For this evaluation I will be using the <u>ADA Accessibility Guidelines (ADAAG)</u> (found here <u>https://www.access-board.gov/adaag-1991-2002.html#purpose</u>) I will be evaluating the library's physical building and environment using the following 10 elements.

- 1. Doors
- 2. Elevators
- 3. Toilet Stalls
- 4. Parking
- 5. Signage
- 6. Stacks
- 7. Check-Out areas
- 8. Reading & Study areas
- 9. Ground and Floor Surfaces
- 10. Drinking Fountains

# **Doors 4.13:**

First the entrance doors to the lobby as they are different than the other doors inside the building. The entrance doors are made of thick metal and glass and are large, heavy, and have automatic door controls on the inside and outside of the building. Firstly, ADA compliance 4.13.5 for doors says that doorways "shall have a minimum clear opening of 32 in (815mm) with the door open 90 degrees, measured between the face of the door and the opposite stop." This holds true for the doors of the main entrance, there are a total of 2 single side doors one to the right of the entrance on the first floor and one to the left on the second floor, and 2 sets of double doors at the front entrance, the doors of the front entrance are slightly larger than the side doors, and one set of the two doors when using the automatic door switch opens both doors. The automatic doors also comply with section 4.13.12, they open slowly, with low power, and do not take more than 15lbs to stop when automatically closing.

Next are the main inside library entrance doors, much like the other entrance doors these are made of metal and glass. These too comply with 4.13.5 as mentioned above with the minimum opening space of 32 in. These doors have a set entrance and exit door with push bars to open them, meaning that someone only must use the push bars when entering or leaving, this is

compliant with ADA 4.13.9 door hardware. These handles are mounted at acceptable highest on the doors. I believe that the doors work 2 ways but since they are marked as entrance and exit, I did not test this.

Lastly the normal doors on the inside of the library, they too follow 4.13.5 with their dimensions for opening. Many of these doors have automatic switches, however they are magnetically locked open while the library is open, unless they are a study room or classroom door they are closed, but those doors have automatic switches. All these doors are wooden and lightweight, so they do not take a large amount of effort to open. The bathroom doors are push doors that operate both ways, while the other doors to study rooms and classrooms have a door handle that is curved in a way that is easy to open and not loose grip.

There is not anything I would change about the doors in the library to make them more assessable, in many cases they go over what is recommended in terms of dimensions. There is one minor change I would make but it is very minor since the doors have automatic switches, is that manually opening the door can be hard as the doors are very heavy leading into the building. This weight is essentially negated when using the handicap door buttons so this change is very minor and just an observation.

# **Elevators 4.10:**

ECSU Library has a total of 3 elevators, one in the main lobby that goes from the first to second floors of the lobby, and 2 elevators inside the library that goes to all 4 floors. Every elevator follows 4.10 ADA standards for elevators. First to evaluate is 4.10.2 Automatic operation, this entails that the elevators have a self-leveling feature and that they stop appropriately at each landing with a tolerance of 13 mm. The elevators in the library meet this

tolerance and from my view match up with the floor exactly leading to no excess bump or lips. Next to evaluate are the call buttons on the outside of the elevators, these should be at 42 in above the floor, and shall have visible signals to indicate when each call is registered. The buttons are allowed to be raised or flushed with the wall, the buttons for the library lobby elevator are flush while the 2 elevators in the library are raised, both areas meet the requirements laid out in ADA. Next are the elevator door dimensions, ADA recommends the minimum to be 36 in of open space for the entrance and the ECSU library elevator doors far exceed this, I did not take an exact measurement for this, but I would say that its double sitting around 5 ft when fully open. The inside call buttons are also within acceptable height tolerance with the ground. The elevators do not make any auditory indication of floors or elevator arrival.

The only recommendation for the elevators is the lobby elevator should have an auditory indication of the doors opening when they arrive. I believe that this should be in the 2 elevators within the library but one of the floors is a quite floor so the noise of the elevator could be a bother for others. Other than that, the elevators are very nice, they are spacious, and I have personally seen them fit up to two wheelchair users along with a couple of other students.

#### **Toilet Stalls 4.17:**

(Note: I did not check the women's bathroom since I am a man and did not go in there, but I asked the library staff if they have the same accessibility and they said yes.)

