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The ADA and Website Accessibility: A Technical Problem Without a Technical Understanding

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Introduction

On October 19, 2021, the Vice President for a technology company that provides websites for the floral and gift industry signed the settlement agreement to resolve an accessibility complaint filed against the company's e-commerce website. The site launched on January 19, 2021. The Plaintiff was listed as visually impaired, a consumer, and as a "tester" seeking to ensure compliance with federal law.[1] The complaint was settled for $10,000. The Vice President not only believed the website was accessible, but he also had documented test results proving its accessibility and a video of another visually impaired individual successfully navigating the site. The validity or merits of the complaint were never addressed.

At many times over the last decade and even today, as both businesses and consumers rely more and more on websites and phone apps, over 7 million[2] visually impaired Americans are unable to enjoy the same benefits as sighted individuals. Whether it is ordering prescriptions online from Winn-Dixie[3], having a pizza delivered from Domino's Pizza[4], or streaming a movie on Netflix[5], visually impaired individuals, especially those that are blind, are frustrated in their efforts to enjoy the same benefits as sighted individuals.

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[1] *Jennifer Carbine v. Lovingly, LLC,* California, Case No. 21LBCV0296.
[2] Blindness Statistics, National Federation of the Blind, https://nfb.org/resources/blindness-statistics (last visited Nov. 7, 2021).
[3] *Gil v. Winn-Dixie Stores, Inc.* , 993 F.3d 1266 (11th Cir. 2021).
[4] *Robles v. Domino's Pizza, LLC* , 913 F.3d 898 (9th Cir. 2019).
[5] *Cullen v. Netflix, Inc.* , 880 F. Supp. 2d 1017 (N.D. Cal. 2012).

In the examples above, Winn-Dixie and Domino's Pizza have made provisions for all disabled people at their physical locations. The bathrooms have doors wide enough to accommodate wheelchairs, handicapped parking, and braille menus or sighted staff to walk blind patrons through the order process. All these measures are in place because of Title III of the Americans with Disabilities Act of 1990 (ADA).[6] The ADA states "No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation by any person who owns, leases (or leases to), or operates a place of public accommodation."[7] The question is does this rule also apply to their websites? The answer to that is what the remainder of this paper explores.

Part 1 explores website accessibility today and explains the current approach to addressing and resolving Title III challenges. Part 2 maps the journey of the ADA from physical structures to the current circuit rulings on website accessibility. The section also presents the history of the ADA, its applications to websites, and the current appellate circuit split. Part 3 provides an explanation of the technologies involved in creating and rendering websites. It also presents the perspective of the website owner. Finally, Part 4 presents a framework that is a potential solution allowing courts to rule based on known standards and based on substantive claims. This framework is proposed to help create a clear body of case law regarding compliance and strike a fair and just balance between the plaintiffs and defendants.

[6] AMERICANS WITH DISABILITIES ACT OF 1990, 1990 Enacted S. 933, 101 Enacted S. 933, 104 Stat. 327.
[7] 42 U.S.C.S. § 12182 (LexisNexis, Lexis Advance through Public Law 117-51, approved October 19, 2021).

Part 1: Website Accessibility Today

Website accessibility lawsuits jumped around 200% per year in 2018 and have remained at that higher level since.[8] In the 2017 case *Gil v. Winn-Dixie Stores, Inc.*[9] the United States District Court for the Southern District of Florida ruled that "Winn-Dixie has violated the ADA because the inaccessibility of its website has denied Gil the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations that Winn-Dixie offers to its sighted customers."[10] After the *Winn-Dixie* ruling, similar claims started to be filed in different areas of the United States, but not always with similar results. Different appellate courts focused on under what circumstances the Title III clause "any place of public accommodation" applied to websites. The result has been a three-way circuit split on the meaning of the place of public accommodation clause as it applies to online technologies. This circuit split has resulted in an extraordinary number of lawsuits against companies, over 7,000 filings between 2017 and 2020.[11]

When it comes to website accessibility there are sufficient rulings which enable any disabled person to claim barriers of access. However, there are no adopted standards or any thresholds in the decisions as to what should be reasonably sufficient access. The court rulings focus entirely on the burden to plaintiffs. The rulings are based on precedents relating to physical and not virtual barriers. How websites are assembled, how often they are updated, and the standards under which websites are built are only factored into decisions in regards to arguments on

[8] Kristina Launey, *Federal Website Accessibility Lawsuits Increased in 2020 Despite Mid-Year Pandemic Lull*, JDSupra (Apr. 30, 2021), https://www.jdsupra.com/legalnews/federal-website-accessibility-lawsuits-8876833/.
[9] *Gil v. Winn-Dixie Stores, Inc.*, 257 F. Supp. 3d 1340 (S.D. Fla. 2017).
[10] *Id.* at 1349.
[11] Launey, *supra*. (showing 2,258 suits filed in 2018; 2,256 suits filed in 2019; and 2,523 suits filed in 2020. These three years total up to 7,037 suits filed).

mootness.[12] These factors need to account for, and the courts need to provide guidance based on, an understanding the courts lack.

The increase in claims empowers millions of visually impaired Americans to demand equal use, but it also burdens thousands of the 1.88 billion website owners[13] being sued annually by serial plaintiffs. Serial plaintiffs are individuals with disabilities who file a multitude of lawsuits alleging violations of the ADA.[14] Serial ADA litigation, also known as "surf-by lawsuits,"[15] would be nothing without their plaintiffs, sometimes labeled "professional plaintiffs."[16] Attorneys who represent these serial plaintiffs are complicit in the serial litigation game by focusing their efforts on recovering their attorneys' fees. Many plaintiffs' firms "have employed an aggressive sue-and-settle strategy, using the threat of fee-shifting under the ADA to force companies to forego fact-heavy, protracted and expensive trials in favor of fast monetary payouts."[17] In addition, because websites and judicial districts do not share the same geographical boundaries, plaintiffs' firms can focus their efforts on a few plaintiff-friendly jurisdictions, settle the cases quickly, and prevent courts from developing a clear body of case law regarding compliance.[18]

