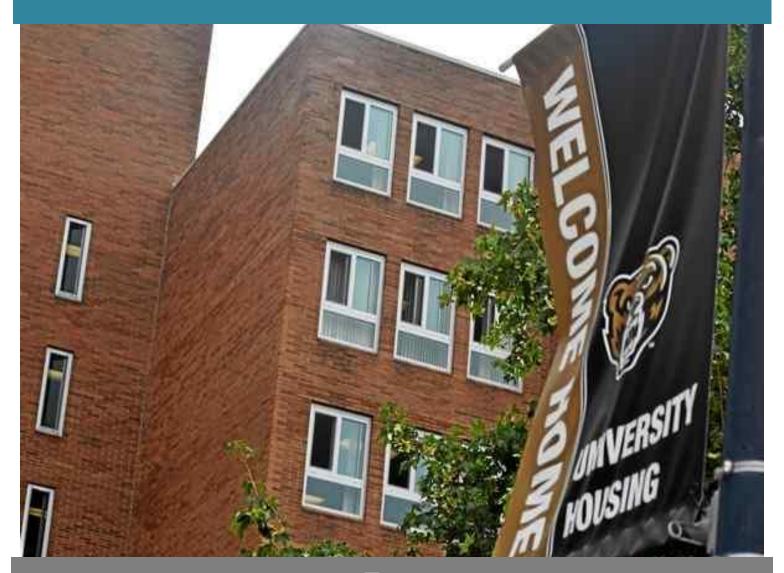
Assessing Accessibility in Oakland University Housing

A report on the accessibility of dining, desk, & nightwatch services



For:

James Zentmeyer, Director University Housing

Prepared by:
Michelle Leona Cecil, MPA Candidate
April 19th, 2018

Table of Contents

Executive Summary: Pages 1-2 Project Background: Page 3 **Research Question:** Page 3 **Definitions:** Pages 3-4 **Literature Review Legislation Overview:** Page 4 Why does it matter: Pages 4-5 Accessibility of services and best practices: Pages 5-7 Dining: Page 6 Nightwatch stations: Page 6 Front desks: Pages 6-7 Methodology **Interviews:** Page 7 **Evaluation Grid:** Page 8 What was found... Front desks: Pages 8- 10 Hamlin: Pages 8-9 **Housing Office:** Page 9 Vandenberg: Page 10 Oak View: Page 10 **Apartments:** Page 10 Nightwatch Stations: Pages 10- 13 Hamlin: Page 11 Vandenberg: Pages 11- 12 Oak View: Page 12 Van Wagoner: Page 12 Hill House: Pages 12-13 Vandenberg Dining Center: Page 13 Recommendations Front desks: Pages 14- 15 **Nightwatch stations:** Pages 15- 16 **Vandenberg Dining Center:** Page 17 **Other Housing Recommendations:** Pages 17- 18 **Concluding Thoughts:** Page 18 **References:** Pages 19- 23 **Appendix Interview Questions:** Pages 24- 25 **Evaluation Grid:** Pages 26- 29

Executive Summary

The Oakland University Housing department provides housing to approximately 2,800 students who attend the university. The addition of the new residence hall, Hillcrest, will increase the number of individuals residing on campus and using housing services to 3,500 in 2018-2019. The residence halls overseen by University Housing provide a variety of free services that can be used by residents on a daily basis. Some of the daily services provided by University Housing include dining, front desk services, and security in the form of nightwatch stations. While most of these services are compliant with the American Disabilities Act (ADA), there are many improvements that can be made to make these services more accessible for those with physical disabilities or mobility issues. The decision to analyze the three specific areas of dining, desk, and nightwatch was due to the fact that these services tend to be used on a daily manner by residents who live in the various halls. Since most residents interact with these services on a daily basis it is critical that they are designed to be accessible to all residents regardless of their ability to be mobile. While many of the residential dining, desk, and nightwatch services are ADA compliant undertaking a thorough analysis of these services will ensure the department is providing truly equitable and accessible services.

Methodology

To analyze the services, qualitative and quantitative research methods were used in the forms of interviews and the creation of a unique chart composed of questions to determine ADA compliance for each service area. Interviews were conducted with six different stakeholders to gain a holistic understanding of where the department is excelling and where there could be room for growth. Interviews were chosen as a method of analysis to get an idea of the perceptions that existed revolving around the services from various stakeholder groups. The other analytical method chosen was in the creation of a chart to analyze all thirteen-service areas using a consistent set of questions. These questions were composed using recommendations/ guidelines and rules that surround supporting students with mobility issues/ physical disabilities along with being ADA compliant. The use of this method allowed for a comparison of all service areas as well as a way to see if the service areas met accessibility standards.

Analysis

When looking at the front desk spaces present in the residence halls, there were several important notable findings. The first was in Oak View Hall, which in comparison with all of the other hall desks was the most accessible for those with mobility issues. However, the front desk in Oak View Hall was the lacking use of the universal symbol of accessibility on handicap door openers. The Vandenberg Hall front desk was the second-best desk regarding accessibility, however the portion of the front desk meant to be used for ADA services is covered in electronic equipment, making the services inaccessible to those with mobility issues. The Apartments front desk is at an accessible height, however the furniture in the waiting area is set up in a way that would be difficult to maneuver if one had a physical disability. In addition, this waiting area is full of bulky heavy furniture, not providing the space for someone in a wheelchair to wait if waiting was needed. The Hamlin front desk is at the maximum height for ADA compliance, making service access difficult for someone in a wheelchair. The housing main office front desk is at a height where not only could services not be accessed by someone in a wheelchair, but the individuals working the desk could not see someone in a wheelchair come in. Also, materials are frequently in the space surrounding the front desk, making navigating to offices difficult.

When it comes to the nightwatch stations there were several significant findings. Hamlin Hall's nightwatch station is composed of two desks of varying heights, the lower one being accessible. During nightwatch hours the ADA door opener works for exiting the building and the nightwatch station also has one to open the doors. However, to notify nightwatch that the ADA button needs to be used, one would have to open the door, rendering the button essentially useless. Van Wagoner nightwatch has an ADA button to exit the building but not to enter. Hill House nightwatch does not have an inside or outside ADA door opener and their station is at a height that no one in a wheelchair would be able to access. Vandenberg's Bear Lake nightwatch station is a bit too tall to be ADA compliant, but otherwise complies with the all the questions on the grid. The East Vandenberg nightwatch station has an ADA button to enter the buildings main doors, but not to enter the

second set of doors to reach the nightwatch station. The West Vandenberg nightwatch station has no ADA buttons, which makes accessing services in Vandenberg difficult.

While it was expected that there would be a variety of issues with the dining center only a few were discovered. One issue was the moveable tables in the dining areas can be too close together making it difficult to traverse the eating area to find seating. To access the Glassrooms, there is no way to prop the door open making it difficult to dine. Additionally, during peak dining hours the Chartwells staff who typically help folks in chairs acquire food are busy doing other tasks leaving folks to try and get food on their own.

Recommendations

Based on the analysis provided there are several recommendations for each of the service areas that should be considered to provide the best services possible for those living with physical disabilities/mobility issues. When looking at the entrances for the desk and nightwatch stations it is imperative that proper ADA buttons and openers be installed for entering and exiting the building. As mentioned in the analysis, there are several buildings where this is an issue, so providing these proper openers will allow all residents the ability to traverse all buildings. Express check out key boxes are placed strategically in several residence halls to allow for an expedited checkout at the end of the year. These boxes with slots are placed at a height that someone in a wheelchair would not be able to use this service. Therefore, it is essential that these key return boxes be moved to a more accessible height so that all students can use them.

Front Desks

There are many areas where front desks can be improved (including the main housing front office). The Hamlin desk can be outfitted with a shelf that either folds down or can be pulled out so that those in wheelchairs can access desk services such as signing for packages. Long term, the housing office should consider redesigning the reception desk so that it is not only at an accessible height, but there is also space for those with mobility aid devices to move more comfortably around the office. This will also ensure that the receptionists can see who is entering the space so that they can properly provide services. For smaller desk spaces, like the apartments office, waiting area furniture should become smaller and lighter so that the space can be rearranged to serve the needs of any guest that would arrive. The Vandenberg front desk, is one of the more accessible desks, however the ADA portion of their desk is covered in computer equipment. It is recommended that the equipment be moved to a different section of the desk so that way those needing to use the ADA section of the counter have access to do so.

Nightwatch Stations

For the nightwatch stations one of the largest and most prominent issues was the desks being too tall. Therefore, it is recommended that any future renovations or purchasing of new nightwatch stations be modeled after the station in Oak View Hall. Not only does Oak View Hall have a button they can press from their station to open the residential hallway, they also have a counter that is accessible to any student. The buildings that especially need an upgrade in this manner are Hill House and the Bear Lake station of Vandenberg. Additionally, the creation of small seating areas in the Small Halls nightwatch stations would be a long-term addition that would greatly benefit that residential community. For some individuals with mobility issues/physical disabilities, standing for shorter periods of time can be exhausting. Having optional seating would provide individuals a place to rest if waiting for a guest or completing a sign in.

Dining

Dining is another area where some improvements can be made. In the residential dining area, it is common for students to move tables. However, this student practice can be detrimental to the ability of those in assisted mobility devices to get around. Therefore, it is recommended that dining services consider a solution for helping students to know how to place tables in a manner where everyone can pass through. Additionally, Chartwells should consider a way to communicate services available to students that need additional assistance. This includes, information on how staff can help around the cafeteria as well as information on "sick meal" services, which are offered but not well publicized or used. Implementing these recommendations would greatly improve how housing is able to serve residents with mobility issues. The implementation of these recommendations in addition to understanding the impact of universal design will help to make Oakland University Housing a more accessible place for residents.

Project Background

Imagine being a resident in a college residence hall with a broken leg living on the 3rd floor of a building with an elevator that is out of maintenance for the weekend. Having a broken leg makes getting to the dining hall for the weekend to get food a daunting task, but the Oakland University Housing website provides information on receiving a sick meal. A seemingly useful service, the website directs residents to call the Residence Directors (RD), who have never been educated on how to help residents use this service. This story is very similar to one that was encountered by a student, except in their scenario it was not a broken leg, but rather a broken mobility device. This situation brought upon the realization that while Oakland University Housing is generally compliant with the American Disabilities Act (ADA) requirements for a university, there are daily services used by residents that could be improved to better support students with disabilities.

Oakland University Housing provides residential facilities for students of all abilities. However, when a student needs more than just an ADA compliant space University Housing relies on a close relationship with other departments on campus to provide the services a student need. The essential relationships with campus departments such as Disability Support Services, the Tutor Center, Dean of Students, and many others ensure that students have the resources they need to be successful. Oakland University has 800-900 students who are registered with Disability Support Services to receive accommodations. Of those, 62-100 residents specifically receive accommodations regarding their residency on campus. A resident with a disability (whether disclosed or not), will also interact with a variety of housing services daily.

