Summary: Analysis of Pete McNally Survey by Silver Task Force

Introduction

An invitation was extended by the Silver Task Force to accessibility researchers to partner with the Task Force in researching how people use accessibility guidelines and how such guidelines can be approved. The Task Force provided researchers with a list of research questions that should be used.

Peter McNally of Bentley University proposed approaching UX professionals with a survey followed by selected interviews to answer questions about current use of WCAG 2.0 by UX professionals.

McNally shared his raw data (without identifying information) with the Task Force so that the Task Force could analyze the data prior to the interviews. When the interview results are available, this report will be updated. The following report was written by the Silver Task Force *without* input from Peter McNally with the exception of his presentation of the raw data results[1] to the Task Force.

Peter McNally Bio[2]

Peter McNally is a Senior Usability Consultant at the User Experience Center. McNally has more than 20 years' experience in usability, information architecture, accessibility, and software engineering. He has designed and evaluated user interfaces in the healthcare, financial services, government, education, energy, manufacturing, defense, and electronics industries. Prior to joining the center, McNally was a Principal Consultant in the CSC user experience Practice, Senior User Experience Architect at HP Enterprise Services, Research Officer at University of Hertfordshire, and Senior Software Engineer at 3M Health Information Systems.

McNally holds a Bachelor of Science in Computer Science from Northeastern University and a Master of Science in Computer Science from Rensselaer Polytechnic Institute (RPI). He is a member of the International Usability Professionals' Association (UPA), ACM CHI, Boston UPA, and Boston CHI.

Methodology: Survey distributed to English-speaking UX and accessibility professionals. The survey was completed by 121 respondents.

---

[1] Minutes of meeting where Pete presented results: https://www.w3.org/2017/09/29-silver-minutes.html
[2] http://www.bentley.edu/events/uxc/speakers/peter-mcnally

Results

Demographics:

● About 75% of the respondents ranged in age between 25-50 years, with the majority ranging 35-49 years.

● When asked if they self-identified as having a disability, 77% self-identified as not having a disability with 21% identifying as having a disability.

● The respondents were from 15 countries with the U.S. accounting for 60% (73) of the respondents. Overall, the demographics were heavily oriented toward U.S., the UK, and Canada.

What is your age group?

Answer	%	Count	
Under 18	0.00%	0	
18 - 24	3.31%	4	
25 - 34	30.58%	37	75.21%
35 - 49	44.63%	54	
50 - 64	19.01%	23	
65 or over	2.48%	3	
Total	100%	121	

Do you self-identify as having a disability or impairment?

Answer	%	Count
Yes	21.49%	26
No	77.69%	94
Prefer not to answer	0.83%	1
Total	**100%**	**121**

What country do you reside in?

Country	%	Count
Australia	5.79%	7
Belgium	0.83%	1
Canada	5.79%	7
France	4.96%	6
Germany	0.83%	1
Greece	0.83%	1
India	1.65%	2
Italy	0.83%	1
Netherlands	1.65%	2
Philippines	0.83%	1
Spain	0.83%	1
Sweden	0.83%	1
Switzerland	0.83%	1

UK	13.22%	16
USA	60.33%	73
Total	**100.00%**	**121**

Employment:
- 89% of the respondents reported being employed full time.
- Some respondents reported part-time work or being students.
- Others reported being retired, semi-retired, or even working as independent consultants.
- About 22% of the respondents reported experience in Telecommunications, Technology, Internet, and Electronics while other areas reported included Consulting/Agency (14%), Education (13%), and Advertising and Marketing (11%).
- Other areas of experience had less than 10% in each but include Nonprofit, Government, Financial Service, and Healthcare and Pharmaceuticals.
- Almost 45% reported their primary role as UX Designers or UX Researchers while 36% were Accessibility Specialists.
- Other roles include being an advocate, back-end or front-end developer, educator, influencer, researcher, and many others.

What is your current employment status?

Answer	%	Count
Full Time	89.26%	108
Part-Time	3.31%	4
Student	2.48%	3
Retired	0.83%	1
Not Employed	1.65%	2
Other (please describe)	2.48%	3
Total	**100%**	**121**

Other (please describe)
Independent Consultant
semi-retired
Consultant

In which of the following areas do you have experience? Please select all that apply.

Answer	%	Count
Advertising and Marketing	11.24%	39
Agriculture	0.58%	2
Airlines and Aerospace	1.44%	5
Automotive	1.73%	6
Business Support and Logistics	2.31%	8

	%	Count
Construction, Machinery, and Homes	0.58%	2
Consulting/Agency	14.41%	50
Education	12.68%	44
Entertainment and Leisure	1.44%	5
Finance and Financial Services	3.75%	13
Food and Beverage	1.15%	4
Government	6.34%	22
Healthcare and Pharmaceuticals	4.03%	14
Insurance	1.73%	6
Manufacturing	1.15%	4
Nonprofit	8.07%	28
Retail and Consumer Durables	1.15%	4
Real Estate	0.29%	1
Telecommunications, Technology, Internet, and Electronics	22.48%	78
Transportation and Delivery	0.86%	3
Utilities, Energy, and Extraction	0.58%	2
Other (please describe)	2.02%	7
Total	**100%**	**347**

Other (please describe)
Creative; graphic and web design
Publishing
Digital
Journalism
UX Design
Design
Plain English

How would you describe your primary role within user experience?

