



Summer 2022

## Accessing History in Gettysburg: A Study of Accessibility of Public History Institutions

Theodore J. Szpakowski  
*Gettysburg College*

Follow this and additional works at: [https://cupola.gettysburg.edu/student\\_scholarship](https://cupola.gettysburg.edu/student_scholarship)



Part of the [Disability Studies Commons](#), [Museum Studies Commons](#), and the [Public History Commons](#)

**Share feedback** about the accessibility of this item.

---

### Recommended Citation

Szpakowski, Theodore J., "Accessing History in Gettysburg: A Study of Accessibility of Public History Institutions" (2022). *Student Publications*. 1050.

[https://cupola.gettysburg.edu/student\\_scholarship/1050](https://cupola.gettysburg.edu/student_scholarship/1050)

This open access student research paper is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact [cupola@gettysburg.edu](mailto:cupola@gettysburg.edu).

---

# Accessing History in Gettysburg: A Study of Accessibility of Public History Institutions

## Abstract

Based on field observation and interviews with staff, this paper evaluates the state of accessibility in five Gettysburg public history institutions in the summer of 2022. Evaluation criteria for field observations were determined based on a critical disability studies approach, focusing on disabled people's accounts of these and similar institutions. The research revealed areas of success and failure in current accessibility measures, as well as ongoing projects to increase accessibility in most institutions. The rubric developed here could be refined and used as a research tool or an institutional planning tool.

## Keywords

public history, critical disability studies, accessibility, museums, historic sites

## Disciplines

Disability Studies | Museum Studies | Public History

## Comments

Produced as part of the Kolbe Fellowship in Summer 2022.

## Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Accessing History in Gettysburg:  
A Study of Accessibility of Public History  
Institutions

Theodore Szpakowski

Gettysburg College

Kolbe Research Fellow 2022

Advisor: Dr. Jill Titus

## **Abstract**

Based on field observation and interviews with staff, this paper evaluates the state of accessibility in five Gettysburg public history institutions in the summer of 2022. Evaluation criteria for field observations were determined based on a critical disability studies approach, focusing on disabled people's accounts of these and similar institutions. The research revealed areas of success and failure in current accessibility measures, as well as ongoing projects to increase accessibility in most institutions. The rubric developed here could be refined and used as a research tool or an institutional planning tool.

Keywords: public history, critical disability studies, accessibility, museums, historic sites

## Introduction

Many people enjoy visiting public history institutions (PHIs). Local history museums can often be alluring due to the rich detail and enthusiastic employees found within.<sup>1</sup> However, disabled visitors face barriers when trying to access these places. When Catherine Kudlick, who has low vision, visited one such museum with a blind friend, she was disappointed at the lack of accessibility there.<sup>2</sup> On site, accessibility information was only provided in a pamphlet that neither visitor could read; they also did not have a way to read the website from their hotel's inaccessible computers.<sup>3</sup> An art museum across the street had audio guides available and helpful staff, making a much more enjoyable experience for Kudlick and her friend.<sup>4</sup>

Ideally, PHIs are centers for lifelong learning. In the seminal study "Presence of the Past," history museums were seen as the most trustworthy source of history, ranked over other sources that included personal accounts, high school or college instructors, and nonfiction books.<sup>5</sup> However, not everyone can access the knowledge shared by history museums and other PHIs. As Kudlick and her friend experienced, PHIs need to improve services in order to meet the needs of disabled visitors.

Meeting the needs of the entire public is an essential part of *public* history. This responsibility has been passed down from early public historians like Benjamin Shambaugh, who

---

<sup>1</sup> Catherine Kudlick, "The Local History Museum, So Near and Yet So Far," *The Public Historian* 27, no. 2 (Spring 2005): 76.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid, 80.

<sup>5</sup> Roy Rosenzweig and David Thelen, *The Presence of the Past: Popular Uses of History in American Life* (New York, N.Y., United States: Columbia University Press, 1998), 21.

saw the preservation and delivery of history as a duty to the people.<sup>6</sup> For institutions to fulfill their responsibilities, research must examine what criteria an accessible PHI needs to meet, and how well institutions currently meet those criteria. It is also important to research the perspectives of stakeholders such as PHI staff. This research study has been conducted to meet both of these goals through a combination of field observation and interviews.

Previous literature shows a limited view of accessibility in the public history field. Accessible sites are defined as those where exhibits and programs are available to all visitors.<sup>7</sup> However, museums tend to focus on access to physical spaces, not the information shared there.<sup>8</sup> Entering a space does not mean someone is able to learn there, and for public history institutions, a lack of learning is a failure to meet the profession's stated goals.<sup>9</sup> This limited view of accessibility is part of a larger trend where "recreational and tourist sites" tend to focus most on accommodations for mobility disabilities over other disability categories.<sup>10</sup> For mobility disabilities, a focus on physical space makes sense. But when considering, for example, neurodivergent visitors, the most restrictive barriers can be in how information is conveyed. Even when a broader range of disabilities are addressed, they may be overly homogenized. Museums tend to focus on ASL when considering accessibility for d/Deaf and Hard of Hearing

---

<sup>6</sup> Robert Goodell, "Origins of Public History," History 201: Introduction to Public History (class lecture, Gettysburg College, Gettysburg, PA, September 8, 2021).

<sup>7</sup> John P. S. Salmen, "Everyone's Welcome: The Americans with Disabilities Act and Museums" (American Association of Museums, 1998), 3, <http://eric.ed.gov/ERICWebPortal/detail?accno=ED437754>.

<sup>8</sup> Janice Rieger, Charlotte Kessler, and Megan Strickfaden, "Doing Dis/Ordered Mappings: Shapes of Inclusive Spaces in Museums," *Space and Culture* 25, no. 1 (February 2022): 4–19, <https://doi.org/10.1177/1206331219850442>.

<sup>9</sup> Robert Goodell, "Origins of Public History."

<sup>10</sup> Lalita Sen and Sara Maryfield, "Accessible Tourism: Transportation to and Accessibility of Historic Buildings and Other Recreational Areas in the City of Galveston, Texas," *Public Works Management & Policy* 8, no. 4, (April 1, 2004), 227, <https://doi.org/10.1177/1087724X03262829>.

individuals.<sup>11</sup> However, not every d/Deaf or Hard of Hearing person prefers to communicate this way.

This study considered a broad view of accessibility including a variety of disability groups: mobility-disabled people who use wheelchairs, mobility-disabled people who do not use wheelchairs, people with limited dexterity, blind people, people with low vision, d/Deaf people, Hard of Hearing people, chronically ill people, and neurodivergent people. Additionally, both access to spaces and access to information were considered.

Potential benefits of this study are both local and distant. In Gettysburg, the study sites can use the results to highlight areas for improvement. Other sites can use the criteria developed for their own evaluations and future planning. The study can also serve as a snapshot of accessibility in the summer of 2022 for future researchers in Gettysburg. Seeing how these PHIs change over time is only possible with the baseline understanding that the study provides. Finally, the method developed here could be replicated in other places. Gettysburg is a town centered on tourism. Comparison to PHIs that are more focused on local visitation could be a fruitful area of research.

---

<sup>11</sup> Juli Goss et al., “Understanding the Multilingualism and Communication of Museum Visitors Who Are d/Deaf or Hard of Hearing,” *Museums & Social Issues* 10, no. 1 (April 2015): 57, <https://doi.org/10.1179/1559689314Z.00000000032>.

## Review of the Literature

Data from 2020 suggests that 2.66 million adults in Pennsylvania, about 26% of the population, are disabled.<sup>12</sup> This number may increase when more recent data is available. Millions of formerly non-disabled Americans have been affected with “long COVID” and have experienced drastic changes in functioning.<sup>13</sup> Disabled people, including those with long COVID, are a significant portion of potential visitors to public history institutions. However, their disabilities can create barriers to access that institutions must take down before these visitors can be reached.

Since the mid-1990s, the tourism industry has devoted increased attention to accessibility for disabled tourists, sparked by a general increase in the well-being of disabled people.<sup>14</sup> Laws such as the Americans with Disabilities Act (ADA) require greater inclusion of disabled people in public life. More research has been done on the quality of life for disabled people, which showed the positive effects of travel.<sup>15</sup> Furthermore, increased attention to disabled tourism also has economic benefits, by opening up a new, potentially very profitable target market.<sup>16</sup> Public history institutions may want to mimic this trend. Although they are motivated by knowledge-sharing rather than profit, public historians can use the same logic. Increased

---

<sup>12</sup> Centers for Disease Control and Prevention [CDC], “Disability & Health U.S. State Profile Data: Pennsylvania,” Disability and Health Promotion, last reviewed May 18, 2022, <https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/pennsylvania.html>.

<sup>13</sup> Frances Stead Sellers, “How Long COVID Could Change the Way We Think About Disability,” *Washington Post*, June 6, 2022, <https://www.washingtonpost.com/health/2022/06/06/long-covid-disability-advocacy/>.

<sup>14</sup> Sen and Mayfield, “Accessible Tourism,” 225.

<sup>15</sup> Sen and Mayfield, “Accessible Tourism,” 225.

<sup>16</sup> Sen and Mayfield, “Accessible Tourism,” 227.



attention to accessibility in public history institutions can open up a new group of people curious about local and distant history.

## Critical Disability Studies: The Research in Context

The research study examines accessibility through a critical disability studies lens. This approach involves centering the lived experiences of disabled people as well as taking a broad view of disability.<sup>17</sup> Most accessibility research focuses on mobility and cognitive disabilities, blindness, and deafness.<sup>18</sup> Invisible disabilities, such as chronic illness or autism, are underrepresented in the literature.<sup>19</sup> The study includes both commonly represented disabilities and more hidden ones.

Critical disability researchers also recognize the social cost that can come with accessing accommodations intended specifically for disabled users.<sup>20</sup> For example, ambulatory wheelchair users often face disbelief from the public.<sup>21</sup> Some people may also feel uncomfortable identifying with a disability label which can feel like “an extra unnecessary burden,” while still needing supports typically associated with disability to access a site.<sup>22</sup> One team of researchers that chose to disclose their disabilities during a study found staff to be unwelcoming.<sup>23</sup> Because of the complexity surrounding disability disclosure, the fieldwork focused on how accessible sites are

---

<sup>17</sup> Megan Hofmann et al., “Living Disability Theory: Reflections on Access, Research, and Design” (paper, ASSETS '20: The 22nd International ACM SIGACCESS Conference on Computers and Accessibility, virtual event, October 26, 2020), <https://dl.acm.org/doi/10.1145/3373625.3416996>; Julie Avril Minich, “Enabling Whom? Critical Disability Studies Now,” *Lateral* 5, no. 1 (2016), <https://csalateral.org/issue/5-1/forum-alt-humanities-critical-disability-studies-now-minich/>.

<sup>18</sup> Hofmann, “Living Disability Theory: Reflections on Access, Research, and Design.”

<sup>19</sup> Hofmann, “Living Disability Theory: Reflections on Access, Research, and Design.”

<sup>20</sup> Hofmann, “Living Disability Theory: Reflections on Access, Research, and Design.”

<sup>21</sup> Hofmann, “Living Disability Theory: Reflections on Access, Research, and Design.”

<sup>22</sup> Alice Wong, ed., *Disability Visibility: First-person Stories from the Twenty-First Century* (New York, United States: Vintage Books, 2020), 56.

<sup>23</sup> Jonathan Rix, Ticky Lowe, and the Heritage Forum, “Including People with Learning Differences in Cultural and Heritage Sites,” *International Journal of Heritage Studies* 16, no. 3 (May 2010): 18, <https://doi.org/10.1080/13527251003620743>.

without a disability being disclosed. However, interviews provide additional information about accommodations that are available upon request.

Finally, the critical disability studies lens impacted which prior studies were consulted in determining accessibility criteria. The first person perspectives of disabled people were prioritized, while studies that focused mainly on outsider perspectives were avoided. I was also influenced by my lived experience of disability.

## How do public historians think about accessibility?

Public history institutions, a term which includes history museums of all sizes and historic sites, have commonalities with related locations such as art museums and galleries, science museums, and archives. However, they also face unique challenges. Literature related to this broader array of sites was consulted, while minding in transferability.

Literature indicates that public historians who work as museum professionals learn about accessibility in formal and informal ways.<sup>24</sup> Formal training for staff exists in conjunction with learning that comes from individual interactions with disabled visitors and staff.<sup>25</sup> Museum professionals may also get information about evaluating accessibility from legislative codes or guidelines produced by local organizations or other public history institutions.<sup>26</sup> However, these guidelines are simplified and do not perfectly represent real disabled experiences.<sup>27</sup>

As PHI staff learn about accessibility, they are also learning about other goals that may seem contradictory. Public history institutions and their peers face conflict between accessibility

---

<sup>24</sup> Christine Reich, "Taking Action Toward Inclusion: Organizational Change and the Inclusion of People with Disabilities in Museum Learning," (doctoral thesis, Boston College, May 2014), <http://hdl.handle.net/2345/3678>.

<sup>25</sup> Ibid.

<sup>26</sup> Rieger, Kessler, and Strickfaden, "Doing Dis/ordered Mappings."