There are services offered by Oakland University Housing that are used daily by most residents that live on campus. Some of the daily services used by residents daily include front desk services, dining services, and the overnight security stations known as nightwatch. Since these services are used almost daily it is critical that they are more than simply ADA compliant. Providing an inclusive environment where all students are able to equitably access services is critical for the college experience. A review of literature from the fields of public administration and higher education will provide necessary insight as to why an analysis of the accessibility of daily services provided by Oakland University Housing is important.

Literature on this topic will provide insight as to why an analysis the accessibility of daily services offered by housing is so critical and important. Conducting an analysis of these daily services through interviews, observations, and benchmarking comparisons with similar universities will bring to light areas where improvements may be made in regard to these services. Finally, recommendations for the short, medium, and long-term changes/ modifications will be provided to assist efforts of Oakland University Housing's efforts to best support all students.

Research Question

Using best practices from universities along with public administration theories and literature, what improvements can be made to the desk, dining, and nightwatch services to best support students with disabilities and health issues in Oakland University Housing?

Definitions

To understand the importance of this research it is of critical importance to define the terms of disability, physical disability, and accessibility.

Disability – Disability is more than just the impairment of certain aspects of a person. Some researchers argue that in fact disability is a social justice issue belonging in the world of multicultural theory. This view of disability focuses on the idea of a disability not being an impairment of the individual, but rather

the barriers society creates, which restrict those with disabilities.³ Theorists also believe that individuals with disabilities are a part of a, "a cultural minority group or a culturally oppressed category".⁴ Simply put, disability is the systematic creation of barriers that impede the ability of those that need additional assistance to live the same quality of life as those who are able bodied.

Physical Disability – A physical disability can best be defined as a disability that limits or impairs an individual's ability to be mobile, these barriers inhibit the person's ability to be active.⁵ Individuals living with a physical disability are at a disadvantage of accomplishing certain achievements like obtaining specific jobs, completing higher education, and living with lower income.⁶ Additionally, interviews with campus stakeholders revealed that individuals that are deaf or blind fall into this category as they will often face physical barriers associated with their impairment.⁷

Accessibility – Generically defined, accessibility is the ability for an individual to access space and services no matter their physical ability. From an institutional perspective accessibility is defined by how well an organization accommodates an individual's ability to be mobile in their space in regard to the American Disabilities Act (ADA) guidelines.⁸ When thinking of accessibility in regard to residential services it is important to have an understanding of how residents are able to access services.

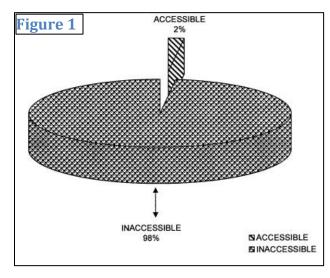
Literature Review

Legislation Overview

A variety of national legislation has been passed in the last 50 years that is critical to understand when supporting students with physical disabilities. There are two main pieces of legislation regarding supporting college students with disabilities that are critical to this research, the section 504 of the Rehabilitation Act of 1973 and the American Disabilities Act of 1990 and its subsequent amendments in 2008. Some of the accommodations that a student can ask for under section 504 of the Rehabilitation Act of 1973 and the American Disabilities Act (1990) include (1) removing physical barriers in buildings, (2) academic changes/ accommodations to help students get to the same level as their peers, and (3) access to equipment, staff, and university rule changes as needed to support student needs. Following these guidelines as well as going beyond them will make sure that all students will be able to access critical services. These legislative policies along with other considerations enhance the reasoning behind investigating why improvements should be made to housing services to support students with physical disabilities.

Why does it matter?

Higher education literature supports the idea that services should be offered in a manner that is inclusive to individuals with disabilities in university residential environments. In 2003 it was reported that there are three times as more students with disabilities in college today than there were in the past. ¹¹Additionally, 11% of national undergraduate students who attended a four-year college self-reported that they had a disability during their time in college. ¹² Supporting these students is important since students with disabilities are less likely to persist in college and graduate compared to other students who do not have disabilities. Higher education scholar Tinto (1975) explained that it is not only the history of a student that helps determine how



successful they will be in college, but the persistence of a college student is also derivative of "the academic and social systems of the college". A study conducted in 2000 of university campuses across the country reported that of the 137 campuses assessed only 2% of the "dorm living" spaces were accessible (see figure 1 above). Making sure that students with disabilities have a place where they can thrive while living on campus is critical, and that includes making sure that where they will live is accessible. 14

Living on campus provides tremendous benefits for college students including greater academic performance as well as the opportunity to get more involved on campus. ¹⁵ Due to the obstacles they face,

Category	Barriers
Faculty Perceptions	Lower expectations
	Past experiences
Fit of Advisors	Lack of knowledge
	Unresponsiveness
Stressors	Physical demand
	Mental and emotional struggle
	Social stigmatization
Quality of Support Services	Intimidations by personnel Figure 2

students with physical disabilities are less likely to live on campus, denying them the experiences that their peers without disabilities who get to live on campus. 16 The theory of student involvement along with other research shows that students do better when they feel they belong and the residence hall environment in college provides this experience.¹⁷ Once on campus however, students worry about the judgment they may face from their peers while enjoying their residential social experience. The struggle with peers along with the conflict of their self-identity adds to the stress of navigating college as a student with a disability. These issues are displayed in Figure 2 to the left, which displays some of the additional stressors college students with disabilities face. 18

A further issue encountered by students with disabilities is that of the stress encountered while living on campus. Stress encountered by this group of students (in addition to the stress faced by any college student) is increased by the fact that they live with a physical disability. Those living with a disability in college are more likely to become burdened by additional health issues due to the stressors that they encounter. In fact, many of the issues that these residents encounter are due to the fact that they may not have the ability to control the environment around them, especially in regards to their conditions, creating additional stress. ¹⁹ Furthermore, college students with disabilities may not have had the education of how to fund expenses related to their condition causing additional barriers to their self-care and additional stress on their lives. ²⁰ Tension can also be developed when students do not have the ability to get involved in activities because options are limited or nonexistent with their disability. ²¹ Due to the issues of stress and the living experience it is important to provide students with physical disabilities the same opportunities afforded to their peers.

Accessibility of Services and Best Practices

Out of the various services offered by Oakland University Housing there are three main services students most commonly use on a daily basis. These services are dining, nightwatch (overnight security desk), and front desk services. Accessibility for each of these services have unique factors that affect students with disabilities and have individualized best practices to be considered when reviewing Oakland University Housing services. Finding literature regarding these best practices however is difficult considering only 85 of 4,000 two and four-year universities in the country fit into an ideal realm of accessibility for students with physical disabilities.²² When considering the best practices for the three-service areas, there are some best practices that apply to all of these areas. One such practice is the application of universal design principles, which is best described as the creation of facilities that can be used by anyone despite their ability (or lack thereof) to be mobile.²³ An additional practice comes from a study explaining best practices for residential services including making sure the buttons are at the correct height for

wheelchairs, laundry rooms can be used by anyone, having accessible dining services, in addition to accessible residence hall rooms.²⁴

Dining

Current literature on dining services relating to physical accessibility is limited as most of the current literature focuses on dining services for students with food allergies. When considering where students on campus dine it is important to also consider the needs of those with mobility issues and disabilities. This means that students in wheel chairs should be able to navigate between tables, reach counter tops to serve themselves food, and enter the building where the food services are present. When it comes to recognizing the best practices of a university dining center research recommends looking at universities with inclusive campus partnerships, which have open dialogues regarding student services. A specific successful example of this was at the University of North Carolina where Residential Education and Disability Services worked together to create a place where students could openly come forward regarding their concerns about campus facilities. This has practice of campus communication and collaboration also entails not only including a variety of discussions with campus authorities but also student stakeholders who truly understand the scope of their needs.

Nightwatch

When considering the open entrances of buildings during the evening hours it is important to keep in mind which entrances will be the most accessible for all residents. Often times handicap accessible entrances are kept in areas out of the way of the main entrance, it is important that all main entrances are accessible to any party.²⁸ In fact, a guide to accessibility audits notes this issue and explained that many times campus administrators are not in tune with these students when choosing entrances and overlook the struggles a student with a disability may face.²⁹ These areas need to be wide enough for wheelchairs to navigate and for individuals in wheelchairs to also have the ability to use necessary buttons and ramps to get in.³⁰ The closest best practices that exist when thinking of the nightwatch stations at Oakland University are those in place for hotels. Similar to residence halls, during the day hotel guests can come and go as they please through the main entrance or through swiping into the side doors, and during the evening hours can only gain entrance into through the main doors for security purposes.³¹ While literature does not speak specifically to best practices regarding disabilities, it would be safe to say that safety plans that are in place should include a plan for evacuating those with disabilities. Additionally, following the front desk best practices will also provide viable solutions since the set up and purpose of both remain similar.

Front Desks

Front desks are often one of the first places a student, visitor, or guest will interact with when visiting a university residence hall. Since these entry points are used by building residents along with their friends/ family and guests, it is critical that they are as accessible as possible. Essentially, an accessible front desk is one that is at the appropriate height that an individual in a wheelchair could access the same services as a standing person. It also includes a knowledgeable desk staff who

