

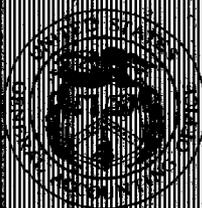
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June 1984

AMERICANS WITH DISABILITIES ACT

Effects of the Law on Access to Goods and Services



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Program Evaluation and
Methodology Division

B-246667

June 21, 1994

The Honorable Major R. Owens
Chairman, Subcommittee on Select Education
and Civil Rights
Committee on Education and Labor
House of Representatives

Dear Mr. Chairman:

This report discusses the extent to which one of the main objectives of the Americans With Disabilities Act (ADA) has been met.¹ Specifically, the Subcommittee wanted to know if access by persons with disabilities to goods and services provided by businesses and state and local governments had increased compared to the situation before the effective dates of the law. This report compares such accessibility just before the effective date of these parts of the law (January 1992), as previously reported, to accessibility at two later dates, August 1992 and April 1993.²

In brief, we found that the ADA has had some notable effects: both accessibility for persons with disabilities, and owners' and managers' awareness about the ADA considerably and steadily increased from January 1992 to April 1993. Nevertheless, we identified some areas where improvements could still be made and, therefore, the attention of the Congress continues to be helpful.

For example:

- In the facilities we observed, the percentage of features that were consistent with the ADA Accessibility Guidelines (ADAAG) increased by 7 points from January 1992 to April 1993.³ Similarly, with regard to barriers that persons with disabilities had reported to us in our survey, we found a decrease of 10 percentage points during that same period.
- According to both our observations and the reported experiences of persons with disabilities, a number of important barriers remained in April

¹Public Law 101-336.

²U.S. General Accounting Office, Americans With Disabilities Act: Initial Accessibility Good But Important Barriers Remain (GAO/PEMD-93-16; May 19, 1993).

³The ADA required that minimum guidelines be issued by the Architectural and Transportation Barriers Compliance Board (ATBCB), a federal agency. The ADA Accessibility Guidelines were subsequently adopted by the Department of Justice as standards to define new construction and alteration requirements.

1993 even though the number of such barriers had decreased by nearly 50 percent compared to those observed in January 1992.

- Managers and owners of establishments covered by the ADA and in our sample reported greater awareness of the law and their specific responsibilities under it as time passed.
- By April 1993, approximately half of the owners and managers interviewed still had not made any barrier-removal efforts and half did not have any specific plans to do so in the future. Nevertheless, barrier-removal efforts, both completed and planned, increased by 26 and 24 percentage points, respectively, from January 1992 to April 1993.
- By April 1993, a greater number of owners and managers reported that completed barrier-removal efforts were beneficial and fewer mentioned burdens, compared to those in January 1992.
- In the facilities we visited, completed barrier-removal efforts were more consistent with the standards than they had been: the number of completed efforts that resulted in features still not consistent with the ADAAG had decreased by 39 percentage points from January 1992 to April 1993.
- In contrast, a sizable minority of planned barrier-removal efforts are not necessary, in that we judged the features they targeted to be already consistent with the ADAAG. This percentage of unnecessary planned changes increased slightly from 28 percent in January 1992 to 35 percent in April 1993.

Overall, we observed steady improvement in both accessibility and awareness during the initial 15 months that the ADA was in effect. However, enough areas of concern remain to suggest a need for continuing educational outreach and technical assistance to businesses and government agencies covered by the act and continued monitoring by the Congress. Specifically, the ongoing presence of common and important barriers, the failure of half of those visited to remove architectural barriers or develop plans to do so in the future, and the lack of fully informed planned barrier-removal efforts indicate that the goal of the ADA to increase accessibility to persons with disabilities has not yet been completely fulfilled. With 15 months available to complete barrier-removal efforts in areas where little difficulty or expense would have been involved, we believe that the facilities we observed could have done more.⁴

⁴Neither the ADA nor Justice regulations specify a date by which barrier-removal efforts must be completed. Rather, such efforts by businesses are a continuing obligation in that barrier removal that is not readily achievable at this time may be readily achievable in the future.

Background

In passing the ADA in 1990, the Congress estimated that there were 43 million Americans with disabilities and that these individuals had been isolated and segregated, faced restrictions and limitations, occupied an inferior status, and had been seriously disadvantaged. The ADA defines disability as (a) a physical or mental impairment that substantially limits one or more of the major life activities, (b) a record of such an impairment, or (c) being regarded as having such an impairment. The act prohibits discrimination in employment, public services (including transportation), public accommodations, and telecommunications and was designed with a phased implementation schedule.

We began our work on the provisions that went into effect first—public services and public accommodations—and we plan to evaluate the employment provisions later. The law prohibits discrimination by either state or local governments (referred to as public services in title II, subtitle A) or by private businesses (referred to as public accommodations and commercial facilities in title III). A major type of potential discrimination occurs when access to goods and services offered by businesses and government agencies is limited. Thus the majority of the relevant ADA regulations concerning accessibility focus on physical or architectural barriers, such as the width of doorways, the slope of ramps, the readability of signs, and the location of assistive listening devices. Our study therefore focused on the extent to which businesses and government agencies had met these accessibility standards.⁵

Objectives and Methodology

We addressed four main questions:

- To what extent did the accessibility of businesses and state and local government facilities to persons with disabilities change in the 15 months after the ADA took effect?
- What were the most common barriers remaining?
- To what extent did the level of owners' and managers' awareness of their responsibilities under the ADA change in the 15 months after the law took effect?
- What was the nature of the barrier-removal efforts made by owners and managers from the passage of the ADA to 15 months after it took effect?

⁵Legal compliance is a separate issue and was beyond the scope of our work, as discussed in detail in appendix I. In brief, determining legal compliance involves not only identifying barriers but also, in the case of business, evaluating whether barrier removal is readily achievable and, if not, whether the goods or services of the public accommodation have been made available through alternative methods (e.g., providing curb service or home delivery) or, in the case of government, determining if barrier removal is required to provide program access. We did not attempt to reach conclusions in this area.

We used three different methods to collect the data necessary to answer these questions. (A detailed description of our scope and methodology is presented in appendix I.) Data were collected using each of the three methods at three different times: January 1992, August 1992, and April 1993.

First, we visited businesses and government facilities to evaluate specific features of the establishments using the minimum accessibility standards in the ADAAG.⁶ In each of the 11 cities we visited, we randomly selected up to four facilities representing each of eight different kinds of businesses and state and local government facilities.⁷ In January 1992, we visited 231 such establishments; in August 1992, we visited 322 different businesses and government facilities; and in April 1993, we visited an additional 276.

Second, we interviewed the owners or managers of the facilities we visited to find out what they knew about the ADA and what actions, if any, they had taken. (We did not directly measure the extent or accuracy of what they knew, but rather asked them to rate their own level of knowledge.)⁸

Finally, we surveyed persons with mobility and sensory-related disabilities about how often and where, in the 6 months before each survey, they found specific barriers in trying to access public services and public accommodations.⁹ These surveys were conducted at the same times as the observational assessments and interviews; that is, in January 1992, August 1992, and April 1993.¹⁰ The number of valid responses to each survey was 1,193, 854, and 726, respectively, representing adjusted response rates

⁶The ADA requires that government facilities provide program access to all, which may or may not require structural change. Our work however, focused only on the physical accessibility of government facilities.

⁷We included in our review only those businesses immediately subject to civil penalties; that is, those with 25 or more employees or more than \$1 million in gross receipts.

⁸We are grateful to all the owners and managers who assisted with the observations and interviews, not only giving of their time, but also opening their establishments to us.

⁹Persons surveyed were on the mailing lists of certain disability-specific organizations and may not be representative of all persons with disabilities. We greatly appreciate the cooperation we received from all of the organizations that assisted with this data collection task. We are especially indebted to the individuals with disabilities who completed our survey.

¹⁰The survey was initially sent to more than 2,200 individuals, but many did not have a disability or were otherwise inappropriate to include. These individuals were excluded from the subsequent mailings.

(after invalid cases were removed) of 64 percent, 55 percent, and 49 percent.¹¹

The primary strength of our method was our ability to repeat these assessments at three different times. This allowed us to test for changes from a baseline as the law was implemented. In addition, our use of both on-site observations and our survey of the experiences of persons with disabilities permitted us to corroborate the accessibility status of facilities. This helps us have more confidence in our findings than would otherwise be the case.

Principal Findings

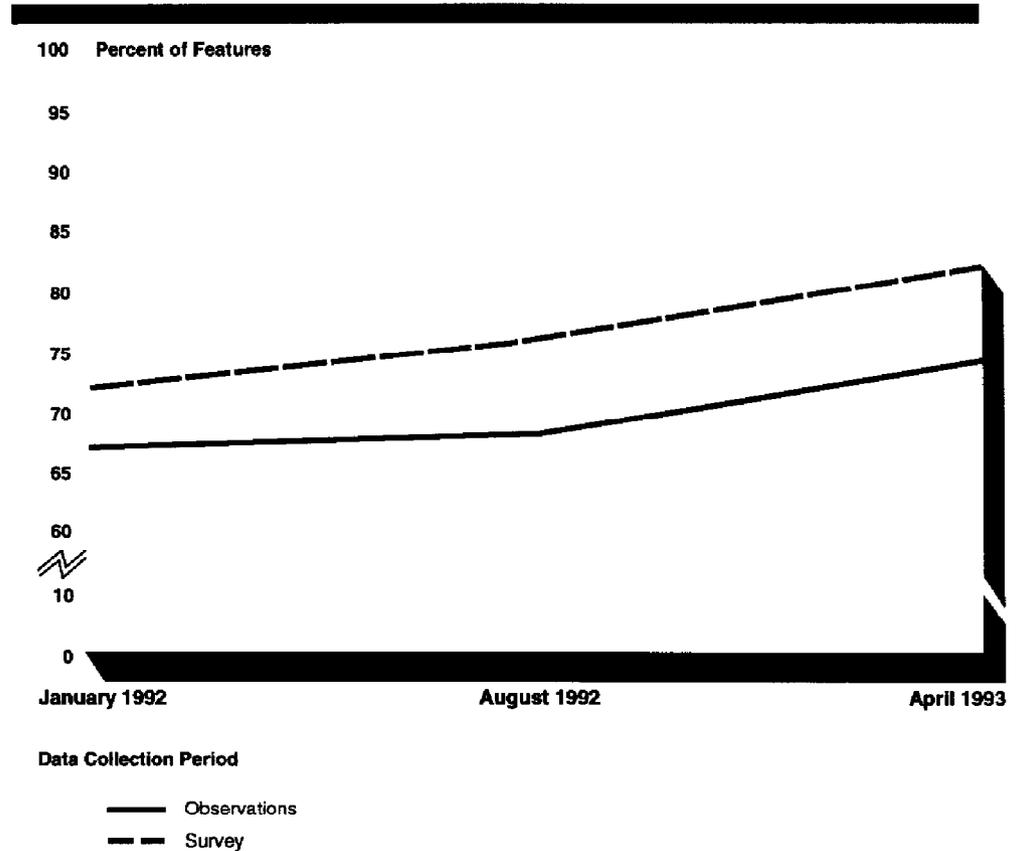
Accessibility Improved After Implementation of the ADA

We found that 67 percent of the features we observed in businesses and government facilities were consistent with the accessibility standards by January 1992, and the level of the accessibility further improved by 7 points by April 1993. Our survey yielded similar findings from the viewpoint of persons with disabilities, showing a 10-percentage-point increase. The full results of our observations and surveys are presented in appendixes II and III.

We judged each establishment on as many as 431 different features. We also surveyed persons with disabilities about their experiences with 97 different potential barriers. Specifically, we found a slight improvement in accessibility from January 1992 to April 1993. (See figure 1.)

¹¹We have no reason to believe that there is any systematic bias introduced by differences between respondents and nonrespondents. First, the pattern of response rates across the members of the different organizations is similar at all three assessment periods, as shown in appendix I. Second, also illustrated in appendix I, there are no differences based on employment status, gender, or age of the respondents at the three assessment periods. Finally, most of the feedback we received from respondents at the third assessment period suggests that some felt overly burdened. Specifically, many reported that they had already responded on more than one occasion and could not respond again.

Figure 1: Accessibility of Facilities



- When looking at the performance of each establishment we visited, we found the percentage of the observed features that were consistent with the ADA Accessibility Guidelines increased from an average of 67 percent to 74 percent in the first 15 months the ADA was effective.
- When considering a wide range of potential barriers listed in our survey, we found the percentage of persons with disabilities reporting that the features we asked about did not often create barriers increased from 72 percent to 82 percent in the 15 months after the ADA was implemented.¹²

These findings are consistent with a nationwide set of observations made by the United Cerebral Palsy Associations in the summer of 1993. Scores

¹²The rate at which respondents reported encountering barriers may underrepresent the actual presence of barriers. Individuals with disabilities more than likely frequent establishments they know to be accessible and try to avoid those they know will present barriers.

for their assessment averaged a "B" for basically barrier-free; few rated an "A" for accessible.¹³

Some Important Barriers Remain

To determine the most common barriers remaining, we noted any features that met two criteria: our survey respondents reported encountering the barrier at least "often" and we frequently observed the problem in our visits (in more than 50 percent of the facilities). Fifteen months after the ADA was implemented, we found seven items that met these criteria. This compares to the 13 items we found meeting the criteria just before the law went into effect. However, frequent barriers may or may not be important ones. We therefore reviewed our findings using priorities set by the Department of Justice for barrier removal in businesses. Where scarce resources set limits on barrier removal, Justice recommended that top priority be given to improving access to a facility, followed by access to the goods and services within; that is, doing what one comes to do in that facility. Access to rest room facilities ranked third, followed by the fourth category of all remaining access matters.

Of the seven common barriers we found, five, or 71 percent, were in the second highest Justice priority area—access to goods and services—as shown in table 1.¹⁴ Thus we concluded that despite the relatively high level of accessibility of many of the establishments, important barriers remain.

