# Comments on the Notice of Proposed Rulemaking for Web Information and Services of State and Local Government Entities

## Date:

October 1, 2023

## Submitted by:

Oregon Health Authority and Oregon Department of Human Services

500 Summer St. NE

Salem, OR 97301

Voice: 503-947-2315

Fax: 503-947-5221

## In Response To:

Notice of Proposed Rulemaking (RIN 1190-AA79) issued by the United States Department of Justice under Title II of the Americans with Disabilities Act (ADA), “Nondiscrimination on the Basis of Disability: Accessibility of Web Information and Services of State and Local Government Entities”.

## Executive Summary

We welcome this Notice of Proposed Rulemaking as greatly needed and long overdue. Overall, we believe the NPRM relies on solid research and reasoning. In some instances, we disagree with exceptions, rationales, or estimates provided by the Department. In other instances, we agree. Nonetheless, we hope that however the Department chooses to proceed, that it will do so without inordinate delay.

The Advance Notice of Proposed Rulemaking on this subject was published in 2010. In the 13 years that have passed since then, states, municipalities, and the other entities covered by this NPRM have fallen further behind the federal government, the private sector, and much of the rest of the world with regard to digital accessibility. The COVID-19 pandemic showed how dangerous a lack of accessible information from state and local governments can be for people with disabilities. We need all the public bodies covered by this rule to start working immediately to redress this inequitable and unsustainable *status quo*. However, without pressure from the federal government, little is likely to change. Budgets and staffing will not be allocated; policies and roadmaps will lack executive support.

We hope the Department will carefully consider the answers we have provided below, as well as the answers provided by other entities and members of the public. However, we implore the Department to move forward with urgency. The rule must be published and enforced – in its current form, or in altered form – for meaningful change to begin.

## Question 1 - The Department’s definition of “conventional electronic documents” consists of an exhaustive list of specific file types. Should the Department instead craft a more flexible definition that generally describes the types of documents that are covered or otherwise change the proposed definition, such as by including other file types (e.g., images or movies), or removing some of the listed file types?

In the proposed regulatory text, the Department defines “conventional electronic documents” as follows: “Conventional electronic documents means web content or content in mobile apps that is in the following electronic file formats: portable document formats (“PDF”), word processor file formats, presentation file formats, spreadsheet file formats, and database file formats.” No exhaustive list is provided beyond this. The categorical definition provided in the text seems sufficient. An exhaustive list of examples might help institutions understand the scope of these categories, but as new products are constantly coming on the market, it might also prove overly restrictive. Any attempt at an exhaustive list should include the wording “examples include but are not limited to…” or similar.

## Question 2 - Are there refinements to the definition of “web content” the Department should consider? Consider, for example, WCAG 2.1’s definition of “web content” as “information and sensory experience to be communicated to the user by means of a user agent, including code or markup that defines the content’s structure, presentation, and interactions.”

In the proposed regulatory text, the Department defines “web content” as follows: “Web content means information or sensory experience—including the encoding that defines the content’s structure, presentation, and interactions—that is communicated to the user by a web browser or other software. Examples of web content include text, images, sounds, videos, controls, animations, and conventional electronic documents.” This definition is sufficient.

## Question 3 - Are there technical standards or performance standards other than WCAG 2.1 that the Department should consider? For example, if WCAG 2.2 is finalized before the Department issues a final rule, should the Department consider adopting that standard? If so, what is a reasonable time frame for State and local compliance with WCAG 2.2 and why? Is there any other standard that the Department should consider, especially in light of the rapid pace at which technology changes?

We strongly urge the department to adopt WCAG 2.2 Level AA as the technical standard for this rule if WCAG 2.2 becomes the w3c Recommendation before the rule is finalized. There are three reasons for this position:

First, WCAG 2.2 adds requirements that will have an important impact on end users. That impact is likely to increase over time given current trends in technological uptake in the public sector. One example of this is represented by SC 2.5.8 Target Size (Minimum) – Level AA. This criterion fills a gap that was left by SC 2.5.5 Target Size (Enhanced) – Level AAA. The new minimum criterion will be Level AA and thus will be required for conformance.

When our web accessibility team was conducting testing on sites such as Get Vaccinated Oregon and My Electronic Vaccine Card in 2021 and 2022, we worked with native assistive technology users to identify accessibility gaps. One of our testers used a joystick switch with gliding cursor mode on her wheelchair-mounted iPad. We discovered that a large majority of this user’s accessibility complaints stemmed from targets that were too small or that were inadequately spaced. However, with no WCAG 2.1 success criterion related to target size at Level A or AA, it was a challenge to convince designers to make targets bigger, and to increase spacing around them.

It should be said that the same problem arises with touch interface users – particularly those that have low vision or dexterity disabilities, such as hand tremors. This user group is arguably larger than switch with gliding cursor users, and OHA has historically received several accessibility complaints related to target size. The number of users relying on touch interface is only likely to grow, with more and more state and local governments making use of mobile apps – a trend that the NPRM also refers to (p4). For this reason, the impact of this success criterion will only increase over time.

Moreover, taken as a whole, the WCAG 2.2 success criteria both address long-underserved populations (such as SC 3.3.8 – Accessible Authentication, which regulates the use of “cognitive function” tests for authentication, an important concern for people with cognitive disabilities) or fill notable gaps in previous iterations of WCAG.

