# The Impact of Accessibility Policies on Video Game Accessibility

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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**Introduction**

The global video games industry has grown dramatically over the past few years. In 2023, the gaming industry reportedly earned more than the film industry and music industry combined which is estimated to be about $249.60 billion (Peri, 2024). Video games have become one of the major entertainment mediums in the world. I personally have enjoyed video games since I was young. I played games such as *Super Mario Galaxy 2* on my Wii and *The Legend of Zelda: The Wind Waker* on my Wii U. However, not everyone can properly enjoy video games like I did. People with disabilities struggle to play certain games if those games do not include accessibility features. Gamers with disabilities comprise about 20 percent of the gaming population (Waller, 2022). With disabled gamers taking up a large chunk of the gaming population, accommodations should be made for these gamers to enjoy a majority of games. One way to alleviate this issue is to promote accessibility within video games.

What exactly is accessibility? As stated by the Game Accessibility Guidelines website, “Accessibility means avoiding unnecessary barriers that prevent people with a range of impairments from accessing or enjoying your output (Ellis et al., 2012)”. These unnecessary barriers prevent people with disabilities from enjoying video games to their full potential. There is a wide range of disabilities that people can have. These types of disabilities might impair a person's ability to enjoy a video game and they range from motor impairments, visual impairments, and auditory impairments. Motor impairments such as severe tendonitis can result in difficulty in using specific controllers when playing a game. Visual impairments such as color blindness can result in players failing due to not recognizing colors that are integral to the gameplay. Auditory impairments can result in players not getting the necessary information to succeed in the game.

Through the use of policies, accessibility in video games could be improved. Policies could be used to regulate gaming accessibility to ensure that people with disabilities have equal access to video games. However, there are a surprisingly limited amount of policies that directly affect video game accessibility. This paper will explore the reasoning behind why there is such a lack of policies addressing accessibility in video games. An analysis of the current landscape of policies on gaming accessibility will be done to showcase its effects on the game industry and community. Specifically, I will analyze a policy that currently does affect video game accessibility. I will discuss another policy that currently does not affect video game accessibility but ideally should. I will analyze a policy that could affect video game accessibility but is currently not passed yet. I will also talk about a non-federal guideline that serves as an ideal example of addressing accessibility.

**Literature Review**

There is a surprising lack of policies relating to video game accessibility. One federal policy called The 21st Century Communications and Video Accessibility Act of 2010 (CVAA) does relate to video game accessibility. The act calls for advanced communication services to be accessible and usable by individuals with disabilities (FCC, 2010). For video games, advanced communication services would involve two-way communication such as voice chat and text chat in multiplayer games. Note that the CVAA, only such features would have to comply with the CVAA, or else the entity behind the software will have to pay hefty fines. The CVAA will ensure that people with disabilities are able to access modern communication services. Equal access to communication will allow everyone to have a voice in our society. This act initially did not apply to video games due to the Entertainment Software Association (ESA) advocating for waivers.

These waivers exempted video games from being affected by the act for a limited amount of time. It was not until 2019, that the last waiver expired and video games were finally affected under the CVAA. Game developers will have to accommodate people with disabilities if they want to implement communication features in their games. With the CVAA in effect, gamers with disabilities will be able to utilize features such as voice chat and text chat within video games in spite of their disabilities.

The Americans with Disabilities Act (ADA) is a federal law that ensures equal access for individuals with disabilities by accommodating them (Nguyen & Frieden, 2015). The ADA provides accommodations for people with disabilities with some exemptions. Accommodations will not be provided if it will greatly alter the nature of a good or service. Accommodations can also not be provided if doing so causes a great burden due to difficulty and cost. The ADA also states that physical facilities must be designed with specific requirements in mind to ensure accessibility. The act extends beyond physical structures as interpreted by the court in cases such as *Carparts Distrib. Ctr. v. Auto. Wholesaler's Assoc.* (1994). However, there are some cases where the court had a different interpretation as shown in *Mejia v. High Brew Coffee Inc.* (2024), where the court argued that the ADA doesn't apply to non-physical locations. If people are protected under the ADA when receiving services from a physical facility then people should also be protected when getting the same services online. However, despite the act advocating for accessibility, it was shown to not apply to video game accessibility. In *Stern v. Sony Corp., et al*. (2010), a plaintiff with a disability brought a suit claiming that Sony failed to accommodate his disability by not including visual and auditory cues in their video games. The court ruled against the plaintiff, setting the precedent that video games are not affected by the ADA. The way that the ADA is interpreted is mixed. If video games are to be affected under the ADA, then there

must be one clear interpretation of the ADA which states that non-physical structures such as video games should be made accessible to those with disabilities.