Γ		Pre-Arrival	Arrival	During Stay	Departure								
- 1	[Focus on clear training and reinforcement of that	Empower front line	Empower front line staff	Encourage employees to present								
- 1		training for employees as well as an understanding	employees to make	members to make decisions	opportunities for improvement in the								
- 1		of the product offerings for guests with mobility	decisions that will satisfy	that will enhance the service	operation								
- 1		impairments	the needs of guests with	experience and satisfy guests'									
- 1			mobility impairments,	needs as they arise	Utilize customer satisfaction surveys								
ı	Managers	Adherence to the hotel's stated policies must be	including decisions about		to gauge the experience of guests								
- 1		demonstrated in the actions of management	policy modifications, or	Assist the front line staff	with mobility impairments								
- 1			assist the staff member in	member to make policy									
- 1		Require a test that each employee must pass after a	making this determination if	modification decisions that									
- 1		training seminar dedicated to guests with	necessary	comply with the ADA									
- 1		disabilities is an appropriate way to communicate											
- 1		the seriousness with which management views this											
		knowledge											
ΣU	re 3	Understand basic ADA requirements so that they	Recognize and anticipate	Offer assistance and then let	Share information, make								
-		are aware of the legal rights of guests with mobility	the needs of guests with	the guest decide whether they	recommendations, and provide								
- 1		impairments and recognize that the ADA takes	mobility impairments	want help	valuable feedback to management in								
- 1		priority over any county health department, state,			order to improve the service delivery								
- 1		or local laws	Understand that guests	Speak directly to the guest,	process								
- 1			with mobility impairments	rather than to their companion									
	mployees	Become familiar with all areas of hotel, including	want to be treated with		Bring forth recommendations for								
- 1		the hotel rooms, pool area, banquet areas, public	respect and dignity in a way		improvement in physical layout and								
- 1		areas, evacuation routes, the parking lot, in order	that focuses on them not		design so that reasonable								
- 1		to be able to recognize potential obstacles and	their disability		modifications can be considered								
- 1		provide better direction for guests with mobility											
- 1		impairments.			Be knowledgeable about the needs of								
- 1		Booklots and in our books at the toronto.			guests with mobility impairments								
- 1		Be able to explain any barriers that may be			during departure and be able to								
- 1		encountered at the specific hotel property at the			satisfy these needs when they arise								
- 1		time of booking.											
- 1		Guest makes the service provider aware of his/her		Guest may request modification	Guest makes the service provider								
- 1		needs.		of a policy or procedure or have	aware of his/her needs and may								
-	Guests			additional needs requiring staff	provide feedback about his/her								
- 1				assistance.	experience.								
- 1	All	Encourage and support open and honest communicat	ion at all levels of the organizat										
- [A"												
L		employee and the customer, and between management and the front line employee											

know how to best serve individuals with disabilities so that everyone has an equitable and inclusive experience as any other guest.³² When considering best practices for this service area it is best to once again reflect on the services of the hotel hospitality industry. The service industry has published a significant amount of literature that outlines the importance of providing in-depth training for staff on serving individuals with physical disabilities in order to understand how to best serve their needs. Figure 3 (above on the previous page) shows the hospitality model of how hotel front desks should serve guests with disabilities, particularly those with physical mobility issues.³³ Another recommended best practice for supporting students with mobility issues is to make sure that front desk staff is able to provide students with recommendations for support services on campus.³⁴

Methodology

In order to comprehend the accessibility of the desk, nightwatch, and dining services in University Housing a mix of qualitative and quantitative research was used. The decision to use a mix of both qualitative and quantitative research was the result of wanting to gather stakeholder insight through interviews from a variety of individuals and wanting to gather actual observations of each service area. Additionally, public administration text supports the "marriage" of these two research methods since using both methods provides a comprehensive evaluation of programs. Quantitative information was gathered through the use of a grid that held yes or no questions that were composed using ADA standards, recommendations, and best practices that were then used to evaluate each service area. The use of the grid created a method for services to be analyzed in an unbiased way while also allowing to see all of the services and how they measure up to the presented questions and other service areas in the department. The gathering of quantitative data was important as it provided the opportunity to gather actual observed data from which recommendations were made.

Qualitative information was gathered through the form of personal interviews with key campus and department stakeholders. Using personal interviews allowed for the gathering of key stakeholder perceptions on the three service areas along with other issues they felt may exist regarding accessibility challenges in University Housing. Gathering stakeholder input was essential to this analysis to not only determine where improvements could be made, but also the feasibility of recommendations, understanding the dynamics of various department relationships across campus, and the perceptions that currently exist regarding services.³⁶

Interviews

In person interviews were an essential in gathering information in determining the accessibility of housings desk, dining, and nightwatch services. In order to ensure that ethical standards were followed student stakeholders were not interviewed to avoid disclosing student health information. Six interviews were completed over a period of three months and ranged in length from fifteen to forty-five minutes. All six individuals interviewed were asked a series of the same questions followed by a set of unique questions for each person. These questions were made using a variety of resources to ensure that the interviews would produce useful information.³⁷ The questions that were asked can be found in the appendix as "Interview Questions" under Appendix Item 1. Interviews were conducted with the following campus leaders to ensure insight was gathered from a variety of perspectives:

- James Zentmeyer, Director University Housing
- Rebecca Wickham, Associate Director University Housing
- Christie Gough, Program Coordinator Disability Support Services
- Michael Wadsworth, Assistant Dean of Students
- Joesph Cieslik, Manager Residential Dining
- Lauryn Doussett, Program Co-Chair Residence Halls Association

Evaluation Grid

Having the ability to do an unbiased evaluation of the services was also essential in analyzing the housing service areas. To accomplish this, an evaluation grid was created in an effort to gather information regarding the accessibility of each service area. The created grid was composed of yes/ no questions which were made and compiled using recommendations, guidelines, and best practices from the Centre for Excellence in Universal Design (located in Ireland), the ADAchecklist.org website created by the New England ADA Center, and the U.S. Architectural and Transportation Barriers Compliance Board.³⁸ The evaluation questions were broken into the three category areas of desks, entrances, and dining with all of the services being evaluated in the categories of desks and entrances. If needed, comments were provided for services in order to note specific things or important observations regarding the service area. Desk and nightwatch services were evaluated in every residence hall (except the front desks in Van Wagoner and Hill House or nightwatch in the Apartments since they are nonexistent in those areas). Additionally, Fitzgerald Hall (closing after winter 2018) and Hillcrest Hall (opening fall 2018 and currently under construction) were not included in the analysis. In total, thirteen service areas were evaluated including all desk and nightwatch services in all residence halls (except new building) along with the department office reception area and the Vandenberg Dining Center. The complete grid is in the appendix as "Evaluation for the accessibility of services for those with physical/mobility challenges" under Appendix Item 2.

What Was Found...

In order to make sense of the analyzed data the analysis will be broken down by the specific service (desk, nightwatch, and dining) and then by building location of the service. The findings and information from the interviews and evaluation will be scattered throughout since the analysis will focus on the information of the area as opposed to the method in which it was gathered. Each service is analyzed by where it is located to ensure that there is in depth information as to what issues may be present. Additionally, throughout the analysis of each service, there will be information on how the analysis impacts stakeholders, diversity/ equity, ethics, and efficiency/ effectiveness of the services.

Front Desks

One of the core services offered and used by the residents of University Housing are the services offered at the various front desks. These services are available in most of the residence halls (with the exception of Van Wagoner and Hill House) and are open 8am- Midnight Monday- Friday and 10am-10pm for

Saturdays and Sundays. With services offered such as stamp purchasing, vending refunds, free toilet paper, vacuum check out, and package/ mail delivery the front desks are used fairly frequently by residents. Therefore, it is essential that the desks are not only ADA compliant, but that they truly are universally accessible. Several of the interviews highlighted an issue that has not yet occurred but could in the future regarding desk services and that is mailbox height. Mailboxes are set up differently in every building and due to this a resident may be in an ADA room, but their mailbox may be at a height that they cannot access. ³⁹ It is issues similar to this that will be discussed regarding the front desk in each residence hall.

<u>Hamlin Hall</u>- When one first approaches the Hamlin front desk, it appears rather tall and does not seem to be compliant with ADA standards, despite being renovated in the summer of 2017. Yet, upon further examination, one will discover



that in fact the desk is at the tallest height allotted by the standards set in the Americans with Disabilities Act. However, while compliant, the height of the desk would make it difficult for someone attempting to use the desk services if they were in a mobility aid device such as a wheelchair. In fact, the desk attendants must use a high-top chair themselves to reach the counter (see figure 4). For a student with a disability, the layout of this desk could make the process of signing for packages, being handed toilet paper, trying to purchase a stamp, or get change difficult. During the hours of 8pm - midnight an additional issue with the Hamlin desk becomes apparent. The main entrance to the building becomes locked for nightwatch hours, and therefore becomes difficult to enter if using a wheelchair. The discussion on this issue can be found in the analysis of the Hamlin nightwatch station.

<u>University Housing Department Office</u> - Located in Hamlin Hall (and pictured below), the housing office is used by residents from all buildings to seek assistance with a variety of issues regarding their housing experience. The entrance to the housing office is welcoming, however the presence of a high counter desk requires a guest be standing in order to be used (as captured in figure 5). Additionally, the height of the desk makes it difficult for workers to see if someone is entering the space, making it difficult to recognize and assist individuals with a disability coming in for a meeting, assistance, or to ask a question. The tall counter height on all sides of the desk also means that if a resident needed to sign any paperwork for a lockout or contract, they may have a difficult time if they are unable to reach the counter.



An additional issue present in the entry area of the housing office is mail and clutter. As the space where all the live-in professionals receive their personal mail along with other housing staff, the "mail area" can be overflowing at times (pictured in figure 6, boxes blocking the hallway to the back offices). When large boxes are received, or many packages are delivered at the same time, there is a tendency to stack them in a way that blocks the hallway to the office spaces in the back of the office. Therefore, students that may have a meeting with an assistant director may not have the ability to traverse to certain offices and may have a difficult time trying to squeeze past all of the mail. Finally, the key drop boxes (for which the housing office is responsible for) located in each residence hall are situated at heights and locations that are inaccessible to residents in wheelchairs.⁴¹ These key boxes have the slants to return keys on the top of the box and are at height that would be eye level for the average standing person. This can make express checkout for residents in wheelchairs an un-useable service that cannot be used, as they would not be able to reach the box to return their keys.

Vandenberg Hall - Similar to the Hamlin front desk, the Vandenberg front desk was renovated over the summer of 2017. This new renovation created a desk with an ADA cut out providing two varying heights so that someone could access the desk services if sitting or standing to ensure that those in a wheelchair could use desk services equitably. However, the ADA cut out is not truly being used in the manner it was intended as it currently is hosting a very large computer along with the package signature pad, taking up the majority of the desk space (pictured in figure 7). The obstruction of the ADA counter space limits the actual purpose for this service and makes it difficult for those in wheelchairs to access the services provided.



<u>Oak View Hall</u> - As the newest residence hall, one may assume that the desk services would be ADA compliant and have few to no issues. In this instance, those individuals would be correct. While the accessibility of the Oak View desk is far superior to the others, the restroom in that entry space (which is ADA accessible) is missing a coat hook at the level of an individual in a wheelchair. The primary issue that was found with the Oak View front desk was that of the entrances into the building. The detailed analysis of that issue can be read about in the analysis of Oak View Nightwatch.