Answer	%	Count	
Accessibility Specialist	36.36%	44	
Customer Experience Professional	1.65%	2	
Interaction Designer	3.31%	4	
User Experience Designer	24.79%	30	44.63%
User Experience Researcher	19.83%	24	
Student	1.65%	2	
Visual Designer	2.48%	3	

Answer	%	Count
Other / Don't work within user experience	9.92%	12
Total	**100%**	**121**

Which of the following best describes your roles?
Please select all that apply

Answer	%	Count
Advocate	9.76%	4
Assistive technology developer	2.44%	1
Authoring tool developer	2.44%	1
Back-end developer	7.32%	3
Call center representative	0.00%	0
Content provider/producer	0.00%	0
Educator	7.32%	3
Evaluation tool developer	2.44%	1
Front-end developer	17.07%	7
Influencer	9.76%	4
Intern	2.44%	1
Information technology manager	4.88%	2
Lawyer	0.00%	0
Manager	2.44%	1
Platform developer	2.44%	1
Policymaker	0.00%	0
Product manager	7.32%	3
Project manager	2.44%	1
QA specialist	0.00%	0
Researcher	9.76%	4
Standards developer	2.44%	1
Team lead	4.88%	2
Vice president/Officer	0.00%	0
Other (please describe)	2.44%	1
Total	**100%**	**41**

Other (please describe)
UI Designer

Platform Focus:
● 	Various platforms among users with an almost equal focus on desktop (41%) and mobile (38%).
● 	About 14% or 41 respondents reported their platform was tablet or kiosk with 2%, or 7 working on wearables and another 2% on hardware.

What platforms do you focus on within user experience? Please select all that apply.

Answer	%	Count
Desktop	41.38%	120
Mobile	38.28%	111
Kiosk/Tablet	14.14%	41
Wearables	2.41%	7
Hardware	2.41%	7
Other (please describe)	1.38%	4
Total	**100%**	**290**

Other (please describe)
print materials
#NoUI, AR, Voice, TV, Environmental
Responsive websites
offline experiences, the whole shebang

Experience and Involvement with Accessibility

● Seventy-eight percent (78%) reported that accessibility is the main focus with almost 21% reporting that accessibility plays a small role.

● Forty-two percent indicated they had 1-5 years of experience while 45% reported more than 6 years of experience.

● A small percentage (12%) reported less than one year of experience or no experience with accessibility.

● Sixty-seven percent (67%) of UX or accessibility professionals surveyed believe their companies/clients value accessibility.

● However, a significant number of professionals surveyed (32%) work in environments where they believe accessibility is not considered to be important.

How many years experience do you have in accessibility?

Answer	%	Count	
Less than a year	11.57%	14	
1 to 5 years	42.15%	51	
6 to 10 years	22.31%	27	45%
11 to 15 years	9.92%	12	
More than 15 years	13.22%	16	
I have no experience in accessibility	0.83%	1	12%
Total	**100%**	**121**	

How involved are you with accessibility in your current position?

Answer	%	Count	
Main focus of my position	39.67%	48	78%
Not my main focus, but it is part of my position	38.02%	46	
It plays a limited role in my position	20.66%	25	
It is not part of my position	1.65%	2	
Total	**100%**	**121**	

How important is accessibility to your company/clients
in creating an excellent user/customer experience?

Answer	%	Count	
Extremely important	33.88%	41	67%
Very important	33.06%	40	
Moderately important	14.88%	18	
Slightly important	12.40%	15	17%
Not at all important	4.13%	5	
Don't know	1.65%	2	
Total	**100%**	**121**	

Learning about and Keeping up with Accessibility

● The results of the survey show that the sources for learning were wide-ranging from W3C Resources (21%) to using a search engine to search for content (20%) to gaining advice from colleagues and consultants (19%).

● Additional sources included social media (18%) and accessibility email forums (12%).

● There is no one source for learning accessibility. "Websites and blog posts that translate the WCAG into more consumable, approachable chunks of information." Websites include:
  ○ WebAim (5 mentions)
  ○ The Paciello Group's blog (2 mentions)
  ○ 4Syllables
  ○ Association of Computer Machinery
  ○ Deque University
  ○ DIAGRAM Center
  ○ Google Alerts
  ○ Gov.uk
  ○ Simply Accessible
  ○ StackExchange
  ○ Tenon.io
  ○ University resource sites
  ○ WCAG
  ○ Webaccessibility.com

- Other (17 freeform answers)
    - Conferences - 6
    - Webinars - 4
    - Books - 3
    - Academic research and journals - 3
    - Professional articles - 2
    - Meetups - 2
    - University-based certificate courses - 2
    - Training - 1
    - Trying things out - 1
    - "We have an accessibility specialist and we're bound to them by government regulations" - 1

How do you learn or keep up with accessibility topics? Please select all that apply.

Answer	%	Count
Advice from colleagues or consultants	19.29%	81
Email forums discussing accessibility	12.14%	51
Search for content using a search engine	20.48%	86
Social media	17.86%	75
W3C web resources	20.95%	88
Web sites (please describe)	4.29%	18
I don't learn or keep up with accessibility topics	0.95%	4
Other (please describe)	4.05%	17
Total	**100%**	**420**

Web sites (please describe)
UX, accessibility, or other related web sites (please describe)
WCAG, AIM
DIAMGRAM Center, other university resource sites sites and blog posts that translate the WCAG into more consumable, approachable chunks of information
Google Alerts, StackExchange
WebAim
I actively research and follow the topic on multiple channels
association of computer machinery
Simply Acessible, The Paciello Group's blog, etc.

Log into webaccessibility.com and tenon.io
Blogs and designers' guides
well known accessibility centered web site :
paciello group, webaim...
Blogs of practitioners
webaim
Deque Université , anysutfer
Webaim, 4Syllables, gov.uk
Blogs about accessibility and new web
tecnologies.