The Websites and Software Applications Accessibility Act (WSAAA) is a federal act that has not yet been passed. It was first introduced on September 28, 2022. The act advocates for accessibility standards for websites and software applications. The WSSAAA was made in response to the ADA due to that act failing to protect website accessibility even though the act's broad language said that it would. In the court case *Mejia v. High Brew Coffee Inc.* (2024), the blind plaintiff, argued that High Brew Coffee was violating the ADA by not accommodating the plaintiff's disability when the plaintiff tried to purchase coffee on the High Brew Coffee website. The plaintiff uses a screen reader for his disability but something with the website coding caused it to not work and made the plaintiff unable to make a purchase. However, the court stated that web-only businesses without physical locations are not covered under the ADA due to them not being public places of accommodation. (Goren 2024). The WSAAA agrees with the purpose of the ADA but it does not agree with how the ADA is used in practice especially when it comes to website accessibility. For the purposes of the WSAAA, websites include those accessed through browsers whether it is through a desktop or on a mobile device. Ensuring accessibility within websites would enable people with disabilities to explore and do tasks on the World Wide Web without being restricted or impaired.

The Game Accessibility Guidelines (GAG) are a set of non-federal guidelines that serve to provide guidance to game developers by outlining various disabilities and discussing how to accommodate said disabilities through game design. The GAG was created in 2012 in a collaborative effort between a group of studios, specialists, and academics (Ellis et al., 2012). The GAG gives recommendations in different categories according to how difficult it would be

to implement accessibility accommodations. The three categories are basic, intermediate, and advanced. Within these categories are subcategories that separate the accommodations according to the type of disability it is addressing. The subcategories include motor, cognitive, vision, hearing, speech, and general. For each accommodation, the GAG provides quotes from gamers or experts about the specific accessibility issue being addressed. Afterward, the GAG gives details on what game developers should do to address the accessibility issue. Then some examples are provided to showcase the accommodation being put into action. One example of an accommodation would be to present subtitles/captions in a clear way if they are used (Ellis et al., 2012). People with visual impairments might struggle to see subtitles if the font is not big enough and the text is not against a contrasting background. The GAG provides a great amount of guidance for any game developer wanting to implement accommodations into their video games to make them more accessible to their audience base.

**Methods**

Gathering information on legal policies was a bit difficult due to the lack of said policies in our current legislation. There are only a couple of policies that could relate to video game accessibility. To conduct my research, I searched Google Scholar for research papers and articles that discuss video game accessibility in the law. Once I found a specific policy relating to my research topic, I would check out the official federal website to get the details of said policy and see exactly how it relates to accessibility in video games. As an example, when I discovered the CVAA, I went to check out the FCC website to see the official documents that detail what the purpose of the CVAA is and how it is applied. From these documents, I want to learn more about how the policy affects video game accessibility. Does the policy cover different types of

disabilities such as audio, visual, and motor impairments? What limitations does it impose to regulate accessibility? These are the questions I want answered by reading the documents. Additionally, if there are notable court cases involving the policies I researched then I would look into them to see how the policies are applied in the real world.

**Analysis**

The CVAA is one of the only acts that apply to video game accessibility and it took until 9 years for that to be the case. One of the reasons that the act took so long to affect video games is due to the waivers that were petitioned by the ESA that the FCC accepted. There was a good number of video games including the consoles they were played on that had advanced communication services in their functionality. The regulations brought upon by the CVAA were not small so the ESA requested waivers to give them time to adjust to the new regulations. Over the years, the ESA defended these waivers, arguing that video game software and consoles are not primarily used for their advanced communication services but instead for their entertainment value through gameplay and story. The FCC agreed with the ESA argument which led to the many years of the CVAA not applying to video games due to waivers (FCC, 2016). However, even if the FCC agreed with the ESA argument, the ESA can not use waivers forever. The FCC believed enough time had passed for the ESA to adjust and soon enough the last waiver expired in 2019. With the last waiver expired, voice chat, text chat, and other advanced communication services within video games had to comply with the CVAA or the entity behind the software will have to suffer heavy fines. The CVAA is also quite limited when it comes to addressing accessibility in gaming. The CVAA only covers advanced communication services which ignores other aspects of video games that could be made more accessible. Mainly, the gameplay and

