



Accessibility:

The law demands it. We deliver it.

**Tap Into More Business:
Accessible Mobile Apps
for Retail & Restaurants**

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Introduction

Mobile apps are everywhere. While they were practically unheard of just ten years ago, the explosion of smartphones and tablets over the past decade have made them an increasingly important way for businesses to connect with their customers. In the United States alone, at least 160 million adults have used a mobile phone to make at least one purchase, with younger users especially likely to do so.¹ Mobile apps are a growing part of that, as shoppers flock to the well-designed store fronts and loyalty programs they offer.

But, mobile apps—and kiosks, which are often built on the same technology—leave some shoppers and diners without access. Customers with disabilities encounter many barriers while using retail and dining mobile apps and kiosks. Some of these are minor inconveniences, but others can make navigating a mobile app extremely difficult or even impossible without help.

When thinking about disability, organizations think first about those who are blind, deaf, or in a wheelchair. However, it is important to consider the full range of disabilities, including "invisible" ones like colorblindness, arthritis, autism, or dyslexia. These conditions can affect how shoppers interact with your mobile apps, kiosks, or other information and communications technology.

While it is widely understood that the Americans with Disabilities Act (ADA) regulates access to shops and restaurants in the physical world, there is much greater uncertainty when it comes to the internet and mobile devices. One area of contention is whether a website or mobile app—with or without a nexus to a physical location—is considered a "place of public accommodation" under Title III of the ADA. In the absence of specific legislation or clarifying regulations, people with disabilities and their advocates have resorted to litigation to achieve access to the information and services on the web that other people take for granted.



In the United States alone, at least 160 million adults have used a mobile phone to make at least one purchase, with younger users especially likely to do so.



¹ Bronto, *Mobile Shopping Behaviors: Browsing, Buying or Both? US Edition* at 2-3, available at http://go.bronto.com/LP_corpWhitepaper_DG?campaignid=PR_TR_03012018&leadsource=PR&leadsource_detail=TotalRetail&interest=MobileShopping.

While the Web Content Accessibility Guidelines (WCAG) 2.0 is the gold standard for digital accessibility when it comes to websites and digital documents, it does not address many of the issue specific to mobile apps and kiosks. Fortunately, WCAG 2.1 is expected to cover many of these gaps. While the final WCAG 2.1 guidelines have not yet at the time of writing been released, in the meantime developers can look to the WCAG 2.1 Candidate Recommendation for guidance,² as well as the App Quality Alliance’s Best Practices Guidelines for Developing Quality Mobile Apps³ or the BBC Standards and Guidelines for Mobile Accessibility.⁴

This whitepaper will help acquaint you with many of the barriers faced by individuals with disabilities when using mobile apps and in-store kiosks, will discuss how the Americans with Disabilities Act and other accessibility laws apply to mobile apps and kiosks, and will reveal some of the steps you can take to make your apps accessible to shoppers and diners with disabilities.

Fortunately, you don’t have to go it alone. Level Access can help you and your organization determine if your mobile apps or kiosks are accessible and, if not, what needs to be changed to make—and keep—they accessible to individuals with disabilities.

This whitepaper is for informational use only. While it outlines many of the legal requirements set by the Americans with Disabilities Act and other federal laws, it does not constitute legal advice. If you have questions about it or how these laws apply to your organization, consider speaking with your organization’s legal counsel.

What Do We Mean by Mobile Apps?

Mobile apps are programs designed to run on a mobile device, such as a smartphone, tablet, or even a watch, and which take advantage of the native capabilities of the device. While some come pre-installed on mobile devices, the majority are downloaded by the user, usually through a digital storefront like the Google Play Store, the Amazon Fire App Store, or the Apple iOS App Store.

Mobile apps can be used to do practically anything a desktop application can do, including everything from simple matching games to high-end productivity software like word processing or photo editing software.

² W3C, Web Content Accessibility Guidelines (WCAG) 2.1: W3C Candidate Recommendation 30 January 2018, *available at* <https://www.w3.org/TR/WCAG21/>.

³ App Quality Alliance, Best Practice Guidelines for Developing Quality Mobile Apps, *available at* <http://www.appqualityalliance.org/AQuA-best-practice-guidelines>.

⁴ BBC, Mobile Accessibility Guidelines, *available at* <http://www.bbc.co.uk/guidelines/futuremedia/accessibility/mobile>.

Mobile apps have been particularly popular for retailers and restaurants who want to create a uniform, easily-navigated storefront that is not constrained by the limits of mobile web browsers. Retail websites, usually designed with desktop or notebook computers in mind, are rarely laid out in a mobile-friendly format. While making a mobile version of the website is one common solution, apps have been a popular way to get around design limitations and create a welcoming environment for shopping.