Within the ECSU Library there are a total of 6 bathrooms to my knowledge, 2 on the first through third floors, with none on the fourth floor but this floor is a dedicated archive. There are men's and women's for a total of 3 each. Each bathroom has a handicap assessable stall along with a normal stall and 2 urinals in the men's bathrooms. First the accessible stalls have a lot of

room, more than what is recommended by ADA. The stall door locks are within the height requirements. Each stall, apart from the bathroom on the third floor, had 2 grab bars, one mounted to the wall and another that can be extended down from the wall on the back of the toilet allowing for a grab bar on either side of the toilet. The third-floor stall in the men's bathroom did not have this second extendable grab bar but there were holes in the wall where it would have gone. I had forgotten to mention this to the library staff, so I do not know how long it had been like that or if there are plans for it to be fixed. I should also mention that the bathrooms had no facilities for children, this is a college campus, but the library is open to the public and has a dedicated children's area. For the urinals in the men's room each bathroom has 2 I did not get exact measures, but one is much lower to the floor than the other and they are separated by a divider.

My one recommendation for the toilet stalls is to fix or add the missing extendable grab bar in the third-floor men's bathrooms. My other recommendation, which is more of an observation, is that if the library is going to have an area set aside for children, then they should have at least one facility for children as laid out in ADA 4.17.7.

## Parking 4.6:

The ECSU Library had a large parking lot off to the side of the building with a total of 9 handicap parking spaces, the spaces are split into groups of two with an extra space in between them that is the access aisle, the access is much larger than the ADA standard being almost the same size as another parking space. The parking spaces are technically in compliance with parking 4.6.2 which says that the spaces should be located on the shortest accessible route of travel from parking to an accessible entrance. The distance from the furthest parking space measured with google maps is 333 ft from parking space to the nearest assessable door, ADA has

no specific requirements on distance from space to building but to me personally this seem a little far especially if it is poor weather conditions outside. The parking spaces are also in compliance with 4.6.4 signage, each space had the handicap symbol painted in bule on the space and a sign in front of the space. The library does not seem to have a dedicated passenger loading zone as laid out in section 4.6.6 of the ADA guidelines.

My biggest recommendation here would be the addition of passenger loading zones and drop off zones closer to the front entrance. Currently the parking lot is closest to the side entrance that leads to the second floor since the parking lot on the side is raised on a hill. This would be the easiest recommendation to add since the other recommendation of making the parking spots closer to the door would require a lot of construction and disrupt the flow of the library. The library parking lot doubles as a commuter lot for students, this parking lot is much closer to other campus classrooms than the parking garage on the other side of campus.

# Signage 4.30:

The use of signage is major all throughout the library, it's at the main entrance, in the lobby, on the doors and in the stairwells, it's at the check-out desk and in many other spots. The ADA guidelines says that letters and numbers on signs should have a width-to-height ratio of 3:5 to 1:1 with the stroke-width-to-height ratio between 1:5 and 1:10, I am not exactly sure how to measure this in person with out having access to digital files but I can say that all of the signs in the library that are official by the school or library staff are in large clear print, easy to read, and placed at a height that is easy to see from a lower perspective. This follows section 4.30.4. The signs indicating locations and where to go also have brail, these are the signs that are permanently wall mounted.

I could not find anything glaringly out of ADA standards for signs, so I have no recommendations for them. The standards seem to be thoroughly met regarding signs, and the library even goes out of the way to install signs and things of that nature at a level easy to read from lower perspectives.

# Stacks 8.5:

For ADA standards in libraries the stacks should have at minimum clear aisle width of 42 in where possible, and the stack shelf height is unrestricted. The stacks at the library are well above 6 ft in height and go to the floor, and the aisle space just meets the required 42 in of space. But in some aisles the space is not clear. Since the stacks are so tall the library offers stepping stools for students to grab and use, the problem here is that many of the stools are just left in the aisle effectively removing about one ft worth of space from the aisle, when this happens the required space if then knocked out of ADA guidelines.