Attorneys send out individuals with disabilities to check businesses for any ADA violations. Those individuals use screen reading software and then claim that "Plaintiff is being deterred

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[12] Nicole Sieb Smith, How Businesses Can Defeat Website Accessibility Lawsuits, JDSupra (Dec. 20, 2019), https://www.jdsupra.com/legalnews/how-businesses-can-defeat-website-33311/ (stating "The court in Diaz agreed with plaintiff that, because websites are always evolving, violations are more likely to reoccur than in the case of brick and mortar modifications, which are more permanent, the court disagreed that a website case can never be mooted.").
[13] Digital Information World, https://www.digitalinformationworld.com/2021/08/how-many-websites-are-there-in-2021.html (last visited Dec. 13, 2021).
[14] Phoebe Joseph, *An Argument for Sanctions against Serial ADA Plaintiffs*, 29 U. FLA. J.L. & PUB. POL'y 193 (2019).
[15] Randy Pavlicko, The Future of the Americans with Disabilities Act: Website Accessibility Litigation After COVID-19, 69 Clev. St. L. Rev. 953 (2021).
[16] Smith, *supra*.
[17] Smith, *supra*.(Federal Website Accessibility Lawsuits Increased in 2020 Despite Mid-Year Pandemic Lull).
[18] Smith, *supra*.

from patronizing the Defendant's Website on particular occasions"[19] in order to file a complaint. Once the complaint is filed, defendants have no affirmative defenses and generally have to either settle or go through discovery. More than 93% of website accessibility cases filed in 2018 settled, and of the cases filed in 2019, 55% settled within 60 days, according to *Usablenet's Midyear ADA Web & App Accessibility Lawsuit Report*.[20] Consistent with the concept of a serial plaintiff, it was discovered that the Plaintiff in the settled case of the floral technology company had previously been the plaintiff in at least five[21] similar complaints.

Part 2: History of the ADA; the current circuit split, the reasons for it, and the problems it has created.

The History and Provisions of the ADA itself.

The Americans with Disabilities Act of 1990 (ADA) was enacted to prohibit discrimination against individuals based on their disabilities.[22] The ADA defines disability as "a physical or mental impairment that substantially limits one or more major life activities."[23] Some of those major life activities are seeing, hearing, speaking, learning, communicating, and walking. While enacting this legislation, Congress declared that "physical or mental disabilities in no way diminish a person's right to fully participate in all aspects of society, yet many people with

[19] *supra*.
[20] Smith, *supra*.(citing *Usablenet's Midyear ADA Web & App Accessibility Lawsuit Report*).
[21] *Carbine v. Universal Studios, LLC* , No. 2:18-cv-02680-JAK-AGR, 2018 U.S. Dist. LEXIS 84245 (C.D. Cal. May 18, 2018); *Carbine v. Lacoste USA, Inc.* , No. 18-CV-4442 (RA), 2018 U.S. Dist. LEXIS 129276 (S.D.N.Y. July 30, 2018); *Carbine v. Room* , No. CV 20-4814-DMG (JPRx), 2020 U.S. Dist. LEXIS 131519 (C.D. Cal. July 23, 2020); *Carbine v. MMMG LLC* , No. 2:20-cv-04762-RGK-AFM, 2020 U.S. Dist. LEXIS 120057 (C.D. Cal. July 8, 2020); *Carbine v. Buds* , No. 2:20-cv-05793-JAK-PJW, 2021 U.S. Dist. LEXIS 50794 (C.D. Cal. Mar. 17, 2021).
[22] See Introduction to the ADA, *supra* note 3 ("The ADA is one of America's most comprehensive pieces of civil rights legislation that prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life . . . .").
[23] AMERICANS WITH DISABILITIES ACT OF 1990, 1990 Enacted S. 933, 101 Enacted S. 933, 104 Stat. 327.

physical or mental disabilities have been precluded from doing so because of discrimination." The Department of Justice (DOJ) regulates Title II and Title III of the ADA. Since its enactment, the ADA was amended by the ADA Amendments Act of 2008, and further revisions in 2010 included the ADA Standards for Accessible Design.[24]

Under Title III of the ADA in order to state a claim, a plaintiff must allege that: (1) he is disabled within the meaning of the ADA; (2) the defendant owns, leases, or operates a place of public accommodation; and (3) the defendant discriminated against him by denying him a full and equal opportunity to enjoy the services the defendant provides.[25]

From the ratification of the ADA until 2017, Title III offenses were limited to physical structures and to the limited list of private entities whose operations affect commerce[26] that are classified by one of its twelve definitions.[27] Each definition encompasses a number of business types that provide similar services, such as "(B) a restaurant, bar, or other establishment serving food or drink;"[28] "(E) a bakery, grocery store, clothing store, hardware store, shopping center, or other sales or rental establishment;"[29] or even "(F) a laundromat, dry-cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a healthcare provider, hospital, or other service establishment."[30] Examples of (B) would be Five Guys, Hooters, Domino's Pizza, or a local diner. Examples of (E) would be a Winn-Dixie, Hobby Lobby, or a

[24] Randy Pavlicko, *The Future of the Americans with Disabilities Act: Website Accessibility Litigation After COVID-19*, 69 Clev. St. L. Rev. 953 (2021).
[25] *Martinez v. Mylife.com, Inc.* , No. 21-cv-4779 (BMC), 2021 U.S. Dist. LEXIS 210585, at *3 (E.D.N.Y. Nov. 1, 2021).
[26] *Gil v. Winn Dixie Stores, Inc*., 242 F. Supp. 3d 1315, 1317 (S.D. Fla. 2017).
[27] §7- Public accommodation, 42 U.S.C.S. § 12181 (LexisNexis, Lexis Advance through Public Law 117-51, approved October 19, 2021).
[28] *Id*.
[29] *Id*.
[30] *Id*.

local flower shop. Examples of (F) Winn-Dixie's Pharmacy, Metropolitan Life Insurance, or any lawyer's office.