Other

Conferences, Webinars

conferences and webinars

A11y meetup

Conferences

Local meetups

books, webinars

We have an accessibility specialist and we're
bound to them by government regulations

book and professional articles

Took the Information Accessibility Design & Policy
professional cert from University of Illinois Urbana
Champaign

academic research

Academic journals and conferences

Trying things out

Undertaking a university-based Professional
Certificate of Web Accessibility

conferences

web conferences

conferences, books, articles, research

Training

Accessibility Guidelines

Familiarity and Usefulness of WCAG 2.0

● **Those surveyed were asked about their familiarity with WCAG 2.0 as well as accessibility laws.** Ninety-seven percent reported a familiarity with WCAG 2.0. Those who were not familiar had knowledge of the WCAG 1.0, the ADA, or nothing at all.

● To further breakdown this knowledge, respondents were asked about familiarity with the components of WCAG and 23% reported being familiar with the guidelines, 22% with the principles.

Others reported familiarity with success criteria (19%), with techniques (18%) and 16% reported familiarity of how to meet WCAG 2.0. Respondents provided multiple responses in this area.

● Half responded being most familiar with WCAG 1.0 while the other half of the responses are evenly split between the ADA or not having knowledge of any laws or guidelines.

Are you familiar with the W3C Web Content Accessibility Guidelines (WCAG 2.0)?

Answer	%	Count
Yes	96.69%	117
No	3.31%	4
Total	**100%**	**121**

Which components of the W3C Web Content Accessibility Guidelines (WCAG) 2.0 are you familiar with? Please select all that apply.

Answer	%	Count
Principles - foundational principles of perceivable, operable, understandable, and robust	22.25%	91
Guidelines - framework of objectives for ensuring content is accessible	23.96%	98
Success Criteria - specific success criteria that will be either true or false when tested against	19.32%	79
Techniques - instructions on how to meet the success criteria	18.34%	75
How to meet WCAG 2.0 - customizable quick reference	16.14%	66
Total	**100%**	**409**

Please list which accessibility laws or guidelines you use or are familiar with (if not familiar with WCAG 2.0). Please select all that apply.

Answer	%	Count
Americans with Disabilities Act	25.00%	1
Section 508	0.00%	0
W3C Web Content Accessibility Guidelines (WCAG) 1.0	50.00%	2
Other (please describe)	0.00%	0
I am not familiar with any accessibility laws or guidelines	25.00%	1
Total	**100%**	**4**

● **Respondents were asked to gauge how well WCAG 2.0 helps them in a number of areas: learning, teaching, and applying accessibility.** In relation to learning accessibility, about 34% reported that WCAG 2.0 helped them moderately well while 30% reported that it helped them very well.

●   Interestingly those that identified that WCAG 2.0 helped extremely well and even not well were tied at 7%.

How well does WCAG 2.0 help you in learning accessibility?

Answer	%	Count
Extremely well	7.14%	8
Very well	29.46%	33
Moderately well	33.93%	38
Slightly well	22.32%	25
Not well at all	7.14%	8
Total	**100%**	**112**

●   In relation to how well WCAG 2.0 helps in teaching others about accessibility, more than half of the respondents reported that WCAG 2.0 helps moderately to extremely well.

●   Almost 27% felt that the guidelines helped slightly well with 19% reporting that it was not helpful. This implies that WCAG 2.0 is helpful to cite or reference but not really helpful to use initially.

How well does WCAG 2.0 help you in teaching others about accessibility?

Answer	%	Count
Extremely well	4.46%	5
Very well	16.07%	18
Moderately well	30.36%	34
Slightly well	26.79%	30
Not well at all	18.75%	21
Not Applicable	3.57%	4
Total	**100%**	**112**

●   **Overall, with 86 respondents providing the strongest response in the moderately well-very well categories, the implication can be made that people do apply the standards.** About 32% of the respondents reported that WCAG helps applying accessibility very well with 45% stating that it helped moderately well.

●   A couple of thoughts come from this, one, the word "applying" could be interpreted differently and two, one can apply things technically, or apply as policy in organizations and government, but since most of the respondents were UX professionals and Accessibility professionals, the answers are most likely technical.

How well does WCAG 2.0 help you in applying accessibility?

Answer	%	Count
Extremely well	7.14%	8
Very well	32.14%	36
Moderately well	44.64%	50

Slightly well	13.39%	15
Not well at all	2.68%	3
Total	**100%**	**112**

Difficult Aspects of WCAG 2.0 Success Criteria

Which aspects of the WCAG 2.0 Success Criteria are most difficult to apply in your work?
The participants were provided with a popup window listing the WCAG 2.0 success criteria and could give any long form answer they wanted. For easier organization and readability, some answers were split up, and spelling or capitalization was corrected when possible.

No Problem:
● **Those who presented both experience in computer science and learning WCAG through their jobs reported no problem with the criteria, but feel that those who may not have similar expertise may find the criteria difficult.** "I have experience in computer science and learning about WCAG through technology consulting. So I know them and understand them fairly well. Those without my kind of background, however, seem to find them more overwhelming in my experience (such as visual designers)."

Mastery:
● **It is difficult to master WCAG and feel confident you have the right answer.** "There is not a clear distinction on what is the 'right' answer. Even in the industry experts disagree. It is difficult to implement across a large organization without clear direction."
● **There is flexibility in how to master WCAG, but specific knowledge is needed and the language is higher level.** The whole web interface looks like a very technical manual. I don't like the use of acronyms and hadn't considered using this page as a resource.
● **Prioritizing resources for implementing would be helpful for people new to WCAG.** "As a UX researcher who does work in accessibility, I'm often asked a simple question: 'what do we do?' There are so many layers to WCAG and then when you try to explain, there are so so so many resources for implementing them that my clients get quickly overwhelmed. It would be really nice if there could be some prioritization for people who are new accessibility, but want to do the right thing."

