

Challenges in Making Web Surveys 508 Compliant

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March 21, 2013

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Today's Presentation

- Overview
- Section 508 requirements
- Examples of challenging requirements
- Impact on budget
- Takeaways





Section 508 - Overview

It is the law

 Federal employees or members of public seeking information or services from a Federal Department or agency - have access to and use of information and data that is comparable to the access to and use of the information and data by such members of the public who are not individuals with disabilities.

Categorized broadly into –

- General (Subpart A)
- Technical Standards (Subpart B)
- Functional Performance Criteria (Subpart C)
- Information, Documentation, and Support (Subpart D)





Focus Groups

- People with Visual Disabilities
 - blind, low vision
- People with Hearing Disabilities
 - deaf, hard-of-hearing
- People with Mobility & Dexterity Impairments
- Other
 - color blindness, cognitive and seizure related disabilities



Technical Standards

- Software applications and operating systems (1194.21)
- Web-based intranet and internet information and applications (1194.22)
- Telecommunication products (1194.23)
- Video and multimedia products (1194.24)
- Self contained, closed products (1194.25)
- Desktop and portable computers (1194.26)



Website/Web Survey Requirements

1194.21

- Keyboard Accessibility (a)
- On Screen indication of current focus (c)

1194.22

- All 16 possible provisions apply
- Frequently encountered ones
 - Alternate text to images/non-text elements (a)
 - Color (c)
 - Style Sheet (d)
 - Simple data tables (g)
 - Electronic forms (n)
 - Skip repetitive navigation links (o)



Challenging Requirements

- Images like graphs, screenshots (1194.22 a)
- Multimedia (Audio or video or both) (1194.22 b)
- Client-Side image maps (1194.22 f)
- Complex data tables (1194.22 h)



Mapping of standards to Focus Groups

1194.22 Web Standards	Test Results	Blind	Low Vision	Deaf/ Hard of Hearing	Mobility	*Other
a. Text equivalents		Х				
b1. Synchronized captions				Х		
b2. Audio description		Х	Х			
c. Color dependence		Х	Х			Х
d. Style sheet dependence		Х	Х			Х
e. Text links for server side image maps		Х			Х	
f. Client side image maps instead of server side		Х			Х	
g. Simple data tables: Identify row and column headers with <scope></scope>		Х				
h. Complex data tables: Associate data cells to row and column headers		Х		-1-		
i. Descriptive titles for frames.		Х				
j. Flickering elements						Х
k. Equivalent text only page, only when necessary.		Х	Х	Х	Х	
I. Functional text for scripts		Х				
m. Provide plugin links when required		Х				
n. Label form fields		Х				
o. Skip repetitive navigation links		Х	Х		Х	
p. Timed response		Х	Х		Х	Х

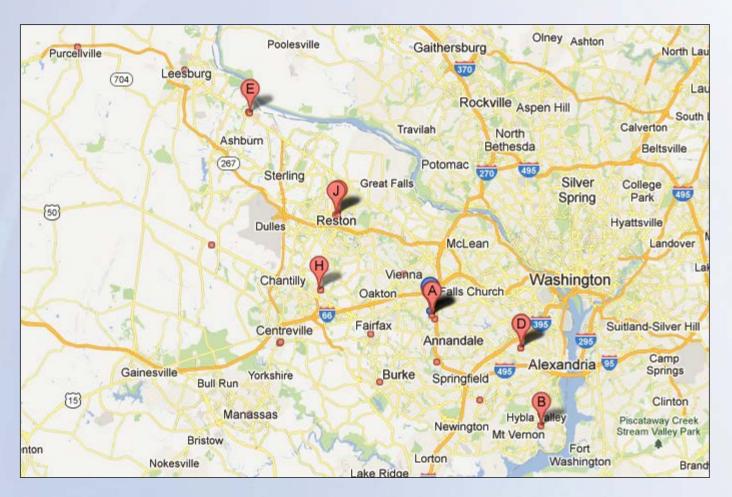
Source: Office of Accessible Systems & Technology (OAST)





Images - I

Participating sites of INOVA Hospitals in a Google Map

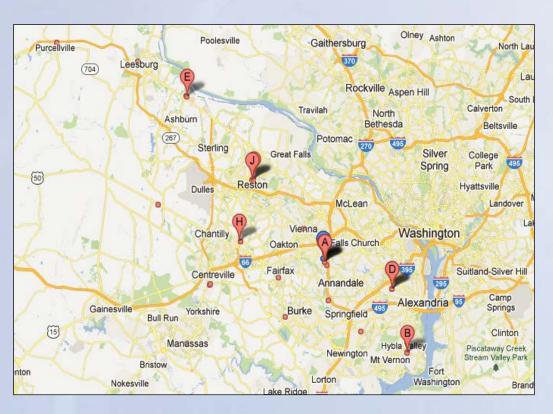






Images – I (Compliant)