Restaurants have also found mobile apps a convenient way to manage and promote customer loyalty programs. Diners are able to use mobile apps to:

- find the nearest location,
- review the menu,
- check nutritional information,
- place orders,
- make payments,
- credit purchases to their loyalty account,
- check their points total,
- select rewards, and
- get exclusive deals and coupons.



Mobile apps are also becoming an increasingly-important way in which retailers and restaurants operate in-store kiosks and self-checkouts. More and more retailers now use tablets loaded with mobile payment apps to ring up purchases at the checkout, or even have sales associates wandering the floor with smartphones to check customers out without having to wait in line at a central cash wrap. Self-order and at-table kiosks have also become increasingly popular at fast food, fast casual and casual dining restaurants.

In many cases, these mini kiosks are built on the same platforms with the same development tools as mobile apps. Google's Android, which can be installed on a wide variety of hardware, is particularly popular. As such, the main difference between mobile apps and in-store kiosks is whether they are installed on the customer's device or a device owned by the retailer or restaurant.

Because of their similarities, this whitepaper will treat kiosks built on mobile platforms as if they were mobile apps, though it will distinguish where there are kiosk-specific issues.

What Is Digital Accessibility?

Digital accessibility is the practice of making websites, mobile applications, kiosks, and other information and communications systems useable by people with disabilities. When digital assets are correctly designed and developed to be accessible, all users can have equal access to information and functionality.

What Technologies Need to Be Accessible?

Anything that provides useful information or services needs to be accessible to users with disabilities.

This includes:

- Websites
- Web applications
- Mobile websites
- Mobile applications
- Self-service systems (e.g., kiosks)
- Software applications
- Electronic documents (PDF, Word, Excel, etc.)

Over the past few years, mobile applications have become increasingly popular, both as a means for consumers to shop and compare prices, as well as for retailers and restaurants to manage loyalty programs.

Because mobile apps still feel new, it's sometimes easy for organizations to leave them off the list when thinking about accessibility. But, as they become ubiquitous (and in many cases, the only way to access discounts and other deals) mobile app accessibility is fast becoming a critical issue—and an area where litigation is likely to increase significantly in the coming years.



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How Do People with Disabilities Use Mobile Devices?

By building in accessibility—and allowing users to easily turn it on and personalize settings—mobile devices can make it much easier for individuals with disabilities to do things that many people take for granted.

But how do people with disabilities use mobile devices in the first place?

There are as many answers as there are people with disabilities, with some individuals using some accessibility options and others taking advantage of others.

While this whitepaper will explore inaccessible designs that affect individuals with many different sorts of disabilities, it's worth exploring one example in greater depth—users who are blind—to illustrate how important mobile accessibility really is, as well as how easy it can be to achieve it.

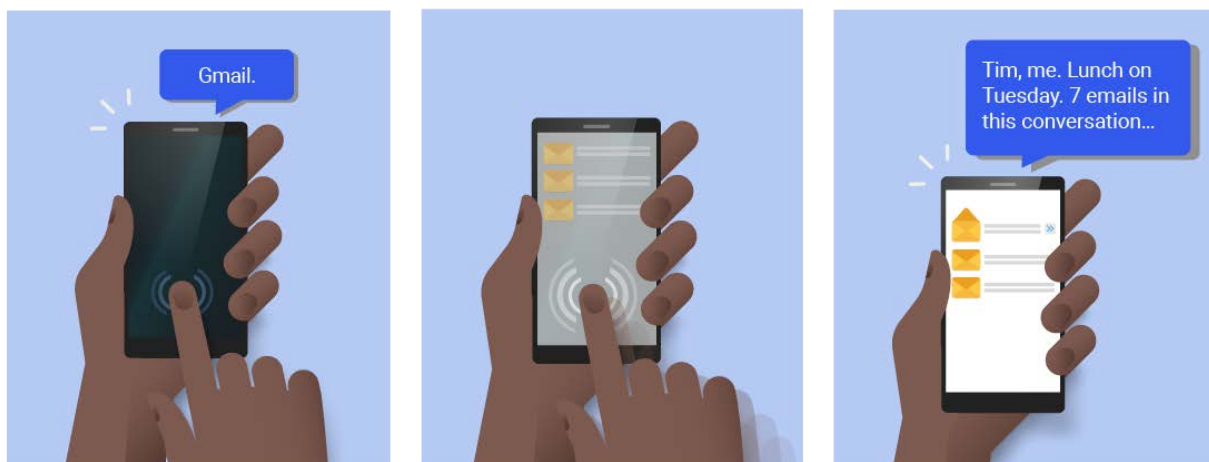
Mobile devices like smartphones and tablets have opened new possibilities to blind users. There are apps that help people who are blind recognize money, identify colors, scan bar codes and read product information, and navigate in unfamiliar areas.

