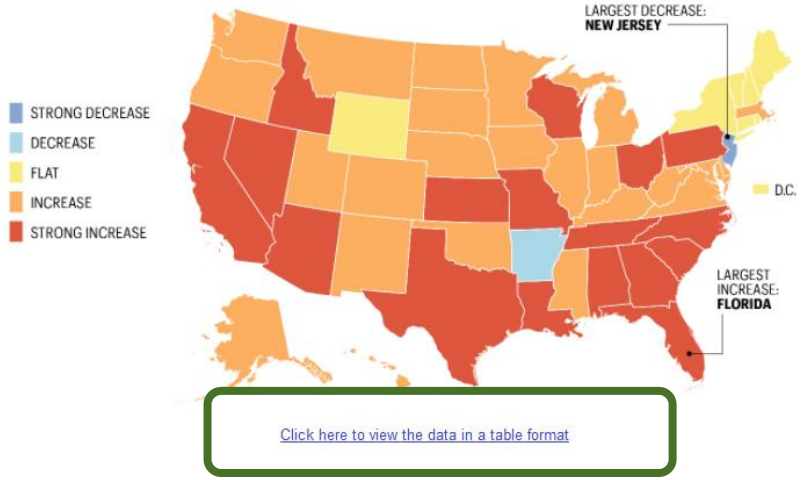


Non-Text Content – Compliant

Q15

Based on the

in your state?

- Strongly disagr
- Disagree
- Neither agree r
- Agree
- Strongly agree

	CASES DAILY AVG.	PER 100,000 ▼	14-DAY CHANGE
United States	27,088	8	–9%
American Samoa	261	527	+235%
Alaska ›	192	26	–9%
Vermont ›	136	22	+3%
Rhode Island ›	191	18	+6%
Kentucky ›	773	17	–46%
Massachusetts ›	1,169	17	+55%
Colorado ›	955	17	+9%
New York ›	2,984	15	+38%
Maine ›	203	15	+1%
New Jersey ›	1,217	14	+51%
Washington, D.C. ›	96	14	+45%

Web Form Elements

WCAG 2.0 Requirements 3.3.2, 2.4.6

- Labels or instructions are provided when user input is required
- Each form label is sufficiently descriptive

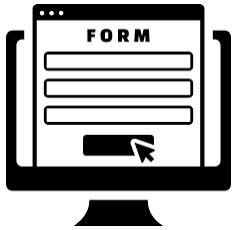
Who is most impacted?

Visual

Motor

Cognitive

Hearing

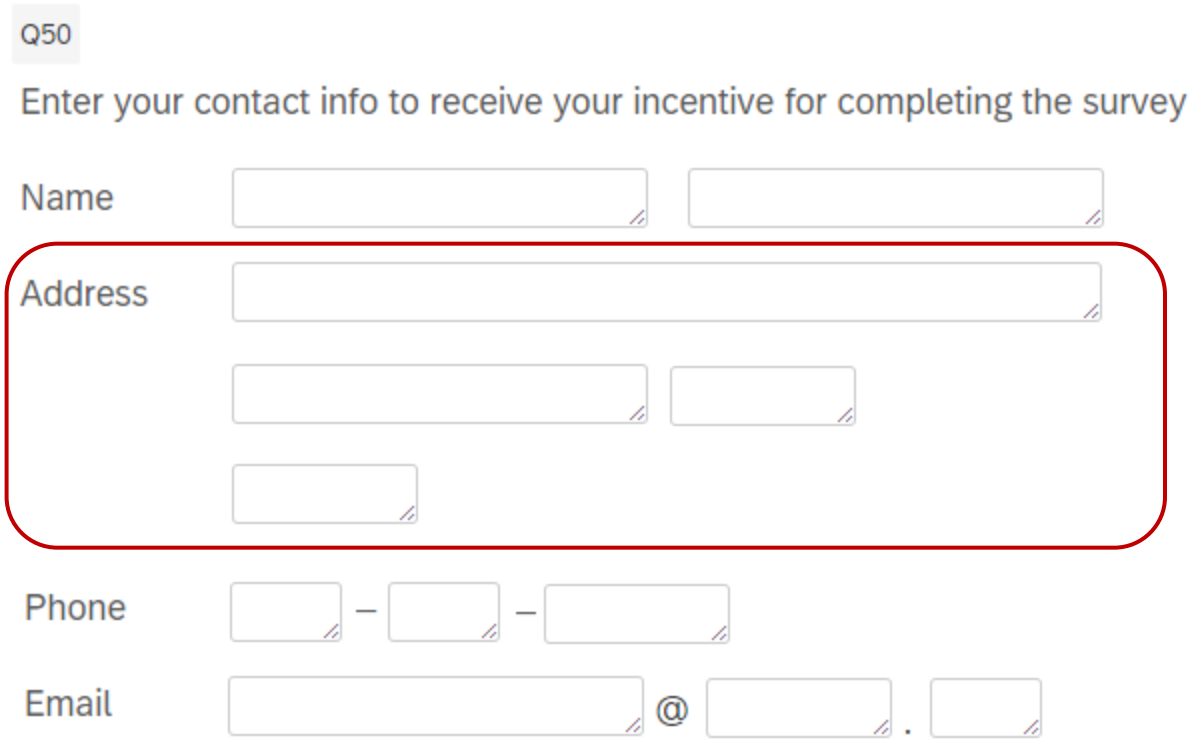


Web Form Elements - Why is it important?

All web forms elements should

- be made available to all users
- have meaningful labels
- provide instructions to enter information correctly

Web Form Elements – Non-Compliant



‘Address’ and then ‘Enter text’ ‘Enter text’ ‘Enter text’ ‘Enter text’

Web Form Elements - Compliant

Q50

Enter your contact info to receive your incentive for completing the survey

First Name

Last Name

Street Address

City

State

Zip code

Phone

Email

‘Street Address’ and then ‘Enter text for street address’

‘City’ and then ‘Enter text for city’ …

Error Identification and Suggestion

WCAG 2.0 Requirements 3.3.1 and 3.3.3

- Errors are identified and described to the user in text
- Error-suggestion - Guidance (e.g., suggestion for corrected input) is provided about how to correct errors for form fields.

Who is most impacted?

Visual

Motor

Cognitive

Hearing

Error Identification and Suggestion - Why is it important?

Error identification and suggestions helps:

- users with guidance to fill forms accurately
- explain nature or location of error
- users with or without disabilities to submit forms

Error Identification and Suggestion – Non-Compliant

Q50

Enter your contact info to receive your incentive for completing the survey

First Name	John
Last Name	Hancock
Street Address	123 Some St
City	Neverland
State	
Zip code	12345
Phone	(919)-123-4567
Email	johnh@gmail

Error submitting survey!

Back Submit survey

Error Identification and Suggestion – Compliant

Enter your contact info to receive your incentive for completing the survey

Please correct the errors to submit survey

'State' is a required field
'Email' should be in the *name@mail.com* format

First Name	John
Last Name	Hancock
Street Address	123 Some St
City	Neverland
State	
Zip code	12345
Phone	(919)-123-4567
Email	johnh@gmail

Back | Submit survey

Conclusion

Section 508 Compliance -

- It's a law that requires federal government websites to be safe and accessible for people with disabilities
- The WCAG are the standards for web compliance which explains how to make web content more accessible to people with disabilities.
- Ensures disabled people don't miss out on essential and life saving information
- Safeguards company's reputation, both with the government and clients.

Thank You!

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