On June 12, 2017, that physical limitation was removed by the United States District Court for the Southern District of Florida. In the *Gil v. Winn-Dixie Stores, Inc.* case, Juan Carlos Gil, a legally blind individual filed a complaint that the Winn-Dixie website, www.winndixie.com, was inaccessible to the visually impaired. Gil had prescriptions previously filled at Winn-Dixie's pharmacy, but always had to go in person and announce to the person at the store what medication he was filling. At the time, the Winn-Dixie website did not perform any direct sales, but gave access to digital coupons and from the "pharmacy" tab on the website, would refill prescriptions. The website allowed a user to choose any of the Winn-Dixie stores with a pharmacy to pick up the prescription without any further interactions.[31] Gil presented evidence that he was proficient in the use of the JAWS screen reader software, that other websites (up to 600 others) were navigable and that 90% of winndixie.com did not work.[32] At the conclusion of this case, the court ruled that the factual findings demonstrate that Winn-Dixie's website is inaccessible to visually impaired individuals who must use screen reader software. Therefore, Winn-Dixie had violated the ADA because the inaccessibility of its website denied Gil the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations that Winn-Dixie offers to its sighted customers.[33]

Application of ADA to Websites

Winn-Dixie was not the first case that involved website accessibility, but it became the catalyst of the avalanche of lawsuits that came after it. Adding to the problem is the fact that the

[31] *Gil v. Winn-Dixie Stores, Inc.*, 257 F. Supp. 3d 1340, 1345 (S.D. Fla. 2017).
[32] *Id.*
[33] *Id.*

appellate courts are split as to whether the provisions of the ADA, mainly those involving places of public accommodation under Title III, apply to online technology such as websites.[34] The Second and Ninth Circuits follow the approach that Title III applies to the services **of** a place of public accommodation and not limited to services only **in** the place of accommodation. In other words, Title III applies if there is sufficient **nexus** between the website and the physical location. However, if the physical location is not a place of public accommodation, then neither need be its website. This is in contrast with the Third, Sixth, and Eleventh Circuit approach where Title III is currently limited to only physical places. Both of these groups are in contrast to the First and Seventh Circuit which broadly applies the ADA and does not limit its interpretation to a physical structure.

A) Second and Ninth Circuit approach

The ADA defined "a restaurant, bar, or other establishment serving food or drink" as a place of public accommodation. If someone with a disability walks into a Domino's Pizza and orders a pizza, then Title III of the ADA would compel Domino's to provide accommodations to account for that person's disability. What if that person went online to make that same purchase? Should that person expect Domino's to accommodate their disability? That is the question that confronted the Ninth Circuit in *Robles v. Domino's Pizza, LLC*.[35]

Guillermo Robles, a blind man, appealed dismissal of his complaint alleging violations of the ADA. He alleged that Domino's Pizza, LLC, "failed to design, construct, maintain, and operate its website and mobile application (app) to be fully accessible to him."[36] On at least two occasions, Robles unsuccessfully attempted to order online a customized pizza from a nearby

[34] Pavlicko, *supra*.
[35] *Robles v. Domino's Pizza, LLC*, 913 F.3d 898, 902 (9th Cir. 2019).
[36] *Id.*

Domino's. Robles contends that he could not order the pizza because Domino's failed to design its website and app so his software could read them.[37] He subsequently filed suit seeking damages and injunctive relief and sought a "permanent injunction requiring Defendant to . . . comply with [Web Content Accessibility Guidelines (WCAG) 2.0] for its website and Mobile App."[38] Even though, the district court first held that Title III of the ADA applied to Domino's website and app[39], it granted Domino's motion to dismiss without prejudice based upon its view that "only the long-awaited regulations from DOJ could cure the due process concerns."[40]

The Ninth Circuit reversed and remanded the dismissal. It concluded that the ADA mandates that places of public accommodation, like Domino's, provide auxiliary aids and services to make visual materials available to individuals who are blind, and this requirement applies to Domino's website and app, even though customers predominantly access them away from the physical restaurant: "The statute applies to the services of a place **of** public accommodation, not services **in** a place of public accommodation. To limit the ADA to discrimination in the provision of services occurring on the premises of a public accommodation would contradict the plain language of the statute."[41] The alleged inaccessibility of Domino's website and app impedes access to the goods and services of its physical pizza franchises — which are places of public accommodation. Customers use the website and app to locate a nearby Domino's restaurant and order pizzas for at-home delivery or in-store pickup. This **nexus** between Domino's website and app and physical restaurants was critical to the analysis.[42]

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[37] *Id.*
[38] *Id.*
[39] *Id.* at 903.
[40] *Id.* at 903-04.
[41] *Id.* at 905 (quoting *Nat'l Fed'n of the Blind v. Target Corp.*, 452 F. Supp. 2d 946, 953 (N.D. Cal. 2006)).
[42] *Id.*

This approach, which is the mandatory precedent in the Ninth Circuit, is known as the nexus approach. The nexus approach evaluates the connection between the services offered by a business' physical location, as long as that business is a place of public accommodation, with the services offered through a virtual location like a website or mobile application. If a sufficient connection exists, the website must comply with the ADA.[43]

The Second Circuit Court of Appeals has not yet resolved the question of whether a website is a place of public accommodation under the ADA.[44] Several recent district court cases in the Second Circuit, including *Martinez v. Mylife.com*, Inc.[45] and *Winegard v. Newsday LLC*, indicates their adoption of the nexus approach.[46]

B) Third, Sixth and Eleventh Circuit approach

Despite being the catalyst of the avalanche of website accessibility complaints with its ruling on *Gil v. Winn-Dixie Stores, Inc.* in 2017, the Eleventh Circuit reversed course in 2021 with another appeal in the case. In *Gil v. Winn-Dixie Stores, Inc.*, 993 F.3d 1266 (11th Cir. 2021), the appellate court reversed its previous opinion.