Participating sites of INOVA Hospitals in a Google Map

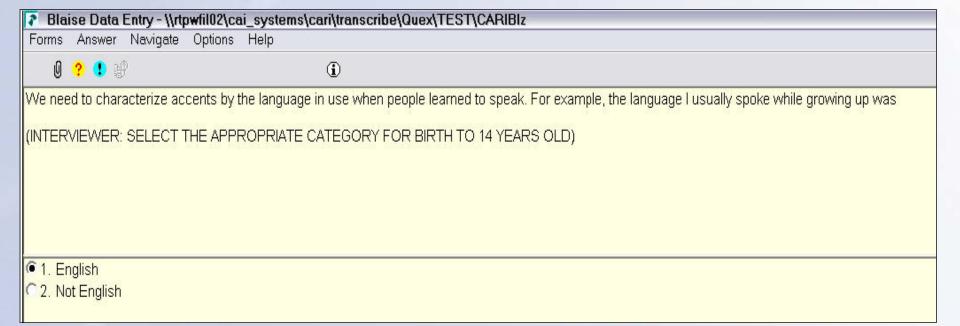


- A INOVA Fairfax Hospital
- B INOVA Mount Vernon
- D INOVA Alexandria
- E INOVA Loudoun
- J INOVA Emergency Care
- H INOVA Urgent Care Center





Images – II



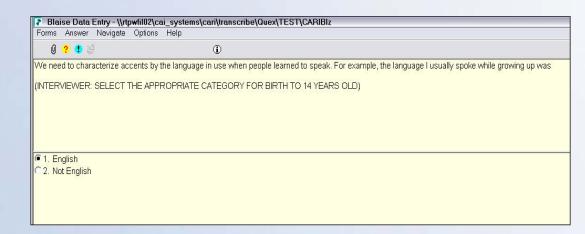


Images II (Compliant)

 Question – We need to characterize accents by the language in use when people learned to speak
 For example, the language I usually spoke while growing up was

(INTERVIEWER SELECT THE APPROPRIATE CATEGORY FOR BIRTH TO 14 YEARS OLD)

- Two options are provided to the respondent. Please select one of the two
 - English
 - Not English

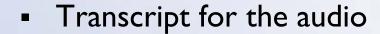


Audio





Audio - Compliant





- Interviewer How would you categorize the speed of your speaking in this interview?
 - Rapid
 - Medium
 - Slow
- Respondent Medium
- There is some background noise in the recording.

Complex data table

8. For what purpose do you generally use visual materials?

Please identify how important for your academic and research work are each of the following tasks

	Not Important			Very Important				
	1	2	3	4	5	6	7	
Analysis								
To study an artists technique	©	0	0	0	0	0	©	
To compare several images	©	0	0	0	0	0	©	
To document the contents of an image	©	0	0	0	0	0	©	
To interpret images in a historical context	©	0	0	0	0	0	©	
Expression								
To gain ideas and inspiration	©	0	0	0	0	0	©	
To communicate and express ideas	©	0	0	0	0	0	©	
Manipulation								
To obtain a copy of the image	©	0	0	0	0	0	©	
To edit and reuse the image	0	0	0	0	0	0	0	



Alternate (Compliant)

8. For what purpose do you generally use visual materials?

Please identify how important for your academic and research work are each of the following tasks

	Not Important						Very Important
	1	2	3	4	5	6	7
Analysis							
To study an artists technique	0	0	0	0	0	0	©
To compare several images	0	0	0	0	0	0	0
To document the contents of an image	0	0	0	0	0	0	0
To interpret images in a historical context	0	0	0	0	0	0	0
Expression							
To gain ideas and inspiration	0	0	0	0	0	0	0
To communicate and express ideas	0	0	0	0	0	0	0
Manipulation							
To obtain a copy of the image	0	0	0	0	0	0	0
To edit and reuse the image	0	0	0	0	0	0	0

- 8. For what purpose do you generally use visual materials?

 Please identify how important for your academic and research work are each of the following tasks
- 1. Analysis
 - a. To study an artist's technique
 - i. O 1 = Not important
 - ii.

 2 = Somewhat important
 - iii. © 3 = Maybe important
 - iv. 0 4 = Neutral
 - v. O 5 = Sort of important
 - vi. © 6 = Important
 - vii. © 7 = Very important
 - b. To compare several images
 - i.