Ambiguity:
● **Success criteria is ambiguous, so many gray areas.** "Provide concrete examples and different scenarios. Native Apps is different than Web. While the generic principles from web applies, spell out the rules that apply to native App."
● **Language is vague and open for interpretation.** "Some things are very subjective. Language used is often not easy to understand"

Convincing Others:
● **It's hard to convince others to follow or apply WCAG.** "Honestly, the criteria are not the problem in the agency world. The most difficult aspect is convincing others."
● **A business case for accessibility is needed.** "Trying to get others on board is the greatest challenge…Video may be created and captions will fall onto the 'I'll do it later' pile...Convincing people of the importance of designing for screen readers…Convincing others to put Alt tags on existing products."

Too technical or poorly written:

- **As is, WCAG is diffiult to understand technical language or acronyms not understood.** "ALL of WCAG is a problem implementing because it is so poorly written. The ideas are great, the actual normative language is a nightmare for native English speakers…can't imagine how hard it is for people who don't speak English or speak it as a second language."
- **Levels of conformance have a bit of overlap that is confusing to implement.** "Additionally, having 3 levels of conformance is a mess. It made sense initially, but once people began adopting WCAG 2.0, no one actually supports only A or all of AAA. So, the way it's written to do just his for A and this for AA and have overlap is very complex - especially around 1.2.1 - 1.2.5."
- **As is, the criteria is good for simple interactions only.** "The success criteria are great for simpler, individual interactions, but when you combine things into a more complex component, it's hard to apply the success criteria to that."

(Optional) Which aspects of the WCAG 2.0 Success Criteria are most difficult to apply in your work?   Open the WCAG 2.0 Success Criteria in a new window.

Answer
The whole web interface looks like a very technical manual. I don't like the use of acronyms and hadn't considered using this page as a resource. Is this written for programmers? I am not a software programmer.
3.2.1
On Focus
Level A
Time-based Media
Use of Color
Minimum Contrast
Captions
Audio description of media
Audio control
Resize text
Not particularly.
There is not a clear distinction on what is the "right" answer. Even in the industry experts disagree. It is difficult to implement across a large organization without clear direction.
Perceivable
In some ways the 4.1.1 is hard as only possible on the desktop or if you have access to the source code for applications. Also I have found 1.3.3 is very subjective and used as a catch all for any failures that are hard to classify.
The explanation and use of applicable techniques.
Honestly, the criteria are not the problem in the agency world. The most difficult aspect is convincing others.
Live video captioning
Including video descriptions for people who can't see
The Colors
SC that don't map clearly to native apps and mobile web (most of these under operable principle)
Hhhh
I work mostly in creating web applications, so end up doing a lot of rich interactions. The success criteria are great for simpler, individual interactions, but when you combine things into a more complex component, it's hard to apply the success criteria to that. The WAI-ARIA guidelines help, but more examples - and more definitive best practices - would be welcome.

1.4.1, 1.4.3, 2.4.3

All

Video guidelines are hard to get clients to follow because of YouTube

Primarily items related to color and text size.

Guideline 1.3 - making content/layouts more adaptable. Clients still perceive websites as collections of pages.

N/A, I apply them all the time. But I have experience in computer science and learning about WCAG through technology consulting. So I know them and understand them fairly well. Those without my kind of background, however, seem to find them more overwhelming in my experience (such as visual designers).

Trying to get others on board is the greatest challenge, so a designer may create an image for social media with text overlaying it. The marketing specialist may then tweet that out with no ALT text, or clarity of what the image means. Video may be created and captions will fall onto the 'I'll do it later' pile. When it comes to the actual website that I work on, we have skilled developers involved and meeting WCAG AA was one of the principles outlined at the very start. We are perhaps more fortunate than most because our developers use good semantic elements in the first instance, so don't need to throw ARIA roles all over the place!

Perceivable - 1.2 - Time-based media; 1.4 - Distinguishable: 1.4.3 Contrast, 1.4.4 Resize text, 1.4.5 Images of text
Understandable - 3.1 - Readable: 3.1.5 Reading level; 3.2 Predictable: 3.2.3 Consistent navigation and 3.2.4 Consistent identification
Operable - 2.4 Navigable: 2.4.4 Link Purpose (in context)

Difficulty in applying arises mostly from tech end not consulting with content end before creating styles and themes, and with governance saying 'it's good enough, we'll fix it later'.

Text alternatives for UGC images; getting designers to simplify without losing information or structure (over simplification); keeping predictable UX interactions and not inventing one-off patterns; communicating and spec'ing state changes of a UI and building them as a predictable implementation.

Navigable, Text Alternatives

The general language is a double edged sword. It gives us flexibility in using various techniques to meet WCAG success criteria, but requires very specific knowledge so that novice users don't feel it is specific enough to help them reach the criteria.

Contrast needs to be further defined. It doesn't specify between mathematical contrast and perceptual contrast. At certain sizes, fonts, while mathematically being one color, may display as a different color because of aliasing, or be perceived differently because of color blindness.

Ambiguity and having to interpret, gray areas. Provide concrete examples and different scenarios. Native Apps is different than Web. While the generic principles from web applies, spell out the rules that apply to native App.
ALL of WCAG is a problem implementing because it is so poorly written. The ideas are great, they the actual normative language is a nightmare for native English speakers and I can;t imagine how hard it is for people who don;t speak Engloish or speak it as a second language. Look at all the proposals on language for WCAG 2.1 and see how badly WCAG 2.0's normative language fails them.

1.2.1 - 1.2.5 are difficult to apply simply because they are so complex. I understand them, but getting designers, developers and marketers to fully understand when captions, transcripts and audio description are required is incredibly complex. I've tried tutorials, videos and wizards and it's always difficult.

Additionally, having 3 levels of conformance is a mess. It made sense initially, but once people began adopting WCAG 2.0, no one actually supports only A or all of AAA. So, the way it's written to do just his for A and this for AA and have overlap is very complex - especially around 1.2.1 - 1.2.5.