> *The statutory language in Title III of the ADA defining "public accommodation" is unambiguous and clear. It describes twelve types of locations that are public accommodations. All of these listed types of locations are tangible, physical places. No intangible places or spaces, such as websites, are listed. Thus, we conclude that, pursuant to the plain language of Title III of the ADA, public accommodations are limited to actual, physical places. Necessarily then, we hold that websites are not a place of public accommodation under Title III of the ADA. Therefore, Gil's*

[43] *Id.* (explaining how the inaccessible website and app impeded the customer's connection to the physical location of Domino's stores).
[44] *Martinez v. Mylife.com, Inc.*, No. 21-cv-4779 (BMC), 2021 U.S. Dist. LEXIS 210585, at *3 (E.D.N.Y. Nov. 1, 2021).
[45] *Id.*
[46] *Winegard v. Newsday LLC*, No. 19-CV-04420(EK)(RER), 2021 U.S. Dist. LEXIS 153995, at *2 (E.D.N.Y. Aug. 16, 2021) (stating that the ADA excludes, by its plain language, the websites of businesses with no public-facing, physical retail operations from the definition of "public accommodations.").

> *inability to access and communicate with the website itself is not a violation of Title III.*[47]

The Eleventh Circuit has now adopted the position that a place of public accommodation must be a "tangible and physical space."[48] This is also the position adopted by the Sixth and Third circuits, as well. In *Parker v. Metro. Life Ins. Co.*[49], the Sixth Circuit used the canon of *noscitur a sociis* to interpret the meaning of a place of public accommodation in relation to the examples listed in Title III. A "place," as defined by the applicable regulations, is "'a facility, operated by a private entity, whose operations affect commerce and fall within at least one of the' twelve 'public accommodation' categories."[50] Similarly, the Third Circuit relies on similar wording in *Ford v. Schering-Plough Corp.*[51], with the position that "the plain meaning of Title III is that a public accommodation is a place."[52]

C) First and Seventh Circuit approach

The First and Seventh Circuits interpret Title III of the ADA to broadly apply. The plain meaning of the terms does not require "public accommodations" to have physical structures for persons to enter.[53] Although, it has been acknowledged that neither the statutory nor regulatory definitions expressly states whether websites are "public accommodations,"[54] cases in the First Circuit are firmly rooted in the *Carparts Distribution Ctr. v. Auto. Wholesaler's Ass'n*[55] which, prior to adoption of the internet, established that Congress clearly contemplated that "service

[47] *Gil v. Winn-Dixie Stores, Inc.*, 993 F.3d 1266, 1276-77 (11th Cir. 2021).
[48] *Id.*
[49] *Parker v. Metro. Life Ins. Co.*, 121 F.3d 1006, 1011 (6th Cir. 1997).
[50] *Id.*
[51] *Ford v. Schering-Plough Corp.*, 145 F.3d 601, 612 (3d Cir. 1998).
[52] *Id.*
[53] *Carparts Distribution Ctr. v. Auto. Wholesaler's Ass'n*, 37 F.3d 12 (1st Cir. 1994).
[54] *Access Now, Inc. v. Blue Apron, LLC,* 2017 DNH 236.
[55] *Carparts Distribution Ctr.* v. Auto. Wholesaler's Ass'n, 37 F.3d at 19.

establishments" include providers of services which do not require a person to physically enter an actual physical structure.[56]

Access Now, Inc. v. Blue Apron[57] is a First Circuit case where Blue Apron's website allows consumers to view and purchase various meal plans for home delivery but has no physical store. Access Now alleges that Blue Apron's website is not compatible with screen-reader software and, as a result, Plaintiffs cannot fully use and enjoy Blue Apron's services.[58] Blue Apron sought to dismiss the complaint pursuant that websites are not "places of public accommodation" absent connection with a brick-and-mortar store, and that it therefore cannot be held liable under the ADA for its website's inaccessibility.[59] Based on the *Carparts* ruling, the district court denied the request.

Similarly, the Seventh Circuit Court of Appeals rejected the argument that "public accommodation" requires a physical place. In *Morgan v. Joint Admin. Bd., Ret. Plan of Pillsbury Co. & Am. Fed'n of Grain Millers*[60], the Court explained that "[a]n insurance company can no more refuse to sell a policy to a disabled person over the Internet than a furniture store can refuse to sell furniture to a disabled person who enters the store." It emphasized that an accommodation's location is irrelevant for Title III purposes.[61] Finally, citing *Carparts*, the Courts states that "the site of the sale is irrelevant to Congress's goal of granting the disabled equal access to sellers of goods and services. What matters is that the goods or services be offered to the public."[62]

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[56] *Id.*
[57] *Access Now, Inc. v. Blue Apron, LLC,* 2017 DNH 236.
[58] *Id.*
[59] *Id.*
[60] *Morgan v. Joint Admin. Bd., Ret. Plan of Pillsbury Co. & Am. Fed'n of Grain Millers, AFL-CIO-CLC,* 268 F.3d 456 (7th Cir. 2001).
[61] *Id.* at 459.
[62] *Id.*

Part 3: How all the technology works together: A technical explanation.

As the Vice President for the floral technology company found out, whether a website is accessible or not is not dispositive of the case. Although it is important to establish whether Title III of the ADA applies, the court cases all stop there. The cases do not pivot on the merits of the claim but focus more on whether the claim has standing. Plaintiffs are able to state a claim with non-specific assertions like "encountered multiple pages containing insufficient navigational heading requiring Plaintiff to expend substantial additional time to access information."[63] Once the courts have ruled on whether the ADA applies there is never a discussion about whether the plaintiff was actually denied access. It is just assumed so. In all of the Title III ADA compliance cases there is generally discussion of WCAG and of the screen readers and yet, neither of these are substantively part of the conversation. The reluctance to deal with the substantive facts is quite possibly because, since there is not a published set of standards, there is not sufficient confidence in understanding what should and should not qualify as a Title III ADA violation.