Apartments Office - The apartment's office is located in a small stand-alone building in the middle of the

apartment's campus at Oakland University, lovingly referred to by residents as the "4000's" building. Entering the building can be confusing, with an entrance by the parking lot that has stairs along with a locked non-ADA opening door, or a front entrance the requires the opening of two non-ADA doors to get inside. However, the barriers to access services are not limited to the entrances. To access the mail area, again a resident must open an additional set of doors with no opener. If one had a meeting in the apartments office with the Residence Director (RD) or Graduate Residence Director (GRD) it is a bit easier to get in the additional door to the offices, but if an individual in a wheelchair may have an issue finding somewhere



to wait before their meeting. The furniture in the apartment's office desk is bulky, heavy, and takes up a large amount of space (pictured in figure 8). Additionally, if meeting with the GRD turning a chair to get in the office would be difficult as the space is small and filled with large furniture. Luckily, the actual desk that provides some of the services is a welcoming ADA height making it easily accessible to receive specific services.

Nightwatch Stations

When Oakland University was ranked the second safest university in the country, this did not come as a shock to the department of University Housing. During the hours of 8pm - 5am every night the residence halls (with the exception of the apartment buildings) enter nightwatch hours. During this time most of the entrances to the building lock down, requiring residents to enter through a specific designated station and "swipe in" using their OU ID and sign in any guests that they may have. Due to the location of some of these entrances, navigating the residence halls during nightwatch hours with a physical disability/mobility issue can be difficult. Therefore, the following analysis of the accessibility of the nighwatch

stations for each residence hall plays an important role in bringing to light some of the issues that exist with the nightwatch stations.

<u>Hamlin Hall</u> - The Hamlin nightwatch station has many glaring issues with its station that limit the



accessibility of the building to residents with physical disabilities/ mobility issues. Entering the building during nightwatch hours is one of the largest problems that exist regarding nightwatch accessibility in Hamlin. Several years ago, in the hopes of creating a more accessible environment, an ADA door opener was added to the north Hamlin entrance (by the nighwatch station) to ensure that residents who needed assistance with doors could enter and exit the building.⁴⁵ This button works for exiting the building during nightwatch hours but can still be problematic for entering the building as pressing the button outside the building does not open the doors. As a solution to this issue the nightwatch station was installed with a handicap opener across from their station so that workers could open the doors for students who need it (pictured in figure 9). However, for a student to get the attention of nighwatch to let them know they need the doors opened, they would have to physically open one of the doors to notify the employee, defeating the purpose of having this resource.

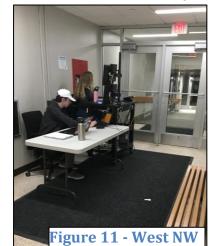
Vandenberg Hall – In Vandenberg Hall there are three nightwatch stations.

Bear Lake - Located on the first floor of Vandenberg Hall across from the Journalism department, this station is fairly accessible. There is ample space to navigate around the station and the ADA buttons are well placed for entering and exiting the building. This station is of similar height to the Hamlin desk, meaning it is just a bit too tall for individuals to comfortably receive services or hand over IDs. Other than this issue, this station does well regarding accessibility.

East - The East Vandenberg nightwatch station (pictured in figure 10) is located on the second floor facing Meadowbrook road. To enter the building to get to the station there is a well-placed ADA button to open the first set of doors to the building. However, after navigating the ramp up to the station,

there is no opener for the second set of doors adjacent to where the station sits. Additionally, there





is an absence of one if needing to exit the first set of doors to the building (similarly seen in figure 11). The East station is composed of two parts, one very tall desk where residents hand IDs over to swipe into the resident spaces and a short folding table for the worker signing in guests. The folding table is frequently placed in a way that blocks part of the entrance to the hallway which houses the elevator needed to get to the ADA spaces in Vandenberg located on the third floor, which can be seen if closely looking at figure 10.⁴⁶ Additionally, the taller station can make it difficult for residents in mobility devices to hand over IDs to swipe into the building.

West - The West Vandenberg nighwatch station is a mirror image of the East station with the exception of a few details regarding accessibility. The West Vandenberg station has no ADA buttons to enter or exit the building, meaning a

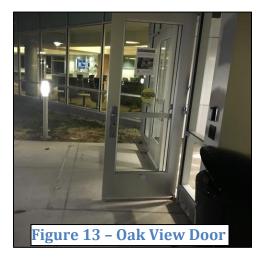
student would have to go to the Bear Lake station if they needed to access the resident spaces in West or wanted to attend a program in the Glassrooms after dining hours. Additionally, similar to East, there is no

method provided to open the second set of doors (pictured in figure 11) and the folding table will also occasionally cross over into the doorway that is used to access the elevator.

<u>Oak View Hall</u> - When analyzing the nighwatch station in Oak View Hall, the only issue that was found was the entrances to the building. The ADA buttons to enter Oak View are little black boxes that one waves their hand in front of to have the doors open (figure 12). However, many of these boxes inside and outside Oak View are missing the universal image of accessibility letting individuals entering the building aware that the black box is what they have to wave to have the doors open. Additionally, the door opener for main entrance at the top of the hill facing



Meadowbrook road is placed in an unfortunate spot. If one were to wave in front of the box, the door opens, and the user has to move around the door to get inside. By the time this is done the user risks the doors actually closing on them (figure 13). Despite the issues with the



entrances, the nightwatch station in this hall is a great example of a station that is universally accessible to all residents regardless of mobile abilities.

Van Wagoner Hall - Located between Hamlin Hall and Hill House, Van Wagoner Hall is one of

buildings that composes the "Small Halls" complex. To enter Van Wagoner during nightwatch one must cross a bridge entering on the third floor of the building. After crossing the bridge, there is no ADA button to assist with the opening of the rather old and heavy doors. The nightwatch station is similar to East/ West Vandenberg where it is a bit on the taller side, but there is an additional person at a fold out table performing guest sign ins (see figure 14). Therefore, while the taller station is not ideal for handing over an ID to enter the building, the folding table makes the services a bit more accessible. Those that may physically get exhausted after



Figure 14- Van Wagoner Hall Station

standing for long time periods are at a disadvantage in Van Wagoner as there are no benches or chairs to sit on while waiting to complete a guest sign in or for a pizza to arrive. Luckily, to exit the building an ADA button is present to assist those who may need it.

Hill House is the other building that is a part of the "Small Halls" complex and is located at



the top of the hill from Vandenberg Hall and to the right of Van Wagoner Hall. Similar to Van Wagoner, the entrance to the building is on the third floor of the building after crossing a bridge. There is no ADA button to enter the building, again leaving someone to swipe to unlock the door and then attempt to grab and open the door before it locks again. The Hill House nightwatch station is of an incredulous height, far taller than any of the other nightwatch stations in any other residence hall (figure 15). On the weekends, there is a folding table with an additional worker present; however, this is not always the case, which means that accessing the services in Hill

House can be problematic. Also similar to Van Wagoner, there are no benches or chairs to sit on if an

extended wait is required to complete services offered at the nighwatch station. Finally, unlike Van Wagoner, there is no ADA button to exit the building, making Hill House a great barrier to exit during nightwatch hours.

Residential Dining

Vandenberg Dining Center - Currently Vandenberg Dining center is the only option available for residents who wish to use their meal plan for meal periods (declining dollars can be used at other locations). This dining center provides an average of 2,000 meals a day Monday - Thursday and 700-1000 meals on the weekends and with nearly 2,000 residents having meal plans residents use this dining center fairly frequently. ⁴⁷ Yet even with the opening of Hill Crest Hall in the fall of 2018 providing new dining options, the Vandenberg Dining Center will remain the closest option for many residents wishing to dine close to home. One service that is provided to residents in the dining center is the provision of a sick meal if one is unable to make a trip to the dining center due to health issues, yet less than five students utilized this service last year.

The recent renovations to the dining center (completed over the previous two summers 2016 and 2017) has created a space that is more accessible to residents who may have mobility issues with lower counters, the removal of tray rails, and designing of larger pathways so that residents can easily traverse the areas. However, despite these renovations there are still some issues with accessibility in the dining center. One of the sitting areas popular with students is the Glassrooms adjacent to the main dining area, which can be accessed through a wall of glass doors. The doors to this room remain closed fairly consistently which can cause an issue if a student in a wheelchair wished to dine in there. This is problematic because they would have to navigate opening the door since there is no ADA button. Additionally, the space in the Glassrooms and main dining area are primarily tables that can be moved. Frequently students will move these tables, which may create smaller spaces to navigate between tables making the space difficult to navigate if in a wheelchair. While staff in the dining center are trained to offer help to those who may need it in gathering food and navigating the space, often times students in wheelchairs are seen navigating the space alone trying to balance food while also operating their chairs.

The analysis of the dining, desk, and nightwatch services through interviews and the use of an evaluation instrument brought to light many areas of success along with areas where accessibility may be an issue for those with physical disabilities/ mobility issues. This analysis yielded several areas where improvements can be made, so in an effort to support the department vision recommendations will be provided. The vision explains how the department will, "cultivate learning, personal well-being and social experiences that enhance student life on campus".⁵⁰

Recommendations

To assist the department in going beyond the minimum standards set by the American Disabilities Act (ADA) and to help further support the department mission, vision, and values (Figure 16) there are changes that can be made to support students with physical disabilities in University Housing. Implementing the recommendations below will show the departments support for students with mobility issues and assist in facilitating a feeling of importance and belonging at

UNIVERSITY HOUSING MISSION STATEMENT

Figure 16

Oakland University Housing vision

University Housing will be recognized as an integral part of the university, in which academics and residential living work together to cultivate learning, personal well-being and social experiences that enhance student life on campus.

Oakland University Housing mission

The mission of University Housing is to provide a safe living and learning experience that promotes a sense of community, civic responsibility and an appreciation for individual differences.

Oakland University Housing core values

In order to cultivate learning, personal well-being and social experiences, University Housing subscribes to the following core values: academic achievement; ethical conduct; civility/citizenship; financial responsibility; personal wellness; and multicultural understanding. Oakland University with these students.⁵¹ The recommendations to assist the department are provided in order by service area and then by short (before fall 2018 move in), mid (before fall 2019 move in), and long (in the next five years) term recommendations for the various service locations. In consideration of the department opening a new residence hall in the fall 2018 semester and the increased costs associated with that opening, some of the recommendations provided below are given longer recommended timelines to assist in limiting additional high costs to the department this year.

Front Desks

When considering the interactions students have with the front desks and the services they provide, implementing these recommendations will assist in truly making students feel at home and welcomed.

Short term recommendations (to be implemented before move in fall 2018)-

Install coat hooks in ADA public restrooms - In Oak View Hall to assist in the facet of the department vision of enhancing student life, lower coat hooks should be installed in the public restrooms to allow guests to place their belongings when using the facility. The cost of this change can be less than \$20 per restroom but will allow the user more flexibility in their time in the restroom and will also help in keeping their belongings clean helping them to stay healthy.