And teaching 2.2.2 is also a mess because there are so many qualifiers. Animation? 5 second rule and no refresh

rate option. Updating content? No 5 second rule but does have the refresh rate option. Oh, but it only applies to page with other content. Just try to write a review question about that that's clear, comprehensive, accurate, and do it in under 30 words. Just try.

Labels or instructions needs to be clarified to cover exactly when instructions are needed.

Info and relationships needs to be clarified to cover whether it applies to heading levels, roles for interactive elements, whether landmarks and headings are actually required or just a way to meet it.

Name, role value needs to be clarified to say just how wrong a role has to be before it;s a defect. For instance, is a button used as a link a violation? I know expert SMEs who say yes, but others would say that's being ridiculously restrictive and that by requiring it you make it less likely people will try to apply WCAG at all.
Audio descriptions are currently the most difficult to apply, but it can also be difficult to apply some of the less technical aspects, such as those dealing with cognitive disabilities.
The success criteria aren't difficult but you have to understand them in the context of the full WCAG 2.0, and this is not easy reading/implementing. As a UX researcher who does work in accessibilty, I'm often asked a simple question: "what do we do?" There are so many layers to WCAG and then when you try to explain, there are so so so many resources for implementing them that my clients get quickly overwhelmed. It would be really nice if there could be some prioritization for people who are new accessibility, but want to do the right thing. The other thing is that people talk about is being "accessible," but what is accessible? It depends on what tasks and by whom? (Just like usability.) I get very frustrated by accessibilty experts seeing a single issue and saying "it's not accessible." Accessible by whom and for what task?
It's hard to apply principles around robustness in the mobile context. Sometimes a platform just isn't accessible enough by default.
The presentation of the content makes it hard to parse.

Also, since the accessibility guidelines are old, the examples feel dated.
Alt tags on existing products, convincing people of the importance of designing for screen readers
Those dealing with time-based media
None
Some things are very subjective.

Language used is often not easy to understand

Other Themes:
● **WCAG is hard to apply to non-desktop content.** "It's hard to apply principles around robustness in the mobile context. Sometimes a platform just isn't accessible enough by default."
● **Difficult to get designers to simplify material.** "Getting designers to simplify without losing information or structure (over simplification); keeping predictable UX interactions and not inventing one-off patterns; communicating and spec'ing state changes of a UI and building them as a predictable implementation.

What should be added to WCAG 2.0 Success Criteria?

● **There is a need for mobile guidelines.** "We need mobile specific guidelines and SC plus we need some full proof working (but also usable) examples."

● **More specific font guidelines are needed.** "More sophisticated guidelines around fonts and considering the nuances of what makes typography legible and usable. I'd love to have an open source, globally localized, and community driven for pattern for date picker and forms. More specificity around touch screens and tap target sizes (minimal/optimal) across screen densities."

● **The contrast guidelines need to be expanded to include icons**. "Contrast needs to be expanded to include iconography that's used instead of words. It makes no sense that text needs to be visible and discernible but an image that is used to communicate something important that is not communicated with text could have 1:1 contrast and still be technically conformant."

● **Consider a reference chart for WCAG.** "This may seem a little low-key, but a chart would be most welcome. I have a chart on my wall showing the interactions between the different WCAG 2.0 elements."

● Clear priorities would be helpful for all users. "…would like to see priorities, perhaps by type of disability, e.g., for screen reader users, these are the most important things to think about; for keyboard users, these are the things to think about, etc…in the end, it's all good for everyone but my clients need some prioritization to get started. What should they tackle first?"

(Optional) What additional information or items should be added to the WCAG 2.0 Success Criteria?
Answer
How to prioritize. What is more important to look at/work on first.
It would be great if guidelines for text size and color contrast guidelines covered scenarios involving very large text sizes (24px and up) and heavier font weights (semibold, bold, black.) I'd also love some more clear guidelines on how large links should be in mobile to avoid "fat-fingering."
It is an overwhelming amount of information. It is hard to train people who are new to accessibility who may not be taking it on as their sole career path. For example a developer who needs to understand is often overwhelmed by the amount of information.
I have seen the draft WCAG 2.1 checkpoints are helping with the updates required, like adding specific mobile guidelines and clarifying the more subjective checkpoints.
I am a big advocate of the published 2.1 criteria
Size of fonts
More cognitive guidelines
Requiring user testing
Sole think about SEO to Help exports to improvise website as accessible than well native search
update/add SC to cover native apps
I've found that I have to teach certain concepts first to my coworkers, namely "Name/Role/Value/State" and the concept of "keyboard focus". People who are visual mouse users have no concept of the underlying technology (even if they are developers) and don't understand that the computer needs to know what something is and how you should be able to interact with it just as much as a user does. Having a more formal place (that's not intimidating and written in plain English) to start laypeople within the WCAG pages would help.

We need mobile specific guidelines and SC plus we need some full proof working (but also usable) examples. Also, we need SC that encompass success messages and alerts eg ARIA live regions for site like eCommerce platforms...

More sophisticated guidelines around fonts and considering the nuances of what makes typography legible and usable. I'd love to have an open source, globally localized, and community driven for pattern for date picker and forms. More specificity around touch screens and tap target sizes (minimal/optimal) across screen densities. Examples of what's excellent, acceptable and bad.

On Google's Material Design Intro, they have some good examples of does and don'ts.
On https://material.io/guidelines/motion/movement.html#movement-movement-within-screen-bounds, see "Movement within screen bounds"

More vetted example code would be suuuper helpful. Take, for example, autocompletesâ€"you gotta venture to somewhere else on the web to find any would-be accessible examples. And then best of luck trying to figure out whether the thing that claims to be accessible actually is.