This reluctance most likely stems from a lack of understanding of the technology that may or may not actually be violating the ADA. In his concurrence of the Supreme Court's decision in *Molecular*, Justice Scalia states "I am unable to affirm those details on my own knowledge or even my own belief. It suffices for me to affirm, having studied the opinions."[64] The concern is not that Justice Scalia admitted he did not understand the science behind what was being decided, the concern is that the other 8 justices did not admit the same thing. Almost a decade later there remains controversy over whether the 9-0 ruling was the correct decision in the

[63] *Jennifer Carbine v. Lovingly, LLC,* California, Case No. 21LBCV0296.
[64] *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.,* 569 U.S. 576, 596, 133 S. Ct. 2107, 2120 (2013).

Molecular case. A further concern is that the general public is fairly ignorant of technology as well. Of these people that might become finders of fact on a jury, 34% did not know how the internet worked[65] and 24% do not "understand computers and new technology."[66]

Although the internet and websites are amazing and complex systems, they are also very logical and well defined. Software developers are given business objectives and try to interpret those objectives and render them into a usable form by using a programming language (i.e., code) according to published industry standards. Most businesses, especially those that cater to commerce or application development, have a staff that is constantly working on the code that powers their website. They need it. Not only does code need to be updated to meet a new business objective, but, many times, it needs to be updated because of either cybersecurity vulnerabilities or just previously undiscovered errors, faults, or flaws (i.e., bugs). These developers are responsible for building the web browsers, the web servers, the web pages, and even programming the system that connects everything together.

A web browser is an application running on a local device, written by software developers in a programming language, that accepts the output of a web server and renders it in a readable and functional format for the end-user to consume and interact with. The web browser received data from a web server in a Document Object Model (DOM), which is only a single page created using semantic markup text.[67] Along with graphics and scripting, HTML and CSS are the basis

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[65] Digital Information World, https://www.digitalinformationworld.com/2019/10/1-out-of-3-americans-dont-know-how-internet-works.html (last visited Nov. 4, 2021).
[66] Digital Information World, https://www.digitalinformationworld.com/2019/11/tech-angst-is-growing-just-like-the-trends.html# (last visited Nov. 4, 2021).
[67] *What On Earth Is Semantic Markup? (And Why Should You Learn To Write It)*, HTML.com, https://html.com/semantic-markup/#ixzz7AuBRmRz4 (last visited on Nov. 7, 2021)
(Semantic markup is the use of a markup language such as HTML to convey information about the meaning of each element in a document through proper selection of markup elements, and to maintain complete separation between the markup and the visual presentation of the elements contained in the document.).

of building web pages and web Applications.[68] These are just two of the standards published by the World Wide Web Consortium (W3C)[69] that developers must follow. W3C is an international community where Member organizations, full-time staff, and the public work together to develop Web standards.[70] HTML provides the structure of the page and CSS the (visual and aural) layout for a variety of devices. HTML uses well-defined tag pairs in the document to indicate the title of the document <title>...</title>, the headline <h1>...</h1>, and many other constructs within the document including, but not limited to, form fields (<form ...>...<input ….></form>), images (<img …>), video (<video …>...</video>), links (...), etc. As innovations, computing power, and demand increased web servers became more complex. Today, software developers can use any one of a multitude of programming languages; such as PHP, Java, and Python, just to name a few; to perform complex calculations, actions, and data collections tasks. Regardless of how complex these tasks are, the output has to be rendered in well-formed HTML. What is well-formed HTML? It is a structure that follows the published standards. It contains the correct nesting of pairs, so the document structure is sound. If the pairs are not assembled correctly or an extra element is inserted into the DOM, then the entire page may appear broken.

Following published standards is an agreement like adhering to a contract. Sometimes the standard is precise enough that there is no question about its interpretation. However, sometimes there are subtle, varied interpretations of the standards. This manifests itself as different behavior from one web browser to another. Remember that web browsers are also written by software developers, just as websites are. This means that either side of the agreement might intentionally or unintentionally violate the contract. When one side or the other violates this

[68] W3C, https://www.w3.org/standards/webdesign/htmlcss (last visited Nov. 7, 2021).
[69] W3C, https://www.w3.org/standards/webdesign/ (last visited Nov. 7, 2021).
[70] *supra*.

contract, it is not a breach, it is a bug. A bug will, in some form, affect the performance and operation of the end user's experience. As examples, a bug in the web server could result in no data or web page being returned; a bug in the web browser may misinterpret any of the HTML, CSS or scripts and make the page unusable to both sighted and visually impaired individuals; and a bug in the web page itself could be dramatic and have the same unusable effect because the DOM is malformed or be as simple as an overlooked display attribute, like the "alt" tag[71], that visually is not an issue, but is a problem for the screen readers. There are 4.38 billion internet users worldwide[72] and approximately 83% of those people use one of the top three browsers: Google Chrome (63.37%), Apple Safari (15.05%), or Mozilla Firefox (4.49%).[73] Because of this huge market share and usage, bugs that happen at the browser level are rare or quickly caught. In regards to conforming to the standards, if these three web browsers agree on an interpretation on a standard than it matters little what the other 109 browsers[74] or 1.7 billion websites[75] decide.

Visually impaired people use additional software called screen readers. The screen reader is an application running on a local device, written by software developers in a programming language, that works in conjunction with a web browser to allow visually impaired people to consume data on the web. These applications not only have to adhere to the same HTML, CSS, and JavaScript standards as web browsers, but they are also supposed to adhere to an additional W3C standard, the Web Content Accessibility Guidelines (WCAG).[76] These screen readers also

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[71] Alt tags are attributes of the img element (<img…>). The img element is what presents an image on the web page. The alt tag is there to provide a description of the image and will show if the image fails to load. Sighed individuals normally see it when the mouse is hovered over the image. This descriptive text is what is used by screen readers and should always be present but is easy to overlook.
[72] Deyan Georgiev, *60+ Browser Usage Statistics, Facts, and Trends [Updated for 2021]*, Review42 (Oct. 3, 2021) https://review42.com/resources/browser-usage-statistics/ .
[73] *supra*.
[74] *supra*.
[75] *supra*.
[76] W3C, https://www.w3.org/WAI/standards-guidelines/wcag/ (last visited Nov. 7, 2021).