Move the Vandenberg desk computer - At the Vandenberg Hall front desk, the most prominent issue was the placement of the computer equipment on the only ADA counter space present. To ensure that the desk space follows the guidelines outlined in the evaluation instrument created for this project, it is recommended that the computer is moved to the right side of the desk behind the taller part of the counter ensuring those who need it can use the counter space.⁵²

Lower express checkout key boxes - To help residents meet the housing value of being a responsible citizen in housing it is recommended that the key boxes be lowered in height. This will allow all residents (of any ability) to follow housing procedures and complete a proper checkout at the end of the year creating an equitable move out experience and along with responsible residents.⁵³ Moving these boxes will be a low-cost impact on the department as it requires moving the existing boxes to a lower, more accessible height, and then repainting where the former box sat.

A new place for packages - In the housing office the placement of packages can be a barrier to individuals attempting to access the back offices for meetings. The essence of this issue is that of complying with ADA guidelines and not providing the space that is required for a wheelchair to navigate hallways.⁵⁴ Therefore, it is recommended that a new location for staff packages be identified and used so that individuals with mobility issues can easily access the back-office spaces. A few possible places where these packages can be stored include the empty desk next to the housing receptionists or the desk across from the staff mailboxes that is infrequently used.

Mid-term recommendations (to be implemented before move in fall 2019) -

The analysis of the front desk services helped bring to light some issues, which can be corrected in the mid-term to help improve the experience of those with physical disabilities in University Housing.

A drawer/ table added to the Hamlin desk - Despite being renovated in the summer of 2017, the Hamlin desk remained at a height that makes it difficult for those in wheelchairs to obtain services. Using the best practices outlined in the ADA checklist while also helping with the University Housing vision of enhancing student life, it is recommended that an accessible added shelf be added to the Hamlin desk.⁵⁵ A simple online search of "folding ADA shelf" brings up many results for inexpensive easy installation shelves that can be added to the desk so that anyone can access the Hamlin desk services. An additional option would be to create a shelf/ drawer that can be created behind the desk and pulled out on the user's side providing access to services, without ruining the outer aesthetic of the new desk with a shelf. While

this option would be costlier (as the desk would require a minor renovation) it would be more user and aesthetic friendly.

New furniture in the apartments - In the Apartments office the glaring issue that was present was the bulky furniture that did not provide the space for someone in a wheelchair to wait. Since the residence halls are intended to create a feeling of belonging, no matter the space/ location it is important that this space is arranged to fit the needs of any visitor. ⁵⁶ Therefore, it is recommended that this smaller office obtain furniture that can be either easily moved or has space provided for an individual in a wheelchair to wait. This furniture can be obtained for a low cost on campus through the university furniture storage or new furniture can be purchased. Making this a mid-term recommendation provides time for finding the funding needed to make this change.

<u>Long-term recommendations</u> (to be implemented in the next five years)

Department office welcome desk redesign - As the central location for the University Housing department and as the location where residents frequent to get assistance, have meetings with upper-level staff, or learn more about their housing experience it is critical that this space is welcoming to all visitors. As discussed in the analysis, the Housing Office front desk is at a height where neither the visitor nor the workers are able to see each other when they enter the office if a wheelchair. While the benefit of this tall counter makes sense for those completing paperwork, it leaves those with physical disabilities at a disadvantage, as they cannot reach the counter. The recommendation here is to remove the tall counter on the welcome desk so that the side that faces the main doors becomes an open desk. This will allow the workers to see those coming in and allow those with accessibility issues to access services.⁵⁷ Additionally, the removal of that side and the keeping of the higher counter will also allow those standing to use services comfortably as well, while also protecting confidential information on the desks of the reception workers. Implementing this recommendation will make the main office a more accessible and friendly space while also assisting the department in following the portion of the housing mission of appreciating individual differences.⁵⁸

Nightwatch Stations

As the only entrances into the residence halls between 8pm and 5am, it is unlikely that residents will never interact with these stations. Even during evening events or if residents want to get a late-night meal, they have to check in to the nightwatch station. In order for residents to be social or active during nightwatch hours it is important that all stations and entrances are accessible by everyone. In fact, in not providing accessible stations there is a risk of those with mobility issues not attending programs, visiting friends, or participating in other activities. This may come as a result of the fear of social judgment from peers due to the issues of accessing the building or not being able to do the same things as their peers. The following recommended changes/ improvements would assist in diminishing of the ability to not access buildings and provide more welcoming and inclusive entrances to the residence halls.

Short-term recommendations (to be implemented before move in fall 2018)-

There are several areas regarding the various nightwatch stations where short-term changes can be made to increase accessibility.

A doorbell for Hamlin nightwatch - In Hamlin Hall one of the concerning issues that was discussed in the analysis was the operation of the ADA doors during nightwatch hours and not having the ability to notify the nightwatch workers that the doors need to be opened. This is an important issue to resolve as any student should have the ability to attend college independently and have the ability to enter the building using the resources already in place (such as the installation of the ADA button at the nighwatch station).⁶⁰ Additionally, solving this issue will help assist in the housing mission of providing a safe living experience. The recommended solution for this issue is to create a doorbell/ buzzer outside the nightwatch entrance that can be pressed to notify nightwatch to open the ADA doors. While this may be a bit costly

for a short-term recommendation, it is an important one so that all residents can access Hamlin after hours.

Universal access stickers on Oak View door openers - While Oak View's nighwatch station was an ideal example of an accessible station, the doors to enter the building were an issue identified in the analysis. In order to comply with accessibility standards, it is important that any ADA door opener have the universal access symbol present.⁶¹ Therefore, it is recommended that new stickers be placed by all ADA door openers in Oak View so that individuals understand accessing the door opening service.

New small station tables in Vandenberg - At the East Vandenberg nightwatch station one of the issues identified was that of the lower station table intruding into the entryway of the residential hallway that hosts the elevator. For those in a wheelchair, the literature explains that not being able to control an environment where accessibility challenges exist can be discouraging and cause increased stress. 62 Additionally, it is small issues similar to this that make some individuals with disabilities feel as though administrators do not understand their needs since they are often not included in the design process. 63 Through purchasing a smaller folding table for the lower station table, the obstruction to the elevator hallway is removed, assisting in meeting the housing core value of personal wellbeing and creating a sense of community.

Mid-term recommendations (to be implemented before move in fall 2019) -

Addition of benches/ seating in Van Wagoner and Hill House - In Van Wagoner and Hill House, the lack of seating available can be burdensome for those waiting by the station to complete various services if they can only stand for short periods of time. According to interviews data, this can be an issue for some residents or their guests and the lack of seating can potentially be a negative impact on someone's health.⁶⁴ In order to help facilitate a sense of community and provide a space where individuals can wait in the entrances of these buildings it is recommended that benches be added in the general area of these stations. The cost adding these benches may be higher than other recommendations, which is why it is being placed as a mid-term recommendation.

Nightwatch station height - At the Hill House and Vandenberg Bear Lake stations, the height of the stations makes accessing services difficult. The tall height of these stations connects with individuals with disabilities and how they feel that sometimes decisions made by administrators are out of tune with the needs of those with disabilities.⁶⁵ Therefore, it is important that these desks be replaced with ones that are lower in height so that all can access the nightwatch services. Making this change will further help in following the housing mission of creating a sense of community.

Long term recommendations (to be implemented in the next five years)

Door pillar ADA buttons for Oak View Hall - Sometimes, issues do not become apparent until someone else brings the issue to the attention of key stakeholders. This is the case of the Oak View Hall ADA button for the doors at the top of the hill facing Meadowbrook road. Due to its location, after pressing the door opener one has to navigate around the swing of the open door to go through it risking the door closing before one can get through it. This is another example of a design that potentially did not consider the user in mind when it was installed. It is recommended that long term, an ADA button pillar be added for these doors (similar to the ones outside Vandenberg Hall) so that those who need to use the opener do not have to navigate around the swing of the door to enter the building. A potential reason that may be given to avoid the creation of these pillars is the cost of deferred maintenance. However, planning accordingly in the budget for this change will make this change feasible in the next five years. Additionally, this change would assist in following the housing vision of personal wellbeing and social experiences.

Vandenberg Dining Center

Since undergoing renovations during the summers of 2016 and 2017 the accessibility of the Vandenberg Dining Center has greatly improved. While the accessibility of this service has improved there are still some ways that the Vandenberg Dining Center can improve to better serve the housing mission of creating a sense of community and increasing accessibility.

Short-term recommendations (to be implemented before move in fall 2018)-

Promotion of sick meal service - One great service that is offered by the dining center is that of sick meals, but as mentioned in the analysis is one that is not used by students. Through assisting in the marketing of this service on the University Housing website and ensuring all Chartwells staff members are trained on this service there is a greater chance that residents will utilize this service. By helping promote this service provided by Chartwells housing can further promote their vision of personal well-being and social experiences.

Table Charts - In the dining area residents will frequently move tables to make a space that best fits their needs based on their dining group size. However, when residents leave they frequently do not put the tables back in their original location which makes navigating the dining spaces difficult if in a wheelchair. Literature on this topic explains that dining areas must have a certain amount of space between tables to allow individuals in wheelchairs to navigate.⁶⁷ To assist in this Chartwells staff should be trained on how much space is needed between tables and helping staff understand the impact of the tables being too close.

Collaborative department trainings - Balancing navigating a space in a wheelchair, grabbing food, and carrying that food can be difficult, yet is a frequent sight in the Vandenberg Dining Center. While staff are trained to help assist individuals in wheelchairs, crutches, or others needing assistance often times these individuals are seen attempting to balance this on their own. Service industry literature supports that specific training on supporting individuals with disabilities helps to create a more positive experience for the guest. Additional literature explains that campus collaboration between departments helps enforce the importance of training that is provided.⁶⁸ Providing a training with a collaboration of the department of Disability Support Services and the Chartwells staff will help provide a better sense of community but also help train staff on supporting individuals with disabilities.

Mid-term recommendations (to be implemented before move in fall 2019)

Entry button to Glassrooms - The other issue discussed in the analysis regarding the Vandenberg Dining Center was that of the doors to the Glassrooms. The Glassroom doors do not have a door opener and are frequently closed during peak dining hours. Dining in the Glassrooms can be difficult for a student in a wheelchair if the doors are not open while they are there because they may fear being judged by others since they cannot get to that specific dining area. ⁶⁹ Through installing an ADA button or a way to bolt the door open during the dining hall operation hours, students will be able to easily decide where to dine without worrying how to get in.

Other Housing Recommendations

There were additional issues that came to light through the analysis of the evaluation and interview data that do not fit into any category above but should be discussed along with associated recommendations. These areas include the installation of proper door openers for exits and entries at nightwatch entrances and future construction projects.