¹³United Cerebral Palsy Associations, ADA Report Card on America: 1993 Progress Report on ADA in American Businesses (Washington, D.C.: August 1993).

¹⁴We included barriers in hotel room bathrooms in the second Justice priority category as those are barriers to the basic use of the hotel guest room. Barriers we found in rest rooms elsewhere, such as in shopping malls or even the common lobby areas of hotels, were placed in the third Justice priority category, related to rest room access in general.

Table 1: Important Barriers Remaining in April 1993 by Priority Category

Category	Barrier	Mean survey score ^a	Features observed that were not consistent with ADAAG
Entry	None		
Access to goods and services	Not enough signs with raised print or Braille	3.15	82%
	Lack of required number of assistive devices for the deaf in hotel rooms	3.56	81
	Inaccessible showers or tubs in hotel rooms	3.51	65
	Inaccessible toilets in hotel rooms	3.06	52
	Inaccessible sinks in hotel rooms	3.04	66
Rest Rooms	None		
Other access	Pay phones without text telephones (TTYs or TDDs)	3.57	80
	Pay phones without amplification systems	3.16	77

^aOur survey asked persons with disabilities how often they found specific features to be a problem. A response of "seldom if ever" was given a score of 1; "sometimes," 2; "often," 3; "very often," 4; and "always or almost always," 5. Thus a higher score indicates more frequent encountering of the barrier.

Frequent barriers to reaching goods and services (the second Justice barrier-removal priority) included the following:

- There were not enough signs with raised print or Braille, thus making it difficult for persons who are visually impaired to locate rooms on their own.
- Hotels lacked enough assistive devices for the deaf; for example, devices allowing them to know that someone is knocking at the door or calling on the phone, that a smoke or fire alarm is ringing, or that the alarm clock is ringing. This restricts the extent to which persons with hearing impairments can fully use the services and features of hotel accommodations.

-
- Hotel room showers or bathtubs, toilets, and sinks were not accessible for wheelchairs, thus impeding access for persons who use wheelchairs to the rest room provided as part of normal hotel accommodations.¹⁵

Other barriers included the following:

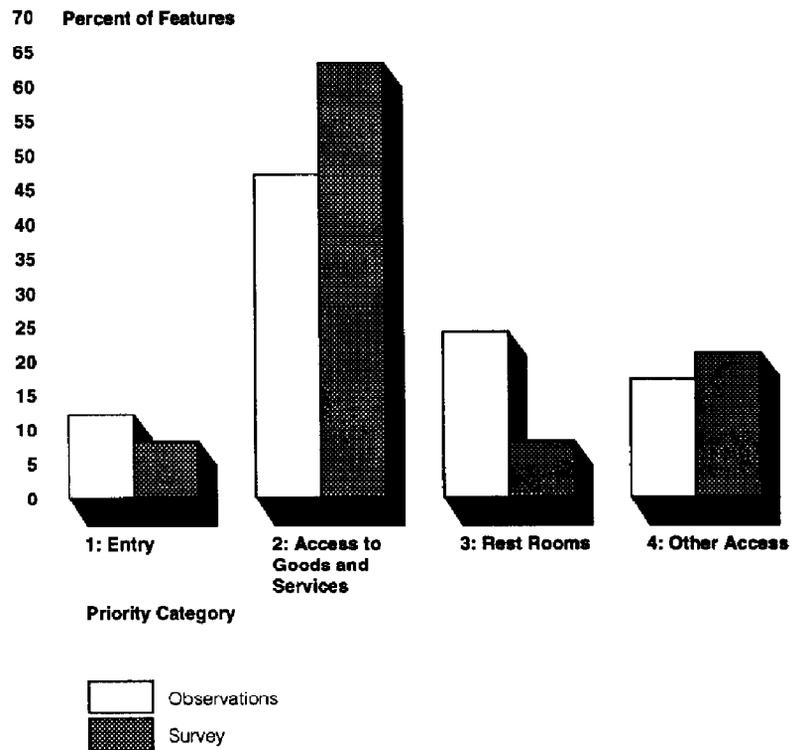
- Public telephones lacked text telephones (telecommunication devices for the deaf, TDDS, TTYS).
- Public telephones lacked amplification systems for the hearing impaired.¹⁶

We also examined the individual features for which the most work still needed to be done as of our last assessment; in other words, those features that were frequently not consistent with the ADA Accessibility Guidelines or that people told us often created a barrier. Of those, most were also in the second highest Justice priority area. Figure 2 illustrates this distribution for items in our observation checklist and in our survey. The specific items are shown in the complete results in appendixes II and III.

¹⁵We believe that, generally, persons with disabilities may choose to frequent facilities that are most accessible for them. Doing so is easier in their own community than it is out of town. Because they almost always use hotels in a community other than their own, people would find it more difficult to select an accessible hotel out of town than to select an accessible local grocery store. For this reason, hotels may have received particularly high scores (indicating more barriers) from our survey respondents.

¹⁶Text telephones and amplification systems are auxiliary aids. They are required only if the facility customarily offers telephone service to its customers on more than an incidental convenience basis and providing them does not create an undue burden (significant difficulty or expense).

Figure 2: Features That Were Often Barriers as of April 1993



Familiarity With ADA Requirements Increased

We found a notable increase in the level of awareness of the ADA by owners and managers. (See figure 3.) Specifically, we found the following:

- The percentage of owners and managers interviewed who reported that they were familiar with the ADA increased from 69 percent just before the law went into effect to 92 percent 15 months later.
- Of those owners and managers who were familiar with the ADA, the percentage who reported that they knew they had been expected to remove barriers before the effective date of January 26, 1992, increased from 77 percent in January 1992 to 88 percent by April 1993.

business or government agency headquarters while the local managers we spoke with were less knowledgeable.

Those who were familiar with the ADA received information about the law most frequently from their corporate headquarters and the media. Only 10 percent reported receiving information directly from federal agencies in April 1993, the assessment period with the highest percentage receiving information from this source.¹⁷ Sixteen percent of the owners and managers interviewed in August 1992 and 19 percent of those interviewed in April 1993 reported being approached, unsolicited, by a vendor, contractor, architect, or similar person. (This question was not asked in January 1992.)

Barrier-Removal Efforts Incomplete Despite Increase

At our third assessment period in April 1993, 45 percent of the facilities had yet to remove an architectural barrier and 50 percent had no plans to do so in the future. However, at that time, 15 months after the ADA went into effect, only one establishment was free of all barriers. Therefore, nearly all could have had such plans. We believe that many businesses may simply be waiting to remove barriers until someone complains.

Nevertheless, the number of facilities in which an architectural barrier was removed increased from 29 percent just before the implementation of the ADA to 55 percent 15 months later. Of those establishments we visited where the owner or manager reported recently removing a barrier, the percentage who said they had done so because of the ADA increased from 39 percent to 75 percent. Further, the percentage of owners and managers who reported any specific plans for future barrier removal at their facility increased from 26 percent just before the law went into effect to 50 percent in April 1993.

Figure 4 illustrates that most of this improvement occurred in the period immediately following the effective date of the law, between January and August 1992, with little additional improvement by April 1993. These findings, combined with a similarly initial sharp increase and then a leveling off or slight decline in familiarity with the ADA, may reflect the intensive educational efforts and media attention during the period when the law was first implemented.

¹⁷This may understate the involvement of federal agencies in providing information about the ADA. The owners and managers we spoke with may have been unaware that the sources they used had received federal funding to provide information or had developed their materials from information provided by federal agencies. Some federally funded resources for information about the ADA are listed in appendix IV.

Figure 4: Barrier-Removal Efforts

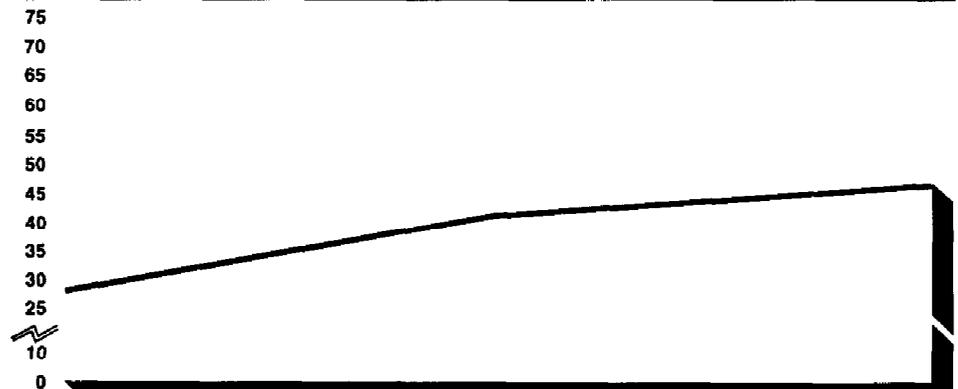
Completed



Completed Because of the ADA



Planned



January 1992
Data Collection Period

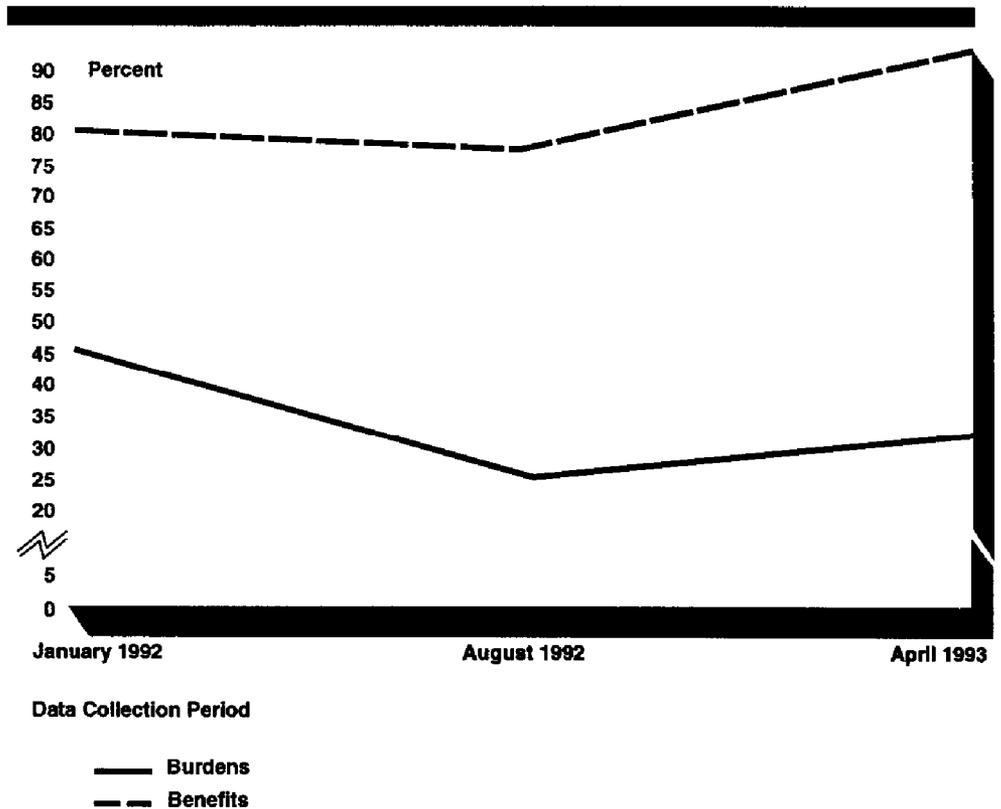
August 1992

April 1993

Barrier-Removal Efforts Beneficial but Not Always Consistent With Standards

In addition, of those who removed architectural barriers, the percentage who reported burdens related to such efforts decreased from 41 percent in January 1992 to 27 percent in April 1993, while the percentage who cited specific benefits—most often improved accessibility, an increase in business, or improved customer satisfaction—increased from 75 percent to 87 percent. (See figure 5.)

Figure 5: Burdens and Benefits Associated With Barrier-Removal Efforts



We found, however, that while the completed barrier-removal efforts were more consistent with the ADA Accessibility Guidelines than they had been, the proportion of unnecessary planned barrier-removal efforts had increased.

- The percentage of the barriers removed after the ADA was passed that did not result in features consistent with the ADAAG decreased from 63 percent

in January 1992 to 24 percent by April 1993.¹⁸ For example, an owner reported widening doorways, yet we observed that the doorways were still too narrow.¹⁹

- The percentage of planned changes that were not necessary, since we judged those features to be already consistent with the ADAAG, increased from 28 percent in January 1992 to 35 percent in April 1993.²⁰

Conclusions

Together, these findings suggest that businesses have begun to respond to the Americans With Disabilities Act, changing the lives of persons with disabilities by increasing their access to goods and services. Nevertheless, while accessibility for persons with disabilities is steadily improving, there remains a need for continuing educational outreach and technical assistance for businesses and government agencies covered by the ADA and therefore the continued attention of a watchful Congress.

First, we found important barriers remaining. Second, we found that half of the businesses and government facilities we visited had yet to remove any barrier and half had no specific plans to do so in the future. Finally, we also found that many of the barrier-removal efforts that were being planned did not appear to be accompanied by adequate guidance. Despite the availability of information and guidance from the Department of Justice and Regional Disability and Business Technical Assistance Centers, it is difficult for businesses to get complete assurance that they are in compliance with the ADA. This leads to their continuing uncertainty about how—and especially, how much—to comply with the act.

This final conclusion echoes recent concerns of the National Council on Disability that the demand for technical assistance is exceeding the resources of federal or local governments.²¹ It is also consistent with another finding from that same report and others that businesses and

¹⁸The number of situations for which this consistency was examined was 54 for January 1992, 146 for August 1992, and 115 for April 1993.

¹⁹The facility thus lacked full accessibility according to the guidelines. Note, however, that lack of information on the standards is not the only possible interpretation. The facility may have done as much as necessary to comply with the law if the nature of the facility made it virtually impossible to comply fully with accessibility standards.