But none of this is possible if the device or app isn't accessible. Mobile devices have many of the same problems in accessibility as desktop computers, except now, it's a touchscreen and no physical keyboard.

How Does a Blind Person Use a Touchscreen?

Did we just read your mind? It's cool, we get this question a lot. We'll answer your question with another one: Think of your favorite app, one you use every day. Can you visualize the user interface for that app? Do you know, for example, where the "Pay" button is on your Starbucks app, the "Play" button on Pandora, and what to do when the phone rings?

When accessibility features are turned on, a layer of audio feedback, and in some cases, haptic as well, is added to each tap on the screen. A blind user touches the screen in a particular area and hears information about what they have touched. They can double tap to open that app or click on that button within the app. Thus, even without sight, a user who is blind can understand what is on the screen based on audio feedback.



Try it yourself!



With an iPhone, go to Settings > General > Accessibility > VoiceOver, or simply ask Siri to "Turn on VoiceOver." When you're finished, you can ask her to "Turn off VoiceOver," and she will gladly oblige. On Android, open Settings > Accessibility > TalkBack and turn TalkBack on. When you're done, head back there to turn it off.

Labeling

It's essential that the mobile app is properly coded, with elements correctly labelled, so that they can be identified correctly by screen readers like iOS's VoiceOver and Android's TalkBack. The code should clearly label the location and purpose of where a user is on a screen and within an application. Without it, a user who is blind won't be able to know what they are clicking!

Gestures

Gestures—tapping, swiping, pinching, etc.—are vital for users who are blind. When apps do not respond to native or modified accessibility gestures, it makes it difficult or even impossible for some people to use.

iOS is Especially Popular with People Who Are Blind

As of the time of writing, a majority of blind smartphone owners use iPhones. Why? Apple has the most mature accessible smartphone on the market, allowing for reliable features to work for pretty much any blind user. Apps that are written for iOS are more likely to be accessible, without even meaning to be!

This isn't to say that Google is slouching on accessibility with its Android OS, which features many similar accessibility features. But, a couple of other things have helped drive users with disabilities to iOS over Android. First, Apple implemented out-of-the-box accessibility features into iOS early and introduced its VoiceOver screen reader nearly a decade ago in 2009. This meant that Apple was an early leader in mobile accessibility, helping it become the go-to platform for most people interested in accessibility features.

Second, because Apple makes its own hardware, accessibility features are exactly the same across different devices. Because Android devices are made by several manufacturers, accessibility solutions are not always the same from device to device and on different operating system versions. Once an individual knows how a feature works in iOS, they can make it work across all iPhones and iPads of that same OS version.

That said, we can't ignore or forget about Android when talking about mobile app accessibility. While iOS may be more popular among users with disabilities, many choose to use Android devices for a variety of reasons, including affordability. Android is also an extremely popular operating system for mobile kiosks, reinforcing the fact that it cannot be taken for granted when it comes to accessibility.

Common Accessibility Issues with Retail Apps

By and large, mobile apps face the same digital accessibility issues as websites, although these issues are sometimes exacerbated by the smaller screen size and touch screen interfaces. Fortunately, device manufacturers and operating system developers like Apple and Google have already done much of the work by building accessibility into the device. Mobile screen readers like TalkBack (Google Android) or VoiceOver (Apple iOS), for instance, are pre-installed on their platforms, and there are a number of features that allow a user to customize colors, as well as other display aspects.

However, some apps may be incompatible with third-party accessibility solutions and peripherals commonly used by individuals with disabilities. Other times, devices, such as kiosks provided by a retail establishment, may be locked down to minimize the user's ability to change settings or turn on accessibility features that are built into the operating system.

The good news for app developers is that a wide variety of solutions already exist to make mobile apps accessible to individuals with disabilities. The bad news is that all-too-often, mobile apps are designed so that they don't take full advantage of existing accessibility solutions.



Fortunately for mobile app developers, contemporary mobile operating systems like iOS and Android have many accessibility solutions built into them. In many cases, making your apps accessible is as simple as ensuring that your apps use well-formatted, semantic code, and follow current best coding practices in order for them to support assistive technology such as mobile screen readers.

Below are some common examples of how apps might not support assistive. While this is not a comprehensive list, it should give you an idea of the sorts of problems individuals with disabilities often face when attempting to use mobile apps.