Second, it is likely that WCAG 2.2 will become the w3c Recommendation in the time before the department issues its final rule, or very shortly thereafter. To wit, WCAG 2.2 became a Proposed Recommendation on July 20, 2023. This is the fourth stage (out of five) in the w3c recommendation track, and standards do not typically stay at this stage for more than a few months before moving to the final stage: w3c Recommendations. Having the department’s rule aligned to a superseded standard may cause confusion.

A similar sequence of events occurred in 2018. As the Department is doubtless aware, the Section 508 Refresh came into effect in January of that year, aligning Section 508 with WCAG 2.0. Only six months later, WCAG 2.1 became the w3c’s recommended standard. In the past five years, accessibility practitioners, departments, and organizations have had to navigate this incongruity.

If the Department’s rule is accepted as it stands, WCAG 2.0 will be the legal standard for Section 508, WCAG 2.1 will be the legal standard for ADA title II, and WCAG 2.2 will be the actual recommended w3c standard. For practitioners who know WCAG well, this is a minor annoyance, not a severe impediment. But it will remain challenging to explain this regulatory landscape to stakeholders.

Third, it does not appear likely that there will be another version of WCAG 2 before the w3c moves to WCAG 3. This means that WCAG 2.2 is likely to be a stable standard for the coming 5 to 10 years, whereas WCAG 2.1 may cease to be the recommended standard before the end of 2023. The w3c has not released any information suggesting that a WCAG version 2.3 is imminent. Meanwhile, a new [working draft of WCAG 3.0](https://www.w3.org/TR/wcag-3.0/) was released on July 24, 2023. Given the cycle of updates that the w3c has followed since 1999, and the scale of change that is evident in the move to WCAG 3.0, it is unlikely that the 3.0 standard will reach the recommendation stage in less than 5 years – and it may take 10 years or more. Therefore, WCAG 2.2 is likely here to stay for some time to come.

All of this is not to imply that aligning to WCAG 2.1 is unworkable, in our view. To the contrary, WCAG 2 standards are additive and backward compatible, and WCAG 2.1 will remain a robust and usable standard, even after it is superseded by WCAG 2.2.

In addition, moving to WCAG 2.2 immediately would admittedly present some challenges. It would mean 9 new Level A and AA success criteria that would need to be tested. Furthermore, there are currently no automated tools that test for WCAG 2.2 conformance, although this is likely to change quickly when the w3c recommends 2.2. Nonetheless, we feel that the benefits of adopting WCAG 2.2 as the technical standard for this rule outweigh the drawbacks, and we urge the Department to consider making this change to the rule.

## Question 6 - How do public entities use social media platforms and how do members of the public use content made available by public entities on social media platforms? What kinds of barriers do people with disabilities encounter when attempting to access public entities’ services via social media platforms?

The state of Oregon has Facebook, YouTube Channels, Flickr accounts, blogs and Twitter accounts set up for various agencies. Some of the agencies include agriculture, parks, labor, emergency management, education, etc. The accounts are used to inform the public or to connect the public with programs and neighbors. The public might ask about sales of surplus property and when the surplus center is open, or they might watch a video on an Oregon state YouTube channel about getting ready for fire season or learn more about energy programs and who to contact to get rebates for housing energy upgrades.

People with disabilities often encounter inaccessible social media content, which means they really can’t be part of the conversation or in some cases access critical or essential information. Social media can give marginalized people a voice and give disabled persons a broader experience, access to greater resources and interactions and in some cases help mitigate physical isolation.

When accessibility problems with social media posts arise, they often relate to images that contain large amounts of text. In Oregon, public entities will often post .jpg flyers to Facebook or Twitter/X. These flyers sometimes include large blocks of text. Anecdotally, we see more of our public entities using alt text with these flyers, which is a positive trend. However, these days, a more common problem is that the alt text is incomplete. Not all of the information contained in the graphic is also contained in the alt text. Furthermore, these kinds of posts would present difficulties for users who might want to apply custom CSS or use magnification software, because they consist of images of text (a WCAG 2.1 violation under SC 1.4.5)

## Question 7 - How do public entities use mobile apps to make information and services available to the public? What kinds of barriers do people with disabilities encounter when attempting to access public entities’ services, programs, and activities via mobile apps? Are there any accessibility features unique to mobile apps that the Department should be aware of?

Public entities use apps to communicate with the public about everything government does, from fishing licenses and lottery tickets to road conditions and health insurance applications. Several publicly available apps are associated with the State of Oregon. This is not a comprehensive list and not all apps listed are under the control of the State of Oregon – i.e., they may be run by a third party on behalf of a government or semi-governmental entity.

This is a selection of mobile apps associated with State of Oregon available to the public on the Apps stores and online:

* Oregon ONE Mobile – Manage and apply for public assistance.
* OR PTC DCI Mobile App – provider time capture app from the Oregon Department of Human Services that Homecare Workers and Personal Care Attendants enter their time electronically.
* Blue Button Initiative – Oregon coordinates with federal partners to make Blue Button technology available to all government health plan beneficiaries. Oregon Lottery – All things Lottery personal hub
* MyODFW – Oregon Department of Fish and Wildlife’s electronic licensing system.
* TripCheck 511 – Oregon Department of Transportation’s travel information system.