For this I have two recommendations, the first being maybe unobtainable while the second is more feasible. My first recommendation would be to expand the width of the stacks and lower their height, however this recommendation I can see as being almost impossible with out total disruption to library hours maybe even closing the library until renovations are done. This would involve moving tens of thousands of books around and finding space for them, space that the library currently does not have without taking up student study areas. My second recommendation is to remove the bottom shelf allowing for a space for the stepping stools to slide into allowing them to be out of the aisle.

#### **Check-Out Areas 7.3:**

The library has a total of 3 check out spots at the main circulation desk, 1 on a higher almost standing height desk and 2 at hip level. ADA says that the counter should be at maximum height of 36 inches, while I did not personally measure the counter at my visit, I did measure the ground to my hips which is about 36 in, so the counter is with in rage. Apart from the checkout area are the book security gates; these follow the ADA guidelines of doorways and are slightly further apart than the entrance doors making them more than compliant.

I have no recommendations to improve on for the check out counter, they have more than is required of counterspace height, all signage at the checkout counter is also within ADA and the counter even hale an overhang of about 4 in, allowing for wheelchair space underneath them.

## Reading & Study areas 8.2:

The ADA guidelines say that at least 5% of tables and seating shall comply with ADA guidelines 4.2, 4.32, and 4.3. All the table clearance and seating does fall within ADA guidelines. Then allow enough space of 32 in for maneuverability around the tables and chairs. There are also the fixed in place computer tables and cubbies, these all comply with ADA guideline 4.32 in their height and width requirements.

I have no recommendations for the reading and study areas. All the tables and chairs are within ADA guidelines. If I had to make one recommendation, note that I could not find where in the guidelines this goes to, that recommendation would apply to the student study rooms, the whiteboards are not within acceptable react for people in wheelchairs these should be lowered or put on some sort of track allowing them to be raised and lowered.

## **Ground and Floor Surfaces 4.5:**

The library has 2 types of flooring used throughout the building, there is tile in the main entrance lobby and in the bathrooms and carpet throughout the rest of the building. In the main lobby there are carpets with rubber bottoms placed in front of the entrance door to dry off shoes before entering the lobby area. The carpet does not have a substantial change in level for the floor making it within ADA guidelines. I have noticed from past experiences that wearing wet shoes (in my case flip flops) with poor to no treads will cause you to slip and slide when the tile is wet. As for the carpet in the main library, this all seems to fall within the ADA guidelines as well, I was unable to check the thickness of the carpet, but it is a hard flat carpet, and no thickness is noticed. During an internship I was able to easily push a cart with 80 lbs. of rocks across the carpet of the library. I was even informed that over the summer months maintenance for the campus will go through the buildings and make sure that everything is in order and fix it promptly.

My one recommendation would be regarding how the tile in the front lobby is slippery when wet, but other than the carpets they have at the front to my knowledge there is no other way than changing the entire floor to a different material.

## **Drinking Fountains 4.15:**

There are a total of 8 drinking fountains in the library, 4 in the main lobby 2 on each floor of the lobby, and then 2 on the second and third floors. Each water fountain has 3 fountains, one at standing height on the left, a dedicated water bottle spout in the middle and hip height and a handicap accessible fountain on the right. All the units are wall mounted and have ample knee space as laid out in the ADA guidelines. I do not have any recommendation to improve the ADA compliance of the water fountains.

# **Reflection:**

The main thing that I found challenging was trying to choose the 10 elements to evaluate, in the ADA guide lines there are a lot of elements to pick from and I was trying to cover some of the most encountered and in use ones, and some that would mesh together such as parking leading to the main doors, or signage and check out counters, these are things that people will encounter right away. What I found easy was evaluating the elements, the ADA guidelines make it clear what should be what so in many cases it was easy to evaluate, one golden rule I notices was ADA likes things to be 36 in in width or height. Something I would do differently would be pick a library more out of compliance with ADA. The library at ECSU is very good at being accessible and is in touch often with the Disability Services who are involved a lot with the campus and making it assessable. I had a tough time trying to make recommendations for some of the elements and I tried to make at least one for each.

# **Reference:**

U.S. Access Board—Adaag 1991 2002. (n.d.). Retrieved May 17, 2023, from https://www.access-

board.gov/adaag-1991-2002.html