Not Supportive of Mobile Screen Readers

Many people who are blind or low vision use a screen reader, which reads out loud the visible text and and alternative textual descriptions of images (and emoji!) that appear on their mobile device. Both iOS and Android have screen readers built into their operating systems. While there are some differences between Apple's VoiceOver and Android's TalkBack screen readers, they work largely the same for individuals who are blind or low vision.

Both TalkBack and VoiceOver use a variety of touchscreen gestures to help users navigate between content or skip to other content on the page.⁵

Unfortunately, many mobile apps are not designed to support these built-in screen readers. This can lead to significant frustration, as individuals discover they aren't actually able to use an app they had been excited about using.

The problem is even more acute with app-based kiosks, where the locked-down nature of the system means users have no way of turning on the screen readers in the first place. Ensuring that users with disabilities have a way to turn on accessibility software like Talkback is especially critical—and fairly easy.



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Even when built-in accessibility solutions are not disabled, however, apps still need to be coded so that users with disabilities can take full advantage of them. Mobile apps experience many of the same problems as inaccessible websites, including:

- Failure to use semantic coding like header tags and page titles that allow users to navigate more easily
- Lack of skip navigation that allows users to “skip” past header information and repeated text to quickly access the page’s main content
- Forms that are not clearly coded so that users know what information to enter in which field

When mobile apps are not accessible to screen readers, individuals who are blind or low vision may be discouraged from shopping or dining at your establishment.

⁵ See Kara Van Roekel, “A Smartphone Accessibility Primer; or, How I Learned to Stop Worrying and Master Mobile Accessibility, *Simply Accessible* (Oct. 4, 2017), available at <http://simplyaccessible.com/article/smartphone-a11y-primer-1/>

App Only Works in a Single Orientation

One of the huge advantages of mobile apps over websites is that developers can be fairly sure how they will appear on the end user's device. Because websites can be viewed on any number of devices, at any number of resolutions or window sizes and ratios, they cannot lock in a single appearance to the same degree as a mobile app. This can help mobile apps look truly beautiful, but it can sometimes make them less accessible to users with disabilities.



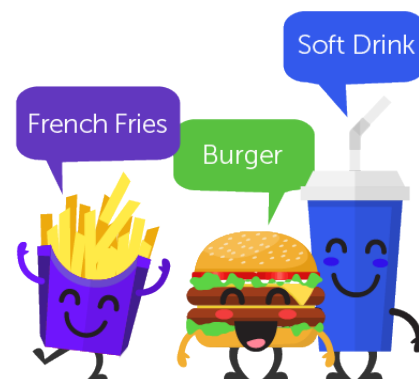
Having an app work only in one orientation might not seem like a big deal to most people, but it can make the app totally unusable for some people with disabilities for whom it is difficult to re-orient the device. Many individuals who use wheelchairs or other mobility devices, for instance, have permanent device mounts installed to hold their phone or tablet. With many of these mounts, it can be difficult to re-orient the device, especially on-the-fly. If your mobile app is not capable of more than one orientation, these potential customers will not be able to access your content and will be less likely to make purchases.

Images Do Not Have Alternative Text

Key information is often conveyed through images rather than through text. Whether they are photographs, tables, charts, maps, or other visuals, this information will be inaccessible to shoppers who are blind or low vision. The solution is to ensure that the image has descriptive alternative text that is read by the browser or screen reader.

In the shopping and dining context, alternative text is needed in a number of situations, including:

- Photographs of products or food items
- Color swatches
- Maps to the store or restaurant location
- Menus
- Text rendered through images (e.g., "click here" button)
- Sizing guides
- Nutritional information charts



Alternative text should contain the same information that a sighted person would be able to glean from looking at the image.

Issues with Color Contrast

Lack of color contrast between text and the background can make it difficult for individuals with low vision (e.g., legally blind, colorblind, etc.) and individuals with learning disabilities (e.g., dyslexia) to read the information in the app, even if it is otherwise well laid-out. For example, light blue or white text on a grey background can be particularly difficult to read. There are many free resources online where you can check color contrast, including one at [LevelAccess.com](https://www.levelaccess.com).

In addition, both iOS and Android have accessibility options built in allowing users to adjust color contrast, invert colors to make text easier to read, filter colors to display differently, and otherwise adjust the way things display on the device, while leaving the basic layout the same. As with built-in screen readers, it is critical that app-based kiosks allow a way for shoppers to enable them.

Unable to Zoom or Adjust Text Size

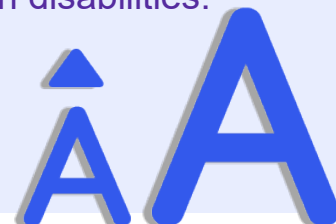
Another common problem in mobile apps—as well as digital content more broadly—is the inability to adjust text size or zoom to make content larger. For individuals who are low vision, this can make it difficult or impossible to engage with content, making them less likely to make purchases or visit your restaurant.