More about cognitive needs

Can you add a rule or specifically update an (or more) existing success criteria to tell visual designers/developers to distinguish an interactive element from plain text for web and native apps. iOS and android gives design guidelines for native apps but WCAG should spell this out. Native apps are getting away with lot of interactive element looking like plain text within main body content.

Contrast needs to be expanded to include iconography that's used instead of words. It makes no sense that text needs to be visible and discernible but an image that is used to communicate something important that is not communicated with text could have 1:1 contrast and still be technically conformant. Additionally, other visual cues like backgrounds and borders are often used to visually convey meaning and you have to really stretch WCAG to say they have to meet any contrast requirements.

Create clear, testable SC for mobile. For instance, the mobile working group recommends touch target of 9mm. Apps don't use mm as a unit of measure. That's a physical measurement of a virtual interface where the devices vary insanely in screen size, resolution, and DPI. Design a touch target that conforms on every device out there today and have Apple introduce the iPhone Nano tomorrow and suddenly you're out of conformance.

A lot of clarification needs to made around keyboard use on mobile as well. iOS doesn't support keyboards at all without VoiceOver running. When it is running, the experience is nothing like keyboard on a desktop. Android OS has better supportm but again, it;s very different. Focus is very different on both platforms, so mapping focus order, keyboard, keyboard trap, on focus, focus visible and other SC is extremely difficult.

WCAG should be focused more on tasks and roles of people in the project team.

A tester, a designer and a developer don't need the same kind and amount of information.

My "priorities" comment above is different from WCAG levels. I would like to see priorities, perhaps by type of disability, e.g., for screen reader users, these are the most important things to think about; for keyboard users, these are the things to think about, etc. I know in the end, it's all good for everyone but my clients need some prioritization to get started. What should they tackle first?

There should be more criteria around authoring tools. This is a huge loophole for tech companies. They can make it possible but very hard to make accessible content. Iknow this is planned.

Easier searching, and possibly visualizations (not just text)

Why aren't disabled elements included in the contrast rules?

In depth code examples

> This may seem a little low-key, but a chart would be most welcome. I have a chart on my wall showing the interactions between the different WCAG 2.0 elements. When silver becomes active, this chart will no longer work.
>
> Simplified examples of what is required and common issues

Specific Success Criteria

These quotations have been organized by principle, guidelines and success criteria wherever possible.

- All
- Perceivable
- Text alternatives for UGC images
- Text alternatives
- Time-based Media
- 1.2 - Time-based media
- Those dealing with time-based media
- Captions
- Live video captioning
- Audio description of media
- Including video descriptions for people who can't see
- Audio descriptions are currently the most difficult to apply, but it can also be difficult to apply some of the less technical aspects, such as those dealing with cognitive disabilities.
- Guideline 1.3 - making content/layouts more adaptable. Clients still perceive websites as collections of pages.
- 1.3.1 Info and relationships needs to be clarified to cover whether it applies to heading levels, roles for interactive elements, whether landmarks and headings are actually required or just a way to meet it.
- I have found 1.3.3 is very subjective and used as a catch all for any failures that are hard to classify.
- Use of Color, Minimum Contrast, Resize text
- Primarily items related to color and text size.
- 1.4.3 Contrast, 1.4.4 Resize text, 1.4.5 Images of text
- The Colors
- 1.4.1, 1.4.3
- Audio control
- Contrast needs to be further defined. It doesn't specify between mathematical contrast and perceptual contrast. At certain sizes, fonts, while mathematically being one color, may display as a different color because of aliasing, or be perceived differently because of color blindness.
- Navigable
- 2.4.3
- 2.4.4 Link Purpose (in context)
- 3.1.5 Reading level
- 3.2 Predictable: 3.2.3 Consistent navigation and 3.2.4 Consistent identification

- 3.2.1 On Focus Level A
- 3.3.2 Labels or instructions needs to be clarified to cover exactly when instructions are needed.
- In some ways the 4.1.1 is hard as only possible on the desktop or if you have access to the source code for applications.

How can WCAG be improved?

How can the WCAG 2.0 be improved to benefit the user experience community, for example to help you in creating a better experience for your users/customers/clients, etc.

● **There is a need for better search capability. "**…the amount of information is good, but a better way to search for the information or solutions would help."

● **Expand the scope of WCAG to pertain to other elements, not just the web.** "We need a spec that is updated to support applications, not just documents, on the web." "Adding guidelines related to accessibility in emerging UX field such as wearable devices, IoT and voice assistant would be great…include guidelines for users with cognitive disabilities."

● **It should be clearly stated that WCAG is not the only resource for providing accessibility.** "By clearly articulating that conformance to the criteria is only a small portion of accessibility considerations."

● **More updated examples are needed within WCAG. "**The way the spec is worded can be very hard to parse, and that is likely due to it trying to be as technology agnostic as possible. It might help to provide some examples of specific technology implementations." **"**Also, pointers to real-world examples would be helpful. Maybe even some case studies of sites that work well or don't."

● **WCAG content should be better presented and organized (more digestible chunks).** "Simplify - Find a way to communicate the guidelines in a way that is simple and easy for someone new to learn." "Rewrite the normative language so it's clear and easy to read using simple language." "The Success Criteria could be rewritten in plain language, or written for an audience with potentially no technical background."

● **Organize the material in the ways that people who use them think about them in the context of the development lifecycle. "**Could they be organized in a way that you could determine when to think about them? For example we marked them by role (content, design, developer, tester) so the role who needs to learn it can focus on the guideline but if someone is a content writer they don't need to learn the design and developer guidelines."

● **The color success criteria could be more specific. "…**specifically define, clarify that contrast difference alone should not be used to indicate an interactive element or to show selected state, even if the contrast is 3:1…always use a distinguishable characteristic to indicate an interactive element in addition to meeting color contrast to surrounding text /element for 3:1.