²⁰The number of situations for which this consistency was examined was 39 for January 1992, 57 for August 1992, and 37 for April 1993.

²¹National Council on Disability, *ADA Watch—Year One: Report to the President and the Congress on Progress in Implementing the Americans With Disabilities Act* (Washington, D.C.: April 1993).

government facilities lack the certainty that they desire, with respect to compliance under the ADA.²²

Agency Comments

Responsible officials of the Department of Justice, the Architectural and Transportation Barriers Compliance Board, and organizations we had consulted in doing our work provided comments on a draft of this report, which have been incorporated in the text where appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from its date of issue. We will then send copies to interested parties and to others upon request. If you have any questions or would like additional information, please call me at (202) 512-2900 or Robert L. York, Director of Program Evaluation in Human Services Areas, at (202) 512-5885. Major contributors to this report are listed in appendix V.

Sincerely yours,



Eleanor Chelimsky
Assistant Comptroller General

²²Andrew I. Batavia, "Implementation of ADA Title III: Progress Toward a Fully Accessible Nation," Milbank Project on ADA Implementation, Milbank Memorial Fund. In press.

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Abbreviations

ADA	Americans With Disabilities Act
ADAAG	ADA Accessibility Guidelines
ANSI	American National Standards Institute
UFAS	Uniform Facilities Accessibility Standards

Scope and Methodology

In designing our study, we focused on the extent to which businesses and government agencies met the accessibility standards outlined in the Americans With Disabilities Act, rather than on strict legal compliance.¹ The possible burden of making changes in businesses was reflected in the law, which recognized that removing architectural barriers can be a cumbersome and expensive proposition. If removal of an architectural or communications barrier is not “readily achievable” (defined in the law as “easily accomplishable and able to be carried out without much difficulty or expense”), the law allows goods, services, and facilities to be made available through alternative methods that are readily achievable.² Government agencies must operate their programs and services so that when viewed in their entirety, they are readily accessible and usable by individuals with disabilities.³ Further, barriers can be removed in stages in existing facilities, while different rules apply to newly constructed facilities.

The flexibility in the law regarding “readily achievable” standards and the alterations provisions allow a business to be in technical compliance with the ADA and yet not be accessible to persons with disabilities.⁴

Therefore, rather than try to determine compliance with the ADA, our study focused on the extent to which places of public services and public accommodation met the accessibility guidelines for buildings and facilities as outlined in the ADA regulations.

To answer our four study questions, we used three kinds of data collected at three different times (January 1992, August 1992, and April 1993). We made firsthand observations of accessibility in businesses and government agencies; we interviewed owners and managers of these establishments; and we asked persons with disabilities about their experiences in trying to access similar facilities.

¹Businesses and government facilities may not necessarily be required to meet the ADAAG to be in compliance with the ADA.

²For example, if a storefront does not have sufficient room for the installation of a ramp or lift, the business may instead install an accessible buzzer so that curbside service may be offered.

³Our work, however, focused only on the physical accessibility of government facilities.

⁴Businesses are required to remove barriers if readily achievable. However, the Department of Justice recognizes the continuing obligation of barrier removal; that is, barrier-removal efforts can be phased in over several years. Thus, a person with a disability may not be able to independently access the company's goods and services for a number of years.

Observational Assessment

Our method included identifying which types of establishments to visit, deciding the cities in which we should conduct our visits, and developing an accessibility checklist.

Types of Establishments Observed

Title III of the ADA applies to 12 broad categories of “places of public accommodation,” with many specific types under each category.⁵ Because we did not have the resources to assess examples of all types of public accommodations, we asked persons with disabilities to list the types of places in which they most often found barriers. For this purpose, we assembled discussion groups of persons with different types of disabilities in three cities. We also asked each person in these discussion groups to select the two types of establishments where they would like to see barriers removed first. We selected as those we would visit, the eight types of establishments most frequently mentioned (clothing stores, department stores, grocery stores, shopping malls, theaters, restaurants, hotels, and government buildings).⁶

Geographic Areas Visited

To identify the geographic areas in which to conduct our observations, we turned to research that has attempted to rate the stringency of existing state laws protecting persons with disabilities. To determine if there was a change in accessibility (the ultimate goal of our work), we wanted to obtain baseline data from those communities that were thought to have the most barriers before the implementation of the ADA. We found no research comparing the actual accessibility of various communities. Using state laws as a proxy is less than perfect, but we considered them the best indicator available. (The absence of state laws protecting persons with disabilities does not guarantee there will be barriers.)

⁵The ADA includes many specific businesses in its definition of public accommodations: hotels, motels, inns, or places of lodging; restaurants, bars, or other establishments serving food or drink; movie theaters, concert halls, stadiums, or other places of exhibition or entertainment; auditoriums, convention centers, lecture halls, or other places of public gathering; bakeries, grocery stores, clothing stores, shopping centers, or other sales or rental establishments; banks, doctors' offices, lawyers' and accountants' offices, laundromats, dry cleaners, barber shops, beauty shops, travel services, shoe repair services, funeral parlors, gas stations, pharmacies, insurance offices, hospitals, or other service establishments; terminal, depot, or other station used for specified public transportation; museum, library, gallery, or other place of public display or collection; park, zoo, amusement park, or other place of recreation; school or other place of education; day care center, homeless shelter, food bank, adoption agency, or other social service center establishment; gymnasium, health spa, bowling alley, golf course, or other place of exercise or recreation.

⁶During our initial assessment period, we also conducted observations in three airports, another frequently mentioned place of barriers to accessibility. We judged the three airports to be too small a set of observations to report separately, but we did include the airport observations in aggregate analyses.

We drew on a study that identified those states with the least protective laws on discrimination against persons with disabilities.⁷ The authors rated state laws on six dimensions: the population covered by employment protection laws, the proportion of employers regulated by these laws, the comprehensiveness of the definition used to define disability, the proportion of buildings covered by architectural accessibility provisions, the extent of protections offered in public accommodations, and the extent of protections offered in housing. States received total scores ranging from 5.08 (most protective) to -9.61 (least protective).

We selected for our work the three GAO regions with the most low-scoring states, producing a list of 11 states. Five selected states had scores in the negative numbers, three were in the bottom half of the list but had positive scores, and three were at the bottom of the top half of states. We then selected one city to visit per state, using two criteria. First, we tried to identify older communities, because we expected barriers to be most prevalent there. Second, we selected cities that were large enough to have a number of businesses or government agencies of the types to be observed. From all these steps, our final sample included 11 cities in three different geographic areas: Southeast (Atlanta, Ga.; Tallahassee, Fla.; Birmingham, Ala.; and Memphis, Tenn.), Rocky Mountains (Denver, Colo.; Cheyenne, Wyo.; and Salt Lake City, Utah), and New England (Boston, Mass.; Portland, Me.; Burlington, Vt., and Providence, R.I.).

Observation Checklist

To construct a data collection instrument to assess a facility's accessibility, we turned to a number of sources. First, we examined an instrument previously used in a similar assessment of federally funded public buildings.⁸ Second, we examined the prior federal standards for accessibility from the American National Standards Institute (ANSI), the Uniform Facilities Accessibility Standards (UFAS), and the ADA Accessibility Guidelines.⁹

⁷T.M. Holbrook and S.L. Percy, "Exploring Variations in State Laws Providing Protections for Persons With Disabilities," *Western Political Quarterly*, 45 (1992), pp. 291-320.

⁸U.S. General Accounting Office, *Further Action Needed to Make All Public Buildings Accessible to the Physically Handicapped*, GAO/FPCD-75-166 (Washington, D.C.: July 1975).

⁹The UFAS standards are based on minimum guidelines developed by the Architectural and Transportation Barriers Compliance Board and were adopted, in consultation with the Secretary of Health and Human Services, by all four standard-setting agencies (General Services Administration, Housing and Urban Development, Postal Service, and Defense) under the Architectural Barriers Act of 1968 (P.L. 90-480).

The ADAAG sets guidelines for accessibility in new construction and alteration of covered businesses and government agencies. These guidelines therefore focus mostly on aspects of a facility that could present physical or communication barriers. We also reviewed accessibility checklists developed by private consulting firms. Our accessibility checklist is reproduced in appendix II.

Local Sampling and Site Visit Procedures

We identified the universe of entities to be sampled from the yellow pages and government sections of the local telephone books in each of the 11 cities. We focused our work only on those businesses for which title III had provided civil penalties in the first 6 months after January 26, 1992; that is, businesses with more than 25 employees or gross receipts in excess of \$1 million. We believed that most such businesses would be listed in the directories, and we had no reason to believe that any systematic bias would be introduced by the exclusion of those not so listed.

For each assessment period, we randomly selected four examples of each type of establishment to visit. During our second and third assessments, we eliminated from consideration any facility that we had previously visited. In the case of some businesses (such as grocery stores, hotels, clothing stores, and restaurants), we arranged our selection method to ensure that we visited examples of both national chains and local or regional outlets, which we expected to differ in the amount of resources available to devote to learning about and responding to the requirements of the ADA.

We contacted the managers or owners of all selected establishments, described the purpose of our visit (and promised confidentiality), and scheduled an appointment for the visit. (In the initial contact, we made sure the business was large enough to meet our eligibility requirements.) Participation was voluntary, but the refusal rate was low. We have no reason to suspect a bias stemming from differences between those who allowed our visit and those who did not. We completed as many of these visits as was possible in our 1-month observation interval during each assessment period.

Interviews of Owners and Managers

At the same time we observed a facility, we also interviewed the manager or owner about his or her knowledge about the ADA, the nature and costs of barrier-removal efforts that the facility had recently made, the burdens

**Appendix I
Scope and Methodology**

and benefits resulting from the removal of architectural barriers, plans for further barrier removal, and any assistance provided to the public in areas that are not fully accessible.¹⁰ Including the interview, our site visits lasted from 1 to 3 hours.

We completed a total of 231 observational assessments and interviews in January 1992, 322 in August 1992, and 276 in April 1993. Table I.1 describes three categories of characteristics of the facilities we visited.

Table I.1: Characteristics of Establishments Observed

Category	Characteristic	Number		
		January 1992	August 1992	April 1993
Type of facility	Restaurant	37	44	42
	Shopping mall	36	35	11
	Grocery store	35	43	45
	State and local government office	34	40	44
	Hotel	33	42	38
	Clothing store	21	32	38
	Theater	18	40	18
	Department store	14	46	40
	Airport	3	0	0
	Nature of establishment	National chain	71	128
Local or regional		153	194	174
Unknown		7	0	14
City	Atlanta, Ga.	15	34	32
	Tallahassee, Fla.	23	27	24
	Birmingham, Ala.	25	30	26
	Memphis, Tenn.	28	31	23
	Denver, Colo.	24	35	32
	Cheyenne, Wyo.	25	27	14
	Salt Lake City	27	28	29
	Boston, Mass.	16	30	31
	Portland, Me.	20	26	22
	Burlington, Vt.	17	27	17
	Providence, R.I.	11	27	26

¹⁰We present no findings on the costs of barrier removal because few of those interviewed were able to report the actual costs of completed barrier-removal efforts.

Survey of Persons With Disabilities

Finally, we also surveyed persons with disabilities. Our survey instrument, presented in appendix III, asked about both potential barriers that are observable and those that are not. Thus we drew many survey items from barriers we looked for in our observations, but we also included a number of items that persons with disabilities had mentioned to us as creating barriers, especially those that are not readily observable. For example, we asked respondents if they had ever been refused service (such as a blind person with a guide dog being refused entry to a restaurant).

In deciding which individuals to survey, we focused our attention on persons most likely to encounter the variety of barriers commonly found in places of public service and public accommodation. The majority of these barriers are architectural; thus, we focused on persons with such disabilities as spinal cord injury, multiple sclerosis, cerebral palsy, blindness, low vision, deafness, and hearing impairments. While this list certainly does not include all types of disabilities, it covers many of the larger groups of persons with disabilities who encounter barriers to access.¹¹

We could find no comprehensive listing of persons with disabilities to use in drawing a sample for our survey; as a substitute, we used national organizations' mailing lists.¹² Most of the organizations had agreements of confidentiality with their members and therefore could not provide us with the names and addresses of those selected. However, each agreed to randomly select names, to make copies of mailing labels, and to keep a record of these names (since we needed to follow up with individuals if they did not respond and we also planned two later surveys of these same individuals). For those organizations that could not release the names, we provided pre-stuffed, sealed, and stamped envelopes containing the questionnaires, and they applied the mailing labels. We followed the same procedures for those organizations that allowed us to conduct the mailing directly.

Where necessary, we sent a follow-up mailing 3 weeks after the first mailing and a follow-up postcard 2 weeks after the second. We recorded a reading of the text of the survey on audio tape and sent a cassette in

¹¹Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, *Task I: Population Profiles of Disability* (Washington, D.C.: October 1989). M.P. LaPlante, *Data on Disability from the National Health Interview Survey, 1983-1985, An Info Use Report* (Washington, D.C.: National Institute on Disability and Rehabilitation Research, 1988).

¹²We recognize that individuals who are on such mailing lists may not be representative of all persons with disabilities.

addition to the printed survey to individuals contacted through the American Council for the Blind.¹³

By coding each questionnaire to indicate the organization through which an individual was selected, we could track responses and also be confident that the mailings were completed. We could not, however, ensure that the names were selected randomly.

In early January 1992, we mailed questionnaires to 2,262 individuals with disabilities, randomly selected from the membership and mailing lists of relevant disability-specific organizations.¹⁴ We received 1,596 responses, for a response rate of 71 percent. However, 403 of these were not valid for several reasons: the individual did not have a disability, had moved and could not be located, was unable to complete the survey (either because of age or the severity of disability), was housebound and therefore did not use public services or accommodations, was deceased, or responded indicating a lack of interest in participating. Subtracting those numbers from the original sample, we recalculated the response rate to be 64 percent. In August 1992, we mailed 1,772 questionnaires and received 1,086 responses, for a response rate of 61 percent. After eliminating invalid cases, our recalculated response rate was 55 percent. In April 1993, we mailed 1,672 questionnaires and received 909 responses for a response rate of 54 percent. After eliminating invalid cases, our recalculated response rate was 49 percent.¹⁵

The number of responses for each membership organization is presented in table I.2 and the characteristics of the respondents with valid questionnaires are listed in table I.3.

