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An Assessment of Disability Access at the University of Kentucky

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University of Kentucky

Executive Summary

This study assesses the Americans with Disabilities Act of 1990 (ADA) compliance at the University of Kentucky. Twenty buildings frequently used by undergraduates at the University of Kentucky were evaluated using the ADA Checklist for Existing Facilities focusing on Title III, Public Accommodations, and Priority Two, Access to Goods and Services. Data was collected over two weeks (July 20, 2017-August 3, 2017) and then evaluated using descriptive analysis. Data was analyzed looking across checklist items, buildings, checklist categories, and construction dates. Looking across checklist items, compliance ranged from 12-20 buildings out of 20 possible with 18.485 buildings as the average. The least compliant checklist items were signs and signs including braille. Looking across buildings, compliance ranged from 50-70 compliant checklist items out of 70 possible with 64.7 compliant checklist items as the average. The most compliant buildings were William T. Young Library and the Jacobs Science Building. The least compliant buildings were the T.P. Cooper Forestry Building and Bowman Hall. Looking across checklist categories, compliance ranged from 83.34 percent compliance to 100 percent compliance. The least compliant checklist category was signs and the most compliant checklist categories were access to goods and services and general seating. Buildings constructed before the ADA had an average percent compliance of 90.55. Buildings constructed after the ADA had an average compliance of 98.57 with buildings constructed after the ADA having 8.02 percent more compliance than buildings constructed before the ADA. Because state legislature determines the specific code for ADA compliance, further examination of disability access laws in Kentucky would be needed to assess state code compliance.

Background

The Americans with Disabilities Act was established as a civil rights law in 1990. It was established to make sure that Americans with disabilities are not discriminated against in public spaces, workplaces, schools, and transportation. The law includes five titles: Employment, State and Local Governments, Public Accommodations, Telecommunications, and Miscellaneous Provisions (Public Accommodations and Commercial Facilities (Title III)). This study in particular focuses on Title III: public accommodations. All students at the University of Kentucky deserve to learn in an environment that is accommodating to their unique situation. This study was conducted to analyze the ADA compliance on the University of Kentucky's campus and to determine which buildings and services are in most need of and update to better serve students with disabilities.

Methods

In order to assess the Americans with Disabilities Act (ADA) compliance on the University of Kentucky's campus, twenty buildings were evaluated using the ADA Checklist for Existing Facilities which is based on the 2010 ADA standards for accessible design. The ADA Checklist for Existing Facilities includes three priority sections: approach and entrance, access to goods and services, and toilet rooms. Priority two, access to goods and services, was chosen for this study because of its direct impact on students and paramount importance—focusing on buildings frequently used by undergraduates at the University of Kentucky. All checklist items are included in the appendix located on page eight. It should be noted that some items recommended by the ADA were omitted from this analysis due to practical constraints. For example, a checklist item in section I evaluates if there is a clear line of sight for a person in a wheelchair when people in front are standing and could not be assessed by only one researcher.

The assessment took place over a two-week period (July 20, 2017-August 3, 2017). Buildings were chosen to include a wide range of frequently used buildings serving a wide variety of subjects and majors. Buildings were visited in no specific order and were assessed using the ADA checklist. Classrooms were also chosen in no specific manner when assessing checklist categories F through J. Many doors were evaluated to satisfy checklist category F.

Buildings included in the study:

- Patterson Office Tower
- Classroom Building
- Funkhouser Building
- William T. Young Library
- Gatton Business college
- Erikson Hall
- Ralph G. Anderson Building
- Chemistry-Physics Building
- Jacobs Science Building
- T.H. Morgan Biology Building
- Mineral and Mining Building
- Ag. North Building
- Garrigus Building
- College of Nursing Building
- Multi-Disciplinary Science Building
- Taylor Education Building
- Kastle Hall
- Forestry Building
- ASTeCC Building

After data collection, the ADA checklist was then analyzed using descriptive analysis.

