

### INTRODUCTION

The Americans with Disabilities Act requires public venues to provide reasonable accommodations for individuals with disabilities. These accommodations are necessary for some attendees to get equal access during events or tours. While great efforts have been made for those with physical disabilities and limited vision, the availability and general knowledge about accommodations for the Deaf and Hard of Hearing is still limited. The purpose of this study was to quantitatively measure how easily accessible these accommodations are and how much and what knowledge was available about said accommodations.

### **AUDITORY ACCOMMODATIONS**

Auditory accommodations are any assistive technology or supplemental material or information which help individuals hear better, or understand more of any spoken or auditorily presented information. This can include but is not limited to wireless digital, frequency modulated, or infrared systems, captioned videos, or American Sign Language (ASL) interpreters. Depending on the degree of one's hearing loss and type of technology used, hearing aids or cochlear implants, it is unlikely that one system will accommodate all the needs of patrons with hearing loss.

## **RESEARCH QUESTIONS**

The purpose of this study was to quantify available information about auditory accommodations in public venues from two inquiry methods: online search and phone interview. The information of interest included:

- What type of auditory accommodations were provided?
- How accessible was the information about accommodations?
- How much and what information was available to patrons?

### VENUES

The accessibility of, and available information about auditory accommodations from several popular public venues were explored in each of four major Texas cities: Dallas, Houston, San Antonio, Austin. These venues were grouped into several categories. Table 1 shows the number of venues in each category and city.

Austin	Dallas	Houston	San Antonio
4	4	4	4
4	3	3	4
3	3	3	3
3	2	3	3
2	2	2	2
3	0	3	3
	4 4 3 3 2	4 4   4 3   3 3   3 2   2 2	4 4 4   4 3 3   3 3 3   3 2 3   2 2 2

Table 1. Number of venues in each category and city.

# Awareness and Accessibility of **Auditory Accommodations in Public Venues**

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### METHODS

Because individuals with hearing loss may seek information about accommodations in two general ways, searching the online or making a phone call, two types of questionnaires were developed to quantify the accessibility at the public venues. The two questionnaires were designed for an online search and for a phone interview. The main topics of interest for each questionnaire are shown in Table 2.

### Online Search

What information about the type of available accommodation(s) was provided?

What details about the device and use of the device were provided?

Where was the information How many people were needed to get information? was found?

What contact information for further questions was provided?

Table 2. Main questions used for online and phone questionnaires.

The researchers followed a systematic protocol to gather information for the questionnaires via an online search and via a phone interview. The two methods had similar questions addressing to what extent the information was found, and how easily it was found. The possible answers to each question were assigned point values which yielded a total perfect score of 100 for each questionnaire. Based on arbitrary categories, these total point scores were then assigned rankings to represent general accessibility for each venue as shown in Table 3 with ranking "A" representing the most accessible and ranking "D" being the least accessible.

Rank	Total Score	
A	100-75	
B	70-50	
C	45-25	
D	20-0	

Table 3. Rankings assigned by total point scores for online search and for phone interview.

### **Phone Interview**

How many times the call was transferred or placed on hold?

The overall points for each venue are shown in Table 4. Most venues either did not have auditory accommodations or did not specify the type. Of the venues that specified the type of accommodation, there was a wide range of options which included captioned videos, printed transcripts, ASL interpreters, and infrared/loop

Museum

Theater

**Outdoor Exhibit** 

**Visual Art Exhibit** 

Stadium

Hotel

#### Museum

Theater

**Outdoor Exhibit** 

Visual Art Exhibit

Stadium

Hotel

Table 4. Scores obtained through the online (top) and phone interview (bottom) by city and venue.

The percentage of venues by rankings are shown in Figure 1. The largest percentage for both conditions (59%, 50%) was for the lowest ranking, category D.

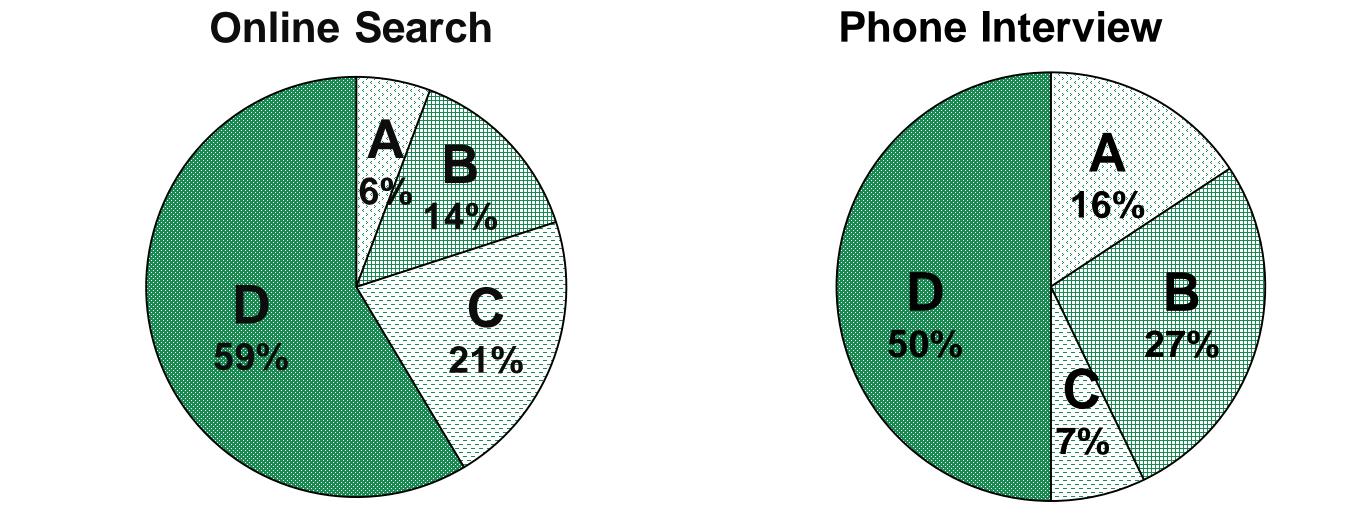


Figure 1. Scores obtained through the online (left) and phone interview (right) across all cities and venues.

According the American with Disabilities Act, public venues must provide auditory accommodations for persons with hearing loss. Of 70 venues in Texas, a small percentage (6%, 16%) ranked in the top rank for providing accommodations and related information.



### RESULTS

Online Search Scores					
Austin	Dallas	Houston	San Antonio		
0, 25, 25, 35	0, 0, 55, 60	5, 10, 15, 25	0, 10, 35, 45		
35, 70, 70, 70	45, 55, 65	35, 75, 90	0, 0, 45, 50		
0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0		
0, 0, 0	0, 30	0, 10, 20	0, 0, 0		
0, 5	75, 80	0, 55	15, 25		
0, 0, 40	n/a	0, 25, 50	0, 0, 40		
Phone Interview Scores					
Austin	Dallas	Houston	San Antonio		
0, 10, 20, 40	15, 15, 15, 90	55, 60, 65, 75	0, 0, 10, 75		
30, 55, 60, 70	0, 65, 70	65, 70, 80	20, 65, 70, 70		
15, 20, 30	10, 20, 20	0, 20, 20	0, 0, 15		
0, 0, 10	10, 10	15, 20, 20	0, 20, 80		
10, 20	0, 65	35, 70	0, 85		
40, 60, 75	n/a	50, 50, 50	80, 80, 80		

### SUMMARY