¹³All individuals were invited to respond to the survey by audiotape, in Braille, or by writing on separate pages if necessary.

¹⁴We selected individuals from the following organizations (the number of individuals selected follows in parentheses): Paralyzed Veterans of America (200), American Paralysis Association (200), National Spinal Cord Injury Association (200), National Multiple Sclerosis Society (400), United Cerebral Palsy Associations (471), American Council for the Blind (300), National Association of the Deaf (200), National Fraternal Society for the Deaf (91), and Deafpride (200).

¹⁵We have no reason to believe that there is any systematic bias introduced by differences between respondents and nonrespondents. First, the pattern of response rates across the members of the different organizations is similar at all three assessment periods, as shown in table I.2. Second, as illustrated in table I.3, there are no differences based on employment status, gender, or age of the respondents at the three assessment periods. Finally, most of the feedback we received from respondents at the third assessment period suggests that some felt overly burdened. Specifically, many reported that they had already responded on more than one occasion and could not respond again.

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Table I.2: Number of Responses Across Membership Organizations

Organization	January 1992		August 1992		April 1993	
	Number valid	Percent of adjusted sample	Number valid	Percent of adjusted sample	Number valid	Percent of adjusted sample
National Spinal Cord Injury Association	150	84	116	68	112	65
American Paralysis Association	136	74	89	50	a	
Paralyzed Veterans of America	135	77	102	60	88	55
United Cerebral Palsy Associations	254	57	172	40	134	32
National Multiple Sclerosis Society	174	62	124	56	132	57
American Council for the Blind	122	61	99	61	78	56
National Association of the Deaf	112	86	95	74	84	66
National Fraternal Society for the Deaf	65	84	57	75	50	71
Deafpride	45	24	a		48	28

^aOwing to staffing problems, the organization was unable to complete the mailing during this assessment period.

Table I.3: Characteristics of Persons With Disabilities Surveyed

Category	Characteristic	Percent		
		January 1992	August 1992	April 1993
Employment status	Not employed	57	59	58
	Employed part-time	14	13	13
	Employed full-time	29	28	29
Gender	Male	57	58	57
	Female	43	42	43
Age	Under 20	1	1	0
	From 20 to under 30	12	11	7
	From 30 to under 40	23	22	19
	From 40 to under 50	26	25	29
	From 50 to under 60	18	19	21
	Over 60	19	22	25

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All response frequencies are reported in percentages, rounded to the nearest whole number. These numbers represent the percentage of facilities for which the feature was observed to be consistent with the ADA Accessibility Guidelines.

T1, T2, and T3 represent time 1 (January 1992), time 2 (August 1992), and time 3 (April 1993) results, respectively. Blanks indicate that data were not available for that assessment period. The figures noted in our observation checklist refer to those in the ADAAG.

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Survey Form 1: PARKING

Facility Name _____

Total Parking in Lot	Required Minimum Number of Accessible Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20 plus 1 for each 100 over 1000

1. Are the required number of designated parking spaces provided? (Note: The total number of designated parking spaces may be distributed among parking lots if greater accessibility is achieved.) T1 36 T2 48 T3 62

2. Are accessible parking spaces the closest spaces to the building's accessible entrance? T1 74 T2 77 T3 87

3. Are accessible parking spaces at least 96 inches wide with a demarcated adjacent access aisle of 60 inches? (Two spaces may share a common aisle.) T1 19 T2 32 T3 43

4. Does the access aisle connect directly to the accessible route? T1 88 T2 66 T3 84

5. Are the spaces and aisles level with no slope greater than 1:50? (This means a curb ramp cannot project into the access aisle.) T1 71 T2 83 T3 89

6. Are 1 out of 8 spaces, but not less than 1, designated as "van accessible"? T1 1 T2 7 T3 12

7. If the parking space is designated as a van space, is the adjacent aisle at least 96 inches wide? T1 25 T2 25 T3 73

8. Do parking spaces designated as van spaces

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have a vertical clearance of at least 132 inches?

T1 _____ T2 43 T3 96

9. Does each accessible parking space have a vertical sign that is unobscured by a parked vehicle and shows the universal symbol of accessibility?

T1 30 T2 39 T3 58

10. Are the required number of fully accessible parking spaces provided? (Note: The total number of accessible parking spaces may be distributed among parking lots if greater accessibility is achieved.)

T1 8 T2 12 T3 16

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Survey Form 2: PATHWAYS (GETTING INTO THE FACILITY)

Facility Name _____

1. Is there an accessible route free of steps from accessible parking and passenger loading zones? T1 94 T2 95 T3 92
2. Is there an accessible route free of steps from public streets and sidewalks? T1 90 T2 96 T3 88
3. If the accessible route is not the only entrance into the facility, is there a sign indicating the location of the accessible route? T1 36 T2 38 T3 32

Design of Route:

4. Is the accessible pathway at least 36 inches wide? (Pathways may have occasional instances of 32 inches wide.) T1 99 T2 98 T3 98
5. If the pathway is less than 60 inches wide, are there passing spaces at least 60 inches wide and 60 inches long at reasonable intervals not exceeding 200 feet? T1 90 T2 89 T3 94

Protruding Objects:

6. Is there at least 80 inches clear head room along the pathway? T1 99 T2 96 T3 98
7. If head room is less than 80 inches in a space next to an accessible pathway, is there a cane detectable barrier within 27 inches of the ground? T1 50 T2 47 T3 57
8. If objects mounted to the wall have bottom edges between 27 and 80 inches from the floor, do they project less than 4 inches into the pathway? (Wall mounted objects with bottom edges below 27 inches may project any amount so long as they do not reduce the required clear width of an accessible route of travel.) T1 69 T2 48 T3 66

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9. If an object mounted on a post (such as a sign or a telephone) has a bottom edge between 27 and 80 inches from the ground, does the object project less than 12 inches into the path of travel? T1 54 T2 68 T3 86
10. Is the accessible pathway at least 36 inches wide alongside the protruding object? T1 94 T2 98 T3 96
- Ramps:
11. Is the maximum slope less than 1:12? T1 _____ T2 75 T3 88
12. Is the maximum rise for any run less than 30 inches? T1 _____ T2 91 T3 90
13. Is there a level landing at the top and bottom of each run? T1 88 T2 81 T3 94
14. Is each landing at least as wide as the ramp and at least 60 inches long? T1 79 T2 78 T3 91
15. Where the ramp changes direction, is the landing at least 60 by 60 inches? T1 57 T2 69 T3 75
16. If a ramp or landing has a drop off, does it have a 2 inch curb, a wall, railings or projecting surfaces which prevent people from falling off? T1 46 T2 62 T3 78
- 16b. Are ramps designed so that water will not accumulate on walking surfaces? T1 95 T2 93 T3 97
- Handrails:
17. If the ramp rises more than 6 inches or is longer than 72 inches, does it have a handrail on each side? T1 46 T2 42 T3 66
18. On dogleg or switchback ramps, is the inside handrail continuous? T1 77 T2 37 T3 62
19. Is the gripping surface of the handrail continuous? T1 81 T2 70 T3 93
20. Are handrails fixed so that they do not rotate within their fittings? T1 98 T2 73 T3 100
21. Is the top of the handrail between 30 and 34 inches above the ramp surface? T1 _____ T2 44 T3 41
22. At ends of handrails, is there at least

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	12 inches of level handrail beyond the top and bottom of the ramp segment?	T1 <u>23</u>	T2 <u>15</u>	T3 <u>21</u>
23.	Are the ends of handrails rounded or returned smoothly to the floor, wall, or post?	T1 <u>60</u>	T2 <u>57</u>	T3 <u>86</u>
24.	Is the diameter of the handrail between 1-1/4 inches and 1-1/2 inches and does the shape provide an equivalent gripping surface?	T1 <u>37</u>	T2 <u>51</u>	T3 <u>72</u>
25.	At wall mounted handrails, is there exactly 1-1/2 inches between the handrail and the wall?	T1 <u>6</u>	T2 <u>14</u>	T3 <u>46</u>
	Surface:			
26.	Are accessible pathway surfaces stable, firm and slip-resistant?	T1 <u>96</u>	T2 <u>98</u>	T3 <u>97</u>
	Slope of Route:			
27.	Is the slope of the accessible pathway no greater than 1:20?	T1 <u>83</u>	T2 <u>82</u>	T3 <u>76</u>
28.	If there is a cross slope of accessible pathway, is it not easily detectable?	T1 <u>63</u>	T2 <u>75</u>	T3 <u>84</u>
29.	Are changes in level between 1/4 and 1/2 inch beveled?	T1 <u>72</u>	T2 <u>61</u>	T3 <u>77</u>
30.	Are changes in level greater than 1/2 inch ramped?	T1 <u>73</u>	T2 <u>73</u>	T3 <u>75</u>
	Curb Ramps:			
31.	Is there a curb ramp wherever an accessible pathway meets a curb?	T1 <u>91</u>	T2 <u>90</u>	T3 <u>89</u>
32.	Are curb ramps located or protected so that they will not be obstructed by parked vehicles?	T1 <u>76</u>	T2 <u>84</u>	T3 <u>82</u>
33.	Are curb ramps at crosswalks wholly contained within the crosswalk lines, except for the flared sides?	T1 <u>62</u>	T2 <u>74</u>	T3 <u>63</u>
34.	Is the slope of the curb ramp 1:12 or less?	T1 <u>61</u>	T2 <u>69</u>	T3 <u>79</u>

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35. Is the transition from the curb ramp to the walkway, road or gutter flush and free of abrupt changes?	T1 <u>77</u>	T2 <u>73</u>	T3 <u>86</u>
36. Is the width of the curb ramp, not including the flared sides, at least 36 inches?	T1 <u>97</u>	T2 <u>93</u>	T3 <u>99</u>
37. Do the flared sides of the curb ramp have a slope of 1:10 or less?	T1 <u>37</u>	T2 <u>60</u>	T3 <u>71</u>
38. Are there detectable warnings at curb cuts entering hazardous vehicular areas?	T1 <u>2</u>	T2 <u>14</u>	T3 <u>2</u>
39. Do detectable warnings consist of raised domes with a diameter of nominal 0.9, a height of nominal 0.2, and a center to center spacing of nominal 2.35?	T1 <u>0</u>	T2 <u>0</u>	T3 <u>4</u>

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Survey Form 3: STAIRS

Facility Name _____

- | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------|
| 1. In any one flight do all the steps have uniform riser height and tread width? | T1_94 | T2_95 | T3_97 |
| 2. Are the risers closed? | T1_88 | T2_88 | T3_95 |
| 3. Are the treads a minimum of 11 inches measured from nosing to nosing? | T1_85 | T2_84 | T3_86 |
| 4. If the nosings do project, are the undersides beveled to prevent someone from tripping? | T1_58 | T2_44 | T3_73 |
| 5. Do the nosings project no more than 1-1/2 inches? | T1_91 | T2_86 | T3_85 |
| 6. Are outdoor stairs designed so that water does not accumulate on walking surfaces? | T1_72 | T2_76 | T3_82 |
| 7. Do stairways have continuous handrails at both sides of all steps? | T1_61 | T2_62 | T3_63 |
| 8. On dogleg or switchback stairs, is the inside handrail continuous? | T1_60 | T2_64 | T3_56 |
| 9. At ends of handrails, is there at least 12 inches of level handrail beyond the top riser? | T1_23 | T2_23 | T3_24 |
| 10. At ends of handrails, is there at least one tread width of sloping handrail beyond the bottom riser plus at least 12 inches of level handrail? | T1_8 | T2_7 | T3_10 |
| 11. At wall mounted handrails, is there exactly 1-1/2 inches between the handrail and the wall? | T1_27 | T2_14 | T3_39 |
| 12. Is the gripping surface uninterrupted by newel posts or other obstructions? | T1_78 | T2_85 | T3_88 |
| 13. Are the tops of handrails between 30 and 34 inches above the nosings? | T1_____ | T2_55 | T3_45 |
| 14. Are the ends of handrails rounded or returned smoothly to the floor, wall or post? | T1_56 | T2_70 | T3_69 |
| 15. Are handrails fixed so that they do not rotate within their fittings? | T1_98 | T2_95 | T3_100 |

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16. Is the diameter of the handrail between 1-1/4 inches and 1-1/2 inches or provide an equivalent gripping surface? T1 39 T2 40 T3 47
17. If there is an accessible alternative pathway (such as a ramp or stairs), is its location indicated with a sign? T1 13 T2 17 T3 18

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Survey Form 4: LIFTS

Facility Name _____

- | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|
| 1. Can the platform lift be used without assistance? | T1 | T2 | T3 |
| | <u>0</u> | <u>100</u> | <u>56</u> |
| 2. Is there at least a 30 x 48 inch clear space positioned for a person in a wheelchair to reach the controls and enter the lift? | T1 | T2 | T3 |
| | <u>100</u> | <u>100</u> | <u>100</u> |
| 3. Is the lift platform at least 30 x 48 inches? | T1 | T2 | T3 |
| | <u>50</u> | <u>100</u> | <u>80</u> |
| 4. If the clear space allows for a forward reach, is the height of the lift control 48 inches or less -OR- if the clear space allows for a side reach, is the height of the lift control 54 inches or less? | T1 | T2 | T3 |
| | <u>100</u> | <u>100</u> | <u>100</u> |
| 5. Are the controls operable with one hand? | T1 | T2 | T3 |
| | <u>100</u> | <u>100</u> | <u>100</u> |
| 6. Are they operable without tight grasping, pinching, or twisting of the wrist? | T1 | T2 | T3 |
| | <u>100</u> | <u>50</u> | <u>100</u> |
| 7. Is the surface on the lift and on the accessible route of travel to which it connects stable, firm and slip-resistant? | T1 | T2 | T3 |
| | <u>50</u> | <u>100</u> | <u>100</u> |
| 8. If there is a change in level of between 1/4 inch and 1/2 inch, is the edge beveled with a slope of 1:2 or less? | T1 | T2 | T3 |
| | <u>100</u> | <u>100</u> | <u>100</u> |