<sup>27</sup> Rieger, Kessler, and Strickfaden, "Doing Dis/ordered Mappings."

and preservation. Hands-on access can be an important part of learning, especially for people with low vision.<sup>28</sup> However, institutions such as art galleries often view handling as a threat to preservation.<sup>29</sup> Many historic house museums view preservation as a main goal, even placing it above education or community engagement.<sup>30</sup> This is a conflict that other types of museums, such as the three science museums profiled by Reich, do not have to consider.<sup>31</sup> Funding affects how much money PHIs can split between goals. Small museums especially can only pay for preservation by taking away money from other projects, such as improving accessibility.<sup>32</sup> Preservation to the highest standards is often seen as a requirement for any historic house museum regardless of size, making it especially difficult for the smallest to spend funding on other parts of the visitor experience.<sup>33</sup> Accessibility can end up at the bottom of a never-ending to-do list.

## How do museums and historic sites currently promote accessibility?

Public history institutions throughout the world have been working to promote accessibility. One tool in these efforts has been new technology. For example, some institutions have provided apps to aid in accessibility, with features such as navigation information and audio description.<sup>34</sup> The most accessible of these programs include device checkout with additional

---

<sup>28</sup> Leona Holloway et al., “Making Sense of Art: Access for Gallery Visitors with Vision Impairments” (paper, CHI '19: CHI Conference on Human Factors in Computing Systems, Glasgow, Scotland, UK, May 2, 2019), 2, <https://dl.acm.org/doi/10.1145/3290605.3300250>.

<sup>29</sup> Holloway et al., “Making Sense of Art,” 2.

<sup>30</sup> Franklin D. Vagnone and Deborah E. Ryan, *Anarchist's Guide to Historic House Museums* (Walnut Creek, California: Routledge, 2016,) 51.

<sup>31</sup> Reich, “Taking Action Toward Inclusion.”

<sup>32</sup> Vagnone and Ryan, *Anarchist's Guide to Historic House Museums*, 156.

<sup>33</sup> Vagnone and Ryan, *Anarchist's Guide to Historic House Museums*, 156.

<sup>34</sup> Beth Ziebarth et al., eds., *Inclusive Digital Interactives: Best Practices + Research* (Washington, DC: Smithsonian Institution Press, September 2020), 245.

tools such as headphones and carrying cases, making these apps usable for those who do not have their own devices.<sup>35</sup>

Some PHIs offer disability-specific programming, which can be appreciated, but risks othering disabled people.<sup>36</sup> Ideally, disabled visitors should be able to visit an institution on any day that it is open with the same autonomy as all other visitors. When disability-specific programming is used, there should be some progression within events the same way that there is for general programming.<sup>37</sup> The most immediate consequence of not doing so is boredom and lack of participation from disabled people with prior historical knowledge. But more seriously, the impression given over time is that the institution does not see disabled people as capable of building a knowledge base on a topic.<sup>38</sup>

Especially for blind visitors and those with low vision, many public history institutions address accessibility concerns through docent-led tours. However, these guided tours can be restricting because of the requirements of moving through institution space following someone else's path and pace.<sup>39</sup> Audio guides may provide more autonomy by allowing visitors to set their own pace, especially if they also allow the visitor to choose in which order they want to listen to segments. Otherwise, they may have the same problem of limiting choice.

The success of an accessibility measure has to do not just with the tools that are used, but with the attitude that is applied. Accessibility works best when seen as an on-going process, not

---

<sup>35</sup> Ziebarth, *Inclusive Digital Interactives*, 386.

<sup>36</sup> Holloway, "Making Sense of Art," 5.

<sup>37</sup> Fiona Candlin, "Blindness, Art, and Exclusion in Museums and Galleries," *International Journal of Art & Design Education* 22, no. 1 (February 2003), 102.

<sup>38</sup> Candlin, "Blindness, Art, and Exclusion," 102.

<sup>39</sup> Gretchen Henrich, Felice Q. Cleveland, and Emily Wolverton, "Case Studies from Three Museums in Art Beyond Sights's Multi-Site Museum Study," *Museums & Social Issues* 9, no. 2 (October 1, 2014): 127, <https://doi.org/10.1179/1559689314Z.00000000023>.

something that is done once and then completed.<sup>40</sup> When accessibility is not viewed as on-going, disabled visitors can face issues of unreliability. For example, one blind visitor expressed frustration when visiting a museum with inconsistent audio descriptive labels.<sup>41</sup> Accessibility measures may need to start with small steps, such as adding accessible features to an especially popular exhibit. However, the goal should be to make the entire institution accessible.

Another important part of improving accessibility is using disabled people as consultants. Consulting with stakeholders is an important step in any public history practice.<sup>42</sup> This is especially true when working with marginalized groups, like disabled people, whose lived experience is often misunderstood or outright ignored. Disabled people should be recognized as experts on their own lives by institutions that serve them. Otherwise, any improvements these institutions seek will be rooted in ableism rather than being genuinely helpful.<sup>43</sup> Consulting with disabled stakeholders on accessibility can help PHI staff to understand how disabled people are already interacting with public history and what steps are most crucial to improve this access. One program that successfully collaborated with disabled individuals was the Heritage Forum, based in the United Kingdom.<sup>44</sup> A group of individuals with learning difficulties visited “cultural and heritage sites,” including public history institutions, to evaluate accessibility there.<sup>45</sup> They were able to produce a list of ways sites could be more inclusive of people with learning difficulties, as well as guidelines for those wishing to do similar projects in the future.<sup>46</sup> Along the way, these researchers found that first hand experience working with people with learning

---

<sup>40</sup> Alison F. Eardley et al., “Redefining Access: Embracing Multimodality, Memorability, and Shared Experience in Museums,” *Curator: The Museum Journal* 59, no. 3 (July 28, 2016), 273, <https://onlinelibrary.wiley.com/doi/abs/10.1111/cura.12163>.

<sup>41</sup> Reich, “Taking Action Toward Inclusion,” 111-13.

<sup>42</sup> Cherstin M. Lyon, Elizabeth M. Nix, and Rebecca K. Shrum, *Introduction to Public History: Interpreting the Past, Engaging Audiences* (Lanham, MD: Rowman & Littlefield, 2017), 2.

<sup>43</sup> Hofmann et al., “Living Disability Theory.”

<sup>44</sup> Rix, Lowe, and the Heritage Forum, “Including People.”

<sup>45</sup> Rix, Lowe, and the Heritage Forum, “Including People,” 1.

<sup>46</sup> Rix, Lowe, and the Heritage Forum, “Including People,” 23-24.

difficulties helped PHI staff to better understand the accessibility needs and be more willing to do future work addressing them.<sup>47</sup>

Public history institutions may also want to look to their peers working in science museums for ideas about collaboration. One large science museum studied by Reich uses disabled consultants as part of the exhibit design, visitor research, and evaluation processes.<sup>48</sup> They have included disabled consultants since the building was originally constructed and continue to work and learn with them.<sup>49</sup> Another museum in the same study has hired floor staff who are d/Deaf to better serve d/Deaf visitors.<sup>50</sup> Similar collaborations at PHIs could help disabled people to feel more supported as well as helping institution staff understand accessibility better.

## What accessibility criteria should museums and historic sites seek to meet in the future?

Accessibility starts before entering a public history institution. To have a successful experience, disabled visitors need “a reliable source of information geared specifically” to disability issues.<sup>51</sup> Outreach is needed for disabled people to know an institution is an option for their needs. An informative, accessible website can be an important part of this process, as can having a specific point person for accessibility questions.<sup>52</sup> Because brochures are another common way of sharing information about PHIs, these should also contain information about accessibility.<sup>53</sup>

---

<sup>47</sup> Rix, Lowe, and the Heritage Forum, “Including People,” 20.

<sup>48</sup> Reich, “Taking Action Toward Inclusion,” 182.

<sup>49</sup> Reich, “Taking Action Toward Inclusion,” 182.

<sup>50</sup> Reich, “Taking Action Toward Inclusion,” 264.

<sup>51</sup> Sen and Mayfield, “Accessible Tourism,” 225.

<sup>52</sup> Henrich, Cleveland, and Wolverson, “Case Studies,” 132-139.

<sup>53</sup> Sen and Mayfield, “Accessible Tourism,” 232.

Once someone determines that they wish to visit an institution, they must be able to get there and get in. Public transportation can be an important factor, as some disabilities prevent driving. However, local transit is not necessarily in an institution's control, so it was not a focus of this study. Still, when possible, public history institutions should fight to be included on bus lines so that disabled people, as well as those who cannot afford to drive, are able to visit. Bicycle racks are also a key part of this effort. For drivers, accessible parking is important.<sup>54</sup> There should be enough space for wheelchair users and a short, flat path to the entrance.

More opportunities and barriers exist at the point of entrance to a museum. Ideally, all visitors should be able to enter through the same door. Using a different entrance from others can be a dehumanizing experience for disabled people.<sup>55</sup> An inaccessible main entrance can also force visitors to separate from family members or friends, which one mother described as "awful."<sup>56</sup> This entrance should not have revolving doors or turnstiles.<sup>57</sup> Instead, doors should be swinging and power-operated.<sup>58</sup>

The entrance area is an important part of the wayfinding process for visitors with low vision.<sup>59</sup> Autistic or otherwise neurodivergent visitors, who tend to dislike surprises, also benefit from knowing what they are getting into ahead of time. PHI layouts that offer limited choices on clearly defined routes are typically the most accessible.<sup>60</sup> Entrance halls can also provide Braille

---

<sup>54</sup> Ayşe Nilay Evcil, "Barriers and Preferences to Leisure Activities for Wheelchair Users in Historic Places," *Tourism Geographies* 20, no. 4 (August 8, 2018), 702, <https://www.tandfonline.com/doi/full/10.1080/14616688.2017.1293721>.

<sup>55</sup> Agneta Fänge, Susanne Iwarsson, and Åsa Persson, "Accessibility to the Public Environment as Perceived by Teenagers with Functional Limitations in a South Swedish Town Centre," *Disability and Rehabilitation* 24, no. 6 (January 2022): 324, <http://www.tandfonline.com/doi/full/10.1080/09638280110089906>.

<sup>56</sup> Yaniv Poria, Arie Reichel, and Yael Brandt, "People with Disabilities Visit Art Museums: An Exploratory Study of Obstacles and Difficulties," *Journal of Heritage Tourism* 4, no. 2 (May 6, 2009), 122, <https://doi.org/10.1080/17438730802366508>.

<sup>57</sup> National Endowment for the Arts [NEA] et al., *Design for Accessibility: A Cultural Administrator's Handbook*, (Washington, DC: National Assembly of State Arts Agencies [NASAA], 2003), 67, <https://www.arts.gov/about/publications/design-accessibility-cultural-administrators-handbook>.

<sup>58</sup> NEA et al., *Design for Accessibility*, 66-67.

<sup>59</sup> Henrich, Cleveland, and Wolverson, "Case Studies," 129.

<sup>60</sup> Rix, Lowe, and the Heritage Forum, "Including People," 3.

materials such as maps, guides, and collection descriptions for blind visitors.<sup>61</sup> Information in the entrance hall should be readable for all, including wheelchair users and Little People.<sup>62</sup> In addition, counters such as those at an information desk or ticket office should be placed at an appropriate height for all visitors.<sup>63</sup> Large print signage with good color contrast in good lighting makes signage accessible to those with low vision or learning disabilities such as dyslexia.<sup>64</sup> Some disabled visitors, especially those who are blind or have low vision, may benefit from being able to request a docent's help at the entrance.<sup>65</sup> For others, printed information will be sufficient to get started.

As disabled people move from the entrance hall to the exhibits, they may face further barriers. Elevators are a fairly common way to improve accessibility for mobility disabilities, but need to be kept in working order.<sup>66</sup> Additionally, measures need to be taken to ensure that elevators are usable by all. These measures include light and sound cues of the elevator's arrival at a floor and both raised numerals, and Braille on both internal and external controls.<sup>67</sup> Finally, elevators should be placed toward the front of the building rather than at the back.<sup>68</sup> On stairs or ramps, handrails can be an important component of accessibility for both mobility and visual disabilities.<sup>69</sup> Ramps are often seen as a symbol of accessibility. But even with ramps, frequent

---

<sup>61</sup> Henrich, Cleveland, and Wolverton, "Case Studies," 136.

<sup>62</sup> Pascal Dubois, "The Needs of People with Walking Handicaps: The Association des Paralysés de France," trans. Margaret Rubens, in *Museums Without Barriers: A New Deal for Disabled People*, ed. Fondation de France and International Committee of Museums [ICOM], (New York: Routledge, 1991), 53.

<sup>63</sup> Dubois, "The Needs of People," 53.

<sup>64</sup> Candlin, "Blindness, Art and Exclusion," 108; NEA et al., *Design for Accessibility*, 101; Henrich, Cleveland, and Wolverton, "Case Studies from Three Museums," 128; Rix, Lowe, and the Heritage Forum, "Including People with Learning Difficulties," 24.

<sup>65</sup> Candlin, "Blindness, Art and Exclusion," 108.

<sup>66</sup> Richard Sandell and Chris Ingram, "Do Museums and Galleries Do Enough For Disabled Visitors?" *Apollo* 190, no. 680 (November 2019), 27, <https://www.proquest.com/docview/2308447404/abstract/39D6CA1959A84FD6PQ/1>.

<sup>67</sup> NEA, *Design for Accessibility*, 71-72.

<sup>68</sup> Fänge, Iwarsson, and Persson, "Accessibility to the Public Environment," 322.