OregonAir – The Oregon Department of Environmental Quality’s air quality index app. The use of Mobile Apps is growing, and accessibility issues can be somewhat the same as web application useability on a mobile device. The public often encounters problems with screen size, contrast, missing markups, missing alt- text, missing or incorrect captions or ASL interpretation, and unusable online forms for critical public services.

Sometimes the challenges are device compatibility, and network connectivity or availability. There are also challenges in programming a mobile app that does not interfere with a device's built in accessibility tools. Accessibility features important in mobile apps includes but is not limited to:

* Bright and readable text [including color contrast/color-blind users].
* Large simple controls in which the text/font can be increased.
* Enabled text fields to utilize speech-to-text interaction functionality.
* Alerts and notifications accessed through sound, visual, and haptics.
* Simple touchscreen functionalities should include easy-to-use workarounds for users that do not use a touch screen.

Mobile apps need to seamlessly adapt to the accessibility features built into device software functionality. This includes but is not limited to heterogenous screens, software input mechanisms and other device capabilities and functionalities, and universal interaction mechanisms (touch, vibrations, haptics) for notifications.

## Question 8 - Is WCAG 2.1 Level AA the appropriate accessibility standard for mobile apps? Should the Department instead adopt another accessibility standard or alternative for mobile apps, such as the requirements from section 508 discussed above?

We believe the Department should consider WCAG 2.2 Level AA as its technical standard for both web content and mobile apps, as outlined in our response to Question 3. WCAG 2.2 addresses some accessibility gaps in WCAG 2.1 that relate directly to mobile apps. We also believe that the additional section 508 standards for mobile apps (contained in 36 CFR 1194, appendix C, §§ 502.1, 502.2.2, 503.2, 503.4.1, 503.4.2) include important considerations and should be adopted as part of the department’s rule.

## Question 10 - How will the proposed compliance date affect people with disabilities, particularly in rural areas?

Oregon has a high proportion of rural areas. Of Oregon’s 36 counties, 26 are rural. Some have populations below 10,000.

According to the US Census Digital Equity Act Population Viewer, over 76% of Oregon’s population is defined as a “covered population” for digital equity funding purposes. Oregon’s digital equity covered populations tend to be rural (32%), are over age 60 (25%), and/or belong to a racial or ethnic minority (25%). Approximately 15% of Oregon’s covered populations have disabilities. In an analysis of Oregon’s 2014 – 2017 BRFSS data, the Oregon Office on Disability and Health at Oregon Health and Sciences University estimates that the average rate of adults with disabilities in Oregon counties averages 29%, ranging from 17.5% in Benton County to 40.2% in Malheur County. Notably, every county with a prevalence of adult with disabilities over 30% is a rural county.

The proposed compliance date has the potential to negatively affect people with disabilities given the proportion of rural areas in Oregon as compared to the total number of people with disabilities in Oregon. This is combined with a paucity of affordable broadband internet in rural areas of the state which results in people with disabilities lacking access to health and human services benefits and other critical government services.

The lack of affordable broadband internet in rural areas is just one component; another component is the ability for units of local government to adhere to the proposed compliance date given personnel shortages in rural Oregon as well as the requisite technical expertise at a salary that is commiserate to the knowledge and technical skills that are required to ensure compliance. Often, units of local government are understaffed, staff are performing in multiple roles and government entities are dedicating budgets to education, road repair, and the like, unless supplemented or supported through sustained funding that ensures not only the local capacity to undertake the international standard WCAG 2.1 AA in addition the technical assistance is critical.

## Question 12 - Should the Department consider factors other than population size, such as annual budget, when establishing different or tiered compliance requirements? If so, what should those factors be, why are they more appropriate than population size, and how should they be used to determine regulatory requirements?

No, the population-based tiers currently proposed are appropriate.

## Question 13 - Should the Department consider a different compliance date for the captioning of live-audio content in synchronized media or exclude some public entities from the requirement? If so, when should compliance with this success criterion be required and why? Should there be a different compliance date for different types or sizes of public entities?

No, captioning of live-audio content should not be treated differently. CART captioning is the best option for live-audio content because it has higher accuracy rates. However, auto-generated captions have improved greatly over time and are an acceptable alternative in circumstances where CART is not available due to scheduling or budget constraints.

An institutional approach combining the use of auto-generated captions (when appropriate) and the use of CART (as often as possible) should be reasonably attainable by all public bodies.

## Question 14 - What types of live-audio content do public entities and small public entities post? What has been the cost for providing live-audio captioning?

PSAs range in topic and are usually used to relay important benefit program information, emergency services announcements, and other critical messaging to ensure the safety of constancies. Closed captioning and ASL interpretation are typically included, and PSAs are typically released in the five most spoken languages in the state.

CART services cost on average $120 per hour. Captioning services for a public service announcement range from $165 per hour for recorded content, not including additional languages, to $20 per minute, and is dependent on the length of the recorded content. The number one barrier to ensuring that public entities produce accessible, equitable media is budget.

## Question 15 - How do public entities currently manage content that is maintained for reference, research, or recordkeeping?