have their own interpretation of the published standards. This is equivalent to an additional layer interpreting the DOM, like a contract modification. On certain occasions, some elements of the extra standards may be mistakenly overlooked, the standards could conflict, or the screen reader may interpret the standards differently. Unlike the web browser manufacturer and because of their smaller market, the screen reader manufacturers do not have the resources or feedback system that creates the same authoritarian interpretation of the WCAG as browsers do. There does not appear to be an official count of people who are blind and use screen readers. Estimates fluctuate from as little as 4.4 million[77] to 8.1 million.[78] The National Federation of the Blind listed the total number of blind adults at 7.68 million[79] which means, based on the 57% proportionality of 4.38 billion online technology users to the world population, then the 4.4 million screen readers count is a better approximation. Regardless, even if the 7.68 million number were used, this is a fraction of the exposure the traditional browsers get. There are also far fewer screen readers that are available, with Job Access with Speech (JAWS), None Visual Desktop Access (NVDA), and VoiceOver being the most dominant. These three combined account for about 91% of the screen reader market.[80]

A modern website software development department works in smaller, parallel or sequential steps or subprocesses to improve design, product management, and project management.[81] Since

[77] Nick Steele, *Percentage of screen readers users in USA?*, StackExchange (Jul. 17, 2018), https://ux.stackexchange.com/questions/57340/percentage-of-screen-readers-users-in-usa.
[78] *Accessibility Statistics*, Interactive Accessibility, https://www.interactiveaccessibility.com/accessibility-statistics (last visited Nov. 7, 2021).
[79] *Blindness Statistics*, National Federation of the Blind, https://nfb.org/resources/blindness-statistics (last visited Nov. 7, 2021).
[80] *Screen Reader User Survey #9 Results*, WebAIM, https://webaim.org/projects/screenreadersurvey9/ (last visited Nov. 7, 2021).
[81] Microsoft Academics, https://academic.microsoft.com/topic/180152950/publication/search?q=Software%20development%20process&qe=And(Composite(F.FId%253D180152950)%252CTy%253D%270%27)&f=&orderBy=0 (last visited Dec. 15, 2021).

a website's code is centrally located and easy to update, changes are quickly tested and released. This continuous improvement methodology has the advantage of quickly fixing any current bugs found in the site and it also ensures that end-users are always deriving greater benefit from the website. This means that websites are constantly changing. It also means that even though current bugs are squashed, new bugs may arise. Bugs happen unintentionally but they are also generally easy to fix.

When these concepts are all put together, it presents a very striking contrast between physical and virtual accessibility barriers. In the physical world, accommodations have to be thought of early in the planning phase and implemented originally. If not modifications to accommodate accessibility can be extremely costly and take considerable time to implement. Consider the effort to correct a bathroom if it was not wide enough to allow someone in a wheelchair to successfully enter and navigate. In contrast, consider a case in the virtual world. If none of the images on a web page contained the alt text, which would deny a visually impaired individual the ability to enjoy those images, because the software developer forgot to map them from the database, that could be changed within a business day.

Part 4: The AWSADD Framework

When it comes to application of Title III of the ADA to physical structures there is no circuit split nor any controversy. The DOJ has published the 2*010 ADA Standards for Accessible Design*[82] which contain numerous specifications for accessibility for physically disabled people including height and width requirements to accommodate wheelchairs, protrusion requirements

[82] 2010 ADA Standards for Accessible Design, https://www.ada.gov/regs2010/2010ADAStandards/2010ADAstandards.htm (last visited Dec. 10, 2021).

to accommodate the blind and even the specific number of parking spaces. Yet, when it comes to websites, the DOJ is silent on Title III.

The deluge of serial plaintiffs has come about because it is easy for them to state a claim or make a demand letter, and it is hard for defendants to defend against the claims without going into costly discovery. Even if the plaintiff was denied access, and it is clear in all cases a third-party screen reader is involved, it is never addressed as to whether the screen reader, itself, was the cause. It is just assumed that because any particular screen reader works on 500-600 other websites[83] that the website in question is denying the plaintiff full access. The physical world equivalent of this is the seminal case of *Ruffin v. Rockford Mem'l Hosp.*[84] In *Ruffin*, the plaintiff, a prisoner who was shot by Kane County sheriff's deputies while resisting arrest, sued under Title III of the ADA when a hospital refused to accept him for treatment contending they were not equipped to handle his issues.[85] The court ruled that Ruffin failed to state a claim under Title III because the language of the subchapter's enforcement provision provides a remedy only to a person who is being subjected to discrimination on the basis of disability and seeks only money damages.[86] If the accessibility issue is a result of either a bug in the software or the fact that another party did not meet their obligation, then it cannot qualify as discrimination on the basis of disability.

Remember the settlement of the floral technology company mentioned earlier? The Vice President had evidence that his company's website was highly compliant with WCAG standards at the time it received the complaint. Yet, he could not get the case dismissed with an affirmative defense. Once the case entered discovery the insurance company issued the

[83] *Gil v. Winn-Dixie Stores, Inc.*, 257 F. Supp. 3d at 1344.
[84] *Ruffin v. Rockford Mem'l Hosp.*, 181 F. App'x 582 (7th Cir. 2006).
[85] *Id.* at 585
[86] *Id.*

ultimatum to settle for nuisance value ($10,000) and insurance will cover 100% of the costs or continue and the company is responsible for 30% of any costs, regardless of outcome.

Controlling case law has been prevented from developing a clear body of case law regarding the question of whether the plaintiffs are in actuality injured in fact and discriminated against by the defendants in violation of Title III of the ADA. The scales of justice are out of balance. However, the following framework could provide the necessary standards and procedural rules to right the scales.

AWSADD Framework

A. Accommodation: Establish one standard nationwide for how Title III of the ADA applies to websites and apps.

W. WCAG: Establish that WCAG 2.0 Level AA or greater should be the accessibility standard and set an acceptable threshold.

S. Standing: Require that the plaintiff prove standing by stating the specific element that was a problem.

A. Audit: Required that the plaintiff submit a site audit from one of the accessibility tools available indicating the percentage of violations on any given webpage.