<sup>69</sup> Neela Thapar et al., "A Pilot Study of Functional Access to Public Buildings and Facilities for Persons with Impairments," *Disability and Rehabilitation* 26 (April 1, 2004), 285, <https://doi.org/10.1080/09638280310001649543>.



changes in elevation can be tiring.<sup>70</sup> Downslopes can bring a risk of collision for wheelchair users.<sup>71</sup> Additionally, steep ramps are especially difficult to navigate.<sup>72</sup>

Some considerations are necessary in all public spaces, both inside and outside of exhibit space. Heavy doors and tight or restricted spaces should be avoided.<sup>73</sup> Seating at and between exhibits is important, as some disabled visitors will need to take breaks from standing.<sup>74</sup> However, seating at exhibit components should be movable to facilitate access for wheelchair users.<sup>75</sup> High noise levels can overstimulate autistic people and make it difficult for those using Augmentative and Alternative Communication devices to be heard.<sup>76</sup> For those using mobility aids, carpets that are too thick or not properly secured can prove dangerous.<sup>77</sup> Objects that protrude from the wall at a height about 2 feet can be a hazard for blind people who cannot detect them by using a cane.<sup>78</sup> Finally, the overall size of a public history institution should be considered. Large institutions should pay close attention to the needs of people with fatigue conditions or mobility-based disabilities.<sup>79</sup> These visitors may be able to cope in an inaccessible space for an hour when visiting a small historic site, but not all day at a large state museum. Access opportunities and barriers continue once in the exhibit area. Disabled people have a variety of needs in regards to navigating this space. Wheelchair users need sufficient room to

---

<sup>70</sup> Rieger, Kessler, and Strickfaden, “Doing Dis/ordered Mappings.”

<sup>71</sup> Rieger, Kessler, and Strickfaden, “Doing Dis/ordered Mappings.”

<sup>72</sup> Fänge, Iwarsson, and Persson, “Accessibility to the Public Environment,” 322.

<sup>73</sup> Fänge, Iwarsson, and Persson, “Accessibility to the Public Environment,” 322.

<sup>74</sup> NEA, *Design for Accessibility*, 68; Reich and Borun, “Exhibition Accessibility and the Senior Visitor,” 14; John P. S. Salmen, *Everyone's Welcome: the Americans with Disabilities Act and Museums*, (Washington, D.C.: American Association of Museums, 1998), 5.

<sup>75</sup> Reich, “Taking Action Toward Inclusion,” 255.

<sup>76</sup> Autistic Self Advocacy Network [ASAN], “Autistic Access Needs: Notes on Accessibility,” 2011, <https://autisticadvocacy.org/resources/accessibility/#autistic-access-needs-notes-on-accessibility>; John Dattilo et al., “‘I Have Chosen to Live Life Abundantly:’ Perceptions of Leisure by Adults Who Use Augmentative and Alternative Communication,” *AAC: Augmentative & Alternative Communication* 24, no. 1 (March 2008), 22, <https://www.tandfonline.com/doi/full/10.1080/07434610701390558>.

<sup>77</sup> NEA, *Design for Accessibility*, 69.

<sup>78</sup> NEA, *Design for Accessibility*, 69.

<sup>79</sup> Rieger, Kessler, and Strickfaden, “Doing Dis/ordered Mappings.”

maneuver at and between exhibits.<sup>80</sup> This includes room underneath displays where a wheelchair can fit, so that a wheelchair user can get close.<sup>81</sup> Consistency in exhibit design helps autistic visitors know what to expect in each space, reducing potential negative emotions like fear and discomfort and allowing them to focus on learning.<sup>82</sup>

Many steps can be taken to make exhibit labels more readable for all users. Print size and color contrast have already been discussed in regards to entrance signage and are also applicable here. Label height is important to consider for standing and seated visitors, including Little People.<sup>83</sup> The clarity and conciseness of language used on labels is another important factor, especially for those with speech and language disabilities such as cerebral palsy, autism, cognitive disability, or brain injury.<sup>84</sup> In addition to text labels, audio descriptive labels are useful for blind and low vision visitors and learning disabled visitors.<sup>85</sup> Braille labels are also a good option, although they should not be a replacement for audio labels.<sup>86</sup> Verbal communication should meet the same standards for clarity as written communication.<sup>87</sup> Any communication should contain information at multiple levels of understanding, with a mix of concrete and abstract details.<sup>88</sup> This allows all visitors to understand and enjoy some parts of the given exhibit, even if some of it is too complex or too basic for a specific individual.<sup>89</sup>

---

<sup>80</sup> Ryan Lee Cartwright, "Out of Sorts: A Queer Crip in the Archive," *Feminist Review* 125, no. 1 (2020), <https://doi.org/10.1177/0141778920911936>.

<sup>81</sup> NEA, *Design for Accessibility*, 56.

<sup>82</sup> Giulia Tola et al, "Built Environment Design and People with Autism Spectrum Disorder (ASD): A Scoping Review," *International Journal of Environmental Research and Public Health* 18, no. 6 (January 2021): 7, <https://www.mdpi.com/1660-4601/18/6/3203>; Ziebarth et al., *Inclusive Digital Interactives*, 150-152.

<sup>83</sup> Sandell and Ingram, "Do Museums and Galleries Do Enough," 27.

<sup>84</sup> Barbara Collier, Sarah W. Blackstone, and Andrew Taylor, "Communication Access to Businesses and Organizations for People with Complex Communication Needs," *AAC: Augmentative & Alternative Communication* 28, no. 4 (December 2012), 209, <https://doi.org/10.3109/07434618.2012.732611>.

<sup>85</sup> Henrich, Cleveland, and Wolverton, "Case Studies," 128; Rix, Lowe, and the Heritage Forum, "Including People With Learning Difficulties in Cultural and Heritage Sites," 24.

<sup>86</sup> Candlin, "Blindness, Art and Exclusion," 108.

<sup>87</sup> Collier, Blackstone, and Taylor, "Communication Access," 209.

<sup>88</sup> Janice Majewski and Lonnie Bunch, "The Expanding Definition of Diversity: Accessibility and Disability Culture Issues in Museum Exhibitions," *Curator: The Museum Journal* 41, no. 3 (September 1998), 156, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.2151-6952.1998.tb00829.x>.

<sup>89</sup> Ibid.

When considering exhibit design, adding multisensory components can make an exhibit more accessible for a variety of patrons. The prioritization of visual information above all else is harmful to blind visitors and those with low vision.<sup>90</sup> This is not to say that imagery should be ignored. Using interpretive images helps reach learning disabled people who find reading text difficult.<sup>91</sup> However, information conveyed visually should also be available through other senses. Touch can be an important addition to a museum exhibit. Both blind visitors and those with typical vision described a prototype touch exhibit as “simple, pleasant, and motivating.”<sup>92</sup> Smell components are less common, but could be explored. However, decision makers do need to be cognizant of how much sensory information is being conveyed within a given space. Too much information can be confusing for a variety of visitors.<sup>93</sup> In autistic people and others with sensory sensitivities, sensory overload can lead to a meltdown or shutdown, potentially ruining their experience at an institution.<sup>94</sup>

Additional considerations apply to the accessibility of interactive exhibits. The areas to consider as laid out by Ziebarth et al. are navigation and wayfinding, reach and use, information and instructions, comfort, aesthetics, and inclusion and independence.<sup>95</sup> When it comes to usability of an exhibit, one way to test whether components are suitable for a wide audience is whether they are operable with a closed fist.<sup>96</sup> Touchscreens can be an especially difficult component for blind people as well as those with low vision, limited dexterity, or artificial

---

<sup>90</sup> Candlin, “Blindness, Art and Exclusion,” 108.

<sup>91</sup> Rix, Lowe, and the Heritage Forum, “Including People With Learning Difficulties,” 4.

<sup>92</sup> Ziebarth, *Inclusive Digital Interactives*, 195.

<sup>93</sup> Ziebarth, *Inclusive Digital Interactives*, 68.

<sup>94</sup> Devon Price, *Unmasking Autism: Discovering the New Faces of Neurodiversity* (New York: Harmony Books, 2022), 114-115.

<sup>95</sup> Ziebarth, *Inclusive Digital Interactives*, 100-101.

<sup>96</sup> Harpers Ferry Center Accessibility Committee, *Programmatic Accessibility Guidelines for National Park Services Interpretive Media*, (Harpers Ferry, VA: National Park Service, February 2012), 38.

limbs.<sup>97</sup> One way around this is to provide accessible keypads at these stations.<sup>98</sup> Some interactive exhibits use flashing lights to create dramatic effects. This should be avoided, as these can be overstimulating for neurodivergent people and induce seizures in epileptic people.<sup>99</sup> If they must be used, a warning should be provided.

Especially in large PHIs, staff must consider the bodily functions of visitors. Wheelchair-accessible bathrooms are an important component to consider.<sup>100</sup> Ideally, restrooms should not require a key to enter.<sup>101</sup> Additionally, availability of food and drink should be considered. Some PHIs sell food to visitors. In this case, there should be allergy-friendly options.<sup>102</sup> In other cases, food is not available inside the PHI. Some institutions do not allow food at all, which can limit access for some disabled visitors. People with disabilities such as diabetes may need to have food available at all times.<sup>103</sup> The availability of water is also crucial, especially for individuals using supplemental oxygen.<sup>104</sup> Thus, restrictive food and water policies can prevent certain disabled visitors from having a safe, enjoyable experience.

## How can public history institutions handle competing access needs?

In attempting to make an institution accessible for one disabled person, staff can unintentionally make it less accessible for another with competing access needs. One example of this phenomenon is found in exhibit lighting. Bright lights can improve the sight of some people with

---

<sup>97</sup> Ziebarth, *Inclusive Digital Interactives*, 170-175.

<sup>98</sup> Ziebarth, *Inclusive Digital Interactives*, 175.

<sup>99</sup> Tola et al., "Built Environment Design," 8; Stefano Seri, "Photosensitive Epilepsy," Epilepsy Society, September 2019, <https://epilepsysociety.org.uk/about-epilepsy/epileptic-seizures/seizure-triggers/photosensitive-epilepsy>.

<sup>100</sup> Evcil, "Barriers and Preferences," 702.

<sup>101</sup> Fänge, Iwarsson, and Persson, "Accessibility to the Public Environment," 322.

<sup>102</sup> Reich, "Taking Action Toward Inclusion," 153.

<sup>103</sup> Reich, "Taking Action Toward Inclusion," 171.

<sup>104</sup> Reich, "Taking Action Toward Inclusion," 171.

low vision.<sup>105</sup> Bright lighting is also important for those who rely on lip-reading.<sup>106</sup> However, these same bright lights can be harmful to other people with low vision.<sup>107</sup> Additionally, autistic people or others with visual hypersensitivity may be overstimulated by bright lights.<sup>108</sup> The type of lighting also matters. Fluorescent lighting can bother autistic folks, but natural lighting can cause problems with glare and reflections, making exhibit labels harder to read.<sup>109</sup> Also, lighting needs to be carefully placed so that it does not end up at eye level for wheelchair users and Little People.<sup>110</sup> One way that museums have dealt with these competing access needs is by using a “toolbox” approach, offering a multitude of potential solutions rather than assuming that all disabled visitors, even within a disability group, will benefit from the same solution.<sup>111</sup> Providing flashlights allows visitors to increase the amount of light in a specific area while keeping the light low for others.<sup>112</sup> However, this does not address the issue of lip-reading. Shining a flashlight directly at someone’s face is not recommended. A possible alternate approach is to keep lights bright throughout the main exhibit space, but offer a sensory retreat room for those with hypersensitivity to recover.<sup>113</sup> Institutions may wish to select a strategy based on what their most frequent visitors prefer.

---

<sup>105</sup> Henrich, Cleveland, and Wolverton, “Case Studies,” 141.

<sup>106</sup> Goss et al., “Understanding the Multilingualism,” 59.

<sup>107</sup> Henrich, Cleveland, and Wolverton, “Case Studies,” 141.

<sup>108</sup> Autistic Self-Advocacy Network, “About Autism,” last accessed January 12, 2023, <https://autisticadvocacy.org/about-asan/about-autism/>.

<sup>109</sup> Heidi Morgan, “Connections Between Sensory Sensitivities in Autism; the Importance of Sensory Friendly Environments for Accessibility and Increased Quality of Life for the Neurodivergent Autistic Minority,” *PSU McNair Scholars Online Journal* 13, no. 1 (November 19, 2019): 11, <https://pdxscholar.library.pdx.edu/mcnair/vol13/iss1/11>; Christine Reich and Minda Borun, “Exhibition Accessibility and the Senior Visitor,” *The Journal of Museum Education* 26, no. 1 (Winter 2001): 15, <https://www.jstor.org/stable/40479198>.

<sup>110</sup> Rieger, Kessler, and Strickfaden, “Doing Dis/ordered Mappings.”

<sup>111</sup> Henrich, Cleveland, and Wolverton, “Case Studies,” 141.

<sup>112</sup> Henrich, Cleveland, and Wolverton, “Case Studies,” 141.

<sup>113</sup> Tola, “Built Environment Design,” 6.

Another example of competing access needs is the use of ramps. Ramps can be a crucial part of access for wheelchair users. However, they can be unsafe for crutch users to navigate.<sup>114</sup> Again, a toolbox approach can be useful here. When space allows, providing both stairs and a ramp allows everyone to move safely. When space is too tight to allow for both, public history institutions must pay careful attention to their constituencies in order to determine the solution that fits best in their context.