Content is stored within electronic records systems according to state administrative rules. Certain documents may also be stored using the Oregon Records Management Solution (ORMS): Secured Access. Information is made available to the public based on Open Records laws.

## Question 18 - Where do public entities make conventional electronic documents available to the public? Do public entities post conventional electronic documents anywhere else on the web besides their own websites?

Conventional electronic documents, particularly PDFs, are used widely by the Oregon State agencies to communicate with the public. They are often posted as links on state websites.

## Question 20 - What would the impact of this exception be on people with disabilities? Are there alternatives to this exception that the Department should consider, or additional limitations that should be placed on this exception? How would foreseeable advances in technology affect the need for this exception?

All new materials should be required to meet compliance guidelines. Public agencies should also remediate documents currently in use, including those that were archived and edited or otherwise revived for public use.

In determining compliance requirements, it is important to note that remediating all existing documents, including those that are out of date and not actively used, would create an insurmountable volume of remediation work for large public entities and cause conflicting operational priorities.

In an ideal world, no conventional electronic documents would be excluded from this rule. This would ensure absolute equality of access to government communications and records to people with disabilities. However, making an exception for pre-existing documents accounts for the sheer scope of the problem, and offers a workable compromise.

Public sector bodies tend to produce an overabundance of documents, particularly PDFs. In our experience, Oregon is no exception. The total number of PDFs and other documents on Oregon State websites certainly numbers in the hundreds of thousands and may be higher.

Furthermore, in our experience, these documents sometimes contain "catastrophic" accessibility problems requiring hours of remediation work per page, and in some cases total recreation. The estimate of 6 minutes maximum of work time per page listed in the DOJ’s PRIA is simply not realistic in many cases. Up to 3 hours of remediation work per page may be required in the worst cases, based on our experience.

Remediating such a high quantity of documents, with page rates such as these, would be an enormous undertaking. It would require either staffing levels far beyond what even the best-supported state and national accessibility teams currently maintain, and/or it would require a timespan greatly exceeding the 2 to 3 years laid out in the NPRM.

The DOJ's rule as proposed encourages public entities to focus on the most pressing problem – ensuring that all documents that are "currently used by members of the public to access the public entity's services, programs, or activities," and all future documents of any kind, are accessible. This approach allows entities to intervene at the moment of document creation, thus vastly reducing the work hours required for document remediation. It would also allow public bodies to adjust policy to account for the workload requirements of producing accessible documents. Public entities should (and likely will) consider policies that restrict the use of documents such as PDFs in favor of properly formed HTML, which is easier and less costly to make accessible. Making these decisions retroactively, however, is not possible in some cases.

Finally, if the department were to strike this exception, we would view a requirement to remediate all existing documents - rather than simply documents currently in use and all future documents - as an undue burden. We view the Department’s exception pertaining to preexisting conventional documents as a de facto ruling of undue burden, and we support it.

## Question 21 - What types of third-party web content can be found on websites of public entities and, how would foreseeable advances in technology affect the need for creating an exception for this content? To what extent is this content posted by the public entities themselves, as opposed to third parties? To what extent do public entities delegate to third parties to post on their behalf? What degree of control do public entities have over content posted by third parties, and what steps can public entities take to make sure this content is accessible?

To our knowledge, no social media companies have considered requiring posts to be accessible, nor is it likely that page owners will be able to edit third-party posts for accessibility in the future. It is entirely up to the third party to make their posts and content accessible and there are tools built into social media sites that can be used when the party is submitting their content. These tools can enhance the accessibility of posts. However, the entity that has or manages the social media account cannot, at this point, control the content and accessibility of a post. The state can dictate and manage the accessibility of its blogs, like Oregon Office of Economic Analysis, which is a state agency blog and the state of Oregon Employment Department - Employment blog.

## Question 22 - What would the impact of this exception be on people with disabilities?

It is not without impact, but it is difficult to envision how public bodies could mandate a solution. It might be worthwhile posting accessibility guidelines for social media posts to state owned accounts, and it is something we will consider implementing as we work to improve our organizational maturity.

## Question 23 - Do public entities link to third-party web content to allow members of the public to participate in or benefit from the entities’ services, programs, or activities? If so, to what extent does the third-party web content that public entities use for that purpose comply with WCAG 2.1 Level AA?

Oregon websites regularly link to third-party web content. Regarding Oregon Health Authority, CCO's represent a notable proportion of third-party content links. To our knowledge, no systematic accessibility reviews of CCO content or other third-party content have been conducted. However, statistically speaking, it is likely that most of this third-party content does not comply with WCAG 2.1 Level AA, due to the fact that [96.3% of websites have one or more WCAG 2 errors](https://webaim.org/projects/million/).).

## Question 24 - What would the impact of this exception be on people with disabilities and how would foreseeable advances in technology affect the need for this exception?

Generally speaking, we don't believe that any advances in technology, including the widespread adoption of AI, are likely to greatly affect digital accessibility in the near term; nor should we expect (or wait for) any new technology to offer a "magic bullet" solution. The solutions to inaccessible technology will be found in muscular rulemaking and enforcement, adequate and consistent funding, the involvement, and participation of people with disabilities, and community supports that include a more robust social safety net, so that people with disabilities can participate in paid testing and advisory work without fear of losing their healthcare and SSI/SSDI benefits. In other words, the solutions are social, economic, and political in nature, rather than technological.