Compliance was assessed across checklist items, buildings, and checklist categories using average compliance, compliance ranges, and percent compliance. In the next step, data regarding the year in which buildings were constructed was gathered. Compliance of buildings built before and after the ADA were compared and analyzed by calculating the average percent compliance of both categories. Data was gathered using the University of Kentucky Campus Catalog online database. The Thomas Hunt Morgan Biology Building and College of Nursing Building were omitted from this portion of the analysis due to the lack of data pertaining to the date each building was constructed. The overall ADA compliance at the University of Kentucky was then outlined.

Analysis

First, when assessing ADA compliance by checklist items, compliance ranged from 12-20 buildings out of 20 possible with 18.485 buildings as the average. The least compliant checklist items were in checklist category E (signs) with checklist item E4 (signs including braille) having 12 buildings compliant and checklist item E5 (mounted sign of latch side of doors) having 13 buildings compliant.

Second, when assessing ADA compliance by buildings, compliance ranged from 50-70 compliant checklist items out of 70 possible with 64.7 compliant checklist items as the average. Two buildings had 100 percent compliancy—William T. Young Library and the Jacobs Science Building. The least compliant buildings included the T.P. Cooper Forestry Building with 78.571 percent compliancy and Bowman Hall with 71.429 percent compliancy.

Third, when assessing ADA compliance by section, or checklist category, compliance ranged from 83.34 percent compliance to 100 percent compliance. The average compliance percentage across sections was 94.24. This assessment can be seen in Table I. The checklist category with the lowest percent compliance was category E: signs. The checklist categories with 100 percent compliance were category A: access to goods and services and category J: general seating.

Table I.

Checklist Category	Percent Compliance
A. Access to Goods and Services	100
B. Interior Accessible Route	99.45
C. Ramps	96.11
D. Elevators	86.25
E. Signs	83.34
F. Interior Doors	95
G. Rooms and Spaces	98.75
H. Controls	90
I. Seating: Assembly Areas	93.5
J. Seating: General	100

Lastly, the percent compliance of buildings constructed before and after the ADA were assessed. Buildings constructed before the ADA had an average percent compliance of 90.55. Buildings constructed after the ADA had an average compliance of 98.57. This assessment can be seen in table II. The buildings constructed after the ADA had 8.02 percent better compliance than buildings constructed before the ADA.

Table II.

Building	Date Built	Before/After ADA	Percent Compliance
Kastle Hall	1926	Before	80
T.P. Cooper Forestry Building	1930	Before	78.57
Taylor Education Building	1930	Before	87.14
Erikson Hall	1939	Before	94.29
Bowman Hall	1949	Before	71.43
Funkhouser Building	1942	Before	98.57
Mineral and Mining Building	1951	Before	97.14
Chemistry/Physics Building	1962	Before	88.57
Ag. North Building	1964	Before	97.14
Patterson Office Tower	1968	Before	97.14
White Hall	1969	Before	98.57
Garrigus Building	1973	Before	95.71
Multi-Disciplinary Science Building	1985	Before	92.86
Gatton Business College	1992	After	97.14
ASTeCC	1994	After	97.14
William T. Young Library	1998	After	100
Ralph G. Anderson Building	2002	After	98.57
Jacobs Science Building	2016	After	100

Conclusion

This study outlines the buildings at the University of Kentucky that are in most need of renovation to better comply with the ADA. Overall, interior signs are in the most need of an update to become more compliant. It is important to note that many signs did not include braille or were placed in a location where braille could not be used. The buildings in most need of an update are Bowman Hall and the T.P. Cooper Forestry Building. Specifically, Bowman Hall is in need of an elevator and door handles that do not require twisting of the wrist. The T.P. Cooper Forestry Building is in need of several elevator updates and a permanent ramp. Buildings