game design of video games could be made more accessible. However, the CVAA is not at fault for not covering such aspects since as the name of the act implies, it was made with only communication in mind. To make video games fully accessible, the other aspects of it besides communication should not be ignored.

The ADA, unlike the CVAA, has never been shown to apply to video games. In *Stern v. Sony Corp., et al*. (2010), the plaintiff with a learning disability brought a suit saying that Sony failed to accommodate his disability within their games. He claimed that his disability could have been accommodated through the use of auditory and visual cues. The court ruled in favor of the defendant Sony stating that Sony is not a place of public accommodation and is a manufacturer of video games. As such Sony, is not to be upheld by the ADA in this instance. The definition of video games here is argued to be that of a good, but typically video game companies have advertised them as a service (Lane, 2012). If video games were to be defined as a service then it could be argued that it should be affected under the ADA. Whether or not video games count as a good or a service is one of the reasons that the ADA currently does not apply to the medium. The purpose of the ADA is to ensure equal access to individuals with disabilities through the use of accommodations. One could argue that video games should not be excluded from this act as even though it might not be a public place of accommodation, it is still a form of medium that people should not be excluded from. To ensure equal access, accommodations should be made within the game design so players with disabilities can enjoy games to their full potential.

The WSAAA, if passed, could impact the accessibility of video games. Typically, when people think about video games they would think of games released for popular consoles such as Xbox, Playstation, or Nintendo Switch. However, video games are not limited to such consoles.

Mobile devices can also host video games such *Angry Birds*, *Cut the Rope*, *Candy Crush*, and much more. Even websites can host video games. These types of games are often referred to as browser games. Some examples of browser games would include *Wordle, Agar.io, and Gartic Phone.* The WSAAA would affect the accessibility of browser games since these types of games are hosted on websites. Although the act would not directly affect the game design of the browser games, it would affect the UI of the website and make it easier for people with disabilities to navigate. In this digital age, websites, and other software applications have become much more important in everyday life. The ADA focusing only on physical locations is a disservice to that act's original purpose to ensure equal access to all. People should be able to access websites and applications like anyone else, and that includes browser games. This act, if passed, would be a step in the right direction for making video games more accessible. The reason this act is not passed yet is because of the arduous process of the legal system which makes acts such as the WSAAA take a long time to pass if it does get passed in the future.

The GAG as stated before is a non-federal guideline made to serve as a reference for game developers when it comes to designing for accessibility during video game development. Since the GAG is not a federal act, people are not forced to comply with it and suffer legal consequences if they fail to do so. The reason the GAG is being covered is to showcase the efforts that citizens took upon themselves to address accessibility in video games. With only the CVAA directly affecting video game accessibility, efforts outside the legal system have been made and the GAG is a good example of that. The GAG even earned awards for how helpful it has been in promoting gaming accessibility, one award being from the FCC's chairman called the FCC Chairman Award for Advancement in Accessibility. Without the guidance made by the GAG and other accessibility guidelines, game developers would be lost when it comes to

implementing accessibility due in part to the limited regulations in video game accessibility within legal policies.