## Question 45 - What kinds of individualized, conventional electronic documents do public entities make available and how are they made available (e.g., on websites or mobile apps)? How difficult would it be to make such documents accessible? How do people with disabilities currently access such documents?

We strongly believe that individualized, password-protected electronic documents should not be excepted under the proposed rule, and we urge the Department to strike this exception from the rule.

In our experience, it is possible to automate the generation of accessible PDFs when these PDFs are generated from HTML and have a layout that is not overly complex.

For example, when we built My Electronic Vaccine Card, we used [iText](https://itextpdf.com/) to generate accessible PDFs of vaccine records for all our users. iText allows developers to add the accessibility tags into a generated PDF document, based on the HTML tags in the template as the software converts the template. iText does have its problems and is not perfect. The documentation for iText is lacking some critical information, but customer support is available. However, our testing confirmed that the PDFs we were outputting conformed with WCAG 2 and PDF/UA.

Our application fell under iText’s AGLP license, which allowed us to use iText as open-source code, if we published our own code to GitHub. It took about 100 development hours to pilot iText on My Electronic Vaccine Card. A subsequent integration of iText on a different OHA project required only 60 additional development hours – this is likely because of the institutional knowledge and documentation we acquired in our trial run.

## Question 46 - Do public entities have adequate systems for receiving notification that an individual with a disability requires access to an individualized, password-protected conventional electronic document? What kinds of burdens do these notification systems place on individuals with disabilities and how easy are these systems to access? Should the Department consider requiring a particular system for notification or a particular process or timeline that entities must follow when they are on notice that an individual with a disability requires access to such a document?

Many of the state's websites don't have a Website Accessibility supporting page or any information about who the public might access if they are having problems using the web application. The main Oregon.gov pages have a Website Accessibility page that allows you to send an email to the E-Government Service Desk. There's no information about the process of responding to or acting on an accessibility report. Other units and programs sometimes have an email that a person can send questions, concerns, or suggestions.

## Question 47 - What would the impact of this exception be on people with disabilities?

In our view, this exception will have a substantial negative impact on people with disabilities. Accessibility statements with links to request accommodations must be made available and prevalent on all state websites. However, even assuming that this is done in the future, requiring people with disabilities to request accessible versions of all individualized, password-protected electronic documents each time they are needed will impose onerous burdens on those individuals. It will likely mean substantial delays in receiving documents, including documents that are time sensitive.

Furthermore, it will ultimately result in entities needing to do more remediation work, not less. When we built the My Electronic Vaccine Card site, it was intended to provide vaccine records for residents of the state - that is, 4.2 million people. Taking the CDC's estimate that 27% of the US population has a disability, this means that as many as 1 million individuals could have needed and requested a remediated version of their vaccine records. Using the time estimates for PDF remediation laid out in the PRIA, this means that potentially as many as 6 million minutes, or 100,000 hours, could have been required to remediate these individual records. To continue this thought exercise, it would have taken a team of 52 remediators a full year to meet this volume of requests - for a single website! Oregon has nowhere near this level of resources devoted to accessible document creation, nor does any state. We did, however, have the resources to ensure that vaccine records downloaded from our site were generated as accessible PDFs at the source.

## Question 48 - Which provisions of this rule, including any exceptions (e.g., the exceptions for individualized, password-protected conventional electronic documents and content posted by a third party), should apply to mobile apps?

Individualized, password-protected conventional electronic documents should not be excepted for large entities (such as states) whether they are generated or shared via website or mobile app. Content posted by a third party should be excepted regardless of the platform.

## Question 49 - Would allowing conforming alternate versions due to technical or legal limitations result in individuals with disabilities receiving unequal access to a public entity’s services, programs, and activities?

If that is the only way for an individual to gain access to a time-sensitive document, or to a document that is frequently updated, then yes, an approach relying on conforming alternate versions generated on request would result in unequal access for people with disabilities.

## Question 50 - What should be considered sufficient evidence to support an allegation of noncompliance with a technical standard for purposes of enforcement action? For example, if web content or a mobile app is noncompliant according to one testing methodology, or using one configuration of assistive technology, hardware, and software, is that sufficient?

We hope the department will consider a mixed approach of self-reporting and centralized monitoring/testing, like the approach taken by the GSA regarding federal agencies, for the purposes of both guidance and enforcement. Monitoring should be transparent, transferable, comparable, and reproducible, to borrow the framing of the European Union’s Directive on the Accessibility of the Websites and Mobile Applications of Public Sector Bodies (EU Directive 2016/2102).

If content is considered noncompliant according to one testing methodology, that is acceptable in our view, provided that the methodology in question is transparent, transferable, comparable, and reproducible.

However, content should not be considered noncompliant because of results gathered using “one configuration of assistive technology, hardware, and software.” Experienced accessibility testers know that even the most up-to-date operating system paired with the most up-to-date screen reader (for example) can produce output errors that are isolated to that configuration, and that are, furthermore, inherent to the user agent and/or assistive technology, not the content itself. Robust testing methodologies should encourage the use of multiple configurations, and review of the underlying markup/code.