<u>Long-term recommendations</u> (to be implemented in the next five years)

ADA Button Installation- The first recommendation is ensuring that proper ADA buttons are installed for entering and exiting the doors closest to the nightwatch stations. Student involvement theory states that students are more successful if they are involved, yet it is difficult to be involved if entering the building

is an obstacle.⁷⁰ To increase the ability for those with mobility issues to enter the residence halls it is recommended the ADA buttons are installed at the entrances and exits of the following buildings: Van Wagoner Hall (only outside), Hill House (inside and outside buttons needed), Vandenberg Hall East station (needed for leaving the main doors along with entering and exiting the second doors), and Vandenberg Hall West station (needed for entering and exiting the main doors and entering and exiting the second set of doors). The installation of ADA buttons helps further support the housing vision of providing a safe environment and a sense of community.

Stakeholder Input- The last long-term consideration regards future construction projects. When building a new residence hall typically only the design firm, facilities manager, Assistant Director for Housing, and Disability Support Services are consulted, no students.⁷¹ For future projects it is recommended that housing receive feedback from student stakeholders to hear about how designs may impact them. Finally, it is further recommended that new buildings or renovations use the concepts of universal design to create spaces that are accessible to anyone.⁷² Implementing these recommendations will help ensure that all residents feel welcome in all housing facilities along with creating a more inclusive space for all of housing.

Concluding Thoughts

Limitations

While conducting this research there were two major limitations in completing a thorough analysis of the three housing service areas. Due to construction not yet completed on the new residence hall, Hill Crest Hall, an analysis of the service areas for this building could not be done. Secondly, literature on the topic of physical disabilities and the impact in higher education is limited as most of the current research in the fields of higher education and public administration have a focus on the topic of mental illness and learning disabilities.⁷³ The lack of research on this topic made it difficult to find best practices in the field along with how recommendations could be connected to current literature.

Future Research

Moving forward there are some areas of future research and issues of concern that should be considered by University Housing. With the focus in University Housing on student success one area the department should consider doing further research on is how to support those with learning disabilities, mental health issues, and invisible illnesses. Investigating these areas of student support will likely identify further areas where improvements can be made. An additional area University Housing may want to conduct further research is on engaging students when the new residence hall, Hill Crest, opens in the fall of 2018. The Residence Halls Association has already started taking steps in anticipation of this problem by rotating their meeting location on a weekly basis to further engage students across campus.⁷⁴ Following the example of the Residence Halls Association in programming and other areas will assist in engaging students of all abilities and ensure that the resources of the department are being used in a proper manner.

Conclusion

The use of best practices from other universities along with public administration and higher education literature as a guide assisted in the analysis and recommendations of the dining, desk, and nightwatch services in Oakland University Housing regarding accessibility for those with physical disabilities. The analysis of the three service areas discovered many areas where University Housing can make changes to better support students who may have mobility issues or physical disabilities. As a result of the analysis many recommendations were provided on the updating of several desk, dining, and nightwatch services for the short, mid, and long-term periods. Through the implementation of the provided recommendations the department will be able to support students with physical disabilities in the most supportive manner possible.

References

- ¹ Gough, C. (2018, February 12). Program Coordinator Disability Support Services Capstone Interview [Personal interview].
- ² Wickham, R. (2018, February 14). Associate Director of Housing Capstone Interview [Personal interview].
- ³ Anastasiou, D., Kauffman, J. M., & Michail, D. (2014). Disability in Multicultural Theory. *Journal of Disability Policy Studies*, 27(1), 3-12. doi:10.1177/1044207314558595
- Miskovic, M., & Gabel, S. L. (2012). When numbers don't add up and words can't explain: Challenges in defining disability in higher education. *International Journal of Multiple Research Approaches*, 6(3), 233-244.
- ⁴ ibid
- Anastasiou, D., Kauffman, J. M., & Michail, D. (2014). Disability in Multicultural Theory. *Journal of Disability Policy Studies*, 27(1), 3-12. doi:10.1177/1044207314558595
- ⁵ Cooper, L. M. Disability as diversity: Assessing the perceptions of students with physical disabilities regarding access and equal opportunity in postsecondary education Available from ERIC. (1373093002; ED543086).
- ⁶ Hedrick, B., Stumbo, N., Nordstrom, D., & Morill, J. (2012). Personal Assistant Support for Students with Severe Physical Disabilities in Postsecondary Education . *Journal of Postsecondary Education and Disability*, 25(3), 161-176.
- ⁷ Gough, C. (2018, February 12). Program Coordinator Disability Support Services Capstone Interview [Personal interview].
- ⁸ ibid
- ⁹ ibid
- ¹⁰ Kennedy, M. (2008). Universal design takes the concept of accessible facilities to a higher level. *American School & University*, 80(9), 16.
- ¹¹ Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. Journal of College Student Development 56(3), 209-226. The Johns Hopkins University Press. Retrieved January 28, 2018, from Project MUSE database.
- ¹² O'Neill, L., & French, J. (2012). Predictors of Graduation Among College Students with Disabilities . *Journal of Postsecondary Education and Disability*, 21(1), 21-36.
- Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. Journal of College Student Development 56(3), 209-226. The Johns Hopkins University Press. Retrieved January 28, 2018, from Project MUSE database.
- Miskovic, M., & Gabel, S. L. (2012). When numbers don't add up and words can't explain: Challenges in defining disability in higher education. *International Journal of Multiple Research Approaches*, 6(3), 233-244.
- ¹³ Singh, D. (2000, November). *Transition to Post-Secondary Environments*[Paper presented at the New York State Council for Exceptional Children Convention]. Niagra Falls.
- ¹⁴ Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the united states. *Rehabilitation Counseling Bulletin*, *54*(2), 93-105.
- ¹⁵ Turley, R. N., & Wodtke, G. (2010). College Residence and Academic Performance: Who Benefits From Living on Campus? *Urban Education*, 45(4), 506-532. doi:10.1177/0042085910372351
- Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. Journal of College Student Development 56(3), 209-226. The Johns Hopkins University Press. Retrieved January 28, 2018, from Project MUSE database.
- ¹⁷ Samura, M. (2016). How can residence hall spaces facilitate student belonging? Examining students' experiences to inform campus planning and programs. *Planning for Higher Education*, *44*(4), 90+.

¹⁸ Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. Journal of College Student Development 56(3), 209-226. The Johns Hopkins University Press. Retrieved January 28, 2018, from Project MUSE database.

¹⁹ Dusselier, L., Dunn, B., & Wang, Y. (2005). Personal, Health, Academic, and Environmental Predictors of Stress for Residence Hall Students. *Journal Of American College Health*, 54(1), 15-24.

- ²⁰ Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the united states. *Rehabilitation Counseling Bulletin*, *54*(2), 93-105.
- ²¹ Devine, M. A. (2013). Group member or outsider: Perceptions of undergraduates with disabilities on leisure time physical activity. *Journal of Postsecondary Education and Disability*, 26(2), 119-133.
- ²² Tiedemann, C. W. (2008). Finding america's most disability-friendly colleges. *Exceptional Parent*, 38(9), 28-30.
- ²³Kennedy, M. (2008). Universal design takes the concept of accessible facilities to a higher level. *American School & University*, 80(9), 16.
- Kennedy, M. (2003). Accessibility. American School & University, 76(2), 18.
- ²⁴ Cooper, L. M. Disability as diversity: Assessing the perceptions of students with physical disabilities regarding access and equal opportunity in postsecondary education Available from ERIC. (1373093002; ED543086).
- ²⁵ Self-Examination: How Accessible Is Your Campus? (n.d.). Retrieved January 28, 2018, from https://www.washington.edu/doit/self-examination-how-accessible-your-campus
- ²⁶ Bryan, A., & Myers, K. (2006, September). Students with disabilities: doing what's right.
- ²⁷ Huger, M. S. (2011). Fostering a disability-friendly institutional climate. *New Directions for Student Services*, 2011(134), 3-11. doi:10.1002/ss.390
- ²⁸ Adams, R. (2011, November 11). Bring Down the Barriers--Seen and Unseen. *Chronicle of Higher Education*. p. A80.
- ²⁹ Catlin, J., Bowen, I., & Babbitt, E. (2010). Surviving An Ada Accessibility Audit: Best Practices For Policy Development And Compliance. *The National Association of College and University Attorneys*.
- ³⁰ Self-Examination: How Accessible Is Your Campus? (n.d.). Retrieved January 23, 2018, from https://www.washington.edu/doit/self-examination-how-accessible-your-campus
- US Department of Justice. (2001). ADA Checklist for New Lodging Facilities . Retrieved January 20, 2018, from https://www.ada.gov/hsurvey.htm#anchor683877
- ³¹ Ronan, T. O. (1993, August). The hospitality of hotel security. Security Management, 37(8), 38+.
- ³² Grady, J., & Ohlin, J. B. (2009). Equal access to hospitality services for guests with mobility impairments under the Americans with Disabilities Act: Implications for the hospitality industry. *International Journal of Hospitality Management*, 28(1), 161-169. doi:10.1016/j.ijhm.2008.06.013
- 33 ibid
- ³⁴ Dusselier, L., Dunn, B., & Wang, Y. (2005). Personal, Health, Academic, and Environmental Predictors of Stress for Residence Hall Students. *Journal Of American College Health*, 54(1), 15-24.
- ³⁵ Posavac, E. J. (2011). *Program evaluation: methods and case studies*(8th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- ³⁶ Garnett, J. (n.d.). Administrative communication (or how to make all the rest work): The concept of its professional centrality. In *Public administration: Concepts and cases*(9th ed., pp. 242-257). Boston, MA: Houghton Mifflin.
- ³⁷ Stolz, S. M. (2010). *Disability trajectories: Disabled youths' identity development, negotiation of experience and expectation, and sense of agency during transition* (Order No. 3403098). Available from ProQuest Dissertations & Theses Global. (305188250).