## Conclusion

Accessibility is a complicated issue. Best practices exist, but cannot always be achieved. In some cases public history professionals do not have the necessary knowledge to create accessible spaces, while in other cases they have their hands tied by external factors. Additionally, competing access needs make it impossible for a PHI to create a perfectly accessible space for every potential visitor. However, public history institutions have the power to take small steps toward accessibility. The first can be as simple as learning more about what an accessible space looks like, and then identifying spots for improvement. A small accessibility improvement is infinitely better than staying the same.

---

<sup>114</sup> Reich, "Taking Action Toward Inclusion," 119.

## Methods

This research study used a convergent parallel mixed-methods design, with two streams of data: the first from field observations, and the second from semi-structured formal interviews.<sup>115</sup> Field observations were analyzed both quantitatively and qualitatively, while only qualitative analysis was used for the interview data. The study contained five cases: various public history institutions in Gettysburg, PA. One further case was thrown out because the institution did not want to participate.

The mixed method design allowed for triangulation between data streams. Field observations described a single moment, while interviews with staff provided a broader idea of change over their years worked. Additionally, the mixed method design allowed for a combination of perspectives: fieldwork focused on a visitor perspective, while interviewees shared their experiences as staff members. Together, both streams of data lended themselves to a complex, detailed portrait of accessibility.

Prior to interviews of field observations, this study was granted exemption status with limited review from the Gettysburg College Institutional Review Board. The reason for exemption was that the portion of the study with human subjects only involved interview procedures and potential disclosure from a confidentiality breach was deemed to be low-risk to participants.<sup>116</sup> Informed consent was granted by each participant at the beginning of the research interview. The informed consent form can be found in the appendix.

---

<sup>115</sup> John W. Creswell, "Revisiting Mixed Methods and Advancing Scientific Practices," in *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*, Oxford Library of Psychology (Oxford University Press, 2015), <https://doi.org/10.1093/oxfordhb/9780199933624.013.39>.

<sup>116</sup> Gettysburg College, "Exempt Review," Provost's Office, accessed July 8, 2022, <https://www.gettysburg.edu/offices/provost/irb/exempt-review>.

## Data Collection

Five museum sites were included in the study: the Gettysburg National Military Park Museum and Visitor Center (Gettysburg NMP), the Eisenhower National Historic Site (Eisenhower NHS), the Children of Gettysburg 1863® museum (Children of Gettysburg), the Jennie Wade House, and the Seminary Ridge Museum and Education Center (Seminary Ridge). These sites were selected to represent a variety of institution types and organizations. Due to the purposive nature of the sample, the results here are not necessarily generalizable to all public history institutions in Gettysburg. There are a wide variety of business structures within that category, and it would be impossible to properly represent them all without a census. However, the sites selected form a general overview of the state of accessibility in PHIs in Gettysburg, Pennsylvania. The sample included the most prominent sites of the town as well as a smaller museum (the Jennie Wade House) and a newer one (Children of Gettysburg 1863). It is important to note the areas of overlap within the museums. Seminary Ridge is independent of other PHIs, as is the Jennie Wade House. However, Eisenhower NHS and Gettysburg NMP are both under the purview of the National Park Service. Most visitors to Eisenhower NHS will first need to purchase a ticket at Gettysburg NMP and then take a shuttle from there to Eisenhower NHS. Additionally, the Gettysburg NMP is run in partnership with the Gettysburg Foundation, who also runs the Children of Gettysburg 1863 museum and several other local PHIs.

These PHIS were evaluated for accessibility through site visits using a measure constructed from the information gathered in the literature review. This measure took the form of a rubric which can be found in the appendix. Site visits all took place on weekdays to avoid the additional crowding likely to be experienced during weekends. With the exception of the Seminary Ridge Museum, all site visits took place prior to interviews. This order was reversed at



the Seminary Ridge Museum due to an unexpected closing on the day I had intended to visit. Most of the data collection was completed in one visit. However, second visits were required at Seminary Ridge and Gettysburg NMP.

Five staff members were interviewed for this study, one for each study site. Most were initially contacted by the study's advisor, a faculty member at Gettysburg College, to assess interest. Some had held prior positions at other sites; others had previously worked in other fields. The interview questions covered several relevant topics. Some dealt with changes to accessibility throughout their career. Others addressed the interviewee's experiences with disabled visitors at the site. Final questions sought information about any future plans to increase accessibility at the interviewee's site. A list of questions can be found in the appendix.

Some interviews took place in person on site, while others took place over Zoom or Microsoft Teams video-conferencing software. This decision was left up to the interviewee's preference. The interviews were semi-structured, loosely based on a list of questions found in the appendix. Notes were taken by hand by the interviewer—exact quotations were written down in some cases, but a complete transcript was not produced. I will maintain all handwritten notes and informed consent forms in a secure location for at least one year before destroying them.

## Data Analysis

Due to the convergent parallel design, analysis took place in phases. The fieldwork and interview data was analyzed separately, then together. Before any analysis could be done, the handwritten interview and field notes were typed, allowing for easier data handling and ensuring that analysis was kept separate from raw data. Analysis of the interview notes used first-round descriptive coding, then second-round pattern coding. Descriptive coding is an approach to

first-round coding in which a portion of text's most important topics are assigned words or phrases that serve as a summary.<sup>117</sup> Simultaneous coding was allowed.<sup>118</sup> After the first round of coding, data was resorted by code. This allowed some codes to be combined, and in one case where a code covered too much information, to be separated. The updated first-round codes were then sorted into second-round pattern codes, which represented larger categories.

The data from field notes was analyzed quantitatively and qualitatively to form the most complete picture. Magnitude codes reflecting level of accessibility and descriptive codes reflecting type of disability were created during the literature review process.<sup>119</sup> Counts of magnitude codes were used for statistical analysis. Specifically, a chi-squared test of homogeneity was used to assess whether there was a significant difference in accessibility across the sites. Residuals from this test were also examined. Due to the size of the data sample, a chi-squared test could not be used in this way to assess differences in accessibility by disability category. Raw data also did not help understand this question because there were different numbers of criteria for each disability. Thus, counts were converted to percentages for analysis. Qualitative analysis was performed to consider the areas of similarity within sites, which the quantitative analysis could not show very well. Magnitude codes for all sites were compiled onto a single rubric. Then, patterns where all or most sites had the same magnitude level for a criterion could be identified. Once separate analysis of each data stream had been completed, the information gained from both was combined.

---

<sup>117</sup> Matthew B. Miles, A. M. Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, Third edition. (Thousand Oaks, California: SAGE Publications, Inc., 2014), 74.

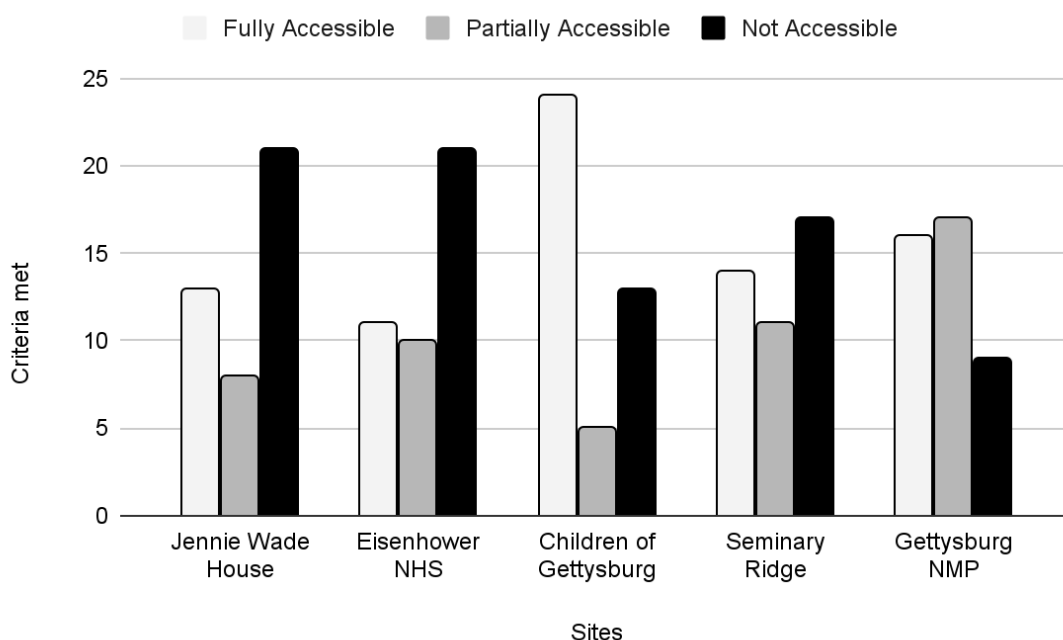
<sup>118</sup> *Ibid*, 81.

<sup>119</sup> *Ibid*, 74-80.

# Results

## Fieldwork

The fieldwork portion of this study considered the current state of accessibility in five Gettysburg public history institutions. The level of accessibility at each site was represented with a count by magnitude code, which can be seen in Figure 1. There are visible differences in levels of accessibility between these sites. However, further analysis was required to determine if these differences were significant or not. A chi-squared test of homogeneity shows that there are statistically significant differences in accessibility level between the five sites. By looking at residuals, we can see which data are most unusual: see Table 1. The amount of criteria fully met at Children of Gettysburg and the amount of criteria partially met at Gettysburg NMP both have a z-score of greater than 2. That means these are significantly higher than the amount of criteria met at this level for other sites. Children of Gettysburg also has a meaningfully lower level of criteria partially met, while the Visitor's Center of Gettysburg NMP has a meaningfully lower level of criteria not met. The Eisenhower site has a meaningfully lower level of fully met criteria and higher level of criteria not met. The Jennie Wade house has a meaningfully higher level of criteria not met. Finally, the Seminary Museum is close to the mean for all levels of criteria. Based on this data, Children of Gettysburg and Gettysburg NMP seem to be the most accessible sites overall. The Eisenhower NHS and Jennie Wade house seemed to be the least accessible overall, with the Eisenhower NHS performing slightly worse.



**Figure 1.** Accessibility of study sites, by criteria met at each magnitude code.

**Table 1.** Standardized Residuals for Chi-Squared Test of Homogeneity

Magnitude Codes	Jennie Wade House	Eisenhower NHS	Children of Gettysburg	Seminary Ridge	Gettysburg NMP
Fully Accessible	-0.704	-1.208	2.063	-0.453	0.050
Partially Accessible	-0.689	-0.062	-1.628	0.250	2.129
Not Accessible	1.250	1.250	-0.750	0.250	-1.75

### Accessibility Successes

Qualitative analysis of the fieldwork revealed several ways in which the studied Gettysburg PHIs have succeeded at fostering accessibility. For example, all sites made use of interpretive images, which is helpful for neurodivergent people who may have trouble comprehending text or audio. Neurodivergent visitors as well as those who are blind or have low

vision can benefit from the information available to orient visitors at all 5 sites. Three of these sites have both written information and information conveyed by staff, while one only has staff-conveyed information and the last only has written information. The consistency of design employed throughout all of three sites and most of the other two also aids in accessibility for these visitor groups.

In some cases, it was the absence of barriers rather than the presence of features that led to successful accessibility. None of the PHIs used turnstiles, which would have been difficult for wheelchair users to navigate. Additionally, almost all protruding objects were detectable by a cane. A cane could not detect low ceiling beams, but a verbal warning was used to solve this potential issue. Lighting was entirely stable at four of the sites; at the site where some flashing effects were used, warning was given. This measure helped to prevent overstimulation in neurodivergent visitors as well as seizures in those with epilepsy or similar conditions.

### **Accessibility Failures**

Qualitative analysis also revealed some cases in which all or almost all sites failed to meet accessibility criteria. Measures for blind visitors and those with low vision were consistently lacking. None of the PHIs used Braille or audio exhibit labels. Audio tours were also not available. Some sites had partially docent led tours, but none were completely docent led. Touch and smell components were also lacking. Only one PHI had touch components at more than half of exhibits, and no smell components were used. The lack of multisensory options represents a missed opportunity for neurodivergent and d/Deaf/Hard of Hearing visitors as well as those who are blind or have low vision.