 1 = Not important
 - ii. © 2 = Somewhat important
 - iii. © 3 = Maybe important
 - iv. 0 4 = Neutral
 - v. © 5 = Sort of important
 - vi.

 6 = Important
 - vii. O 7 = Very important



Client-Side Image Maps

Click on the state where you received services



http://acm.csusb.edu/services/webaccessibility/clientSideImage Maps.html



Client-Side Image Maps(Compliant)

Click on the state where you received services



Alabama Georgia Hawaii Arkansas Illinois Arizona Colorado **Kansas** Delaware **Kentucky** Florida Louisiana **Maryland** Massachusetts Minnesota Missouri <u>Mississippi</u> Montana

Select your State or Province

State/Province



Multimedia (*video may not display on all computers*)



Multimedia Source: DHS Office of Accessible Systems and Technology





Multimedia(Compliant)



Transcript:

This is a conversation that takes place at the Restaurant

Audio description: - In a bustling café a couple sits at the table

Man - Yeah, Yeah - I wonder where our food is?

Audio description: – In the kitchen

Server – Give me the shrimp now!

Chef - Ok, here it comes

Audio description: - Back at the table

Woman - You know, Eva tells me that the food is absolutely amazing here

Audio description: – A server brings wine glasses

Server - Your Wine

Audio description:-The diners linger over a salad course. In the kitchen flames rise from a pan

Head Chef – Chef David you poured too much oil on that!

Audio description:—The chef tosses pasta, and then adds it to the pan. Back at the table, the man sips wine. Now the man in the kitchen sets plates on the counter.

Server - Thank You!

Audio description: – A server in white apron grabs the plates. At the table

Man - Wow! Looks great!

Server – Ok here is fettuccini medley for you and the seafood surprise for you!

Man – Thank you very much!

Server - You are welcome!

Multimedia Source: DHS Office of Accessible Man – Well let's eat Systems and Technology





DO's and DON'Ts

DO's

- identify Section 508 clauses and requirements in contracts
- budget for 508 testing
- look for alternative ways to make the information communicated compliant



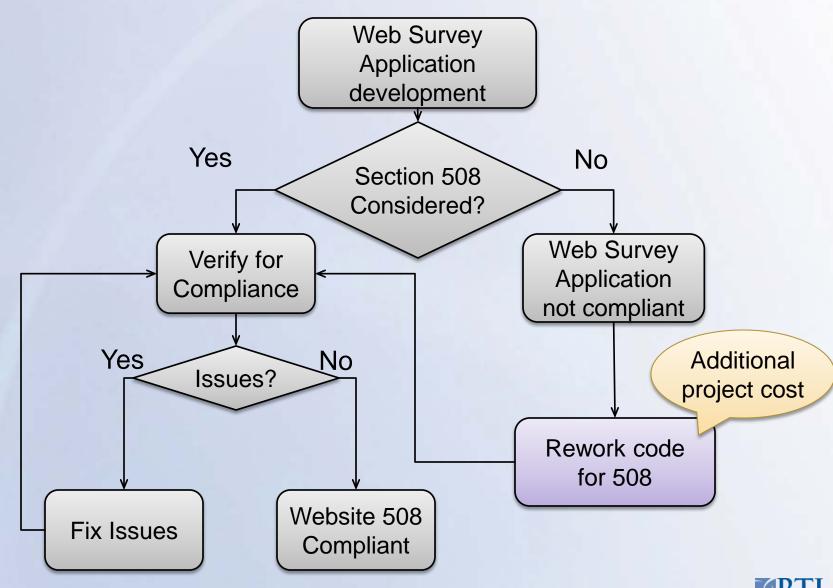
DO's and DON'Ts

DON'Ts

- wait till after the development is done to make the website 508 compliant
- submit reports without first testing for compliance
- assume third party controls stating 508 compliant can be taken as is
- assume Automated tools test 508 compliance completely
- assume JAWS*(screen reader) compliant = Section 508
 compliant



^{*} Job Access With Speech



Budget Considerations

- The key elements that significantly increase time and budgets
 - Graphs
 - Maps
 - Videos
 - Multimedia
 - Usage of scripting languages
 - Complex data tables
 - Several interactive elements like in a web survey
 - Third party plug-ins



Takeaways

- Consider Section 508 compliance at the earliest preferably during requirements phase
- Consider alternatives to minimize effort
- Achieve balance between User Interface(UI)/usability and accessibility if required
- Budget for Section 508 compliance in projects



More Information

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