- ³⁸ U.S. Architectural and Transportation Barriers Compliance Board (Access Board). (2002). Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities. Washington, D.C.: Office of the Federal Register, National Archives and Records Services, General Services Administration. Retrieved March 11, 2018, from https://www.accessboard.gov/attachments/article/1350/adaag.pdf
- New England ADA Center. (2016). *ADA Checklist for Existing Facilities*. Retrieved March 10, 2018, from https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf
- Ireland, National Disability Authority, Centre for Excellence in Universal Design. (2014). *Building for Everyone: A Universal Design Approach- Entrances and horizontal circulation*. Retrieved March 10, 2018, from http://universaldesign.ie/BuiltEnvironment/Building-for-Everyone/2-Entrances%20and%20Horizontal%20Circulation.pdf
- Ireland, National Disability Authority, Centre for Excellence in Universal Design. (2014). *Building for Everyone: A Universal Design Approach- Facilities in Buildings*. Retrieved March 10, 2018, from http://universaldesign.ie/Built-Environment/Building-for-Everyone/6-Facilities.pdf
- ³⁹ Wickham, R. (2018, February 14). Associate Director of Housing Capstone Interview [Personal interview].
- Gough, C. (2018, February 12). Program Coordinator Disability Support Services Capstone Interview [Personal interview].
- ⁴⁰ Wickham, R. (2018, February 14). Associate Director of Housing Capstone Interview [Personal interview].
- ⁴¹ ibid
- ⁴² ibid
- ⁴³ Safest College Campuses in America, 2018 | National Council For Home Safety and Security. (2018, February). Retrieved March 01, 2018, from https://www.alarms.org/safest-college-campuses-in-america-2018/
- ⁴⁴ Gough, C. (2018, February 12). Program Coordinator Disability Support Services Capstone Interview [Personal interview].
- ⁴⁵ Zentmeyer, J. (2018, February 14). Director of Housing Capstone Interview [Personal interview].
- ⁴⁶ Wickham, R. (2018, February 14). Associate Director of Housing Capstone Interview [Personal interview].
- ⁴⁷ Cieslik, J. (2018, February 14). Residential Dining Manager Capstone Interview [Personal interview].
- 48 ibid
- 49 ibid
- ⁵⁰ University Housing Student Handbook[PDF]. (2017, August). Rochester: Oakland University Housing.
- ⁵¹ Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the united states. *Rehabilitation Counseling Bulletin*, *54*(2), 93-105.
- ⁵² Ireland, National Disability Authority, Centre for Excellence in Universal Design. (2014). Building for Everyone: A Universal Design Approach- Entrances and horizontal circulation. Retrieved March 10, 2018, from http://universaldesign.ie/Built-Environment/Building-for-Everyone/2-Entrances% 20and% 20Horizontal% 20Circulation.pdf
- ⁵³ Cooper, L. M. Disability as diversity: Assessing the perceptions of students with physical disabilities regarding access and equal opportunity in postsecondary education Available from ERIC. (1373093002; ED543086).
- ⁵⁴ New England ADA Center. (2016). *ADA Checklist for Existing Facilities*. Retrieved March 10, 2018, from https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf
- 55 ibid
- ⁵⁶ Samura, M. (2016). How can residence hall spaces facilitate student belonging? Examining students' experiences to inform campus planning and programs. *Planning for Higher Education*, 44(4), 901
- ⁵⁷ Grady, J., & Ohlin, J. B. (2009). Equal access to hospitality services for guests with mobility

- impairments under the Americans with Disabilities Act: Implications for the hospitality industry. *International Journal of Hospitality Management*, 28(1), 161-169. doi:10.1016/j.ijhm.2008.06.013
- ⁵⁸ University Housing Student Handbook[PDF]. (2017, August). Rochester: Oakland University Housing.
- ⁵⁹ Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. Journal of College Student Development 56(3), 209-226. The Johns Hopkins University Press. Retrieved January 28, 2018, from Project MUSE database.
- Devine, M. A. (2013). Group member or outsider: Perceptions of undergraduates with disabilities on leisure time physical activity. *Journal of Postsecondary Education and Disability*, 26(2), 119-133.
- ⁶⁰ Dusselier, L., Dunn, B., & Wang, Y. (2005). Personal, Health, Academic, and Environmental Predictors of Stress for Residence Hall Students. *Journal Of American College Health*, 54(1), 15-24.
- Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the united states. *Rehabilitation Counseling Bulletin*, *54*(2), 93-105.
- ⁶¹ Ireland, National Disability Authority, Centre for Excellence in Universal Design. (2014). Building for Everyone: A Universal Design Approach- Entrances and horizontal circulation. Retrieved March 10, 2018, from http://universaldesign.ie/Built-Environment/Building-for-Everyone/2-Entrances% 20and% 20Horizontal% 20Circulation.pdf
- ⁶² Dusselier, L., Dunn, B., & Wang, Y. (2005). Personal, Health, Academic, and Environmental Predictors of Stress for Residence Hall Students. *Journal Of American College Health*, 54(1), 15-24.
- ⁶³ Adams, R. (2011, November 11). Bring Down the Barriers--Seen and Unseen. *Chronicle of Higher Education*. p. A80.
- ⁶⁴Wickham, R. (2018, February 14). Associate Director of Housing Capstone Interview [Personal interview].
- Gough, C. (2018, February 12). Program Coordinator Disability Support Services Capstone Interview [Personal interview].
- ⁶⁵ Adams, R. (2011, November 11). Bring Down the Barriers--Seen and Unseen. *Chronicle of Higher Education*. p. A80.
- 66 ibid
- ⁶⁷ New England ADA Center. (2016). *ADA Checklist for Existing Facilities*. Retrieved March 10, 2018, from https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf
- ⁶⁸ Grady, J., & Ohlin, J. B. (2009). Equal access to hospitality services for guests with mobility impairments under the Americans with Disabilities Act: Implications for the hospitality industry. *International Journal of Hospitality Management*, 28(1), 161-169. doi:10.1016/j.ijhm.2008.06.013
- ⁶⁹ Hong, B. S. S. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. Journal of College Student Development 56(3), 209-226. The Johns Hopkins University Press. Retrieved January 28, 2018, from Project MUSE database.
- ⁷⁰ Turley, R. N., & Wodtke, G. (2010). College Residence and Academic Performance: Who Benefits From Living on Campus? *Urban Education*, *45*(4), 506-532. doi:10.1177/0042085910372351
- ⁷¹ Wickham, R. (2018, February 14). Associate Director of Housing Capstone Interview [Personal interview].
- Gough, C. (2018, February 12). Program Coordinator Disability Support Services Capstone Interview [Personal interview].
- Zentmeyer, J. (2018, February 14). Director of Housing Capstone Interview [Personal interview].
- ⁷² Kennedy, M. (2008). Universal design takes the concept of accessible facilities to a higher level. *American School & University*, 80(9), 16.
- Samura, M. (2016). How can residence hall spaces facilitate student belonging? Examining students'

experiences to inform campus planning and programs. *Planning for Higher Education*, 44(4), 90+.

Mangan, K. (2011, January 7). Disabled Students Declare Independence, by Design. *Chronicle of Higher Education*. pp. A19-A20.

⁷³ Cooper, L. M. Disability as diversity: Assessing the perceptions of students with physical disabilities regarding access and equal opportunity in postsecondary education Available from ERIC. (1373093002; ED543086).

⁷⁴ Doussett, L. (2018, February 13). Residence Halls Association Capstone Interview [Personal interview].

Appendix

Appendix Item 1 -

MPA Capstone Interview Questions

Michelle Leona Cecil

Introduction

- Purpose of interview housing services (three areas)
 - o Focus of research is on those with physical disabilities
- How will interview data be used
- Length of interview (30 min 1hr)
- Cannot promise confidentiality
- Research will be used for capstone only, final report being sent to Director of Housing and Capstone advisor
- Can I record/ take notes?

Questions for all interviews

Background questions

- How long have you worked at OU
- What is your current role
- Have you held other positions on campus? If yes, did you also work with students who have physical disabilities?
- In your current role, how do you work with students who have physical disabilities?
- How many students are served in your area?
 - o How many of them have physical disabilities?

Questions regarding housing services and physical disabilities

- How does your department/ position work with university housing in helping students with physical disabilities?
- What are the most common issues that residential students with physical disabilities come to your department with?
- What issues do you think exist for students with physical disabilities regarding
 - Dining services
 - Desk services
 - Nightwatch services
 - o Residential rooms
- What additional housing services do you think could be provided, adjusted, added, or removed to benefit students with physical disabilities?

Additional questions specific for

RHA's Lauryn Dousett

- Provide a brief summary (date, location, plan) of your program.
- What was your motivation behind planning your living invisible program?
- Who was the target audience and who showed up?
- Why did you think there was a need for this type of program?
- What came out of the program, were any issues identified as a result of it?

Chartwells - Vandenberg Dining Center Manager Joseph Cieslik

- What services/ procedures are in place for supporting students with physical disabilities when they come to the cafeteria?
 - Are all cafeteria staff trained on these procedures?
- How does the staff in the cafeteria support students with mobility issues?

Assistant Dean of Students - Mike Wadsworth

- What are the typical reasons students with physical disabilities visit your office?
- How does DOS work with housing to help support students with physical disabilities?
- When you meet with students that have physical disabilities/ mobility issues, how do those conversations typically go regarding residential services?

Housing - Associate Director Rebecca Wickham (Also potentially a residence director and Director of Housing James Zentmeyer)

- Can you speak to the design process of choosing where to place a student with a disclosed physical disability?
- When building or renovating a residence hall, how do you determine where to place ADA rooms?

Disability Support Services- Program Coordinator Christie Gough

- What are the most common issues residents with physical disabilities contact your office needing help with?
- When requesting housing accommodations for residents with disabilities
 - o How long does the process take for the resident?
 - What is handled by DSS and what is coordinated with housing?
 - o What issues do students typically face in this process?
- When you meet with students that have physical disabilities/ mobility issues, how do those conversations typically go regarding residential services?

Appendix Item 2-

Evaluation for the accessibility of services for those with physical/ mobility challenges

Created by Michelle Leona Cecil for her 2018 Master of Public Administration Capstone Project.

This evaluation was made using a compilation of resources from the Centre For Excellence in Universal Design (located in Ireland), the ADAchecklist.org website created by the New England ADA Center, and the U.S. Architectural and Transportation Barriers compliance Board. Citations for direct quotes from resources or questions that were made from existing information from these resources are provided throughout using end note style format. Full citations for these resources are listed at the end of the evaluation.