D. **Demand Letter:** Require the plaintiff to first deliver a demand letter with a reasonable response period.

D. **Dismissal:** Allow for dismissal on failure to state a claim based on failure to send a demand letter, specificity of the claim, and lack of audits.

A. Accommodation

Websites and apps are accessed via the World Wide Web. That means that a website such as Domino's Pizza or Blue Apron are accessed from all over the world. These websites are not confined to just geographically bound jurisdictions. Although not impossible, it would create an undue burden that a company must produce a website and app that function differently based on the end user's geographical locations. In addition, since the COVID-19 pandemic and leading up to it, the need for people to travel to a physical place for business to be successful no longer exists. Many grocery stores offer online purchasing with delivery, one such website, Fresh Direct, is online only; one can order for delivery or pickup from even the most upscale restaurants; although theaters exist the majority of people consume video content from online streaming services; and one can pretty much buy any clothing or any hardware item you need from Amazon. Someone might actually know where an Amazon warehouse is, but it would not be available to the general public. However, most everyone knows how to shop on amazon.com. If a private entity whose operations affect commerce that are classified by one of Title III of the ADA's twelve definitions is only known by its virtual (website or app) presence, then it cannot have a nexus or just a physical location. Given that, how can the virtual presence not be a place of public accommodation?

Therefore, the standard should follow the First and Seventh Circuit approach and assume any website representing the dozen categories of businesses listed in Title III of the ADA **is** a place of public accommodation.

W. WCAG

The W3C has been the main international standards organization for the world-wide web since 1994.[87] All websites already adhere to many of the standards in order to work on web browsers. There is also a W3C standard that the screen readers are built to support. There are reliable auditing tools that are built to accurately report on WCAG 2.0 Level AA, and it is already part of the Section 508 guidelines that all government related websites must meet. In fact, even though the appellate circuits split on the definition of a place of public accommodation for online technology. The courts acknowledge the existence of WCAG 2.0 as a potential controlling standard and have even endorsed it. The *Robles* court indicated "that the district court can order compliance with WCAG 2.0 as an equitable remedy,"[88] and the Winn-Dixie 2017 court stated that "[r]emediation measures in conformity with the WCAG 2.0 Guidelines will provide Gil and other visually impaired consumers the ability to access Winn-Dixie's website and permit full and equal enjoyment of the services, facilities, privileges, advantages, and accommodations provided through Winn-Dixie's website."[89]

Title III of the ADA states no individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation.[90] "Full" would imply that the threshold could be set at 100%. That level is not a very practical standard and would create an undue burden on website owners. As stated earlier, websites and apps are transmitted over great distances. Browsers also cache files so that they do not have to request information it already has. In these cases, sometimes, all the code that is required to operate together for correct

[87] https://www.w3.org/Consortium/facts (last visited on Dec.15, 2021).
[88] *Robles v. Domino's Pizza, LLC*, 913 F.3d at 907.
[89] *Gil v. Winn-Dixie Stores, Inc.*, 257 F. Supp. 3d at 1350.
[90] *Robles v. Domino's Pizza, LLC*, 913 F.3d at 904.

functionality is not successfully served or transmitted to the end user device. This would be true regardless of if the user was disabled or not, and therefore should not be considered discriminatory. At the same time, websites and pages are very complex constructs that, especially in e-commerce websites, assemble data from various sources to create the output. In addition to that, code in modern organizations is generally being worked on fairly often following the continuous improvement methodology. This is done to improve the functionality of the code, but sometimes mistakes are made, and a bug will introduce uncaught errors to the website or app. In these cases, the bug could affect both disabled and non-disabled the same or it could affect them differently.

In the physical world the ADA does not require that every bathroom stall nor every parking spot be wheelchair accessible. To do so would be cost prohibitive and an undue burden to the business owners. In the physical world, the standards only call for 4% coverage for both parking spaces[91] and bathrooms (but at least 1)[92]. In addition, not all pathways have to accommodate the disabled, there only needs to be "[a]lterations made to provide an accessible path of travel."[93] A similar percent-based standard, along with a virtually accessible path of travel, should apply to online technology. The percent threshold can also be much higher than the physical standards and still not constitute an undue burden on the website owners.

All the mainstream browsers come with developer tools installed, in addition to independent tools like Deque's Axe, that can produce an accessibility report indicating the percentage of errors and the severity. The threshold should be of low enough error percentage as measured by these tools and, especially on commerce sites, a virtually accessible path of travel through to

[91] *Id.* §208.2.
[92] United States. Department of Justice. *2010 ADA standards for accessible design*. [Washington, D.C.]: Dept. of Justice, 2010. https://www.ada.gov/regs2010/2010ADAStandards/2010ADAstandards.htm §213.3.1.
[93] *Id.* §202.4.

purchase completion. Since the tools measure a percent of compliance, then a score between 87% to 90% should be the lower threshold of acceptable compliance. Anything above this threshold should be considered compliant but not require the site to 100% on all elements all the time. These proposed levels of compliance are achievable for companies to reach and maintain, not accounting for bugs impacting accessibility. These levels are also much higher than the accepted standards for physical accessibility and would also have created the inverse experience for Mr. Gil at the Winn-Dixie website.[94]

S. Standing.

"To state a claim, a plaintiff must allege that: (1) he is disabled within the meaning of the ADA; (2) the defendant owns, leases, or operates a place of public accommodation; and (3) the defendant discriminated against him by denying him a full and equal opportunity to enjoy the services the defendant provides."[95] But, Title III ADA website complaints can be filed with as vague and non-specific phrases as "home page has graphics, links, and buttons that are not labeled, or lack alternative text,"[96] or "encountered multiple pages containing insufficient navigational heading requiring Plaintiff to expend substantial additional time to access information."[97] Claims like this are not able to be measured, corrected, or even found by the website owner. There are potentially hundreds of elements that can make up a web page. Identifying the issue that is barring access to the plaintiff without specifics makes it impossible to duplicate, let alone repair. As an alternative the claim or demand letter should contain specifics based on identifiable markers within the offending elements, such as, "the homepage