Accessibility for visitors with mobility disabilities also fell short. Only one PHI had a fully wheelchair accessible entrance. Mobility disabled visitors with or without wheelchairs may

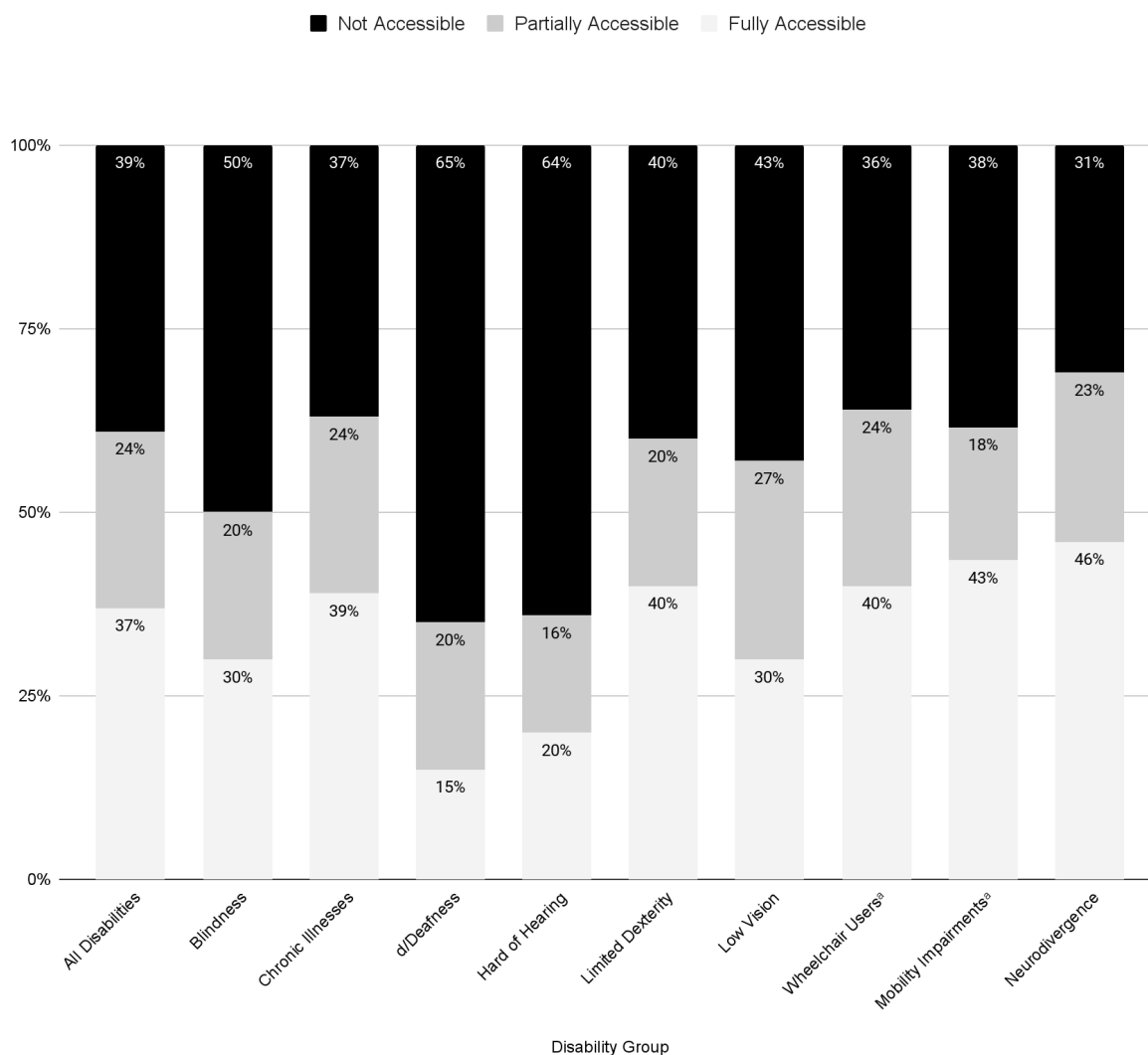
struggle to make it to site entrances, as the path from parking and bus stops was not even and stable at any of the five sites. This barrier also affects chronically ill visitors and blind visitors as well as those with low vision. Upon entering the studied PHIs, there was a lack of seating at exhibits. This represents a problem for those with mobility disabilities who do not use wheelchairs as well as chronically ill visitors. Standing for long periods of time may not be feasible for these guests. Even when benches are available apart from exhibits, repeatedly moving between the exhibit areas and other spaces may be tiring and frustrating. Finally, policies around food and water may not be friendly to chronically ill guests. Two sites limit access to water, while three (including one of the above) prohibit all food. This limited access is a barrier to diabetic visitors and those using oxygen tanks.

### **Accessibility by Disability Group**

Across all sites and disabilities, 37% of criteria were met at the fully accessible level and 24% at the partially accessible level. 39% of criteria were not met. However, when divided by disability group, these percentages are quite different. Some disability groups are quite broad, while others are narrower. Disabilities were grouped based on similarities in access needs. It is important to understand that individuals may fall into more than one disability group. For example, audio description can be extremely helpful to blind visitors but not for DeafBlind visitors. Considering these intersections can help build a more complete program of accessibility. In this case, it would be prudent to consider tactile ways of getting information across in addition to audiovisual ones.

Accessibility is strongest for neurodivergent groups as well as those with physical disabilities, which includes mobility disabled and chronically ill people as well as those with limited dexterity. In contrast, those with sensory disabilities are less accommodated, especially

d/Deaf and Hard of Hearing individuals. Even the neurodivergent group has less than 50% of their relevant criteria fully met, and almost 40% of criteria not met across sites. Levels of accessibility by disability are expressed by percentages rather than by numbers because there are not an equal number of criteria pertaining to each disability.



**Figure 2.** Accessibility for disability groups, by criteria met at each magnitude code.

<sup>a</sup> Mobility impairments specifically refers to disabled people with mobility impairments who do not primarily use wheelchairs.

In addition to overall accessibility, sites vary in their level of accessibility for specific disability groups. Table 3 shows what percentage of criteria are fully met for each disability group at each site. Where d/Deaf people face limited accessibility at most sites, 75% of criteria for d/Deaf visitors are met at Children of Gettysburg. Gettysburg NMP has a higher portion of criteria fully met for mobility disabilities and chronic illnesses than for neurodivergent visitors, in contrast to the overall pattern. Variations in accessibility for those with limited dexterity have limited meaning relative to other disability groups because there was only one criterion for these visitors.

**Table 3.** Criteria met at “fully accessible” magnitude by disability group by site.

Disability Group	Jennie Wade House	Eisenhower NHS	Children of Gettysburg	Seminary Ridge	Gettysburg NMP
Blindness	30%	20%	60%	20%	20%
Chronic Illnesses	29%	14%	57%	50%	43%
d/Deafness	0%	0%	75%	0%	0%
Hard of Hearing	20%	20%	60%	0%	0%
Limited Dexterity	100%	100%	0%	0%	0%
Low Vision	33%	17%	70%	17%	16%
Mobility Impairments: Wheelchair Users	40%	0%	58%	40%	50%
Mobility Impairments: All Except Wheelchair Users	33%	25%	71%	33%	67%
Neurodivergence	43%	43%	67%	43%	29%



## Interviews

After two rounds of coding, five patterns were identified from the interview data. **Views of accessibility** encompassed two main conflicts: conflict between narrow and broad views of accessibility, and conflict between goals of equal access or individualized modifications. **Learning** about accessibility took place through formal and informal methods, and also through comparison with other sites. They faced **barriers** that included access to training, staffing problems, building age, and funding. Despite these, they managed to describe successes in **access over time** which included past projects, the current state of their site, works in progress, and future ideas. As interviewees participated in **decision-making**, they needed to prioritize different institutional goals and responsibilities. Finally, interviewees discussed opportunities for **knowledge sharing** with different groups including visitors and other public historians both local and distant.

### Views of Accessibility

Two conflicts were observed in participants' views of accessibility. Interviewees contrasted narrow and broad conceptions of accessibility. National Park Service (NPS) employees noted that the organization has traditionally had a narrow lens of accessibility that is focused on visitors with mobility, visual, or hearing disabilities. However, both of the NPS employees and two interviewees from non-NPS sites embraced a broader view of accessibility for the present and future. Accessibility "applies to everything we do," said one interviewee, who also saw accessibility as not solely a disability concern. Two interviewees related accessibility to socioeconomic status, making cost a potential barrier to accessibility. Another interviewee explained the concept of demographic accessibility, and lamented that most of their site focuses

on the experiences of white Gettysburgians due to a lack of first person accounts from Gettysburgians of other races.

Another area of conflicting views dealt with what was the ideal way to be accessible: equal access or individual modifications. Some interviewees thought it was important to provide the same access to all, regardless of ability. One interviewee described this approach as “radical accessibility” when discussing how a site outside of Gettysburg was putting it into practice. Others believed this goal was impossible. Instead, one interviewee wanted every visitor to “learn one thing and enjoy it,” and another wanted every visitor to find something in the PHI relevant to their own life.

As part of the idea that an equal experience was not a reasonable goal, several interviewees spoke about changes made for disabled visitors on an individual, as needed basis. Sometimes audio could be turned off to prevent overstimulation, while lights could be turned up to help those with low vision. Furniture could also be moved to provide easier physical access. One interviewee reported that it was a mark of a good interpreter to be able to adjust plans to match an audience, such as by decreasing the distance a tour included or rerouting to stick to paved paths. There were also ways that institutional policy or layout created multiple paths to access. At Seminary Ridge, a docent-led tour of the historic cupola requires navigating several flights of stairs. Visitors choose whether this matches their abilities and will be refunded if they end up unable to complete the experience after paying for it. Those who cannot get up to the cupola can see photographs from it on a lower floor, accessible by elevator. A similar method was used at the Jennie Wade House. Visitors who were unable to navigate the stairs there were able to view the downstairs sections in person and the upstairs sections in a book. These methods

did not give everyone the same experience. However, they did give each visitor something from which they could learn.

## **Learning**

Interviewees learned about accessibility in a variety of ways. Some had access to formal training about accessibility, such as courses through the National Park Service (NPS). One training on audio description through NPS was described as an “illuminating experience” because it put an interviewee into the shoes of someone with a print disability. These types of trainings were reported as one way that interviewees developed a broader view of accessibility, as discussed above.

Informal learning was more common than formal training. Several interviewees learned from interaction with visitors and colleagues during their public history careers. One learned about accessibility in childhood by growing up with autistic and physically disabled relatives. This taught them the lesson that anyone treated with humanity could have fun and learn. Other interviewees found informal learning to be spurred by role changes. One of these interviewees came from outside of the public history realm. As they learned more about the responsibilities of a museum, they became more cognizant of accessibility than they had previously been. Another viewed accessibility with increased importance as they took higher positions within their institution.

Finally, comparison was an important tool for one interviewee in learning about new accessibility measures. At the time of the interview, they were conceptualizing future plans for their site based on current projects at other institutions. The Railroad Museum of PA has a Sensory Hours program that this interviewee may bring to their institution. Another interviewee also compared their current institution to one where they previously worked, which they said was

“leaps and bounds over where we are” in terms of accessibility. However, this instance of comparison was not used to build future programs because it was not seen as a realistic goal given the differences between the buildings of the two institutions.

## **Barriers**

Interviewees reported several barriers to accessibility. One of these was building age. Historic buildings were not built with physical accessibility in mind, which made it difficult for current PHI staff to foster accessibility within them without making major physical changes. Historical preservation concerns often prevent those changes, putting a hard limit on certain forms of accessibility.

Access to training was also an issue. Three of the five interviewees had not received formal training on accessibility as public historians. One interviewee is trying to get staff training on American Sign Language, but was unsuccessful at the time of the interview.

Staffing issues exacerbated pre-existing problems with accessibility. An interviewee who had received training noted that others at their site sometimes missed out on training because of short staffing. When staff are more available, accessibility can be improved. For example, one interviewee mentioned that having extra chaperones for a school group allows for small group “encouragement and support.” Limited staff with limited time may have great plans for accessibility but not be able to execute them.

Finally, one interviewee’s efforts to improve accessibility were challenged by funding issues. They would like to have a bathroom complaint with the Americans with Disabilities Act (ADA), but funding is not available. Additionally, they are looking for grants to add exhibit audio, which would improve accessibility for blind visitors. Another initiative they support is creating sensory friendly virtual tours, but getting a company to make one is “almost

prohibitively expensive” for museums who are “not the Guggenheim or the Met.” Again, staff with limited funding may have great plans but not be able to actualize them.

### **Access over Time**

Several interviewees mentioned past accessibility projects at their sites. For example, they explained how previously inaccessible areas of their sites had since been made accessible. Gettysburg NMP had previously been in what was described as a “Frankenstein building” that was very difficult for anyone with mobility disabilities to access. The new building is “wheelchair-friendly” according to staff, representing an improvement in accessibility. At the same site, the film and cyclorama experience that had previously not been captioned was fixed to meet the legal requirements.

Interviewees also talked about previous collaborations related to accessibility. Children of Gettysburg noted that their child-friendly design had also led to large successes hosting groups of cognitively disabled adults. The first of these groups, which showed up unexpectedly, recommended this museum to similar groups who later also had successful visits. Past school group visits were also mentioned. At one site, a school group of foreign language students revealed issues with a program that required reading in English. The staff found that changing this program to suit this group also helped avoid learning disabled students feeling “uncomfortable.” In both of these examples, successful accommodation of a non-disability group (kids, foreign language students) also helped improve accessibility. Accessibility is not a contrary measure to other PHI goals—they can complement each other, as these past projects show.

However, not all past projects had lasting success the way the above collaborations did. For example, one site previously had a copy of the exhibit script for d/Deaf and Hard of Hearing

which was since removed. Another example is a past partnership with the Wounded Warrior Project that was paused due to the ongoing COVID-19 pandemic. This may return in the future, but it was not able to survive through the extenuating circumstances of the past few years.

Many of the things that interviewees discussed about the current state of access in their sites were similar to those observed in fieldwork, such as the presence of an elevator. However, there were a few additional considerations. The rubric considered the stability and evenness of the path to a building entrance from parking. Length of this path was not included there, but it was mentioned as an issue by one interviewee. Another mentioned the option of an in-house wheelchair at their site as a positive. This was not included on the rubric because it would require disability disclosure to access.