While mobile operating systems have accessibility settings allowing individuals to set text size across apps (e.g., Apple iOS’s Dynamic Type feature), app developers sometimes disable the functionality in order to have a “clean,” uniform design. Unfortunately, this “clean” design comes at the cost of shoppers and diners with disabilities.

Similarly, while zooming to magnify either the entire screen or part of the screen is built into all mobile operating systems, developers can make some kinds of zooming, such as the common pinch-and-expand method of enlarging images, impossible in their own apps. This can have a significant impact on individuals who are low vision, as they may not be able to clearly see images of your products, sizing charts, menus, or other important content.



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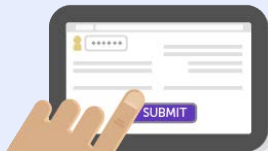
No Simplified Display Option

One of the huge advantages to using a mobile app over having users access a website through a mobile browser is that you can make an interface designed specifically for the device. The complicated interface of Amazon.com, for instance, relays far too much information for a handheld smartphone.

But, sometimes, even mobile apps can be difficult for users with disabilities to use, whether because of a complicated layout or confusing navigation. Offering a simplified display option can help individuals with a variety of disabilities, including those with low vision or cognitive disabilities, to use the app, making it easier for them to make purchases or access other content.



Even a single non-selectable element—such as the “Submit” button on a form—can make an app inaccessible to keyboard users.



Not Compatible with External Accessibility Solutions or Devices

Another fairly common problem with mobile apps is that they are not compatible with external devices and peripherals, such as keyboards, mice, and dedicated switches.

While most contemporary smartphones and tablets—and thus most mobile apps—operate primarily through the use of a touchscreen, many people with disabilities are unable to use a touchscreen, either because of visual impairment or limited mobility. For these users, it is critical that apps can be navigated with an external keyboard and that all clickable elements can be accessed through the use of the Tab and Enter keys.

Unfortunately, even a single non-selectable element—such as the “Submit” button on a form—can make an app inaccessible to keyboard users.

In addition, some individuals with disabilities use external devices to navigate mobile devices in lieu of the touch screen. On Apple’s iOS devices, for instance, Switch Control allows users to select items through the use of a “switch,” which can be an external device, a pre-programmed screen tap, or even head movements tracked by the device’s camera. Switch Control can work with a variety of devices, including some with just a single button. If, however, support for Switch Control or external devices is turned off in the app, users who rely on them will be unable to access your app.⁶

⁶ See “Use Switch Control to Navigate Your iPhone, iPad, or iPod Touch,” Apple Support, *available at* <https://support.apple.com/en-us/HT201370>.

The Bottom Line: Allow Content Customization

At the end of the day, the solution to mobile app accessibility is often personalization. Content should be created in a way that can be adapted to suit the needs of the individual user. By letting users take advantage of the accessibility solutions already built into the mobile operating system, you let them tailor your app to their own needs. This might mean you have a little less control over how your app looks to shoppers or diners, but the upside is you'll get a lot of business from people who couldn't otherwise use your app.

The Americans with Disabilities Act and Mobile Apps

Under Title III of the Americans with Disabilities Act (ADA), places of public accommodation are prohibited from discriminating against individuals because they have a disability. While most people think about the ADA in the context of physical barriers, such as the lack of an elevator or accessible parking spots, the ADA can also apply to electronic barriers that prevent individuals with disabilities from using a website or mobile app.

Although courts have been inconsistent in how and when they apply the ADA to digital content, most courts have agreed that the ADA does apply to the web in at least some instances. With the Department of Justice recently abandoning its efforts to regulate website accessibility,⁷ courts are likely to take on an even more prominent role in determining what the ADA requires of websites and mobile apps.

When Does the ADA Apply?

Title III of the ADA applies to all places of public accommodation, a term that is defined to include twelve broad categories of businesses that interact with the public, including a number that encompass businesses in the broader retail and dining sector:

- Sales or rental establishments, including bakeries, grocery stores, clothing stores, hardware stores, etc.
- Service establishments, including laundromats, dry-cleaners, barber shops and beauty salons, travel agents, funeral parlors, gas stations, pharmacies, insurance offices, health care providers, the offices of lawyers or accountants, etc.
- Restaurants, bars, and other establishments serving food or drinks

⁷ Department of Justice, "Nondiscrimination on the Basis of Disability; Notice of Withdrawal of Four Previously Announced Rulemaking Actions," 82 FR 60932 (Dec. 26, 2017), *available at* <https://www.federalregister.gov/documents/2017/12/26/2017-27510/nondiscrimination-on-the-basis-of-disability-notice-of-withdrawal-of-four-previously-announced>.