In our view, enforcement for noncompliance should be pursued only when two or more of the following criteria are met:

* WCAG errors are inherent to the content itself, not specific configurations of user agents and assistive technologies, for example.
* WCAG errors are high impact (true blockers that appear on widely accessed sites) and/or are widely prevalent (repeated errors across multiple pages/sites)
* A state or other entity shows no evidence of measurable institutional development regarding accessibility policy or practice within a designated timeline, for example, one year.

Transparent monitoring and guidance should take the place of enforcement up until this point.

## Question 51 - In evaluating compliance, do you think a public entity’s policies and practices related to web and mobile app accessibility (e.g., accessibility feedback, testing, remediation) should be considered and, if so, how? For example, should consideration be given to an entity’s effectively working processes for accepting and addressing feedback about accessibility problems; using automated testing, manual testing, or testing by people with relevant disabilities to identify accessibility problems; and remediating any accessibility problems identified within a reasonable period of time according to the entity’s policies, and if so, how? How would such an approach impact people with disabilities?

Yes, policies and practices should be tracked as a part of compliance evaluation. This includes policies and processes “for accepting and addressing feedback about accessibility problems; using automated testing, manual testing, or testing by people with relevant disabilities to identify accessibility problems; and remediating any accessibility problems identified within a reasonable period of time according to the entity’s policies.”

## Question 52 - If you think a public entity’s policies and practices for receiving feedback on web and mobile app accessibility should be considered in assessing compliance, what specific policies and practices for feedback would be effective?

Most accessibility maturity models include the following, or similar, dimensions: an accessibility policy that is clearly communicated to staff and the public, procurement processes that include accessibility, appropriate staffing, appropriate training, integration of accessibility into all key stages ICT life cycle, etc. Other questions to consider:

* Are accessibility SMEs certified (IAAP and/or Trusted Tester and/or Adobe certified)?
* Are there people with disabilities on the accessibility team?
* Are people with disabilities regularly consulted as a part of usability and community testing?
* Are accessible templates and other accessibility information widely available to staff, and are they regularly updated?
* Are accessibility testing tools and platforms widely available to staff (Adobe Acrobat Pro, Color Contrast Analyser, PAC Checker, Axe DevTools, WAVE, JAWS, NVDA, etc.)?
* Is an Accessibility Program Manager (or equivalent) organizationally positioned inside the office of the Chief Information Officer (or equivalent)?
* Are automated and manual testing taking place on a routine basis to ensure compliance?
* Is basic accessibility training required for all staff?

## Question 53 - If you think a public entity’s web and mobile app accessibility testing policies and practices should be considered in assessing compliance, what specific testing policies and practices would be effective? For example, how often should websites and mobile apps undergo testing, and what methods should be used for testing? If manual testing is required, how often should this testing be conducted, by whom, and what methods should be used? Should the Department require public entities’ websites and mobile apps to be tested in consultation with individuals with disabilities or members of disability organizations, and, if so, how?

Automated testing should be continuous and ongoing. Manual testing should also be used in targeted ways to uncover accessibility problems that automated testing doesn’t have the capabilities to find. Manual testing can utilize sampling, as outlined in WCAG’s Evaluation Methodology (EM). Manual testing should be conducted, whenever possible, with the participation of native users of assistive technology. Usability and community testing should be conducted regularly, and testing pools should include people with disabilities. As much as possible, entities should use internal/community resources for manual testing to ensure accountability, inclusion, and the maintenance of institutional knowledge. Smaller entities may want to hire a part-time credentialed accessibility SME or invest in training existing staff. Larger entities, like states, will likely need to hire or train multiple testers and SMEs to manage testing. External consultancies can be used effectively to support testing – successful examples include the DOJ’s contracting of WebAIM to support its work, or the Irish government’s contracting of Deque – provided that the testing by these consultancies is transparent, transferable, comparable, and reproducible, and provided that testing capacities are continuously being built and maintained within public sector bodies, rather than outsourced entirely to private extra governmental bodies.

## Question 54 - If you think a public entity’s web and mobile app accessibility remediation policies and practices should be considered in assessing compliance, what specific remediation policies and practices would be effective? Should instances of nonconformance that have a more serious impact on usability—because of the nature of the nonconformance (i.e., whether it entirely prevents access or makes access more difficult), the importance of the content, or otherwise—be remediated in a shorter period of time, while other instances of nonconformance are remediated in a longer period of time? How should these categories of nonconformance be defined and what time frames should be used, if any?

Yes, see our answer to Question 50.

## Question 55 - Should a public entity be considered in compliance with this part if the entity remediates web and mobile app accessibility errors within a certain period of time after the entity learns of nonconformance through accessibility testing or feedback? If so, what time frame for remediation is reasonable? How would allowing public entities a certain amount of time to remediate instances of nonconformance identified through testing or feedback impact people with disabilities?

If an entity has implemented policies and procedures that include appropriate changes within their software development lifecycle to produce accessible web and mobile applications, then any resolution to errors reported or found during testing of software that is newly implemented should be able to be resolved in a matter of weeks. The entity should be able to demonstrate an effective testing, reporting and resolution cycle for new implementations of their web and mobile applications.