Survey Form 5: ENTRANCES, DOORS AND GATES

Facility Name _____

Design:

1. If a revolving door or turnstile is used on an accessible route, is an accessible door or gate provided to facilitate the same use pattern? T1 71 T2 71 T3 86
2. Does the doorway (or at least one active leaf) provide a 32 inch clear opening width? T1 86 T2 81 T3 92
3. If the door is not automatic or power assisted, does it have maneuvering space relative to the direction of approach as shown in Figure 25? T1 92 T2 89 T3 84
4. Is the floor level and clear within the required maneuvering space? T1 94 T2 91 T3 93

Vestibules:

5. If there are two doors in series, is the clear space between the walls at either end of the vestibule at least 48 inches plus the width of the door -OR- at least 48 inches if the doors in the series swing in either the same direction or away from the space between them? T1 86 T2 88 T3 94

Thresholds:

6. If there is a raised threshold, is it beveled at 1:2 or less? T1 82 T2 83 T3 92
7. Is the threshold no higher than 1/2 inch? (Exception: An exterior sliding door can have a 3/4 inch threshold.) T1 81 T2 81 T3 91

Hardware:

8. Are all handles, locks, and latches operable with one hand? T1 94 T2 99 T3 96
9. Are they operable without tight pinching, tight grasping or twisting of the wrist? T1 55 T2 87 T3 91

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10. Is the hardware mounted no higher than 48 inches above floor level? T1_97 T2_97 T3_99

11. If there are sliding doors, is the operating hardware exposed and usable from both sides when the doors are fully open? T1_83 T2_100 T3_88

Opening and Closing:

12. Do doors open with little force? T1_42 T2_48 T3_71

13. If the door has a closer, does it take at least three seconds to move from 70 degrees open to a point 3 inches from the latch? T1_69 T2_67 T3_87

Entrances:

16. Is the accessible entrance to the building not a service entrance unless the only entrance to the building is a service entrance? T1_98 T2_98 T3_98

17. Within the boundaries of the site, is the accessible entrance connected by an accessible route to existing public transportation stops, accessible parking and passenger loading zones, and to public streets or sidewalks? T1_88 T2_95 T3_86

18. Is the accessible entrance connected by an accessible route to all accessible elements or spaces within the building or facility? T1_87 T2_90 T3_88

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Survey Form 6: BUILDING INTERIORS (LOBBIES, CORRIDORS, ROOMS AND SPACES)

Facility Name _____

Egress:

1. Is the means of egress accessible? T1 83 T2 91 T3 90
2. If only one means of egress in a multi-story building is accessible, are safe areas of refuge provided on each floor? T1 74 T2 64 T3 82

Design:

3. Is the accessible route at least 36 inches wide except at doorways? T1 92 T2 84 T3 91
4. Are doorways at least 32 inches in clear opening width? T1 89 T2 84 T3 91
5. Where the accessible route makes a U-turn around an obstacle which is less than 48 inches wide, does the pathway width increase to at least 42 inches on the approach and 48 inches in the turn? (Figure 7) T1 75 T2 78 T3 83
6. If the accessible route is less than 60 inches wide, are there passing spaces at least 60 inches wide and 60 inches long within reasonable intervals not exceeding 200 feet? T1 75 T2 94 T3 90
7. If objects mounted to the wall have bottom edges between 27 and 80 inches from the floor, do they project less than 4 inches into the space? T1 41 T2 49 T3 76
8. Do free standing objects mounted on posts with bottom edges between 27 and 80 inches high project less than 12 inches into the route of travel? T1 56 T2 69 T3 93
9. Is there an accessible path of at least 36 inches clear alongside the protruding object? T1 86 T2 93 T3 94
10. Is there at least 80 inches clear head room? T1 98 T2 92 T3 96

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- | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------|-------|-------|
| 11. If there is not at least 80 inches of clear head room, is the barrier within 27 inches of the ground so that it is cane-detectable? | T1_54 | T2_32 | T3_63 |
| 12. Are changes of level greater than 1/2 inch treated with a ramp? | T1_89 | T2_72 | T3_80 |
| 13. Is the slope of the route no greater than 1:20 except at ramps? | T1_96 | T2_97 | T3_96 |
| 14. If there is a cross slope, is it not obvious? | T1_91 | T2_88 | T3_97 |
| 15. Are the floors in all accessible areas and routes stable, firm, and slip-resistant? | T1_84 | T2_95 | T3_95 |
| 16. If carpet or carpet tile is used on the floor, is it securely attached? | T1_94 | T2_87 | T3_73 |
| 17. Is it a level, low pile type of carpet with a firm pad or no pad at all underneath it? | T1_100 | T2_98 | T3_99 |
| Signage: | | | |
| 18. On room signs, do the letters and numbers have a width to height ratio between 3:5 and 1:1? | T1_86 | T2_83 | T3_85 |
| 19. Does the color of the characters and symbols contrast with the color of the background? | T1_86 | T2_78 | T3_89 |
| 20. Do signs providing permanent identification of rooms and spaces have raised letters and Braille? | T1_15 | T2_5 | T3_18 |
| 21. Are the characters and symbols on signs raised 1/32 inch? | T1_20 | T2_11 | T3_27 |
| 22. Are they mounted on the wall at the latch side of the door between 54 and 66 inches above the floor? | T1_11 | T2_7 | T3_15 |
| 23. Are the raised characters or symbols between 5/8 inch and 2 inches tall? | T1_53 | T2_20 | T3_60 |

Seating, Tables and Work Surfaces:

24. Do these seating spaces which are provided for people in wheelchairs have a 30 x 48 inch clear space which overlaps an accessible route? T1 90 T2 92 T3 90
25. Is no more than 19 inches of the 30 x 48 inch clear space measured under the table? (Figure 45) T1 93 T2 96 T3 93
26. Is the knee space at least 27 inches high, 30 inches wide, and 19 inches deep? (Figure 45)? T1 36 T2 32 T3 51
27. Is the top of the table or work surface between 28 and 34 inches from the floor? T1 95 T2 90 T3 84
28. Are the aisles between tables at least 36 inches wide? T1 88 T2 66 T3 80
29. Do 5% (but not less than one) of the built-in or fixed seating tables and work surfaces meet the above requirements? T1 42 T2 31 T3 52

Controls:

30. Are light switches, thermostatic controls, electrical receptacles and similar devices between 15 and 54 inches from the floor when the clear floor space allows a parallel approach -OR- are they between 15 and 48 inches when the clear floor space allows only a forward approach? T1 62 T2 81 T3 84

Interior Ramps:

31. Is the maximum slope less than 1:12? T1 T2 68 T3 71
- 31b. Is the maximum rise for any run less than 30 inches? T1 T2 74 T3 86
32. Is there a level landing at the top and bottom of each run? T1 100 T2 93 T3 97
33. Is each landing at least as wide as the ramp and at least 60 inches long? T1 77 T2 87 T3 93
34. Where the ramp changes direction, is the landing at least 60 by 60 inches? T1 60 T2 60 T3 86

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35. If a ramp or landing has a drop off, does it have a 2 inch curb, a wall, railings or projecting surfaces which prevent people from falling off? T1 100 T2 77 T3 100

Handrails:

37. If the ramp rises more than 6 inches or is longer than 72 inches, does it have a handrail on each side? T1 54 T2 28 T3 52

38. On dogleg or switchback ramps, is the inside handrail continuous? T1 100 T2 25 T3 75

39. Is the gripping surface of the handrail continuous? T1 80 T2 52 T3 88

40. Are handrails fixed so that they do not rotate within their fittings? T1 80 T2 54 T3 100

41. Is the top of the handrail between 30 and 34 inches above the ramp surface? T1 30 T2 35 T3 67

42. At ends of handrails, is there at least 12 inches of level handrail beyond the top and bottom of the ramp segment? T1 11 T2 14 T3 29

43. Are the ends of handrails rounded or returned smoothly to the floor, wall, or post? T1 67 T2 45 T3 77

44. Is the diameter of the handrail between 1-1/4 inches and 1-1/2 inches or does the shape provide an equivalent gripping surface? T1 44 T2 24 T3 41

45. At wall mounted handrails, is there exactly 1-1/2 inches between the handrail and the wall? T1 25 T2 19 T3 43

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Survey Form 7: ELEVATORS

Facility Name _____

Hallway Call Buttons:

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------|---------------|---------------|--------------|
| 1. Are the hallway call buttons centered at 42 inches above the floor? | T1 <u>45</u> | T2 <u>44</u> | T3 <u>46</u> |
| 2. Are the call buttons at least 3/4 inches in the smallest dimension? | T1 <u>100</u> | T2 <u>100</u> | T3 <u>97</u> |
| 3. Do they have visual signals to indicate when each call is registered and answered? | T1 <u>92</u> | T2 <u>92</u> | T3 <u>93</u> |
| 4. Is the button designating the up direction above the down button? | T1 <u>98</u> | T2 <u>95</u> | T3 <u>97</u> |
| 5. If there is an object below the buttons, does it project no more than 4 inches into the elevator lobby? | T1 <u>48</u> | T2 <u>21</u> | T3 <u>35</u> |
| 6. Is there a visible and audible signal at each hoistway entrance to indicate which car is answering a call? | T1 <u>54</u> | T2 <u>59</u> | T3 <u>41</u> |
| 7. Do audible signals sound once for up and twice for down, or do they have verbal annunciators that say "up" or "down"? | T1 <u>48</u> | T2 <u>50</u> | T3 <u>40</u> |
| 8. Are the visual signals mounted at least 72 inches above the floor? | T1 <u>82</u> | T2 <u>64</u> | T3 <u>72</u> |
| 9. Are they at least 2-1/2 inches in the smallest dimension? | T1 <u>54</u> | T2 <u>59</u> | T3 <u>84</u> |

Door Jamb and Threshold:

- | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|
| 10. Does each elevator hoistway entrance have a raised and Braille floor designation on each door jamb centered 60 inches from the floor? | T1 <u>37</u> | T2 <u>36</u> | T3 <u>45</u> |
| 11. Are the numbers 2 inches in height? | T1 <u>69</u> | T2 <u>48</u> | T3 <u>78</u> |
| 12. Do the numbers on the floor designation sign have a width-to-height ratio between 3:5 and 1:1? | T1 <u>58</u> | T2 <u>61</u> | T3 <u>84</u> |
| 13. Does the color of the numbers contrast with the color of the background? | T1 <u>78</u> | T2 <u>59</u> | T3 <u>73</u> |

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14. Are the numbers raised at least 1/32 of an inch? T1 76 T2 64 T3 86

Doors:

15. Do the elevator doors open and close automatically? T1 100 T2 100 T3 97

16. Do they re-open automatically without contact if they become obstructed? T1 74 T2 60 T3 74

17. Is the time from when the elevator's arrival is signaled until the doors begin to close at least 5 seconds? T1 89 T2 86 T3 99

18. Do the elevators doors remain fully open for a minimum of 3 seconds? T1 96 T2 99 T3 99

Elevator Floor:

19. Does the floor area of the car allow maneuvering room for wheelchair users to enter the car, reach the controls, and exit? (Figure 22) T1 81 T2 70 T3 82

20. Are the floors in and adjacent to the elevator stable, firm, and slip-resistant? T1 95 T2 100 T3 97

Elevator Control Panels:

21. Are the control buttons at least 3/4 inches in their smallest dimensions? T1 100 T2 100 T3 97

22. Are the controls designated by raised characters or symbols at least 1/32 of an inch high placed immediately to the left of the buttons? T1 61 T2 47 T3 57

23. Do the signs have a width-height ratio between 3:5 and 1:1? T1 81 T2 90 T3 95

24. Does the color of the numbers contrast with the color of the background? T1 90 T2 85 T3 78

25. Is the button for the main entry floor designated by a raised star? T1 40 T2 48 T3 38

26. Do the floor buttons have visual indications to show when each call is registered? T1 93 T2 93 T3 89

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27. Are the emergency buttons grouped at the bottom of the panel with centerlines no less than 35 inches above the floor? T1 61 T2 65 T3 69
28. Are the controls located on the front wall if center doors -OR- front or side wall next to the door if side-opening doors? T1 99 T2 99 T3 100
29. Are the controls placed so that no control is mounted higher than 48 inches from the floor? T1 64 T2 72 T3 69
30. Is there a visual car position indicator above the car control panel or over the door to indicate the floor level? T1 84 T2 86 T3 78
31. Do the numerals illuminate and does an audible signal sound as the car passes or stops at a floor? T1 53 T2 49 T3 42
32. Are the numerals at least 1/2 inch high? T1 98 T2 92 T3 97
- Emergency Communications:**
33. Is there an emergency two-way communication system between the elevator and a point outside the hoistway? T1 75 T2 67 T3 76
34. Is the communication system identified by a raised symbol or lettering? T1 53 T2 52 T3 55
35. Is the highest operable part of a two-way communication system 48 inches above the floor or less? T1 89 T2 73 T3 81
36. If the system uses a handset, is the length of the cord from the panel to the handset at least 29 inches? T1 78 T2 55 T3 77
37. If the system is in a closed compartment, is the hardware on the compartment door operable with one hand, and does its operation not require tight grasping, pinching, or twisting of the wrist? T1 30 T2 39 T3 53
38. Is the emergency intercommunication usable without voice communication? T1 30 T2 15 T3 66