- Hotels, motels, inns, and other places of lodging
- Places of recreation, including gymnasiums, health spas, bowling alleys, golf courses, etc.

With few exceptions, retail and dining establishments thus easily qualify as places of public accommodation under Title III.

But what about their digital content?

This question is more complicated, with federal courts reaching inconsistent decisions. To complicate things further, no court has yet ruled specifically on a case involving mobile apps, as the cases that have been brought have settled before any decision. It is fair to assume, though, that decisions involving inaccessible websites would also apply to mobile apps, since in many cases the underlying content is the same.

Unfortunately, courts have been split on when websites fall under the requirements of Title III. While some courts have ruled that all websites—including web-only businesses—are covered, so long as the organization qualifies as a public accommodation, other courts have found that Title III only applies to websites when they serve as a “nexus” to a physical store. A few courts have even ruled that Title III cannot be applied to websites at all in the absence of further regulation.

Under the nexus standard, a website is covered by Title III where it is used by consumers as a gateway to a physical store. If consumers can search for store locations and hours, download coupons, view and search for products, etc., before going to the store or restaurant, a court is highly likely to find that the nexus requirement has been met.

Last year, for instance, in the first website accessibility case to go to trial, a federal judge in Miami ruled that grocery chain Winn-Dixie’s website met the nexus requirements, and thus was



Retailers and restaurants that operate physical locations are strongly encouraged to ensure that their mobile apps are accessible in order to minimize legal risk.



covered under Title III. The court’s decision was based in part on the ability of shoppers to search for store locations, order prescription refills, and download coupons from the website.⁸

If your app does any of these things, or otherwise helps consumers plan for purchases they make (or pick up) in-store, it is likely to meet the nexus requirement. Restaurant apps are especially likely to meet the standard. Retailers and restaurants that operate physical locations are thus strongly encouraged to ensure that their mobile apps are accessible in order to minimize legal risk.



In the only digital accessibility case to be decided after trial, *Gil v. Winn Dixie Stores, Inc.*, the court adopted WCAG 2.0 as a standard when crafting its remedy.



Courts are currently split on the question of web-only businesses, however. Courts in several jurisdictions, including New York and Massachusetts, have allowed suits against web-only businesses to proceed to trial, while some courts elsewhere have not, reasoning that Title III requires a physical “place.” But, because most web-only retailers do business across the country and businesses cannot predict where they will be sued, this offers little protection against litigation; it simply means they are more likely to be sued in New York or Boston than in Miami or Philadelphia.

At the end of the day, the best way to avoid legal risk is to ensure that your mobile apps are accessible in the first place.

Have There Been Any App-Specific Cases?

While no courts have yet to rule on a Title III case specifically involving a mobile app, a number of cases have been brought. Like the vast majority of digital accessibility cases, they settled before the court to issue a ruling.

Sweetgreen

In March 2016, for instance, the National Federation of the Blind, on behalf of several named plaintiffs, sued the fast-casual restaurant Sweetgreen in federal court in New York City because its website and mobile app were inaccessible to individuals who were blind or low vision. The Sweetgreen website or app allows customers to customize salad orders, search by dietary

⁸ *Gil v. Winn Dixie Stores, Inc.*, No. 1:16-cv-23020-RNS (S.D. Fla. June 13, 2017).

preferences, and view nutritional information. In January 2017, the parties reached a settlement, whereby Sweetgreen agreed to, among other things, bring its website and mobile apps into conformance with Web Content Accessibility Guidelines (WCAG) 2.0 Level AA success criteria.⁹

Eatsa

In March 2017, the automat-style fast food chain Eatsa fell victim to a Title III suit over the iPad-based kiosks it used for ordering. Customers place food orders either on an app downloaded to their own mobile device or on an iPad mounted to a stand. But, the kiosk-mounted iPads were configured so that the iOS VoiceOver capabilities were turned off and could not be activated. The mounting system used for the iPads also obstructed the headphone jack, further preventing customers who were blind or low vision from using the devices.¹⁰

In September 2017, Eatsa reached a settlement with the plaintiffs in which it agreed to make its mobile apps (and its kiosks) accessible through built-in screen readers and implement an order notification system so customers who are blind can know when their orders are ready for pickup.¹¹

What Does the ADA Require?

Because the vast majority of digital accessibility cases settle, there have been very few definitive statements from courts as to what Title III requires for websites or mobile apps to comply with the ADA. There is, however, a growing consensus that the Web Content Accessibility Guidelines (WCAG) 2.0 Level AA success criteria are either a de facto standard or else are sufficient to protect against the vast majority of potential Title III suits.