● **There should be one source for information. "**The guidelines right now are distributed across multiple websites, and the same guidelines are phrased differently on each site. Sometimes, one site will have more information than another. To understand any particular success criteria, I have to read about it in several different places."

(Optional) How can the WCAG 2.0 be improved to benefit the user experience community, for example to help you in creating a better experience for your users/customers/clients, etc.?

Answer

Extend it to pertain to documents as well as web. I have to translate it for use with documents and that can be difficult

Examples... before/after

I used to use the W3 HTML5 validator a lot when I first learned about the HTML5 spec.

It would be hard to develop an accessibility checker that would work, but interactive tools can really help engage users, customers, clients, and those outside of the industry. The filter tab on How to Meet WCAG 2.0 is nice, but I wonder if it could be formatted in a natural language form to make it friendlier. Something like this:

https://tympanus.net/Tutorials/NaturalLanguageForm/

I am a visual designer designing a web app and i need it to meet WCAG 2.0. My app includes audio and animations.

The guidelines right now are distributed across multiple websites, and the same guidelines are phrased differently on each site. Sometimes, one site will have more information than another. To understand any particular success criteria, I have to read about it in several different places.

In order to combat this frustration, I've actually compiled my own personal list of guidelines that are concise and easy to navigate.

I would recommend the WCAG create a single, unified, easily navigable resource for all guidelines and related information.

I am grateful for this very comprehensive effort, but WCAG 2.0 is a very dense document that doesn't appear to have links to tools that help me put these guidelines into practice. Other sites, blog posts, and tools help me apply the guidelines more practically.

Simplify - Find a way to communicate the guidelines in a way that is simple and easy for someone new to learn.

The 38 guidelines are all equally important in this list (other then level a and aa). It would be helpful to know which ones are most often implemented incorrectly so we could focus on training for the ones that are often missed. For example a few of the violations I have never seen on a assessment. Do we need them if they are not often violated? It is difficult to train people on 38 new things.

Could they be organized in a way that you could determine when to think about them? For example we marked them by role (content, design, developer, tester) so the role who needs to learn it can focus on the guideline but if someone is a content writer they don't need to learn the design and developer guidelines.

Adding guidelines related to accessibility in emerging UX field such as wearable devices, IoT and voice assistant would be great.

I think the amount of information is good, but a better way to search for the information or solutions would help.

The Success Criteria could be rewritten in plain language, or written for an audience with potentially no technical background. Often people who ask about the Criteria are tasked with overseeing/implementing accessibility at an agency or organization level, but are not necessarily going to be implementing changes themselves.

By clearly articulating that conformance to the criteria is only a small portion of accessibility considerations â€"
much the same way that breakfast cereals state that they are â€œpart of a balanced breakfastâ€ . There are several universal design principles, considerations, contexts, and use cases that fall outside of the spec. Too many clients and industry people assume that WCAG alone is enough.

Shorter and easier to read

Anything that follows a "show, don't tell" ethos.

An agile match with The web flow. Cause web site Musy ne as sexy than accessible to fÃ©dÃ©rateur more professionnals in this Way :)

Simpler language, more sufficient techniques and failures for each SC

Hhh

I find the docs to be difficult to read when I'm mid-implementation (ie, they provide a lot of info and background, but are not great at the actual implementation) and often rely on other sources for best practices (e.g., http://heydonworks.com/practical_aria_examples/).

It's a wall of text, and not really very friendly for colleagues, managers and clients to read and understand. While it is a highly technical document intended for technical implementers, it seems like, ironically, the WCAG (and indeed, many W3C documents) could stand to be rewritten using simpler English, and with a "chunks, not blobs" approach to content strategy - think in terms of standalone, reusable units of content rather than giant, monolithic documents.

What I've in my company is create a visual simplification of the guidelines as in the Vox Accessibility Guidelines. Our guidelines will hopefully be public soon too. WCAG is a great resource but it's not "accessible" in that it doesn't have an easy entry point. If you're not required to read it, you won't. I would partner with some UI and Visual Designers regarding the presentation of the information. People also need easier ways to find examples. While I know it's hard to keep up with technology, people don't have a lot of time to ingest WCAG and quick (often visual) examples of best practices work best. They at least act as a good entry point.

Clarity - Friendliness - For guidelines they are unwelcoming, over complicated, and far too dry. Selling Accessibility into organisations is often quite tricky and having guidelines as a large wall of text is not ideal!

A place to see and interact with live UX patterns that illustrate best practices. I could go to this resource and manipulate it to "show me excellent and beautiful examples of accessible form field errors and I want to filter the examples to just be AA compliant." Visual or actual code snippets would be great. A curated gallery of patterns or design system components.

Usually I'm in a hurry to find answers to be compliant. There is so much info, I'm never sure I've gotten the right info. The site is geared toward developers and is very dense. But I'm not a developer, but I do need be able to tell developers that we have to be compliant, and point them to the right place to fix stuff.

It would go a long way if the WCAG-related pages were to eat their own dogfood by supporting WCAG 3.1.5 / Reading Level. At the moment, the guidelines and criteria are at times difficult for even accessibility professionals to understand.

Case in point: the accessible-name calculation process. Iâ€™ve read that section like a dozen times and it's still gobbledegoook to me. (And I audit websites against WCAG for a living.)

Can you update Color alone success criteria to specifically define, clarify that contrast difference alone should not be used to indicate an interactive element or to show selected state, even if the contrast is 3:1. always use a distinguishable characteristic to indicate an interactive element in addition to meeting color contrast to surrounding text /element for 3:1.

Rewrite the normative language so it's clear and easy to read using simple language.