[94] *Gil v. Winn-Dixie Stores, Inc.*, 257 F. Supp. 3d at 1345. (claiming that "90% of winndixie.com did not work").
[95] *Martinez v. Mylife.com, Inc.*, No. 21-cv-4779 (BMC), 2021 U.S. Dist. LEXIS 210585, at *3 (E.D.N.Y. Nov. 1, 2021).
[96] *Jennifer Carbine v. Lovingly, LLC*, California, Case No. 21LBCV0296.
[97] *Id.*

hero image lacks a label or alt attribute" or "the page at address https://www.domain.com/page-name, among others, lacks labels on the main nav elements." If the true intent is to remove barriers that prevent the full use and enjoyment of the website, then specifics as presented prove the claim of the barrier and allow the website's owner to address the barriers.

A. Audit

Current case law gives a great deal of deference to the screen reader used and how many sites it will operate on, but there are never facts presented about how compliant the screen reader software itself is. It is possible that the screen reader itself might bar full use and enjoyment of a website if that site implements a part of the specification that is ignored or implemented differently in one or more of the screen readers. If the adopted standard is the WCAG 2.0 Level AA specification, and in order to both eliminate the screen reader as the source of the problem and to better state a claim, the plaintiff can submit a site audit indicating the severity of the WCAG violation at the time they were barred. There are plenty of tools that can measure how compliant a website is relative to the specifications. Every web browser now contains developer tools, all of which come with accessibility audit tools. Lighthouse is an open-source tool[98] supported by Google and installed natively in Google's Chrome browser as well as Microsoft's Edge browser. The accessibility report provides a rating between 0% and 100% as to how well the site met the accessibility standards.

D. Demand Letter

Currently a plaintiff has no obligation to inform the website's owner of any issues they encounter. They can immediately file a claim because the ADA itself has been determined to

[98] Lighthouse, https://developers.google.com/web/tools/lighthouse (last visited on Dec. 13, 2021).

give fair notice.[99] As true as this is in theory and in practice with physical structures, it is much different in practice in a virtual world. In the physical world, the building of a structure requires a large amount of planning time, the right materials, a large amount of labor, and is very hard to change once erected. Websites on the other hand require little in the way of materials and can be changed and deployed rather quickly. If the barrier is minimal or temporary, then fair notice would be to inform the owner that there is a problem. The solution can be prioritized and made within a reasonable period of time. A demand letter would alert the website's owner of the issue and accommodations made in a timely fashion. No further legal action would be necessary, if correcting the barriers is the true motivation but not impacting viable claims.

D. Dismissal

To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to state a claim to relief that is plausible on its face. FRCP 12(b)(6).[100] Current case law makes it very difficult to dismiss a case for failure to state a claim. A plaintiff just needs to indicate that they were barred from full and equal enjoyment of the site without having to present the specific elements that barred the full enjoyment[101] nor indicate whether the experience was equally shared amongst disabled and non-disabled individuals.

As illustrated earlier, without more specific information but taken as truth, it is not immediately clear what caused the individual to not be able to fully enjoy the website. Bugs and internet issues happen all the time to non-disabled people that prevent their full enjoyment of a

[99] *Id.* (stating "we hold that Domino's has received fair notice that its website and app must comply with the ADA.").
[100] *Nat'l Fed'n of the Blind v. United Airlines, Inc.*, No. C 10-04816 WHA, 2011 U.S. Dist. LEXIS 44366, at *5 (N.D. Cal. Apr. 25, 2011).
[101] *Markett v. Five Guys Enters. LLC*, No. 17-cv-788 (KBF), 2017 U.S. Dist. LEXIS 115212, at *2-3 (S.D.N.Y. July 21, 2017) (court denies dismissal against the argument that plaintiff fails to state an essential element of her Title III claim—that she was denied the full and equal enjoyment of a place of public accommodation).

website or app. When a bug appears that affects sighted individuals, the website owner might have to deal with scathing criticisms but is not in danger of being summoned to court or having to pay thousands of dollars in damages. Yet nowhere in case law is this approached or addressed. Equally importantly, even if the lack of full enjoyment was solely limited to the disabled, it might not be truly discriminatory; instead it could be a result of network issues, connectivity problems, or even an oversight in the code that does not provide the same experience as a non-disabled person.

Allowing for dismissal to state a claim if the procedures to state that claim as indicated within the framework are not followed is an effective way for website owners to avoid unnecessary litigation.

Conclusion

When it comes to Title III of the ADA and websites, there are complex issues to resolve. Yes, there are difficult legal considerations, however there are technical considerations involved in these cases that the courts are not equipped to address. The DOJ, Congress and even the Supreme Court have all had sufficient time and opportunity to address this issue but continue to fail to engage. Serial plaintiffs and their lawyers continue to thrive, and the unsuspecting website owners remain vulnerable to a surprise attack and have very few defenses. Compounding the problem is that many websites transcend jurisdictional borders which means that plaintiffs can venue shop for the appellate circuit with the most favorable rulings.

No matter who implements it, the proposed AWSADD framework should introduce some much-needed balance in the website accessibility battles. The increase in online commerce and the shifting nature of business to online-only during the pandemic means adopting the most

stringent definition of a place of public accommodation will give notice to all the businesses listed in Title III of the ADA that their websites must comply with and provide an accessible experience. That the experience must comply with W3C WCAG 2.0 Level AA and be measurable using a third-party tool at a level of at least 87% and, if a commerce website, contains a virtually accessible path of travel. Meanwhile, procedurally, plaintiffs must bring more facts to the claim and fair notice is defined as a demand letter. This will allow unintentionally infringing defendants to remove any barriers prior to an escalation. These measures would remove the threat of fee-shifting and eliminate the sue-and-settle strategy currently employed, resulting in a more equitable conclusion.

If this AWSADD framework had been in place the floral technology company would have had an affirmative defense and would not have been forced into a settlement.