constructed after the ADA had only 8.02 percent better compliance than buildings constructed before the ADA. It was surprising to find that only two buildings constructed after the ADA were 100 percent compliant. Several buildings constructed before the ADA are in clear need of updates to be better accessible for students with disabilities. Overall, the level of compliance is partially influenced by construction date, but not entirely. It would be misleading to only focus on oldest buildings in updates. The ADA compliance laws vary by state because state legislature holds the right to enforce the ADA compliance standards as they see fit (“The Kentucky Civil Rights Act Guarantees Equal Treatment for Everyone by Businesses That Serve the Public”). The Kentucky ADA compliance interpretation is outlined in the Kentucky Civil Rights Act and Kentucky Equal Opportunities Act (“Kentucky Disabilities (ADA): What You Need to Know”). Further examination of these laws would be needed to assess the compliance of the University of Kentucky’s campus in accordance with state law. From observations of buildings during the study and conversations with a University of Kentucky student with disabilities, it was concluded that the outside approach and entrance of campus buildings could also be in need of updates to better comply with the ADA. Further examination of the outside approach and entrance could also be conducted to determine the exact compliance and needed updates.

References

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Appendix

ADA Checklist

Priority 2: Access to Goods and Services

A1: Direct access to main floor and lobby

Interior Accessible Route

B1: One accessible route to public spaces

B2: Stable, firm, and slip-resistant route

B3: 36in. wide route

B4: Passing space 60x60in.

B5: Running slope <1:20in.

B6: Cross slope <1:48in.

B7: Objects protruding <4in.

B8: Objects >4in. are 24in off floor

B9: Elevators or platform lifts to every floor

Ramps

C1: 36in. width

C2: Stable, firm, slip-resistant surface

C3: Running slope <1:12in.

C4: Level landing 60in. long

C5: Level landing at direction change 60x60in.

C6: Handrails if >6in. height

C7: Top of handrail >34in and <38in.

C8: Continuous gripping surface

C9: Circular gripping surface >1.25in. and <2in. diameter

C10: Noncircular gripping surface >4in. and <6.25in.

C11: Handrail extends >12in. beyond ramp

C12: Handrail returns to a wall, guard, or landing

C13: Ramp surface extends >12in. beyond inside face **or** has curb barrier

Elevators

D1: Call buttons <54in.

D2: Automatic reopen when obstructed

D3: Interior 54x36in. with 16 sq. ft. floor

D4: Door opening 32in.

D5: In-car controls >15in. and <48in. **or** <54in with parallel

D6: Car buttons raised

D7: Car buttons braille

D8: Audible floor and stop signals

D9: Door jamb signs

D10: Tactile stars

D11: Contrasting text characters

D12: Sign mounted 48-60in.

Signs

E1: Signs designating rooms and spaces

E2: Contrasting text and background

E3: Raised text characters

E4: Braille

E5: Mounted sign on latch side of door

E6: Clear floor space of 18x18 at 45°

E7: Lowest character >45in and highest character <60in. from floor

E8: Direction signs: contrasting characters

E9: Directions signs: >40in. from floor

Interior Doors

F1: Door opening >32in. clear at 90°

F2: >18in. space at front approach to pull side door

F3: Level floor surface at both sides of door

F4: Under-door trim 0in.-3/4in. height

F5: Operable hardware without twisting, pinching, or tight grasping

F6: Operable hardware >34in. and <48in. above floor

F7: Easily opened door

F8: 5 second door closer

Rooms and Spaces

G1: Aisles and pathways to service areas >36in. wide

G2: Stable, firm, and slip-resistance floors

G3: Carpet <1/2in.

G4: Carpet securely attached

Controls: Door Handles, light switches, etc.

H1: 30x48in. clear space

H2: Operable parts <48in. above floor

H3: Operated with one hand without tight grasping, pinching, or twisting

Seating: Assembly Areas

- I1: Adequate number of wheelchair seating
- I2: Location choices for wheelchair seating
- I3: Single wheelchair space >36in. wide
- I4: Two adjacent wheelchair spaces >33in. wide
- I5: Front or rear entrance wheelchair space >48in. deep
- I6: Side entrance wheelchair space >60in. deep
- I7: Wheelchair spaces adjoin and not overlap
- I8: One or more companion seat for each wheelchair seat
- I9: Shoulder-to-shoulder companion seat
- I10: Companion seat equal in size, comfort, quality, and amenities

Seating: General

- J1: One or more wheelchair spaces 36x48in.