Retrofitting and enhancing older implementations will take more time and will be more difficult than a site that gained accessibility during its initial development cycle. Bringing older and legacy web and mobile apps into conformance may take months. The entity should be able demonstrate that nonconformance in older web and mobile applications can be and are resolved in a matter of months and that they have prioritized addressing any issues that cannot be temporarily resolved by alternate but equitable means. As always, any delay in full conformance to accessibility guidelines negatively impacts people with disabilities.

It is our expectation that instances of non-conformance across state and local websites are going to be serious and extremely widespread when this rule goes into effect. Any automated monitoring system administered at a state level, for example, is going to register thousands of WCAG violations, and manual testing will likely only uncover countless other problems. After all, very few federal agencies have achieved perfect (or near perfect) accessibility scores even after two decades of Section 508 enforcement. The more realistic hope is that this rule will encourage genuine and measurable improvement in both the short and long terms. Given this context, we would recommend that the Department take a more holistic approach to enforcement. Entities should be able to demonstrate:

* Notable improvements on automated accessibility scores on a year-over-year basis.
* Remediation of any serious instances of noncompliance identified by manual testing within three months.
* Notable improvements to policies and procedures (with reference to an agreed upon maturity matrix) on a year-over-year basis.

## Question 56 - Should compliance with this rule be assessed differently for web content that existed on the public entity’s website on the compliance date than for web content that is added after the compliance date? For example, might it be appropriate to allow some additional time for remediation of content that is added to a public entity’s website after the compliance date, if the public entity identifies nonconformance within a certain period of time after the content is added, and, if so, what should the remediation time frame be? How would allowing public entities a certain amount of time to remediate instances of nonconformance identified in content added after the compliance date impact people with disabilities?

This would complicate compliance deadlines and would have a negative impact on end users with disabilities by making needless exceptions and allowing entities to “game” the system by tweaking roll-out dates.

## Question 57 - What policies and practices for testing and remediating web and mobile app accessibility barriers are public entities or others currently using and what types of testing and remediation policies and practices are feasible (or infeasible)? What types of costs are associated with these testing and remediation policies?

Oregon Health Authority (OHA) and Oregon Department of Human Services (ODHS) have been piloting a digital accessibility program since Spring, 2021. Accessibility work has been led by a team of two consultants: a digital accessibility SME (IAAP-certified CPWA & ADS) and a blind, native user of JAWS and VoiceOver. This core team has been supported intermittently by community testers (including testers with visual, motor, and cognitive disabilities) and various full-time staff. Areas of focus have included testing and remediation of major COVID related websites (including Get Vaccinated Oregon and My Electronic Vaccine Card), COVID data visualizations, surveys, workforce registries, PDFs, and other assorted documents. The team has also created an open-source Accessible Web Testing Methodology (AWTM) and worked to develop policy on accessible procurements. Future targets include the creation of a second policy covering accessible content creation, a multi-part training series on accessible document creation, the completion of a formal accessibility maturity assessment and content inventory, and the drafting of an implementation plan to meet the requirements laid out in the DOJ and HHS NPRMs on website accessibility.

We anticipate that a future assessment of organizational maturity for accessibility will reveal the agencies to be at an "Ad-Hoc" level in all categories - that is, the lowest level of maturity in most maturity matrices. To improve organizational maturity in time to meet the timeline laid out in the NPRMs, formalized roles will need to be created, and further resources will need to be allocated. We estimate that a staff of 5 to 10 accessibility SMEs and testers could complete the required work according to the DOJ's timeline as described in the NPRM. We began requesting resources to build such a team before the publication of the DOJ’s NPRM and have continued making that request. To date, the Oregon State government has not allocated the necessary funding.

## Question 58 - In evaluating compliance, do you think a public entity’s organizational maturity related to web and mobile app accessibility should be considered and, if so, how? For example, what categories of accessibility should be measured? How should maturity in each category be assessed or demonstrated (i.e., what should the levels of organizational maturity be and what should an entity be required to do to attain each level)? What indicators of organizational maturity criteria would be feasible for public entities to attain? How would an approach that assesses organizational maturity for purposes of demonstrating compliance impact people with disabilities? Would such an approach be useful for public entities?

Yes, we think so (see our answer to question 50).

There are several maturity models that could be candidates for use by the Department, such as AbilityNet’s DAMM, LevelAccess’s DAMM™, PDAA, the w3c Accessibility Maturity Model, and the GSA maturity model.

AbilityNet’s DAMM (the Digital Accessibility Maturity Model) is a streamlined, but durable model that has been widely used. AbilityNet is a non-profit which does offer consulting services but also offers a free DAMM toolkit with helpful support documentation. Although the possibility of a conflict of interest is not totally avoidable in this case, we think that DAMM is still worthy of consideration if a universal model is to be selected.

LevelAccess’s DAMM™ appears to be a robust model that is maintained and trademarked by a private consultancy. As such, we would not recommend it as a universal standard, as this creates a conflict of interests in which one private sector consultancy maintains the standard used by all applicable public sector actors.

PDAA (Policy Driven Adoption for Accessibility) is a robust model that has been used successfully by a handful of states including Minnesota, Massachusetts, and Texas. Minnesota has developed some helpful materials for implementing PDAA. Although this model doesn’t seem to have been as widely used as some, we think it is still a strong contender that offers the possibility of democratic and transparent ownership and maintenance.