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Survey Form 8: TOILET ROOMS

Facility Name _____

1. Are the toilet rooms located on an accessible route? T1 89 T2 92 T3 92

2. If not the only toilet room, is the location of the accessible toilet room indicated with a sign? T1 51 T2 55 T3 47

Doors to Toilet Room:

3. Does no door swing into a required clear floor space at an accessible fixture? T1 85 T2 76 T3 83

4. Does the doorway (or at least one active leaf) provide a 32 inch clear opening width? T1 70 T2 68 T3 78

5. If the door is not automatic or power assisted, does it have maneuvering space relative to the direction of approach as shown in Figure 25? T1 68 T2 55 T3 70

6. Is the floor level and clear within the required maneuvering space? T1 98 T2 98 T3 98

7. If there are two doors in series, is the clear space between the walls at either end of the vestibule at least 48 inches plus the width of the door -OR- at least 48 inches if the doors in the series swing in either the same direction or away from the space between them? T1 68 T2 33 T3 68

8. If there is a raised threshold, is it beveled at 1:2 or less? T1 73 T2 76 T3 81

9. Is the threshold no higher than 1/2 inch? (Exception: An exterior sliding door can have a 3/4 inch threshold.) T1 84 T2 87 T3 96

10. Are all handles, locks, and latches operable with one hand? T1 93 T2 93 T3 93

11. Are they operable without tight pinching, tight grasping or twisting of the wrist? T1 42 T2 70 T3 74

12. Is the hardware mounted no higher than 48 inches above floor level? T1 98 T2 98 T3 96

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13. Do doors open with little force?	T1 <u>57</u>	T2 <u>65</u>	T3 <u>78</u>
14. If the door has a closer, does it take at least three seconds to move from 70 degrees open to a point 3 inches from the latch?	T1 <u>48</u>	T2 <u>56</u>	T3 <u>77</u>
All Toilet Rooms:			
14b. Is there an unobstructed turning space (a 60 inch diameter circle or T-shaped space) in the toilet room?	T1 _____	T2 <u>69</u>	T3 <u>74</u>
15. Is the centerline of the toilet 18 inches from a wall or partition which is prepared for the installation of a grab bar?	T1 <u>38</u>	T2 <u>35</u>	T3 <u>41</u>
16. Is the top of the toilet seat between 17 and 19 inches from the floor?	T1 <u>40</u>	T2 <u>41</u>	T3 <u>44</u>
17. Is the seat a type that does not automatically spring back to an open position?	T1 <u>98</u>	T2 <u>99</u>	T3 <u>97</u>
18. Are the grab bars mounted horizontally between 33 and 36 inches above the floor?	T1 <u>45</u>	T2 <u>44</u>	T3 <u>46</u>
19. Is the diameter of the grab bar between 1-1/4 inch and 1-1/2 inch or does the shape provide an equivalent surface?	T1 <u>92</u>	T2 <u>78</u>	T3 <u>92</u>
20. Is the space between the grab bar and the wall exactly 1-1/2 inches?	T1 <u>44</u>	T2 <u>29</u>	T3 <u>56</u>
21. Are the grab bars secured so that they do not rotate within their fittings?	T1 <u>93</u>	T2 <u>83</u>	T3 <u>98</u>
22. Is the grab bar and the wall adjacent to it free of any sharp or abrasive elements?	T1 <u>85</u>	T2 <u>79</u>	T3 <u>99</u>
23. Are the grab bars mounted on the wide side of the toilet area?	T1 <u>65</u>	T2 <u>45</u>	T3 <u>51</u>
24. Are flush controls automatic or operable with one hand without excessive force?	T1 <u>97</u>	T2 <u>98</u>	T3 <u>99</u>
25. Are the flush controls operable without tight grasping, pinching or twisting of the wrist?	T1 <u>99</u>	T2 <u>99</u>	T3 <u>100</u>
26. Are the flush controls operable without much pressure?	T1 <u>97</u>	T2 <u>93</u>	T3 <u>99</u>

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27. Is the paper dispenser mounted no more than 36 inches from the back wall and at least 19 inches from the floor? T1 78 T2 74 T3 78
28. Does the paper dispenser not obstruct use of the grab bar? T1 79 T2 88 T3 88
29. Does the dispenser allow continuous paper delivery? T1 97 T2 92 T3 99

Toilet Rooms:

30. If the toilet is not located in a stall, does the clear floor space and room arrangement conform to Figure 28? T1 58 T2 53 T3 64
31. If the toilet is not located in a stall, is the back grab bar at least 36 inches long with one end mounted at least 12 inches from the centerline of the toilet -AND- a side bar at least 42 inches long with the front end 54 inches from the back wall? (Fig. 29) T1 7 T2 7 T3 7

Doors to Toilet Stalls:

32. Does no door swing into a required clear floor space at an accessible fixture? T1 76 T2 69 T3 81
33. When the stall door is open 90 degrees, is there a clear opening of at least 32 inches measured between the face of the door and the edge of the partition on the latch side? T1 52 T2 51 T3 67
34. Are all handles, locks, and latches operable with one hand? T1 93 T2 94 T3 98
35. Are they operable without tight pinching, tight grasping or twisting of the wrist? T1 55 T2 80 T3 77
36. Is the hardware mounted no higher than 48 inches above floor level? T1 99 T2 99 T3 99
37. Do doors open with little force? T1 100 T2 97 T3 99

Accessible Toilet Stalls:

38. Does the size and arrangement of the accessible toilet stalls comply with the standard stall shown in Figure 30(a)? (Arrangements may be reversed.) T1 10 T2 19 T3 18

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39. Is the stall at least 60 inches wide? T1 14 T2 24 T3 25
40. If the toilet is wall mounted, is the stall at least 56 inches deep -OR- if the toilet is a floor mounted model, is the stall at least 59 inches deep? T1 73 T2 74 T3 75
41. Is the stall door located at the "open" side of the toilet? T1 55 T2 89 T3 88
42. If the stall is less than 60 inches deep, does the front partition and at least one side partition have toe clearances of at least 9 inches above the floor? T1 85 T2 80 T3 92
43. If the stall door swings into the stall, is there at least 36 inches additional depth in the stall? (Figure 30 (a-1)) T1 29 T2 38 T3 32
44. If the stall door swings out and the approach is from the latch side, is the aisle approaching the stall at least 42 inch wide -OR- if the stall door swings out and the approach is from the hinge side, is the aisle approaching the stall at least 48 inch wide? T1 81 T2 82 T3 85
45. If the stall door opens out at the end of an aisle, is there at least 18 inches of maneuvering space at the latch side of the stall door? T1 65 T2 71 T3 91
47. Are the grab bars placed as shown in Figure 30a, a-1, c or d? T1 18 T2 26 T3 32
- Urinals:
48. Does the urinal have an elongated rim no more than 17 inches above the floor? T1 16 T2 23 T3 20
49. Is there a clear floor space 30 by 48 inches which allows a forward approach to the urinal? T1 79 T2 85 T3 86
50. Does the clear floor space adjoin or overlap an accessible route? T1 83 T2 84 T3 91
51. If urinal shields are provided, do they allow a minimum of 29 inches between the two panels and not extend beyond the front edge of the urinal rim? T1 6 T2 20 T3 26

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52. Are the flush controls automatic or operable with one hand without tight grasping, pinching, or twisting of the wrist?	T1 <u>97</u>	T2 <u>97</u>	T3 <u>99</u>
53. Are the controls mounted no more than 44 inches above the floor?	T1 <u>36</u>	T2 <u>28</u>	T3 <u>34</u>
54. Where urinals are provided, does at least one meet the above requirements?	T1 <u>8</u>	T2 <u>7</u>	T3 <u>14</u>
Lavatory:			
55. Is the lavatory rim or counter surface no higher than 34 inches above the finished floor?	T1 <u>90</u>	T2 <u>86</u>	T3 <u>86</u>
56. Is there a clearance of at least 29 inches from the floor to the bottom of the apron?	T1 <u>35</u>	T2 <u>58</u>	T3 <u>53</u>
57. Do the toe and knee clearances comply with Figure 31?	T1 <u>32</u>	T2 <u>49</u>	T3 <u>63</u>
58. Is there a clear floor space at least 30 by 48 inches in front of the lavatory allowing a forward approach?	T1 <u>86</u>	T2 <u>85</u>	T3 <u>86</u>
59. Is not more than 19 inches of this clear floor space measured underneath the lavatory?	T1 <u>98</u>	T2 <u>93</u>	T3 <u>82</u>
60. Does the clear floor space adjoin or overlap an accessible route?	T1 <u>85</u>	T2 <u>86</u>	T3 <u>91</u>
61. Are the controls which operate the faucet within 24 inches from the front of the lavatory?	T1 <u>100</u>	T2 <u>98</u>	T3 <u>100</u>
62. Are hot water pipes and drain pipes insulated or otherwise covered?	T1 <u>14</u>	T2 <u>36</u>	T3 <u>44</u>
63. Is the area below the lavatory free of sharp or abrasive surfaces?	T1 <u>66</u>	T2 <u>76</u>	T3 <u>96</u>
64. Can the faucet be operated with one hand without tight grasping, pinching, or twisting of the wrist?	T1 <u>50</u>	T2 <u>67</u>	T3 <u>68</u>
65. If the valve is self closing, does it remain open for at least 10 seconds?	T1 <u>40</u>	T2 <u>58</u>	T3 <u>62</u>
66. Does at least one lavatory meet the above requirements?	T1 <u>2</u>	T2 <u>16</u>	T3 <u>21</u>

Mirrors:

67. Does at least one mirror have a bottom edge of the reflecting surface no higher than 40 inches from the floor? T1 32 T2 49 T3 60
68. Is at least one mirror slanted to provide for viewing from a wheelchair? T1 7 T2 8 T3 11

Dispensers:

69. Is there a 30 x 48 inch clear space which allows either a forward or a parallel approach to the dispensers? (Reaching over a sink 24 inches from a forward approach is acceptable) T1 82 T2 80 T3 89
70. If a forward approach is provided, is the highest operable part no higher than 48 inches or if a side approach is provided, is the highest operable part no higher than 54 inches? T1 73 T2 61 T3 66
71. Can the dispenser be operated with one hand without any tight grasping, pinching, or twisting of the wrist? T1 78 T2 95 T3 88
72. Is at least one of each dispenser type accessible and on an accessible route? T1 54 T2 56 T3 67

Medicine Cabinet:

73. If medicine cabinets are provided, does at least one have a usable shelf no higher than 44 inches from the floor? T1 0 T2 0 T3 0
74. If medicine cabinets are provided, can it be opened with one hand without tight grasping, pinching or twisting of the wrist? T1 T2 67 T3 0

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Survey Form 9: DRINKING FOUNTAINS

Facility Name _____

1. If the unit is free-standing or built in and does not have a clear space underneath it, does it have a clear floor space alongside it at least 30 by 48 inches which allows a wheelchair user to make a parallel approach? T1 87 T2 89 T3 93
2. If the unit is wall or post mounted, is there a clear knee space between the bottom of the apron and the ground which is at least 27 inches high, 30 inches wide and 17 inches deep? T1 23 T2 30 T3 51
3. Is the spout outlet no higher than 36 inches from the ground? T1 51 T2 66 T3 56
4. Is the spout at the front of the unit, with a water flow parallel or nearly parallel to the front edge? T1 69 T2 84 T3 81
5. Is the water stream at least 4 inches high to allow the insertion of a cup under the stream? T1 79 T2 78 T3 88
6. Are the controls located near the front edge? T1 83 T2 97 T3 94
7. Are the controls operable with one hand? T1 99 T2 99 T3 99
8. Are the controls operable without tight grasping, pinching, or twisting of the wrist? T1 94 T2 96 T3 96
9. Are the controls operable without much force? T1 75 T2 89 T3 88
10. Do at least 50% (but not less than one) of the drinking fountains meet the above requirements? T1 16 T2 32 T3 37

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Survey Form 10: TELEPHONES

Telephone Location _____

1. Does the accessible phone have a 30 by 48 inch clear ground space that allows either a forward or parallel approach by a person using a wheelchair? T1 91 T2 91 T3 92
2. If the clear ground space allows only a forward approach, then is the highest operable part of the phone no more than 48 inches from the ground -OR- if the clear ground space allows only a side approach, then is the highest operable part no more than 54 inches from the ground? T1 45 T2 38 T3 49
3. If there are telephone books, are they also within these reach ranges? T1 96 T2 96 T3 96
4. Is the accessible phone location indicated by a sign if not in the main bank of phones? T1 26 T2 5 T3 22
5. Is volume control provided on the telephone? T1 16 T2 14 T3 23
6. Does the telephone have push button controls unless such service is unavailable? T1 97 T2 99 T3 98
7. Is the cord from the telephone to the handset at least 29 inches long? T1 54 T2 59 T3 63
8. Is there a TTY (either permanent or portable, provided by the facility)? T1 5 T2 9 T3 21
9. Is the TTY indicated by a sign? T1 11 T2 1 T3 12
10. If there is one phone or one bank of phones (with two or more phones) on each floor, does at least one phone meet the requirements for wheelchair accessibility -OR- if there are two or more banks of phones on each floor, does at least one phone per bank meet these requirements? T1 12 T2 21 T3 26

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11. If there are four or more phones (interior and exterior) and at least one is interior, is there at least one telephone equipped for or with a TTY (as in #8 above) -OR- if in a stadium, arena, convention center, hotel with a convention center, or covered mall, is at least one phone so equipped? T1 11 T2 20 T3 40
12. If the interior bank has three or more phones, at least one equipped with a shelf with a 6 inch verticle clearance and an outlet, and the ability to place the handset flush on the surface of the shelf? T1 27 T2 33 T3 33

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Survey Form 11: ASSEMBLY ROOMS