In the only digital accessibility case to be decided after trial, *Gil v. Winn Dixie Stores, Inc.*, the court adopted WCAG 2.0 as a standard when crafting its remedy. According to the court's order, Winn-Dixie was required to bring its website into compliance with WCAG 2.0, though the order did not distinguish between Level A, AA, or AAA success criteria.

⁹ Kristina M. Launey, "Innovative Salad Restaurant Agrees to Make Website and Mobile App Accessible," *ADA Title III New & Insights* (January 24, 2017), available at <https://www.adatitleiii.com/2017/01/innovative-salad-restaurant-agrees-to-make-website-and-mobile-app-accessible/>.

¹⁰ April Glaser, "Eatsa Is Being Sued for Not Making Its Automated Self-Serve Kiosks Accessible to Blind Customers," *Recode* (Mar. 23, 2017), available at <https://www.recode.net/2017/3/23/15037806/eatsa-sued-automated-self-serve-kiosks-accessible-blind-customers>.

¹¹ "eatsa Agrees to Make its Cutting-Edge Technology Accessible to Blind Customers," *Disability Rights Advocates* (Sept. 14, 2017), available at <http://dralegal.org/press/eatsa-agrees-make-cutting-edge-technology-accessible-blind-customers/>.

Other courts have been reticent to expressly adopt WCAG 2.0 as a standard, at least at the motion to dismiss stage. In *Gorecki v. Hobby Lobby Stores, Inc.*, for instance, a judge from the Central District of California ruled that the relevant question was whether Hobby Lobby's website was accessible to the plaintiff, not whether it complied with WCAG 2.0 success criteria.¹²

From the perspective of a business trying to avoid a digital accessibility lawsuit, however, this is largely a distinction without a difference, since making content WCAG-compliant will make it accessible to most users with disabilities and will effectively eliminate the risk of the website or app failing when run against an automated accessibility checker.

For years, the Department of Justice (DOJ) also endorsed WCAG 2.0 as a de facto standard in settlements in enforcement actions, as well as in briefs filed in private suits in which the DOJ intervened. It was also widely expected that the DOJ would formally adopt WCAG 2.0 success criteria into its long-pending website accessibility regulations. As of late 2017, however, the DOJ has abandoned its effort to issue digital accessibility regulations, and DOJ interventions in private ADA suits has declined significantly since the beginning of the Trump administration.

But while the DOJ has stepped away from enacting rules to codify WCAG 2.0 AA success criteria, other governmental agencies remain active. The U.S. Access Board's Section 508 Refresh provided a blanket mandate for the use of WCAG 2.0 A and AA requirements as the baseline for the updated Section 508 requirements, which went into effect on January 18, 2018. In addition, nearly all of the recently settled web accessibility cases relating to the ADA have been settled by requiring the defendant organization to conform to either A or AA requirements or a mix of both.

So, while Level Access should stress that no specific technical standards for the ADA compliance of websites exist, we are reasonably confident in selecting the WCAG 2.0 A and AA requirements as the likely ADA technical standards.

Applying WCAG 2.0 to Mobile Apps

But can WCAG 2.0 success criteria really be applied to mobile apps, if the guidelines were designed to make websites accessible?

Yes! While WCAG 2.0 was drafted with websites in mind, most of its provisions are also easily applied to mobile devices and apps.

¹² *Gorecki v. Hobby Lobby Stores, Inc.*, No. CV 17-1131-JFW (C.D. Cal. June 15, 2017), available at <https://www.adatitleiii.com/wp-content/uploads/sites/121/2017/06/Hobby-Lobby-Order.pdf>.

According to the W3C, which oversees WCAG,

The vast majority of user interface patterns from desktop/laptop systems (e.g. text, hyperlinks, tables, buttons, pop-up menus, etc.) are equally applicable to mobile. Therefore, it's not surprising that a large number of existing WCAG 2.0 techniques can be applied to mobile content and applications (see Appendix A). Overall, **WCAG 2.0 is highly relevant to both web and non-web mobile content and applications.**¹³

The W3C has prepared a document, "[Mobile Accessibility: How WCAG 2.0 and Other W3C/WAI Guidelines Apply to Mobile](#)," designed to help mobile app developers ensure that their content meets WCAG 2.0 success criteria. The document notes a number of mobile-specific issues that should be taken into consideration, even when not expressly covered by WCAG 2.0, including:

- Small screen size
- Zoom/magnification
- Contrast
- Keyboard control for touchscreen devices
- Touch target size and spacing
- Device manipulation gestures
- Placing buttons where they are easy to access
- Changing screen orientation
- Consistent layout
- Positioning important page elements before the page scroll
- Grouping operable elements that perform the same action
- Provide clear indication that elements are actionable
- Set virtual keyboard to the type of data entry required

By keeping WCAG 2.0 success criteria in mind when developing your mobile apps, you can reduce most accessibility issues, minimizing legal risk, while increasing the number of individuals able to use your apps to shop or dine at your establishment.