Additionally, interviewees mentioned workarounds for some issues their sites had according to the rubric. Several sites lack automatic door openers, making it difficult for wheelchair users to enter them. However, one interviewee mentioned that their lobby is always staffed during operating hours, so someone would be able to open the door for a wheelchair user as needed. Although it was not mentioned in the interview, this is also the case at a second site that met all criteria for a wheelchair accessible entrance except automatic door opening.

Consideration of workarounds as well as additional criteria mentioned by interviewees may be useful for future studies using the rubric established here.

Three of the five interviewees mentioned works-in-progress at their site. One is working on a new transportation plan as well as a revamped site reception center that will improve accessibility through a tactile model of the site and interactive video components which include audio description and captions. Another site has been addressing physical accessibility in stages; the next step is an ADA compliant bathroom, but funding is needed. They are also looking at

grants to make exhibit audio for blind visitors. Finally, the third site has three ongoing projects designed to increase accessibility. One, a signage project, includes tactile maps which will improve access for blind visitors and those with low vision. This site is also working on a long range interpretive plan and a museum experience redesign, both of which address broader accessibility concerns over a period of five to ten years.

Two of the the three sites above as well as one additional site spoke about future ideas that do not yet have attached concrete plans. One interviewee is interested in adding Braille exhibit text as well as a sensory hours program. Another would like to continue a past collaboration with the Wounded Warriors Project as well as fix the long path from the parking lot to the institution entrance. A third would like to do more programming with cognitively disabled people, as well as making programming more wheelchair-accessible. Currently the only indoor space that could be used as a classroom is the third-floor conference room, and the building does not have an elevator. Programming to reach wheelchair users would mostly likely have to take place outside in the courtyard. Furthermore, this interviewee would like to create a sensory friendly virtual tour for autistic people that experience overstimulation. The fifth interviewee did not know of any plans, concrete or otherwise, to improve accessibility at their site.

## **Decision-Making**

Both National Park Service (NPS) interviewees express the role that responsibility plays in decisions around accessibility. One pointed out that “service is in [the] name” of NPS and their work is done on the behalf of the American people. NPS sites have a dual mission of preservation and access. The responsibility for preservation comes from the American people’s ownership of the park and the collections there. There is also a congressional mandate for NPS sites to interpret with certain legal requirements dictating the required level of accessibility for

these interpretations. For example, NPS websites must attain 50A compliance, which includes closed captioning and audio description of all videos. A non-NPS interviewee expressed hope to improve accessibility beyond legal requirements. Their site is not required to meet federal accessibility requirements, but this interviewee still would like to see the building meet these standards. Thus, institutional responsibility is part of what guides staff during accessibility decisions, but personal responsibility matters too.

The need to prioritize was an important factor in accessibility decisions. One issue where prioritizing was often needed was the balance between accessibility and historic preservation. One interviewee reported that “there seems to be a gap” between these two issues, while another explained that “the rub comes” when deciding how to handle the need to both preserve and interpret. For example, parking at one site is limited in order to preserve the historic landscape. This makes it harder for people to navigate because travel on a crowded shuttle is required. Another site is trying to increase their accessible trails while challenged by the need to preserve the cultural resources located there.

Preservation seemed to be the most salient priority blocking accessibility progress. One interviewee reported that even aside from funding or feasibility issues, they would be unsure about making any accessibility changes to their site because they would not want to change the historic building that is the focus of interpretation there. However, other forms of prioritization exist outside of the preservation issue. For example, interpreters generally have a set of objectives to achieve in a given program. There is a need to balance how to achieve these objectives given the needs and abilities of the audience. Additionally, sites sometimes are unable to prioritize long-term changes such as increasing accessibility due to what one interviewee called a “bandwidth issue.” When other things require immediate action, long-term



improvements can be repeatedly pushed back. Despite these potential difficulties, two interviewees reported an increasing prioritization of accessibility over time—one on a personal level and one on an institutional level.

## **Communication & Collaboration**

One interview topic was how PHI staff communicated about accessibility to potential visitors. Two sites pointed to their website as a primary resource. Another primarily used the phone for this kind of communication. A fourth interviewee mentioned that they had thought it was assumed that their site was ADA compliant until recently, but another employee told them that this was an area of questions from potential visitors. This led the site to explain their level of physical accessibility when printing new rack cards. The fifth interviewee was not part of this communication with potential visitors at their site, so declined comment on the topic. Interviewees also spoke about communication with visitors once they arrived on site. Conversations about accessibility continued on-site. For example, staff showed pictures of an area that was difficult to access so that visitors could decide whether to try it. More broadly, interviews addressed the importance of communicating with the audience in mind. One interviewee mentioned that their site is working on improving communication for younger visitors, who may not have the context to understand the historic preservation taking place there. They want to communicate to visitors that the content of the site is relevant regardless of their personal connection to the period of interpretation.

Interviewees also spoke about collaborative efforts to reach disabled people. Some forms of collaboration took place on a large scale. For example, one site worked with the Wounded Warrior Project to create a monthly program for reintegrating disabled veterans. However, most examples of collaboration mentioned by interviewees happened on a smaller level between site

staff and the leaders of visitor groups. This was often expressed as the need to work with teachers to plan for school groups. However, one interviewee also mentioned pulling parents aside when a child visitor seemed like they might experience accessibility challenges.

Collaboration with colleagues was mentioned less often, although it did come up in terms of learning about accessibility as discussed above. One interviewee mentioned that accessibility “should be something actually that we collaborate on,” after remarking that they were unsure of their colleagues’ views on accessibility. Altogether, interviewees valued communication as necessary even when they faced challenges to communicating successfully.

## Discussion

Combining interview and fieldwork data creates a complex view of accessibility within Gettysburg public history institutions. The most accessible sites are Children of Gettysburg and Gettysburg NMP. These sites are different in some ways and similar in others. Children of Gettysburg is housed in a historic building and specifically geared towards children. In contrast, Gettysburg NMP is housed in a much newer building and geared towards general audiences. However, both sites are run by the same organization: the Gettysburg Foundation. This organization seems to have had success in accessibility across multiple site types, and could serve as an example to others in the area.

In some areas of accessibility, there are consistent failures across sites. As mentioned above, there was a lack of audio or Braille material for blind visitors and those with low vision to interact with. Since all five public history institutions have a need to progress in this area, it could be a target for collaboration efforts. But before these failures can be corrected, it is important to understand why these PHIs are facing accessibility gaps in the first place. Two interviewees reported an increased prioritization of accessibility over time. If this trend is meaningful on a larger scale, accessibility failures may be resolved naturally over time. However, this process may be sped up with research-based understanding. One barrier reported was that staff, especially those outside of National Park Service sites, had not received training on accessibility. In contrast, the two NPS staff interviewed had both received recent training on audio description. On a site level, administrators can make sure that staff have paid time to attend the trainings that are offered by organizations like the American Alliance of Museums. On an organizational level, the National Park Service and other programs that provide training to their own employees could consider outreach to public historians who are not affiliated with the

program in order to better the field overall. Funding may be harder to address, but collaboration efforts can divide this burden. PHIs may also want to focus on changes that make the greatest impact for the lowest cost.

Because formal training seems limited, it is important to consider in more depth the informal learning that several interviewees experienced. Further research would be needed to determine whether this learning from coworkers and job experience can stand in for formal training in matters of accessibility. Supervisors may also want to build in some of this learning into the training and orientation process for new staff members, if such a process exists. Some interviewees reported that their subordinates interacted with disabled people more frequently than they themselves did. This seems to necessitate front line staff getting accessibility knowledge immediately, rather than learning it over time. This requires either creating more formal training programs or being more intentional with informal training. Staff interactions can affect how accessible a museum is, so all staff need to be knowledgeable around matters of accessibility.<sup>120</sup>

In looking at past projects, some accessible features are still around while others have been lost. Some of these, such as a partnership program that met in person, were affected by the COVID-19 project. But for the others, such as a copy of the exhibit script previously available at a PHI, the reason for change is less clear. Future research, especially longitudinal studies, may help to understand what makes changes likely to stay. This research can be seen in science museums, but PHIs have a different context that lends them to be studied separately.<sup>121</sup>

---

<sup>120</sup> Collier, Blackstone, and Taylor, “Communication Access to Businesses and Organizations for People with Complex Communication Needs”; Rix, Lowe, and the Heritage Forum, “Including People with Learning Difficulties in Cultural and Heritage Sites”; Poria, Reichel, and Brandt, “People with Disabilities Visit Art Museums: An Exploratory Study of Obstacles and Difficulties.”

<sup>121</sup> Reich, “Taking Action Toward Inclusion.”

Fieldwork exposed potential shortcomings of the rubric. During the project, the interpretive images category was expanded to include three-dimensional interpretive objects. These may be better for understanding than two-dimensional objects and PHIs should not be rated lower for using them instead of imagery. That was the only instance of a change made, but notes were taken for future projects. As mentioned, some disabled people cannot drive, and rely on walking, biking, or public transit. Bike racks were often far from site entrances or simply not available. Bike access is an example of a criterion that may be included in future versions of the rubric but was not considered here. Finally, the rubric may benefit from a way to incorporate workarounds into quantitative data analysis. Several sites failed the accessible entrance criterion because doors did not open automatically or with a button. However, some of these sites did have staff members on hand to assist. An updated rubric would ideally have more flexibility while still meeting criteria for statistical analysis.

The fieldwork data showed clear differences in accessibility for different visitor groups. Only a small portion of the accessibility criteria were met for d/Deaf, Hard of Hearing, blind, and low vision visitors. This makes a potential area for targeted grant funding in the future. It also may be an area where accessibility training should be developed. Children of Gettysburg was interested in staff training in American Sign Language but was unable to find a suitable program. Creating or expanding training programs that address these specific groups of disabilities could help improve overall accessibility for them.

The works in progress mentioned by the interviewees provide a window into a possible future where there is access for a broader range of disability groups, as several of these projects target accessibility for d/Deaf, Hard of Hearing, and blind visitors as well as those with low vision. For example, one PHI is working to add exhibit audio and provide staff training in

American Sign Language, while two others may add at least one tactile map to their site in the near future. This information is necessary context for the graphs presented earlier; those are a snapshot in time, and some institutions are already addressing the problems represented there. However, future plans are always subject to change. An interviewee wanting to have Braille exhibit text is not a guarantee that it will be a part of the PHI soon or ever.

Much of the literature suggested that public history professionals held a narrow view of accessibility. However, interviews with Gettysburg PHI staff did not support this conclusion. It is possible that this represents a change over time—NPS staff especially noted that their organization has traditionally had a narrow view of accessibility which is changing. There may also be other factors about Gettysburg that lead professionals to take a broad view here, such as the tourism focus. More research in other contexts would be needed to determine whether this finding is transferable.

An interesting concept revealed by the interviews was a conflict between striving for one experience that included everyone and making individual modifications so that people's experiences were different in order to best suit them. Interviewees tended to prioritize everyone getting something from their experience over providing the same experience for everyone. However, it is important to consider the perspectives of disabled individuals themselves. In some cases, individual modifications can feel exclusionary. For example, several individuals reported negative feelings associated with using a separate accessible entrance when the main one was inaccessible.<sup>122</sup> It is also relevant to note competing access needs may make a truly universal experience impossible. A wheelchair user and crutch user may require different pathways for

---

<sup>122</sup> Fänge, Iwarsson, and Persson, "Accessibility to the Public Environment," 324; Poria, Reichel, and Brandt, "People with Disabilities Visit Art Museums," 122.

safety.<sup>123</sup> Expecting both of them to take the same path is unrealistic, but allowing them to both learn something is much more possible.

One interviewee expressed a wish for increased collaboration between public history professionals on the topic of accessibility. There are certain criteria, such as creating multisensory experiences, that seem to be a common struggle for the PHIs of Gettysburg to meet. Working together may lead to some innovative approaches to solve this problem. Collaboration could also be used for areas in which some sites have found success but others are struggling. For example, Eisenhower stands out from most other PHIs in its success at limiting background noise. Collaboration could allow Eisenhower NHS to share its expertise in this area. Through collaboration, Eisenhower NHS could also receive support in areas where other PHIs are currently outperforming it, such as in using concise language. Thus, collaboration would be a mutually beneficial endeavor.

On-site communication seemed to be a strength of this group of institutions. For example, all five sites had ways of orienting visitors at the site entrance. They also used interpretive images to complement text in providing exhibit information to visitors. However, it was difficult to judge whether visitors would be able to get the accessibility information that they needed prior to arriving at a PHI. Some institutions provided accessibility information on their website, while others used phone calls. Telephone calls may be difficult for some visitors, who would prefer written information due to hearing, speaking, or memory difficulties. However, Internet access is not available to everyone. When we take the broad view of accessibility that several interviewees mentioned, which considers socioeconomic status, information distribution through websites also falls short of ideal. One interviewee also mentioned accessibility information present on rack cards, but these are likely only available to an audience already in Gettysburg or the surrounding

---

<sup>123</sup> Reich, "Taking Action Toward Inclusion," 119.

area. Best practices for accessible communication prior to arrival on site is an area of further research based on the interviews, especially given the communication success once on site seen in the field observations. This may be a place where competing access needs necessitate a variety of approaches.