Facility Name _____

Capacity Seating	Number of Required Wheelchair Locations
4 to 25	1
26 to 50	2
51 to 300	3
301 to 500	4
over 500	6, plus 1 additional space to each increase of 100

1. Is the required number of wheelchair locations in assembly spaces provided? T1 63 T2 61 T3 89
2. Is the space for 2 wheelchairs 66 inches wide? (Please note: There is no requirement that wheelchair spaces must be paired.) T1 95 T2 66 T3 91
3. If people must wheel into the space from the side, are the spaces at least 60 inches deep? T1 79 T2 61 T3 92
4. If people can wheel into the space from in front or behind the space, are the spaces 48 inches deep? T1 93 T2 83 T3 100
5. Is the wheelchair seating spacing an integral part of the seating plan? T1 54 T2 62 T3 57
6. Is the wheelchair distributed across a range of seating prices and lines of sight? T1 67 T2 76 T3 79
7. Is there a companion seat provided next to the wheelchair seating spaces? T1 83 T2 91 T3 92
8. Is the wheelchair seating dispersed throughout the seating area? (Exception: Accessible viewing positions may be clustered for bleachers, balconies, and other areas having sight lines which require slopes greater than 5%.) T1 68 T2 73 T3 71
9. Do they adjoin an accessible route that also serves as a means of egress in an emergency? T1 98 T2 88 T3 100
10. Are the sightlines from these seating areas comparable to those for all viewing areas? T1 82 T2 91 T3 89

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11. Is there an accessible route connecting wheelchair seating locations and performance areas including stages, arena floors, dressing rooms, locker rooms, and other spaces used by performers? T1 71 T2 68 T3 73

12. Do these seats have a complete view of the stage or playing area? T1 96 T2 96 T3 100

Audio Amplification:

13. If the assembly area has an audio-amplification system, is there a listening system for persons with severe hearing loss? T1 20 T2 19 T3 61

14. If the area is used primarily as meeting or conference space or has no amplification system, is there a permanently installed or portable listening system? T1 8 T2 19 T3 44

15. If the listening system serves individual fixed seats, are these seats located within a 50 foot viewing distance of the stage or playing area? T1 50 T2 0 T3 100

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Survey Form 12: HOTELS

Facility Name _____

Number of Rooms	Number of Accessible Rooms	Rooms with Roll-in Shower
1 to 25	1	
26 to 50	2	
51 to 75	3	1
76 to 100	4	1
101 to 150	5	2
151 to 200	6	2
201 to 300	7	3
301 to 400	8	4
401 to 500	9	4 plus 1 for each 100 over 400
501 to 1,000 over 1,000	2% of total 20 plus 1 for each 100 over 1,000	

Number of Rooms	Number of	Rooms with Accessible Elements (visual alarms, notification devices, and telephones)
1 to 25	1	
26 to 50	2	
51 to 75	3	
76 to 100	4	
101 to 150	5	
151 to 200	6	
201 to 300	7	
301 to 400	8	
401 to 500	9	
501 to 1,000 over 1,000	2% of total 20 plus 1 for each 100 over 1,000	

Rooms:

1. Does the number of sleeping rooms accessible for wheelchairs comply with the first table above? T1 6 T2 19 T3 16

2. Does the number of sleeping rooms accessible for persons with hearing impairments comply with the second table above? T1 9 T2 5 T3 19

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Hotel Room Doors:

2a. If the door is not automatic or power assisted, does it have maneuvering space relative to the direction of approach as shown in Figure 25?	T1	T2 69	T3 86
2b. Is the floor level and clear within the required maneuvering space?	T1	T2 97	T3 100
2c. If there is a raised threshold, is it beveled at 1:2 or less?	T1	T2 43	T3 73
2d. Is the threshold no higher than 1/2 inch? (Exception: An exterior sliding door can have a 3/4 inch threshold.)	T1	T2 61	T3 73
2e. Are all handles, locks, and latches operable with one hand?	T1	T2 86	T3 79
2f. Are they operable without tight pinching, tight grasping or twisting of the wrist?	T1	T2 49	T3 56
2g. Is the hardware mounted no higher than 48 inches above floor level?	T1	T2 89	T3 97
2h. If there are sliding doors, is the operating hardware exposed and usable from both sides when the doors are fully open?	T1	T2 100	T3 50
2i. Do doors open with little force?	T1	T2 94	T3 97
2j. If the door has a closer, does it take at least three seconds to move from 70 degrees open to a point 3 inches from the latch?	T1	T2 69	T3 93

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3.	Is the accessible route at least 36 inches wide except at doorways?	T1 <u>95</u> T2 <u>63</u> T3 <u>82</u>
4.	Are doorways at least 32 inches in clear opening width?	T1 <u>100</u> T2 <u>76</u> T3 <u>82</u>
5.	Where the accessible route makes a U-turn around an obstacle which is less than 48 inches wide, does the pathway width increase to at least 42 inches on the approach and 48 inches in the turn? (Figure 7)	T1 <u>100</u> T2 <u>54</u> T3 <u>100</u>
6.	If the accessible route is less than 60 inches wide, are there passing spaces at least 60 inches wide and 60 inches long within reasonable intervals not exceeding 200 feet?	T1 <u>100</u> T2 <u>100</u> T3 <u>100</u>
7.	If objects mounted to the wall have bottom edges between 27 and 80 inches from the floor, do they project less than 4 inches into the space?	T1 <u>100</u> T2 <u>50</u> T3 <u>75</u>
8.	Do free-standing objects mounted on posts with bottom edges between 27 and 80 inches high project less than 12 inches into the route of travel?	T1 <u>0</u> T2 <u>56</u> T3 <u>100</u>
9.	Is there an accessible path of at least 36 inches clear alongside the protruding object?	T1 <u>86</u> T2 <u>100</u> T3 <u>88</u>
10.	Is there at least 80 inches clear head room?	T1 <u>100</u> T2 <u>92</u> T3 <u>100</u>
11.	If there is not at least 80 inches of clear head room, is the barrier within 27 inches of the ground so that it is cane-detectable?	T1 _____ T2 <u>67</u> T3 _____
12.	Are changes of level greater than 1/2 inch treated with a ramp?	T1 <u>0</u> T2 <u>63</u> T3 <u>75</u>
13.	Is the slope of the route no greater than 1:20 except at ramps?	T1 <u>100</u> T2 <u>100</u> T3 <u>100</u>
14.	If there is a cross slope, is it not obvious?	T1 <u>100</u> T2 <u>80</u> T3 <u>100</u>
15.	Are the floors in all accessible areas and routes stable, firm, and slip-resistant?	T1 <u>100</u> T2 <u>100</u> T3 <u>100</u>

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16. If carpet or carpet tile is used on the floor, is it securely attached? T1 100 T2 100 T3 97
17. Is it a level, low pile type of carpet with a firm pad or no pad at all underneath it? T1 95 T2 90 T3 97
18. Are light switches, thermostatic controls, electrical receptacles and similar devices between 15 and 54 inches from the floor when the clear floor space allows a parallel approach -OR- are they between 15 and 48 inches when the clear floor space allows only a forward approach? T1 T2 63 T3 68
- Storage**
19. Is there a clear floor space 30 by 48 inches at storage facilities which allow for either a side or forward approach? T1 97 T2 85 T3 85
20. If a side approach is provided, is the storage space between 9 and 54 inches from the floor -OR- if a front approach is provided, is the storage space between 15 and 48 inches from the floor? T1 89 T2 46 T3 32
21. Are clothes rods a maximum of 54 inches from the floor -OR- if the distance to the rod or shelf exceeds 10 inches (doors not accessible), the height is does not exceed 48 inches? T1 30 T2 26 T3 29
- Doors to Toilet Room:**
22. Does no door swing into a required clear floor space at an accessible fixture? T1 72 T2 78 T3 68
23. Does the doorway (or at least one active leaf) provide a 32 inch clear opening width? T1 71 T2 60 T3 83
24. If the door is not automatic or power assisted, does it have maneuvering space relative to the direction of approach as shown in Figure 25? T1 77 T2 55 T3 73
25. Is the floor level and clear within the required maneuvering space? T1 100 T2 100 T3 100

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26. If there are two doors in series, is the clear space between the walls at either end of the vestibule at least 48 inches plus the width of the door -OR- at least 48 inches if the doors in the series swing in either the same direction or away from the space between them? T1 T2 0 T3 0
27. If there is a raised threshold, is it beveled at 1:2 or less? T1 76 T2 76 T3 90
28. Is the threshold no higher than 1/2 inch? (Exception: An exterior sliding door can have a 3/4 inch threshold.) T1 94 T2 87 T3 97
29. Are all handles, locks, and latches operable with one hand? T1 93 T2 85 T3 82
30. Are they operable without tight pinching, tight grasping or twisting of the wrist? T1 59 T2 39 T3 53
31. Is the hardware mounted no higher than 48 inches above floor level? T1 100 T2 93 T3 100
32. Do doors open with little force? T1 96 T2 98 T3 91
33. If the door has a closer, does it take at least three seconds to move from 70 degrees open to a point 3 inches from the latch? T1 100 T2 100 T3 100
- Toilet:
34. Is the centerline of the toilet 18 inches from a wall or partition which is prepared for the installation of a grab bar? T1 33 T2 33 T3 48
35. Is the top of the toilet seat between 17 and 19 inches from the floor? T1 52 T2 27 T3 54
36. Is the seat a type that does not automatically spring back to an open position? T1 96 T2 98 T3 100
37. Are the grab bars mounted horizontally between 33 and 36 inches above the floor? T1 58 T2 42 T3 58
38. Is the diameter of the grab bar between 1-1/4 inch and 1-1/2 inch or does the shape provide an equivalent surface? T1 73 T2 68 T3 91
39. Is the space between the grab bar and the wall exactly 1-1/2 inches? T1 38 T2 22 T3 70

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40. Are the grab bars secured so that they do not rotate within their fittings?	T1 <u>85</u>	T2 <u>74</u>	T3 <u>100</u>
41. Is the grab bar and the wall adjacent to it free of any sharp or abrasive elements?	T1 <u>80</u>	T2 <u>74</u>	T3 <u>94</u>
42. Are the grab bars mounted on the wide side of the toilet area?	T1 <u>70</u>	T2 <u>61</u>	T3 <u>55</u>
43. Are flush controls automatic or operable with one hand without excessive force?	T1 <u>100</u>	T2 <u>98</u>	T3 <u>100</u>
44. Are the flush controls operable without tight grasping, pinching or twisting of the wrist?	T1 <u>100</u>	T2 <u>100</u>	T3 <u>97</u>
45. Are the flush controls operable without much pressure?	T1 <u>100</u>	T2 <u>93</u>	T3 <u>97</u>
46. Is the paper dispenser mounted no more than 36 inches from the back wall and at least 19 inches from the floor?	T1 <u>84</u>	T2 <u>85</u>	T3 <u>86</u>
47. Does the paper dispenser not obstruct use of the grab bar?	T1 <u>96</u>	T2 <u>89</u>	T3 <u>100</u>
48. Does the dispenser allow continuous paper delivery?	T1 <u>96</u>	T2 <u>100</u>	T3 <u>100</u>
49. If the toilet is not located in a stall, does the clear floor space and room arrangement conform to Figure 28?	T1 <u>44</u>	T2 <u>55</u>	T3 <u>66</u>
50. Is the back grab bar at least 36 inches long with one end mounted at least 12 inches from the centerline of the toilet -AND- a side bar at least 42 inches long with the front end 54 inches from the back wall? (Fig. 29)	T1 <u>13</u>	T2 <u>0</u>	T3 <u>12</u>
Lavatory:			
51. Is the lavatory rim or counter surface no higher than 34 inches above the finished floor?	T1 <u>85</u>	T2 <u>88</u>	T3 <u>89</u>
52. Is there a clearance of at least 29 inches from the floor to the bottom of the apron?	T1 <u>31</u>	T2 <u>32</u>	T3 <u>54</u>
53. Do the sinks provide a knee clearance of 27 inches high, 30 inches wide, and 19 inches deep?	T1 <u>36</u>	T2 <u>34</u>	T3 <u>34</u>
54. Are sinks not more than 6 1/2 inches			

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deep?	T1	T2	T3
	<u>76</u>	<u>73</u>	<u>80</u>
55. Is there a clear floor space at least 30 by 48 inches in front of the lavatory allowing a forward approach?	T1	T2	T3
	<u>81</u>	<u>93</u>	<u>89</u>
56. Is not more than 19 inches of this clear floor space measured underneath the lavatory?	T1	T2	T3
	<u>96</u>	<u>98</u>	<u>91</u>
57. Does the clear floor space adjoin or overlap an accessible route?	T1	T2	T3
	<u>100</u>	<u>85</u>	<u>94</u>
58. Are the controls which operate the faucet within 24 inches from the front of the lavatory?	T1	T2	T3
	<u>100</u>	<u>100</u>	<u>100</u>
59. Are hot water pipes and drain pipes insulated or otherwise covered?	T1	T2	T3
	<u>23</u>	<u>61</u>	<u>34</u>
60. Is the area below the lavatory free of sharp or abrasive surfaces?	T1	T2	T3
	<u>50</u>	<u>85</u>	<u>91</u>
61. Can the faucet be operated with one hand without tight grasping, pinching, or twisting of the wrist?	T1	T2	T3
	<u>73</u>	<u>73</u>	<u>63</u>
62. If the valve is self closing, does it remain open for at least 10 seconds?	T1	T2	T3
	<u>100</u>	<u>0</u>	<u>50</u>
Mirrors:			
63. Does at least one mirror have a bottom edge of the reflecting surface no higher than 40 inches from the floor?	T1	T2	T3
	<u>85</u>	<u>85</u>	<u>97</u>
64. Is at least one mirror slanted to provide for viewing from a wheelchair?	T1	T2	T3
	<u>0</u>	<u>3</u>	<u>7</u>
Dispensers:			
65. Is there a 30 x 48 inch clear space which allows either a forward or a parallel approach to the dispensers? (Reaching over a sink 24 inches from a forward approach is acceptable.)	T1	T2	T3
	<u>94</u>	<u>77</u>	<u>93</u>