Column Codes for Service Areas

1A-Hamlin Desk 1B- Hamlin Nightwatch (NW) 2A- Oak View Desk 2B-Oak View NW 3A-Vandenberg Front Desk 3B-Vandenberg Bear Lake NW 3C- East Vandenberg NW 3D- West Vandenberg NW 4- Hill House NW 5- Van Wagoner NW 6- Apartments Desk 7- Housing Front Desk 8- Vandenberg Dining Hall

Key: Y= Yes N= No N/A= Not Applicable C[#]= Comment below

ADA Standard for Service	1A	1B	2A	2B	3A	3B	3C	3D	4	5	6	7	8
Desk Services													
Is the route (including aisles/pathways) to service at least 36in. wide? ^{1, 2}	Y	Y	Y	Y	Y	Y	YC ¹⁵	Y	N	N	N	NC ²¹	Y
Is the route to the service area clear, "unobstructed"? ³	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	Y
Is there enough space for services to given and to have space for passing guests as well? ³	Y	Y	Y	Y	Y	Y	N	N	N	N	N	NC ²²	Y
Are surfaces in the route to /around the service area "stable, firm and slip resistant"? ¹	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Can the employee working the service area be seen if approached by someone in a wheel chair?	Y	NC ⁴	Y	Y	Y	Y	Y	Y	NC ¹⁷	Y	Y	NC ²³	Y
Is there space near the desk service for a wheel chair to complete a 180 degree turn (60in)? ²	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Is the service area counter at a height where services can be accessed by individuals that could be sitting or standing? ³	YC ¹	NC ⁵	Y	Y	Y	N	Y	Y	Y	N	Y	NC ²⁴	Y
"Is there a clear floor space at least 30 in X 48 in for a wheelchair to go under? If there is not, is the accessible counter at least 48 in. long?"	YC ²	Y	Y	Y	Y	N	Y	Y	N	N	Y	N	Y

Assessing Accessibility Appendix 26

						11000	ssing 1	100033	Tomity	rippei	IUIA 2	U
N	Y	Y	Y	Y	N	Y	Y	N	N	Y	N	Y
n/a	Y	Y	Y	N	N	Y	Y	N	N	Y	N	Y
N	N	Y	Y	NC ¹⁴	N	Y	Y	N	N	Y	N	Y
N	N	Y	Y	N	N	N	Y	N	N	N	N	Y
n/a	Y	Y	Y	n/a	Y	Y	Y	N	N	Y	Y	Y
n/a	Y	Y	Y	n/a	Y	Y	Y	N	n/a	N	Y	Y
n/a	Y	Y	Y	n/a	Y	Y	Y	N	n/a	N	Y	Y
Y	YC ⁶	Y	Y	Y	Y	YC ¹⁶	Y	NC ¹⁸	YC ¹⁹	N	/	YC^{25}
N	N	Y	Y	N	N	N	Y	N	N	N	/	N
Y	Y	NC ⁸	NC ¹¹	Y	Y	Y	Y	N	NC ²⁰	N	/	Y
Y	Y	NC ⁹	NC ¹²	Y	Y	Y	n/a	n/a	Y	N	/	Y
N	Y	YC ¹	YC ¹³	N	N	N	n/a	n/a	N	N	/	Y
YC ³	YC ⁷	Y	Y	Y	Y	Y	N	n/a	N	n/a	/	n/a
	n/a N N n/a n/a n/a Y N Y N Y	n/a Y N N N N N N N/a Y n/a Y N/a Y N/a Y Y Y YC ⁶ N N Y Y N Y	n/a Y Y N N Y N N Y Y N Y Y	n/a Y Y Y N N Y Y N N Y Y n/a Y Y Y n/a Y Y Y Y YC6 Y Y N N Y Y Y Y NC8 NC11 Y Y NC9 NC12 N Y YC13 YC13	n/a Y Y Y N N N Y Y NC14 N N Y Y N n/a Y Y Y n/a n/a Y Y Y n/a Y YC6 Y Y Y N Y Y Y N N Y N Y Y NC8 NC11 Y Y Y NC9 NC12 Y N Y YC13 N 0 0 YC13 N	n/a Y Y Y N N N N Y Y N N N N Y Y N N N N Y Y N N N/a Y Y Y N/a Y N/a Y Y Y Y N/a Y N/a Y Y Y Y Y Y Y N/a Y <t< td=""><td>N Y Y Y Y N Y n/a Y Y Y N N Y N N Y Y N N Y N N Y Y N N N n/a Y Y Y N/a Y Y n/a Y Y Y n/a Y Y n/a Y Y Y N/a Y Y Y YC6 Y Y Y Y Y Y N N Y Y Y Y Y Y Y Y Y NC8 NC11 Y Y Y Y N Y YC13 N N N N</td><td>N Y</td><td>N Y Y Y N Y Y N n/a Y Y Y N N Y Y N N N Y Y N N Y Y N N N Y Y N N N Y Y N n/a Y Y Y N N Y Y N n/a Y Y Y N N Y Y N N N Y Y Y Y Y N N Y Y Y Y Y Y Y Y N Y Y Y Y Y Y Y Y N N Y Y Y Y Y Y Y N N N Y Y Y Y Y<!--</td--><td>N Y Y Y Y N Y Y N N n/a Y Y Y N N Y Y N N N N Y Y N N Y Y N N N N Y Y N N N Y Y N N n/a Y Y Y N<td>N Y Y Y N Y Y N N Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N</td><td> N</td></td></td></t<>	N Y Y Y Y N Y n/a Y Y Y N N Y N N Y Y N N Y N N Y Y N N N n/a Y Y Y N/a Y Y n/a Y Y Y n/a Y Y n/a Y Y Y N/a Y Y Y YC6 Y Y Y Y Y Y N N Y Y Y Y Y Y Y Y Y NC8 NC11 Y Y Y Y N Y YC13 N N N N	N Y	N Y Y Y N Y Y N n/a Y Y Y N N Y Y N N N Y Y N N Y Y N N N Y Y N N N Y Y N n/a Y Y Y N N Y Y N n/a Y Y Y N N Y Y N N N Y Y Y Y Y N N Y Y Y Y Y Y Y Y N Y Y Y Y Y Y Y Y N N Y Y Y Y Y Y Y N N N Y Y Y Y Y </td <td>N Y Y Y Y N Y Y N N n/a Y Y Y N N Y Y N N N N Y Y N N Y Y N N N N Y Y N N N Y Y N N n/a Y Y Y N<td>N Y Y Y N Y Y N N Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N</td><td> N</td></td>	N Y Y Y Y N Y Y N N n/a Y Y Y N N Y Y N N N N Y Y N N Y Y N N N N Y Y N N N Y Y N N n/a Y Y Y N <td>N Y Y Y N Y Y N N Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N</td> <td> N</td>	N Y Y Y N Y Y N N Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N N Y Y N	N

Assessing Accessibility Appendix 27

							7 100	coomig 1	100033	Tomity	ripper	IGIA 2	<u>, </u>
Is the card swipe machine (used to enter the building) at an accessible level ("between 900mm and 1000mm above floor or ground level and within 200mm of the door frame") and is it easily visible where it is mounted? ³	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	n/a	/	n/a
"In buildings in which the outer door is left unlocked, but the inner doors are subject to security controls, is the size of the lobby sufficient for people to access the security controls? Is there also ample room to maneuver between the inner and outer doors"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	n/a	/	n/a
Does the accessible entrance have a canopy or covering outside the building to reduce exposure to the elements? ³	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	n/a	/	Y
If mats/ mat wells are present in an entry are they "flush with the surrounding floor surface"? ³	N	N	Y	Y	Y	N	Y	Y	Y	Y	n/a	/	Y
Dining Areas – Vandenberg Dining Center													
immoveable tables, is there enough space for a wheelchair to fit/ navigate around? ²		N											
Is there at least 36in between dining table providing space for a wheelchair to pass? ²			Y										
Where accessible dining tables are present, is there enough space for knees to clear below the table? ²			Y										
In areas where services are near each other, is there between 36in and 42in for a wheelchair to pass? ²			Y										
If food is served at a bar style counter, is there a section at an accessible height for those wishing to dine? ²			Y										
Are food service counters at an accessible height? ²													
Where self-service is present, is food in a reachable distance? ²					Som	e salad	bar op	otions o	could	be dif	ficult	to rea	ch
Are dispensing machines (such as water, soda, milk, etc.) placed no higher than 48in off the ground? ¹			Y										

Notes on Service Areas (C)

1 Meets minimum ADA standards for height, therefore the service counter height is just tall enough where services may be difficult to obtain if in a wheel chair.

2 The counter is at least 48 in. long.

³ Door opener that is present works to leave the building but not enter.

⁴While the employee can be seen due to the windows of the entrance, there would be no way for the employee to see the guest if they were entering the building.

- ⁵ The nightwatch station where students swipe in is at a height that could not be accessed by someone in a wheel chair. However, the desk where the second worker does guest sign ins could be used by someone in a wheel chair.
- ^{6,7} While there is a door opener to get into the building during NW hours it has to be pressed by the NW worker. In order for that to occur the individual would need to open a door to notify they need the button pressed and then would have to exit until the doors opened. The inside button to exit the building is functional during NW hours.
- ^{8, 11} The door openers to access OVH are black boxes and many of them are missing the universal access symbols. This would make it difficult for non-residents of the building to know how to use the handicap services.
- 9, 12 For several of the entrances, the openers are placed in a way that someone in a wheelchair would have to have to navigate around the door once it opened (after being pressed) to get in.
- 10, 13 For several of the entrances, the openers are placed in a way that someone in a wheelchair would have to have to navigate around the door once it opened (after being pressed) to get in.
- ¹⁴ Computer and other electronic items are present on the ADA space.
- ¹⁵ To enter the residential space there is limited width to enter.
- ¹⁶ To enter but not exit.
- ¹⁷ Hill House has no door openers.
- ¹⁸The Hill NW station is insanely tall.
- ¹⁹ To enter yes, to exit, no.
- ²⁰ The opener on the inside of the building is in a place that cannot be easily seen.
- ²¹ The route inside the housing office is narrow and often obstructed with objects such as bins, boxes, and trash cans.
- ²² Due to the narrow area of the main entrance, there would not be passable space.
- ²³ The desk is at such a height that someone working the front desk would be unable to see someone in a wheelchair.
- ²⁴ The desk is too tall to be accessed in any manner by someone in a wheelchair. This means they cannot access services such as signing out a key for a lock out since they would not be able to reach the counter to sign the card.
- ²⁵ There is a button to enter but not to exit.

The following resources were used and cited above to create this evaluation:

- ¹U.S. Architectural and Transportation Barriers Compliance Board (Access Board). (2002). *Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities*. Washington, D.C.: Office of the Federal Register, National Archives and Records Services, General Services Administration. Retrieved March 11, 2018, from https://www.access-board.gov/attachments/article/1350/adaag.pdf
- ² New England ADA Center. (2016). *ADA Checklist for Existing Facilities*. Retrieved March 10, 2018, from https://www.adachecklist.org/doc/fullchecklist/adachecklist.pdf
- ³ Ireland, National Disability Authority, Centre for Excellence in Universal Design. (2014). *Building for Everyone: A Universal Design Approach- Entrances and horizontal circulation*. Retrieved March 10, 2018, from http://universaldesign.ie/Built-Environment/Building-for-Everyone/2-Entrances% 20and% 20Horizontal% 20Circulation.pdf
- ⁴ Ireland, National Disability Authority, Centre for Excellence in Universal Design. (2014). *Building for Everyone: A Universal Design Approach- Facilities in Buildings*. Retrieved March 10, 2018, from http://universaldesign.ie/Built-Environment/Building-for-Everyone