Do not introduce SC that limit which words you can use on a page. That will lose a lot of support from people

who would otherwise support WCAG, it;s overly restrictive, and it stifles innovation. Just think about the number of words in common usage now that were not in common usage 15 years ago. Tweet, favorite (as a verb), Google (verb), SPAM, etc.

The way the spec is worded can be very hard to parse, and that is likely due to it trying to be as technology agnostic as possible. It might help to provide some examples of specific technology implementations?

Including guidelines for users with cognitive disabilities.

We need to provide tools for non technical members of a project team, in particular to UX designers. We have to help them taking in account accessibility easily in their jobs !

I've been wresting with this for years. I think the problem is that UX people think in terms of Neilsen's principles.. Following POUR doesn't result in an end to end experience that serves people well. It's too micro-interaction specific.

We need a spec that is updated to support applications, not just documents, on the web.

Also, pointers to real-world examples would be helpful. Maybe even some case studies of sites that work well or don't.

Make the content easier to digest. Simplify. More images to compliment the text. Videos. Tests. Interactive segments.

Incorporate info on universal design. Have the text re-written to be clearer.

Other Comments Regarding WCAG 2.0

● **Include more visual information for the Success Criteria for cognitive disabilities.** "Some things with visual information for people as me that have "focus problem" Only organic content coast me double Time to understand and find informations." (The person wants more visual representation of content rather than text-based descriptions.)

● **Clarify compliance vs. accessibility.** "There is a notion among my clients of being "compliant" (with WCAG, with 508) as though that is the goal. Perhaps because of lawsuits, people see WCAG/508 as a standard that if they meet, they will not be sued. Again, it depends on who is using the website and for what purpose…perhaps more emphasis on performance criteria - figuring out who the users are and what they need to accomplish, and planning/testing against those things, as opposed to the 'WCAG checklist.'"

● **It would be helpful to note "foundational" guidelines.** "We also marked a few of the guidelines as foundational. Ones that are very difficult to remediate. Information, structure and relationships is very important to get right when building. It is very difficult to remediate for this guideline. It would be helpful to have a list of foundational items that are very difficult to fix later."

● **Providing more examples would provide guidance how to apply principles.** "Add more examples of sufficient techniques. Please Specify rules for native apps for heading structure for iOS and Android, how to make carousels on native app accessible, and identifying integrative element from plain text. Add examples of success criteria for meeting the different WCAG for native Apps" "…it really comes down to how to apply them, which is lacking, from the W3C…Theory is all well and good, until it actually needs to be applied in a specific, custom application."

● **Automated Tools for Compliance.** "Come up with automated ways to assess compliance."

(Optional) Please add any other input or comments regarding WCAG 2.0.
Answer

This survey isn't completely keyboard accessible. I had difficulty maneuvering through it.

We also marked a few of the guidelines as foundational. Ones that are very difficult to remediate. Information, structure and relationships is very important to get right when building. It is very difficult to remediate for this guideline. It would be helpful to have a list of foundational items that are very difficult to fix later.

Will the new 2.1 revisions automatically apply legally to the Countries that use 2.0?

Please escalate the review process to move the 2.1 draft to recommendation status.

Someyhings with visual information d'or people as me that have "focus problem" Only organic content coast me double Time to understand and find informations.

Having WCAG as a resource is invaluable and I am grateful to the entire W3C working group who helps put it together. Making an international standard that is useful and usable is not small feat. It is also incumbent upon professionals to make accessibility a priority and use the tools available to them. However, as asked in this survey, I do find that WCAG assumes a certain level of knowledge that people don't have since this isn't taught in schools (for the most part) and can seem intimidating and time consuming to newcomers working independently.

The website is impenetrable. Developers need to quickly access how to makes something accessible: 'Want a dropdown, modal, tooltip, navigation to work in screen-readers? Do this.' I think developers would make UI's accessible more often if there was definitive resource with clear, up to date examples.

One of the things that I have seen is that the guidelines can seem overwhelming for newbies

Come up with automated ways to assess compliance

Really excited for this update!

I greatly admire the WC3. It's mission for standards has helped the web SOOO much!

Add more examples of sufficient techniques. Please Specify rules for native apps for heading structure for iOS and Android, how to make carousels on native app accessible, and identifying integrative element from plain text. Add examples of success criteria for meeting the different WCAG for native Apps.

There is a notion among my clients of being "compliant" (with WCAG, with 508) as though that is the goal. Perhaps because of lawsuits, people see WCAG/508 as a standard that if they meet, they will not be sued. Again, it depends on who is using the website and for what purpose. I don't know what to suggest here - perhaps more emphasis on performance criteria - figuring out who the users are and what they need to accomplish, and planning/testing against those things, as opposed to the "WCAG checklist."

WCAG is great as a technical standard.. but it loses the forest for the trees.

Thanks so much for doing all of this hard work!

It's a pretty poor site in terms of simple structure.

I can suggest my team read the principles as much as I want, but it really comes down to how to apply them, which is lacking, from the W3C. I'm currently investigating online courses or videos for that aspect. Theory is all well and good, until it actually needs to be applied in a specific, custom application.
Aria authoring guidelines could do with more examples
Since its inception we have used the Webaim checklist as it has been simpler for students to use/understand.

Conclusions

● Caution in broadly applying the results because it is heavily US oriented, which may not apply internationally.
● This diversity of hardware platforms (desktop, mobile, tablet, kiosk, wearable, IoT, etc) indicates that Silver must pursue being hardware agnostic.
● Companies that hire UX or accessibility professionals do so because they value it. A significant number of professionals work in environments where accessibility is not valued.
● There is no one source or one type of accessibility learning. One comment in "improvements to WCAG" thought that all web sites were official.
● WCAG 2.0 is best used for applying accessibility, above average for learning accessibility and below average for teaching accessibility.