## Limitations

Some important parts of the accessibility experience were beyond the scope of this paper. Interactions with staff can have a huge impact on how successful a PHI visit is for a given disabled person. For example, people with complex communication needs reported the respect and patience of conversation partners as a major factor in their access to businesses and organizations.<sup>124</sup> Conversely, staff acting in a condescending way, such as talking to companions rather than disabled visitors, made a major negative impact on one group of Israeli art museum visitors.<sup>125</sup> When a team of researchers with learning difficulties investigated cultural and heritage sites in the United Kingdom, they frequently encountered ableism from staff after disclosing their disability.<sup>126</sup> It is important to recognize the potential accessibility concerns stemming from staff interactions because they are often overlooked. However, the structure of this study was not suitable for an investigation of the effects of staff interactions on accessibility. Future research with a larger team, including visibly and invisibly disabled researchers, would be needed to evaluate how PHI staff in Gettysburg promote or inhibit accessibility.

Some additional limitations come from the size of the research team. Efforts were made to prioritize the work of disabled researchers and work that included first-person accounts by disabled people when establishing the study's accessibility criteria. However, direct consultation

---

<sup>124</sup> Collier, Blackstone, and Taylor, "Communication Access," 209.

<sup>125</sup> Poria, Reichel, and Brandt, "People with Disabilities Visit Art Museums."

<sup>126</sup> Rix, Lowe, and the Heritage Forum, "Including People with Learning Difficulties," 18.



with a broad group of disabled people was impossible given time and funding constraints. Validating the rubric with more direct input is a future goal.

An improved rubric would also include a weighting system. The criteria listed on the accessibility rubric likely do not all have equal weight to the experience of a disabled visitor. My experience provides an example. Concise language and low noise level are both given equal weight for neurodivergent individuals in the current version of the rubric. However, the conciseness of language is unimportant when my noise level needs are not met. If the noise level is loud, I struggle to focus on text of any length, where I may be able to focus on either concise or longer text in a quiet environment. However, I do not stand for all neurodivergent people, and certainly do not have the necessary insight to weight criteria for other disability groups. Proper weighting would require extensive consultation with other disabled people that fell outside of the scope of this study, but would make an excellent source for future research

## Conclusion

This research study provides a snapshot of accessibility at a specific time and place: the summer of 2022 in Gettysburg, Pennsylvania. This information can serve as a baseline for researchers examining change and continuity of accessibility here in the coming years. Several of the PHIs discussed here are currently working on projects relating to accessibility, or hope to begin them soon. This research can be used to evaluate the difference in accessibility that is made by these projects. This paper also suggests new ideas to increase accessibility in these sites given better understanding of their unique circumstances. I would most like to see collaboration between these various sites. Some are further along than others, but they all have areas of strength. Working together could help each site to be cost-efficient by understanding what has and has not been successful in the local context.

The research here is helpful not just for the Gettysburg area, but beyond. The research methods applied here can be used in other towns with a similar proliferation of public history institutions, or across a larger region. Gettysburg's historical institutions are a major tourist destination, but other towns have PHIs intended for local population use. Future research may be able to determine whether accessibility success differs across PHIs with different intended audiences using the methods shown here.

# Appendix

## Sample Informed Consent Form

### **STATEMENT OF RESEARCH**

Your consent is being sought to participate in a research project conducted by the individuals listed above. You may choose to accept or decline to participate in this study, and your decision should be based on a clear understanding of the nature of the study and any risks it entails. This document provides information that is important for you to best understand the study. If you have any additional questions, please ask at any time in person or by email or phone.

### **WHAT IS THE PURPOSE OF THIS STUDY?**

The research will examine how public history institutions in Gettysburg foster accessibility for disabled people.

### **WHAT IS THE OUTCOME OF THIS STUDY?**

The primary outcome of this study will be a presentation given to the Kolbe Fellows and their mentors at the end of July 2022. Participants will not be able to attend as it is a closed event. If a paper is produced, participants may email the researcher to request access. However, the researcher will not be able to contact participants because their contact information will not be kept after the study.

### **IS THIS STUDY VOLUNTARY?**

Your participation is voluntary. You may choose not to participate, or you may discontinue your participation at any time without penalty.

### **WHO WILL PARTICIPATE?**

You were chosen because of your position at a public history institution in Gettysburg, Pennsylvania. Approximately ten people will take part in this study, and they were also chosen because of their work positions at public history institutions in the area.

### **WHAT WILL HAPPEN DURING THIS STUDY?**

During this study, you will be asked a series of questions by the researcher about experiences **during your career** related to accessibility. You will also be given time to share any additional information you think is important. You are free to stop the interview at any time. Additionally, you may choose not to answer a question and to move on to the next one. If you decide during the interview to stop participating, it is up to you whether we will use your data in the research. However, we cannot remove your data after the interview as it will not be readily identifiable.

### **HOW LONG WILL THE STUDY LAST?**

Your participation in the study will last about an hour. There will be only one interview.

### **WHAT ARE THE RISKS OF THE STUDY?**

The researchers have designed this study to have minimal risk. It is possible that you will experience discomfort or tiredness during the interview process. Additionally, there is a limited risk that a future individual could be able to connect some of your data as reported to yourself. However, as we are only asking you questions **in your professional capacity**, we believe the risks of this are minimal.

### **WHAT ARE THE BENEFITS OF THIS STUDY?**

You may not benefit personally from being in this study. However, we hope that in the future, other people might benefit from this study because it will help advance the possibilities for public history professionals to connect with disabled people or others who require accessibility measures. Learning more

### **CONFIDENTIALITY**

The data collected for this research are confidential, meaning that your names or other identifying information will be known to the researcher and faculty mentor. However, we will delete or destroy any record of your participation at the conclusion of the study. Therefore, nobody in the future, except for the researcher who conducted your interview, will know about your participation in this project. We will be using the names of the public history institutions you describe in the research. Because of this, there is a possibility that someone could link the research to you. For this reason, we are asking you to answer questions **in your professional capacity**. No private information will be shared in the research study. Additionally, your information collected as part of the research, even if identifiers are removed, will not be used or distributed for future research studies.

### **WILL I BE PAID FOR PARTICIPATING?**

You will not be paid for being in this research study.

### **WHO IS FUNDING THE STUDY?**

Gettysburg College and the research team are receiving no funding from other agencies, organizations, or companies to support this research study.

### **CONTACTS AND QUESTIONS?**

The researcher conducting this study is listed above, with contact information. If you have any questions, concerns, or complaints about the research please contact them or their faculty sponsor. If you have questions regarding your rights as a research participant or about research ethics, you may contact the Gettysburg College Institutional Review Board via email at [irb@gettysburg.edu](mailto:irb@gettysburg.edu).

Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

## Sample Interview Script

1. You currently work at [site], correct?
  - a. Have you held other roles at public history sites in Gettysburg prior to this one?
    - i. If so, which?
2. How do you define accessibility as a public history professional?
  - a. How do those around you define it?
  - b. Has this changed throughout your career?
3. Have you ever received training on accessibility?
  - a. If so, when and where?
  - b. If so, what did this training look like?
4. What measures has your current site taken to foster accessibility?
  - a. Ask for more detail if needed.
  - b. How were these measures developed?
  - c. If applicable, ask about past sites.
5. How often does your site have visibly disabled visitors?
  - a. Is there any difference in how you interact with these people? If so, what? How about the people around you?
  - b. If applicable, ask about past sites.
6. Do you interact with potential visitors?
  - a. If so, how do often potential visitors ask about accessibility?
  - b. Are there other ways for potential visitors to find out about accessibility?
  - c. If applicable, ask about past sites.
7. Does your site have visitors of large groups?
  - a. Do you ever have large groups of disabled people attend your site?
    - i. If so, are you involved in planning for these occasions?
      1. If so, what does this planning look like?
8. Are you part of future planning for your site?
  - a. If so, does your site have plans for increasing accessibility in the future?
    - i. What kind of plans?
    - ii. How did you come up with these plans?
  - b. If applicable, ask about past sites.
9. If you could make one change to make your site more accessible, what would it be?
  - a. What would be needed for you to make that change?
  - b. How likely is it that this change could be made in the future?
10. Is there anything else you'd like to share about accessibility?

## Rubric

Entrance Area					
Feature	Fully Accessible	Partially Accessible	Not Accessible	Disabled Users	Notes
Wheelchair accessible -ramp available if change in elevation -doors open automatically or with button -doors are not revolving	Wheelchair users can enter through main entrance.	Wheelchair users can enter through side or back entrance	Wheelchair users cannot enter	M-WCU	
Surface	The exterior surface is even and stable entering the building from ALL parking AND the bus stop, if applicable.	The exterior surface is even and stable entering the building from the ACCESSIBLE parking spaces AND the bus stop, if applicable.	The exterior surface is not even and stable entering the building from the ACCESSIBLE parking spaces AND the bus stop, if applicable.	B/LV, M-WCU, M-NWC, CI,	
Information to orient visitors	Museum overview available from staff AND written resources at the entrance	Museum overview available from staff OR written resources at the entrance	Museum overview not available at the entrance	B/LV, ND	
Admission policy	Same day re-entrance is allowed	–	Same day re-entrance is not allowed	CI	
Indoor entrance	Turnstiles are not used	An alternative to a turnstile is present for WCUs	Entry is only possible through a turnstile	M-WCU	

Counters	All counters are at an appropriate height for a seated person	At least one counter is at an appropriate height for a seated person	No counters are at an appropriate height for a seated person	M-WCU	
Exhibit Areas					
Seating available	Seating is available at all exhibits	Seating is available at more than half of exhibits	Seating is available at less than half of exhibits	CI, M-NWC	
Wheelchair accessibility	All exhibits are usable from a seating position AND any pre-placed seating can be moved out of the way	More than half of exhibits are usable from a seating position AND pre-placed seating at more than half of exhibits is not present or can be moved	Less than half of exhibits are usable from a seated position AND/OR pre-placed seating cannot be moved at more than half of exhibits	M-WCU	
Audio description	Audio labels are present 100% of the time AND/OR an audio tour is available	Audio labels are present between 50-100% of the time AND/OR a docent led tour is available	Audio labels are present less than 50% of the time AND a docent led tour is not available AND an audio tour is not available	B/LV, ND	
Multisensory experience	Touch or smell components are present at all exhibits	Touch or smell components are present at between 50-100% of exhibits	Touch or smell components are present at less than 50% of exhibits	B/LV, D/HoH, ND	
Bright lighting	Lighting is bright in 100% of areas, excluding areas	Lighting is bright between 50-100% of areas	Lighting is bright in less than 50% of areas	LV, D/HoH	

	<b>specifically designated</b> as sensory safe spaces/retreat rooms				
Stable lighting	There are no flickering or strobe lights.	Flickering lights are visible in less than 50% of exhibit space AND warnings are present for all strobe lights.	Flickering lights are visible in more than 50% of exhibit space AND/OR strobe lights are present without warning.	ND, CI	
Interpretive Images	Present at all exhibits	Present at more than half of exhibits	Present at less than half of exhibits	ND	
Information at multiple levels of understanding	Present at all exhibits	Present at more than half of exhibits	Present at less than half of exhibits	ND	
Visual input	Captioning AND ASL available for all audio components	Captioning OR ASL available at more than 50% of audio components	Captioning OR ASL present at less than 50% of audio components	D/HoH	
Interactive components	All interactive components can be operated with a closed fist	At least 50% of interactive components can be operated with a closed fist	Less than 50% of interactive components can be operated with a closed fist	LDX	
<b>Labeling</b>					
Feature	Fully Accessible	Partially Accessible	Not Accessible	Disabled Users	Notes
Large Print	all levels of labels	main labels only	less than 50% of labels	LV, ND	
Color contrast	100% of labels	between 50 and 100% of labels	less than 50% of labels	LV, ND	



Braille	all levels of labels	main labels only	less than 50% of labels	B	
Clear language	100% of labels	between 50 and 100% of labels	less than 50% of labels	ND	
Concise language	100% of labels	between 50 and 100% of labels	less than 50% of labels	ND	
Visible from a seated position	100% of labels	between 50 and 100% of labels	less than 50% of labels	M-WCU	
institution Layout					
Maneuvering space for wheelchairs	100% wheelchair accessible	between 50 and 100% wheelchair accessible	less than 50% wheelchair accessible	M-WCU	
Seating available	Seating is available in several places between exhibits or institution areas	Seating is available somewhere in the main institution spaces other than at exhibits	No seating is available in the main institution space other than at exhibits	CI, M-NWC	
Bathrooms are available	Bathrooms are openly available	A key must be requested to use the bathroom	Bathrooms are not available	ND, CI	
Bathrooms are wheelchair accessible	All bathroom locations include a place for WC users	A bathroom is accessible for WC users	No bathrooms are accessible for WC users	M-WCU	
Consistent design	Institution design is consistent in all spaces	Each exhibit uses an internally consistent design and/or more than 50% of institution spaces follow a consistent design	Not all exhibits have internally consistent designs AND less than 50% of institution spaces follow a consistent design	ND, B/LV	