**Conclusion**

The exploration of the policies such as the CVAA, ADA, WSAA, and even the non-federal GAG gave insight into the lack of policies that affect accessibility in gaming. The CVAA is a policy that currently applies to video games but is limited in its scope. The CVAA only cares about the communication aspects of video games. The voice and text chats in gaming software and consoles are regulated by the CVAA to ensure that such features are accessible to all. The ADA is a policy that currently does not apply to video games. The ADA seeks equal access for all through the use of accommodations. The precedent for the ADA not applying to video games was made in *Stern v. Sony Corp., et al*. (2010). These two policies showcased how limited our current regulation is when it comes to video game accessibility. The CVAA is one of the only laws that directly affects video game accessibility even if only limited to the communication aspects. The ADA is a law currently that does not affect video games but could be argued that it should. The ADA was made in the first place to ensure equal access for people with disabilities. The ADA not living up to its purpose is also why the WSAAA was made in the first place. WSAAA is focused on websites that could impact browser games that are hosted on websites. The WSAAA is not a part of our current laws just yet but if it did, it would showcase that our current interpretation of law could be changed with the introduction of new laws. Our current legislation might not think of video games as important, as showcased by the lack of policies, but they most certainly are. Video games have become a major source of entertainment that creates a sense of community and enjoyment for those who play them. To deny people with

disabilities from enjoying such video games is a disservice to both the people and the game. People might struggle with the game controller due to motor impairments or miss important gameplay cues due to visual or auditory impairments. To ensure people can enjoy games despite these impairments, accommodations have to be made. The policies discussed in this paper are ones found with thorough research, however, there might be some policies relating to video game accessibility that I might have missed. To improve the state of accessibility in gaming, changes have to be made to our current policies. One way would be to modify currently existing laws such as the ADA so that video games would be covered under them. The other way would be to pass new laws that regulate accessibility to ensure that people with disabilities have access to video games just like anyone else. People concerned about accessibility created guidelines such as the GAG due to the lack of accessibility policies in gaming. While it is good that such guidelines exist, for real change to occur for gaming accessibility, our legal policies should address video games. The WSAAA showcases that there are people that are looking to change our current understanding of the law. The future of completely accessible video games could be achieved through advocating for new regulations or modifications to existing laws. The road to such a goal will be arduous due to our current legal system but as long as there are people who care about video game accessibility, achieving said goal is not impossible.

## References


*Game accessibility guidelines | A straightforward reference for inclusive game design*. (n.d.). Game Accessibility Guidelines. https://gameaccessibilityguidelines.com/

Soyer, H. (2022, January 13). *A Guide to Video Game Accessibility*. World Institute on Disability. https://wid.org/a-guide-to-video-game-accessibility/

Powers, G., Nguyen, V., & Frieden, L. (2015). Video Game Accessibility: A Legal Approach. *Disability Studies Quarterly*, *35*(1). https://doi.org/10.18061/dsq.v35i1.4513

Americans With Disabilities Act of 1990, 42 U.S.C. § 12101 *et seq*. (1990). https://www.ada.gov/pubs/adastatute08.htm

Federal Communications Commission. (2010). *Twenty-First Century Communications and Video Accessibility Act of 2010.* https://www.govinfo.gov/content/pkg/PLAW-111publ260/pdf/PLAW-111publ260.pdf

Waller, C. (2022, January 3). *The State of Accessibility in Gaming in 2022*.

Www.accessibility.com.

https://www.accessibility.com/blog/the-state-of-accessibility-in-gaming-in-2021

Peri, J. (2024). Video gaming industry in the US. *International Journal of Science and Research Archive*, *11*(1), 1257–1265. https://doi.org/10.30574/ijsra.2024.11.1.0194

Truong, Amy. (2025). The video game industry needs buff: accessibility guidelines for video game design. *Loyola of Los Angeles Law Review, 57(4),* 1109-1139.

Lane, R. (2012, March 2). *To Protect or Serve?* IGN.

https://www.ign.com/articles/2012/03/02/to-protect-or-serve

*Federal Communications Commission*. (n.d.). Retrieved April 4, 2025, from

https://docs.fcc.gov/public/attachments/DA-16-1449A1_Rcd.pdf

*What is the CVAA*. (2019, February 9). AbleGamers. https://ablegamers.org/cvaa/

D-MD-3, J. P. (2021). *Text - H.R.9021 - 117th Congress (2021-2022): Websites and Software Applications Accessibility Act*. Congress.gov. https://www.congress.gov/bill/117th-congress/house-bill/9021/text

Goren, W. (2024, October 28). *William D. Goren, J.D., LL.M., LLC*. Understanding the ADA. https://www.understandingtheada.com/blog/2024/10/28/internet-only-business-not-a-place-of-public-accommodations/