Looking Forward to WCAG 2.1

That said, because WCAG 2.0 was not written with mobile apps in mind, it fails to cover some potential barriers to access.

That's where WCAG 2.1 comes in!

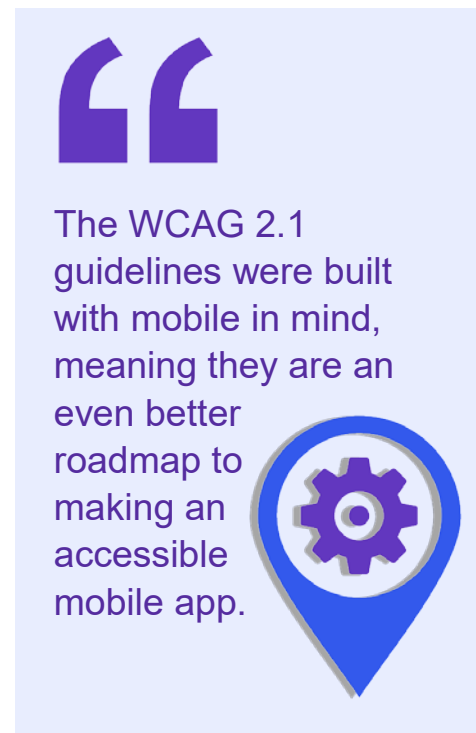
¹³ W3C, "Mobile Accessibility: How WCAG 2.0 and Other W3C/WAI Guidelines Apply to Mobile" (Feb. 26, 2015), available at <https://www.w3.org/TR/mobile-accessibility-mapping/>.

As of the time of writing, WCAG 2.1 has not yet been released in final form or been officially adopted by the W3C. But, a Candidate Recommendation that is expected to be substantially similar to the final guidelines was released in January 2018, offering a glimpse of the accessibility standards of tomorrow.¹⁴

The good news is that the WCAG 2.1 guidelines were built with mobile in mind, meaning they are an even better roadmap to making an accessible mobile app.

Among the new guidelines expected to be added to WCAG 2.1 are:

- **Pointer Accessibility**
 - Multipoint or path-based gestures can be operated with a single pointer without a path-based gesture
 - Pointer functionality is activated on lifting the finger off the touchscreen, rather than pressing it down, allowing users to adjust what they have selected
- **Concurrent Input Mechanisms**
 - Content must be “input agnostic” and allow users to utilize the input mechanism (keyboard, touchscreen, external pointer, etc.) of their choice and allow for switching of input mechanisms
- **Motion Actuation**
 - Functionality activated by device motion (e.g., “shake to undo” on iOS devices) can also be operated by other means and can be disabled to prevent accidental activation
- **Orientation**
 - Content is not restricted to a single display orientation



Because WCAG 2.1 takes the realities of mobile apps much more into account, Level Access highly recommends that mobile app developers begin using its success criteria immediately.

¹⁴ W3C, “Web Content Accessibility Guidelines (WCAG) 2.1; W3C Candidate Recommendation 30 January 2018,” available at <https://www.w3.org/TR/WCAG21/#concurrent-input-mechanisms>.

Conclusion

Over the past decade, mobile apps have become an increasingly important way for retailers and restaurants to connect with their customers. Whether they are making a purchase from an online store, downloading exclusive coupons, or placing a lunch order so they don't have to stand in line, consumers now use retail and dining apps on a daily or near-daily basis. And mobile apps aren't just great for consumers—they're also great for businesses hoping to build a loyal customer base.

But, that only works if customers are actually able to use a retailer's app in the first place. An inaccessible mobile app can turn a potentially loyal customer into someone who never comes back. The problem is even more severe when organizations use inaccessible apps to power in-store kiosks, since many times individuals with disabilities have literally no alternative to the inaccessible device.

If lost business wasn't bad enough, there's also the very real threat that an inaccessible mobile app or app-based kiosk could become the basis of a lawsuit. While there is still some uncertainty over when websites and mobile apps are covered by the Americans with Disabilities Act, the broad consensus is that they are at least some of the time, or at least in some jurisdictions. Considering the relatively low cost of accessibility and the high cost of litigation, it makes sense to be safe rather than sorry.

Your customers will thank you for it.