The w3c Accessibility Maturity Model is officially in draft form, although it has been used to complete maturity assessments. It is a more granular standard than the others listed here, except for PDAA. We consider it a plus that it has been developed by an international team of subject matter experts, however we would like to see more support materials as well as a finalized form take shape.

The GSA maturity model is used by the GSA to measure maturity of federal agencies under Section 508. It is a relatively streamlined model, and we don’t know of any support materials that are available for it.

## Question 59 - If you think a public entity’s organizational maturity should be considered in assessing compliance, what level of organizational maturity would be effective? For example, if an organizational maturity model has ten categories, should an entity be required to attain the highest level of maturity in all ten? Should an entity be required to sustain a particular level of organizational maturity for a certain length of time?

The emphasis should be on sustained, meaningful growth over time. It is likely that most entities will have low maturity levels to begin with. They should, however, show advancements in one or multiple categories on a year-over-year basis.

## Question 60 - Should a public entity be considered in compliance with this part if the entity increases its level of organizational maturity by a certain amount within a certain period of time? If so, what time frame for improvement is reasonable, and how much should organizational maturity be required to improve? How would an entity demonstrate this improvement? How would allowing public entities a certain amount of time to develop organizational maturity with respect to accessibility impact people with disabilities? Would requiring public entities to improve their organizational maturity over time be effective?

As stated above, the emphasis should be on sustained, meaningful growth over time. It is likely that most entities will have low maturity levels to begin with. They should, however, show advancements in one or multiple categories on a year-over-year basis.

## Question 61 - Are there any frameworks or methods for defining, assessing, or demonstrating organizational maturity with respect to digital accessibility that the Department should consider adopting for purposes of this rule?

See our answer to Question 58.

## Question 62 - Should the Department address the different level of impact that different instances of nonconformance with a technical standard might have on the ability of people with disabilities to access the services, programs, and activities that a public entity offers via the web or a mobile app? If so, how?

Ensure that experienced accessibility SMEs and people with disabilities are involved in monitoring. Accessibility features and bugs should be assessed for both WCAG conformance/non-conformance as well as severity. A particular element may technically fail WCAG but have very little real-world impact. Similarly, an element may technically pass WCAG but be a blocker to many users with disabilities. Reports should include not only conformance feedback, but also severity feedback, whenever possible.

## Question 63 - Should the Department consider limiting public entities’ compliance obligations if nonconformance with a technical standard does not prevent a person with disabilities from accessing the services, programs, and activities that a public entity offers via the web or a mobile app? Should the Department consider limiting public entities’ compliance obligations if nonconformance with a technical standard does not prevent a person with disabilities from accessing the same information, engaging in the same interactions, and enjoying the same programs, services, and activities as people without relevant disabilities, within similar time frames and with substantially equivalent ease of use? Should the Department consider limiting public entities’ compliance obligations if members of the public with disabilities who are seeking information or services from a public entity have access to and use of information and services that is comparable to that provided to members of the public who are not individuals with disabilities? How would these limitations impact people with disabilities?

It is possible for an element to fail WCAG and have little real impact on a user. For example, a small decorative line has alt text that reads “horizontal bar.” The alt text for this element should be null, per WCAG, but the impact of this compliance failure is negligible. However, a website might have very small text (8px), written in a florid, difficult to read serif font that is fully justified. It might also have tiny buttons and form fields (12px by 12px) that are not aligned with one another. There are five problems described here that could be blockers for users with disabilities, and yet, such a site would conform with WCAG 2.1 AA. However, no experienced accessibility SME would allow these items to pass without comment. WCAG is a useful technical standard and adopting it will help improve web accessibility in the public sector, with spillover effects in the private sector. But severity should always be balanced against conformance/non-conformance.

## Question 64 - Should the Department adopt percentages of web or mobile app content that need to be accessible or other similar means of measuring compliance? Is there a minimum threshold below 100 percent that is an acceptable level of compliance? If the Department sets a threshold for compliance, how would one determine whether a website or mobile app meets that threshold?

The Department should have high standards and should be prepared to penalize recalcitrant entities. However, it should also offer guidance when appropriate. 100% compliance should be the goal. Setting a lower threshold would send mixed messages and only lead to confusion. However, for the purposes of meeting the rule, we would urge the Department to consider an entity's consistent and meaningful progress as evidence of intent to meet 100% compliance.

## Question 65 - When assessing compliance, should all instances of nonconformance be treated equally? Should nonconformance with certain WCAG 2.1 success criteria, or nonconformance in more frequently accessed content or more important core content, be given more weight when determining whether a website or mobile app meets a particular threshold for compliance?

Yes, more frequently accessed content, or more important core content should be given more weight. Entities will have to stage remediations and they should be encouraged to start work with the most accessed and most important content.

## Question 66 - How should the Department address isolated or temporary noncompliance177 with a technical standard and under what circumstances should noncompliance be considered isolated or temporary? How should the Department address noncompliance that is a result of technical difficulties, maintenance, updates, or repairs?

With guidance, where lenience is merited. With penalties, where lenience is not merited.

## Question 67 - Are there any local, State, Federal, international, or other laws or policies that provide a framework for measuring, evaluating, defining, or demonstrating compliance with web or mobile app accessibility requirements that the Department should consider adopting?

No, WCAG 2 is the Federal and International standard. It should also be the standard for state and local public bodies.