Sensory safe spaces or retreat rooms	There is a designated sensory safe space.	There are quiet places with dim lighting within the institution	There are no quiet, dimly lit spaces within the institution	ND	
Protruding objects	There are no protruding objects not detectable with a cane.	All protruding objects have something under them detectable by a cane.	There are protruding objects that are not detectable by a cane without something under them that is.	B/LV	
Carpet	All carpet is thin and properly secured.	Less than 50% of institution space has loose or thick carpet.	More than 50% of institution space has loose or thick carpet.	M-WCU, M-NWC	
Elevation					
Feature	Fully Accessible	Partially Accessible	Not Accessible	Disabled Users	Notes
Elevator	Elevator access is available to all floors	Elevator access is available to more than 50% of institution space	Elevator access is available to less than 50% of institution space	M-WCU, M-NWC, CI	
Access within elevator	Elevator access with handrails is available to all floors	Elevator access with handrail is available to more than 50% of institution space	Elevator access with handrail is available to less than 50% of institution space	M-NWC, CI	
	Elevator access with light cues is available to all floors	Elevator access with light cues is available to more than 50% of institution space	Elevator access with light cues is available to less than 50% of institution space	D/HoH	
	Elevator access with	Elevator access with sound cues	Elevator access with sound cues	B/LV	

	sound cues is available to all floors	is available to more than 50% of institution space	is available to less than 50% of institution space		
	Elevator access with raised and/or Braille controls is available to all floors	Elevator access with raised and/or Braille controls is available to more than 50% of institution space	Elevator access with raised and/or Braille controls is available to less than 50% of institution space	B/LV	
Stair access	Stair access with handrails on both sides is available to all floors	Stair access with handrails on at least one side is available to more than half of institution space	Stair access with handrails on at least one side is available to less than half of institution space	B/LV, M-NWC, CI	
In-floor changes	There are no changes in elevation within a floor	Ramp AND stair access is available to more than 50% of institution space	Ramp access AND/OR stair access is available to less than 50% of institution space	M-WCU, M-NWC, CI	
Access of ramps	No ramps have steep slopes (more than 1 unit rise to 12 units run)	Less than 50% of ramps have steep slopes	More than 50% of ramps have steep slopes	M-WCU, M-NWC, CI	
	All ramps have handrails on both sides without interruption	More than 50% of ramps have handrails on both sides without interruption	More than 50% of ramps have handrails on both sides without interruption	M-NWC, CI	
Miscellaneous					
Food Policy	Food and	Water is	Water is not	CI	

	water are allowed in all areas of the institution	allowed in all areas AND food is allowed in some areas of the institution	allowed in some areas of the institution OR food is not allowed in the institution		
Allergies	Allergy-friendly food is available AND outside food is allowed	Allergy-friendly food is available OR outside food is allowed	Neither allergy-friendly food is available nor outside food is allowed	CI	
Noise level	The background noise (not including other patrons) is low in all areas of the institution.	The background noise (not including other patrons) is low in at least 50% of the institution.	The background noise (not including other patrons) is low in less than 50% of the institution.	ND, HoH	

## Bibliography

- Autistic Self-Advocacy Network. "About Autism." Last accessed January 12, 2023, <https://autisticadvocacy.org/about-asan/about-autism/>.
- Autistic Self Advocacy Network. "Autistic Access Needs: Notes on Accessibility." 2011. <https://autisticadvocacy.org/resources/accessibility/#autistic-access-needs-notes-on-accessibility>.
- Candlin, Fiona. "Blindness, Art, and Exclusion in Museums and Galleries," *International Journal of Art & Design Education* 22, no. 1 (February 2003), 100-110.
- Cartwright, Ryan Lee. "Out of Sorts: A Queer Crip in the Archive," *Feminist Review* 125, no. 1 (2020), 62-69. <https://doi.org/10.1177/0141778920911936>.
- Centers for Disease Control and Prevention [CDC]. "Disability & Health U.S. State Profile Data: Pennsylvania." Disability and Health Promotion. Last reviewed May 18, 2022. <https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/pennsylvania.html>.
- Collier, Barbara, Sarah W. Blackstone, and Andrew Taylor, "Communication Access to Businesses and Organizations for People with Complex Communication Needs." *AAC: Augmentative & Alternative Communication* 28, no. 4 (December 2012), 205-218. <https://doi.org/10.3109/07434618.2012.732611>.
- Creswell, John W. "Revisiting Mixed Methods and Advancing Scientific Practices." In *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*. Oxford: Oxford University Press, 2015. <https://doi.org/10.1093/oxfordhb/9780199933624.013.39>.
- Dattilo, John, Gus Estrella, Laura J. Estrella, Janice Light, David McNaughton, and Meagan Seabury. "I Have Chosen to Live Life Abundantly: Perceptions of Leisure by Adults Who Use Augmentative and Alternative Communication." *AAC: Augmentative & Alternative Communication* 24, no. 1 (March 2008), 16-28. <https://www.tandfonline.com/doi/full/10.1080/07434610701390558>.
- Dubois, Pascal. "The Needs of People with Walking Handicaps: The Association des Paralysés de France," trans. Margaret Rubens, in *Museums Without Barriers: A New Deal for Disabled People*, ed. Fondation de France and International Committee of Museums. New York: Routledge, 1991.
- Eardley, Alison F., Clara Mineiro, Joselia Neves, and Peter Ride. "Redefining Access: Embracing Multimodality, Memorability, and Shared Experience in Museums," *Curator: The Museum Journal* 59, no. 3 (July 28, 2016), 263-268. <https://onlinelibrary.wiley.com/doi/abs/10.1111/cura.12163>.
- Evcil, Ayşe Nilay. "Barriers and Preferences to Leisure Activities for Wheelchair Users in Historic Places." *Tourism Geographies* 20, no. 4 (August 8, 2018), 698-715. <https://www.tandfonline.com/doi/full/10.1080/14616688.2017.1293721>.

- Fänge, Agneta, Susanne Iwarsson, and Åsa Persson, "Accessibility to the Public Environment as Perceived by Teenagers with Functional Limitations in a South Swedish Town Centre." *Disability and Rehabilitation* 24, no. 6 (January 2022): 318-326. <http://www.tandfonline.com/doi/full/10.1080/09638280110089906>.
- Gettysburg College. "Exempt Review." Provost's Office, last accessed July 8, 2022. <https://www.gettysburg.edu/offices/provost/irb/exempt-review>.
- Goodell, Robert. "Origins of Public History." History 201: Introduction to Public History, Class Lecture at Gettysburg College, Gettysburg, PA, September 8, 2021.
- Goss, Juli, Elizabeth Kunz Kollmann, Christine Reich, and Stephanie Iacovelli. "Understanding the Multilingualism and Communication of Museum Visitors Who Are d/Deaf or Hard of Hearing." *Museums & Social Issues* 10, no. 1 (April 2015): 52-65. <https://doi.org/10.1179/1559689314Z.00000000032>.
- Harpers Ferry Center Accessibility Committee. *Programmatic Accessibility Guidelines for National Park Services Interpretive Media*. Harpers Ferry, VA: National Park Service, February 2012.
- Henrich, Gretchen, Felice Q. Cleveland, and Emily Wolverton, "Case Studies from Three Museums in Art Beyond Sights's Multi-Site Museum Study." *Museums & Social Issues* 9, no. 2 (October 1, 2014): 124-143. <https://doi.org/10.1179/1559689314Z.00000000023>.
- Hofmann, Megan, Devva Kasnitz, Jennifer Mankoff, and Cynthia L. Bennett. "Living Disability Theory: Reflections on Access, Research, and Design." Paper, ASSETS '20: The 22nd International ACM SIGACCESS Conference on Computers and Accessibility, virtual event, October 26, 2020. <https://dl.acm.org/doi/10.1145/3373625.3416996>.
- Holloway, Leona, Kim Marriott, Matthew Butler, and Alan Borning. "Making Sense of Art: Access for Gallery Visitors with Vision Impairments." Paper, CHI '19: CHI Conference on Human Factors in Computing Systems, Glasgow, Scotland, UK, May 2, 2019. <https://dl.acm.org/doi/10.1145/3290605.3300250>.
- Kudlick, Catherine. "The Local History Museum, So Near and Yet So Far." *The Public Historian* 27, no. 2 (Spring 2005): 75-81.
- Lyon, Cherstin M. Elizabeth M. Nix, and Rebecca K. Shrum, *Introduction to Public History: Interpreting the Past, Engaging Audiences*. Lanham, MD: Rowman & Littlefield, 2017.
- Majewski, Janice and Lonnie Bunch. "The Expanding Definition of Diversity: Accessibility and Disability Culture Issues in Museum Exhibitions." *Curator: The Museum Journal* 41, no. 3 (September 1998), 153-160. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.2151-6952.1998.tb00829.x>.
- Morgan, Heidi. "Connections Between Sensory Sensitivities in Autism; the Importance of Sensory Friendly Environments for Accessibility and Increased Quality of Life for the Neurodivergent Autistic Minority." *PSU McNair Scholars Online Journal* 13, no. 1 (November 19, 2019). <https://pdxscholar.library.pdx.edu/mcnair/vol13/iss1/11>.

- Miles, Matthew B., A. M. Huberman, and Johnny Saldaña. *Qualitative Data Analysis: A Methods Sourcebook*, third edition. Thousand Oaks, California: SAGE Publications, Inc., 2014.
- Minich, Julie Avril. "Enabling Whom? Critical Disability Studies Now." *Lateral* 5, no. 1 (2016), <https://csalateral.org/issue/5-1/forum-alt-humanities-critical-disability-studies-now-minich/>.
- National Endowment for the Arts, National Endowment for the Humanities, National Assembly of State Arts Agencies, and John F. Kennedy Center for the Performing Arts. *Design for Accessibility: A Cultural Administrator's Handbook*. Washington, DC: National Assembly of State Arts Agencies, 2003. <https://www.arts.gov/about/publications/design-accessibility-cultural-administrators-handbook>.
- Poria, Yaniv, Arie Reichel, and Yael Brandt, "People with Disabilities Visit Art Museums: An Exploratory Study of Obstacles and Difficulties." *Journal of Heritage Tourism* 4, no. 2 (May 6, 2009), 117-129. <https://doi.org/10.1080/17438730802366508>.
- Price, Devin. *Unmasking Autism: Discovering the New Faces of Neurodiversity*. New York: Harmony Books, 2022.
- Reich, Christine. "Taking Action Toward Inclusion: Organizational Change and the Inclusion of People with Disabilities in Museum Learning." Doctoral thesis, Boston College, May 2014. <http://hdl.handle.net/2345/3678>.
- Reich, Christine and Minda Borun. "Exhibition Accessibility and the Senior Visitor," *The Journal of Museum Education* 26, no. 1 (Winter 2001): 13-16. <https://www.jstor.org/stable/40479198/>.
- Rieger, Janice, Charlotte Kessler, and Megan Strickfaden. "Doing Dis/Ordered Mappings: Shapes of Inclusive Spaces in Museums." *Space and Culture* 25, no. 1 (February 2022): 4-19, <https://doi.org/10.1177/1206331219850442>.
- Rix, Jonathan, Ticky Lowe, and the Heritage Forum, "Including People with Learning Differences in Cultural and Heritage Sites." *International Journal of Heritage Studies* 16, no. 3 (May 2010), <https://doi.org/10.1080/13527251003620743>.
- Rosenzweig, Roy and David Thelen. *The Presence of the Past: Popular Uses of History in American Life*. New York, N.Y., United States: Columbia University Press, 1998.
- Salmen, John P. S. "Everyone's Welcome: The Americans with Disabilities Act and Museums." American Association of Museums, 1998. <http://eric.ed.gov/ERICWebPortal/detail?accno=ED437754>.
- Sandell, Richard and Chris Ingram. "Do Museums and Galleries Do Enough For Disabled Visitors?" *Apollo* 190, no. 680 (November 2019), 26-17. <https://www.proquest.com/docview/2308447404/abstract/39D6CA1959A84FD6PQ/1>.

- Sellers, Frances Stead. "How Long COVID Could Change The Way We Think About Disability." *Washington Post*, June 6, 2022, <https://www.washingtonpost.com/health/2022/06/06/long-covid-disability-advocacy/>.
- Sen, Lalita and Sara Maryfield, "Accessible Tourism: Transportation to and Accessibility of Historic Buildings and Other Recreational Areas in the City of Galveston, Texas." *Public Works Management & Policy* 8, no. 4, (April 1, 2004), 223-234. <https://doi.org/10.1177/1087724X03262829>.
- Seri, Stefano. "Photosensitive Epilepsy." Epilepsy Society, September 2019. <https://epilepsysociety.org.uk/about-epilepsy/epileptic-seizures/seizure-triggers/photosensitive-epilepsy>.
- Thapar, Neela, Grace Warner, Mari-Lynn Drainoni, Steve Williams, Holly Ditchfield, Jane Wierbicky, and Shanker Nesathurai. "A Pilot Study of Functional Access to Public Buildings and Facilities for Persons with Impairments." *Disability and Rehabilitation* 26 (April 1, 2004), 280-289. <https://doi.org/10.1080/09638280310001649543>.
- Tola, Giulia, Valentina Talu, Tanja Congiu, Paul Bain, and Jutta Lindert. "Built Environment Design and People with Autism Spectrum Disorder (ASD): A Scoping Review." *International Journal of Environmental Research and Public Health* 18, no. 6 (January 2021). <https://www.mdpi.com/1660-4601/18/6/3203>.
- Vagnone, Franklin D. and Deborah E. Ryan, *Anarchist's Guide to Historic House Museums*. Walnut Creek, California: Routledge, 2016.
- Wong, Alice, ed. *Disability Visibility: First-person Stories from the Twenty-First Century*. New York, United States: Vintage Books, 2020.
- Ziebarth, Beth, Janice Majewski, Robin Marquis, and Nancy Protecto, eds. *Inclusive Digital Interactives: Best Practices + Research*. Washington, DC: Smithsonian Institution Press, September 2020.