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66. If a forward approach is provided, is the highest operable part no higher than 48 inches or if a side approach is provided, is the highest operable part no higher than 54 inches? T1 83 T2 79 T3 87
67. Can the dispenser be operated with one hand without any tight grasping, pinching, or twisting of the wrist? T1 78 T2 97 T3 100
- Medicine Cabinet:
68. If medicine cabinets are provided, does at least one have a usable shelf no higher than 44 inches from the floor? T1 _____ T2 50 T3 _____
69. If medicine cabinets are provided, can it be opened with one hand without tight grasping, pinching or twisting of the wrist? T1 _____ T2 _____ T3 _____
- Bathtubs:
70. Does the clear floor space which depends on the direction of approach comply with Figure 33? T1 59 T2 32 T3 53
71. Is an in-tub seat or a seat at the head of the tub provided? T1 28 T2 24 T3 56
72. Is the seat mounted securely so that it will not slip during use? T1 86 T2 21 T3 47
73. Are grab bars provided as shown in Figures 33 and 34? T1 40 T2 13 T3 35
74. Is the diameter of the grab bar between 1-1/4 inches and 1-1/2 inches or does the shape provide for an equivalent gripping surface? T1 76 T2 66 T3 82
75. Is the space between the grab bar and the wall exactly 1-1/2 inch? T1 50 T2 24 T3 56
76. Is the grab bar secured so that it does not rotate within the fittings? T1 86 T2 84 T3 97
77. Is the grab bar and wall adjacent to it free of any sharp or abrasive elements? T1 86 T2 84 T3 100

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78. Can faucets and other controls be operated with one hand without any tight grasping, pinching, or twisting of the wrist? T1 69 T2 40 T3 57
79. Are they located within the area shown in Figure 34? T1 60 T2 37 T3 41
80. Is there a shower spray unit with a hose at least 60 inches long? T1 29 T2 29 T3 54
81. Can the shower spray unit be both hand held and fixed to the wall? T1 52 T2 45 T3 70
82. If provided, are bathtub enclosures located so that they do not obstruct the controls or transfer from a wheelchair onto the bathtub seat? T1 52 T2 91 T3 100
83. If the enclosure is mounted on the bathtub, is there no track mounted on the rim? T1 67 T2 67 T3
- Showers:**
84. Is there a transfer type shower? T1 T2 15 T3 6
85. Is there a roll-in shower? T1 T2 5 T3 6
86. Does the shower stall size and clear floor space comply with either Figure 35(a) for a transfer type shower or 35(b) for a roll-in shower? T1 0 T2 4 T3 33
- Transfer Type Shower as shown in Figure 35(a):**
87. If the shower stall is the type shown in Figure 35(a), is it exactly 36 x 36 inches? T1 T2 0 T3 50
88. Is there a clear floor space 36 x 48 inches outside the stall with 12 inches extending beyond the seat wall? (Fig.35(a)) T1 T2 17 T3 100
89. Is there a seat mounted between 17 and 19 inches from the floor? T1 T2 14 T3 100
90. Does the seat extend the full depth of the stall? T1 T2 50 T3 100
91. Is the seat on the wall opposite the controls? T1 T2 25 T3 100

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92. Are grab bars provided along the control wall and half the back wall, but not behind the seat?	T1 _____ T2 <u>13</u> T3 <u>100</u>
93. If curbs are provided, are they no higher than 1/2 inch?	T1 _____ T2 <u>0</u> T3 <u>100</u>
94. If provided, is a shower stall enclosure located so that it does not obstruct the controls or prohibit transfer from the wheelchair onto the shower seat?	T1 _____ T2 <u>80</u> T3 _____
95. Are the controls located within the area shown in Figure 37(a)?	T1 _____ T2 <u>63</u> T3 _____
96. Are grab bars provided as shown in Figure 37(a)?	T1 _____ T2 <u>25</u> T3 _____
Roll-in Type Shower as shown in Figure 35(b):	
97. Is the roll-in shower at least 30 x 60 inches as shown in Figure 35(b)?	T1 _____ T2 <u>0</u> T3 _____
98. Is there a 36 x 60 inch clear floor space alongside the shower as shown in Figure 35(b)?	T1 _____ T2 <u>50</u> T3 _____
99. Does a grab bar extend around three sides as shown in Figure 35(b) and Figure 37(b)?	T1 _____ T2 <u>0</u> T3 _____
100. Is there no curb at all in the roll-in shower?	T1 _____ T2 <u>50</u> T3 _____
101. Are the controls located on the end wall within the area shown in Figure 37(b)?	T1 _____ T2 <u>50</u> T3 _____
Both Types of Shower:	
102. Is the diameter of the grab bar between 1-1/4 inch and 1-1/2 inch or does the shape provide an equivalent gripping surface?	T1 _____ T2 <u>57</u> T3 <u>100</u>
103. Is the space between the grab bars and the wall exactly 1-1/2 inches?	T1 _____ T2 <u>43</u> T3 <u>0</u>
104. Is the grab bar secured so that it does not rotate within the fittings?	T1 _____ T2 <u>71</u> T3 <u>100</u>
105. Is the grab bar and the wall adjacent to it free of any sharp or abrasive elements?	T1 _____ T2 <u>71</u> T3 <u>100</u>

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106. Can the controls be operated with one hand without tight grasping, pinching, or twisting of the wrist? T1 _____ T2 29 T3 100
107. Does the shower spray unit have a hose at least 60 inches long? T1 _____ T2 29 T3 0
108. Can the shower spray unit be both hand held and fixed to the wall? T1 _____ T2 29 T3 0

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Survey Form 13: RESTAURANTS AND CAFETERIAS

Facility Name _____

1. Are all aisles between fixed tables at least 36 inches wide except at doors? T1 79 T2 72 T3 90
2. Where practical, are accessible tables distributed throughout the space facility? T1 78 T2 85 T3 92
3. Where there are mezzanine levels, loggias or raised platforms, are the same service and decorative character provided elsewhere in spaces located on accessible routes? T1 78 T2 64 T3 95

Food Service Lines:

4. Do food service lines have a clear width of 36 inches or more? T1 83 T2 92 T3 96
5. Are tray slides no more than 34 inches above the floor? T1 48 T2 67 T3 57
6. If self-service shelves are provided, are they no more than 54 inches above the floor? T1 72 T2 87 T3 81
7. If self-service shelves are provided, are items within 24 inches from the end of the counter? T1 77 T2 97 T3 98

Seating and Tables:

8. Do seating spaces provided for people in wheelchairs have a 30 x 48 inch clear floor space which overlaps an accessible route? T1 88 T2 92 T3 94
9. Is no more than 19 inches of the 30 x 48 inch clear space measured under the table? (Figure 45) T1 94 T2 92 T3 92
10. Is the knee space at least 27 inches high, 30 inches wide, and 19 inches deep? (Figure 45) T1 48 T2 39 T3 57
11. Is the top of the table between 28 and 34 inches from the floor or ground? T1 99 T2 94 T3 100
12. Do at least 5% of all fixed seats or tables (but not less than 1) meet the above requirements? T1 41 T2 40 T3 55

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13. Is there a 36 inch pathway to the accessible seating? T1 91 T2 96 T3 94

Vending Machines:

14. Is there a 30 x 48 inch clear space at the vending machine which allows either a forward or a parallel approach? T1 93 T2 96 T3 93

15. If a forward approach is provided, are the operating parts of the machine including the coin slots between 15 and 48 inches from the floor? T1 28 T2 42 T3 66

16. If a parallel approach is provided, are the operating parts of the machine including the coin slots between 9 and 54 inches from the floor? T1 60 T2 70 T3 74

17. Are they operable with one hand? T1 93 T2 99 T3 98

18. Are they operable without tight grasping, pinching, or twisting of the wrist? T1 44 T2 83 T3 89

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Survey Form 14: RETAIL OR SERVICE LOCATIONS

Facility Name _____

Number of Each Type	Number Accessible
1 to 4	1
5 to 8	2
9 to 15	3
over 15	3 plus 20% of the total additional

1. Do the number of accessible check-out aisles conform with the table above? (Each type might include regular versus express lanes.) T1 67 T2 44 T3 50
2. Are these accessible check-out aisles at least 36 inches wide with adjoining counters at a maximum height of 38 inches? T1 46 T2 51 T3 53
3. Are service or distribution counters at least 36 inches wide and no higher than 36 inches? T1 19 T2 16 T3 22
4. If there is a preventive method for keeping shopping carts on the premises, does this allow the entrance and exit of persons in wheelchairs? (An alternate entry that is equally convenient is acceptable.) T1 80 T2 85 T3 63
5. Are there dressing rooms designated as accessible? T1 23 T2 35 T3 29
6. Does the dressing room have a clear floor space of 60 inches square? T1 15 T2 26 T3 16
7. Are the benches in dressing rooms 24 inches by 48 inches, mounted between 17 and 19 inches high? T1 0 T2 3 T3 6
8. Do the doors on the dressing room meet all of the specifications for doors? T1 24 T2 26 T3 49
9. Do the dressing rooms have mirrors at least 18 inches wide and 54 inches high and afford a view to a person on the bench or standing? T1 71 T2 62 T3 68

Survey Findings

The results presented are from part one of the survey instrument only. Scores are presented as means. A response of "seldom if ever" was given a score of 1, "sometimes," 2, "often," 3, "very often," 4, and "always or almost always," 5. Thus a higher score indicates more frequent encountering of the barrier. Time 1, time 2, and time 3 refer to January 1992, August 1992, and April 1993, respectively.

The full survey in its original format can be found in our earlier report, Americans With Disabilities Act: Initial Accessibility Good But Important Barriers Remain (GAO/PEMD-93-16; May 19, 1993).

United States General Accounting Office

GAO

Survey of Accessibility
for Persons with Disabilities

The U.S. General Accounting Office (GAO), an agency of the U.S. Congress, is conducting a study of accessibility of public services and public accommodations for persons with disabilities. Congress has asked GAO to learn more about accessibility to understand the impact of the Americans With Disabilities Act (ADA). The survey is limited to architectural, physical, and communication barriers, as well as barriers that may be encountered when assistance is required. It does not, however, include barriers associated with negative attitudes of persons you may encounter.

This questionnaire is being sent to persons with disabilities around the country. Your answers are entirely confidential. Your name and individual responses will not be released to anyone. Your answers will be combined with others to show the pattern of barriers across the nation. We will ask you to complete this survey again later this year.

You were picked at random from the mailing list of a national advocacy group for persons with disabilities. Since this is a scientifically designed sample, we must hear from nearly everyone we have contacted. This is not required, but we are asking for your help. Otherwise our findings will be limited.

HOW TO COMPLETE THIS SURVEY

This survey should be completed by the person it was mailed to because we believe this person has a disability affecting speech, hearing, vision, or mobility. If you do not fit this description, please indicate on the front page and return the survey with your name so we can avoid sending you future mailings. It should take 30 minutes to complete the questionnaire. Most questions can be answered quickly by checking the boxes or filling in the blanks.

A version of this survey is available on audio cassette. If you require a copy, please call the phone number listed below. If you have difficulty checking the boxes or filling in the blanks, please feel free to record your answers on a separate page (in print or Braille) or on audio cassette, being sure to indicate all question and item numbers (e.g. question 1 has 5 items). If none of these options are feasible, please call to arrange for a telephone interview.

Please return the completed questionnaire within 10 days of receipt. If you have any questions, please call Carolyn Feis, collect, at (202) 275-1864 (voice) or (202) 275-7034 (TDD). If the enclosed envelope is misplaced, please send your completed questionnaire to:

Carolyn Feis
U.S. General Accounting Office
PEMD - Room 5729
441 G Street, N.W.
Washington, D.C. 20548

**Appendix III
Survey Findings**

PART ONE: BARRIERS

1. Consider the times you have used parking facilities of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? *(Check one column per barrier).*

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. There are too few parking spaces designated for use by persons with disabilities.	2.93	2.85	2.74
2. The aisle next to the parking spaces is too narrow. The slope of the parking space and/or accessible aisle is too steep.	2.94	2.86	2.71
3. There is debris (leaves, snow, etc.) in the parking space and/or accessible aisle.	2.11	1.99	2.06
4. The curb cuts and/or ramped entrances blocked by the parking space.	2.32	2.25	2.15
5. The designated parking spaces are not those closest to the accessible entrance.	2.33	2.42	2.36
6. Other <i>(please specify):</i>			
7. Other <i>(please specify):</i>			

**Appendix III
Survey Findings**

2. Consider the times you have used pathways of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. There is no entrance that is accessible by wheelchair.	2.43	2.30	2.18
2. The pathway is too narrow.	2.45	2.33	2.20
3. The slope of the ramps is too steep.	2.43	2.33	2.25
4. There is no handrailing on ramped pathways.	2.76	2.65	2.53
5. There is no level platform in front of doors on a ramped entrance.	2.34	2.30	2.18
6. There is an obstacle in the pathway or curb cut.	2.25	2.12	2.02
7. The surface of the pathways is slippery.	2.00	1.88	1.84
8. The surface of the pathway is rough (e.g. cobblestones, brick, or irregular pavement).	2.13	2.09	1.94
9. The lips at the bottom of ramps and/or curb cuts are too big.	2.42	2.35	2.26
10. There are too few places to rest on long pathways.	2.42	2.32	2.21
11. There are no detectible warnings at curb cuts.	2.75	2.61	2.50
12. There are low-hanging objects undetectable by canes.	2.00	1.94	1.94
13. Other (please specify):			
14. Other (please specify):			

**Appendix III
Survey Findings**

3. Consider the times you have used entrances and doors of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. The doors are too heavy.	3.28	3.15	2.98
2. The hardware (e.g. knobs) on the door is difficult to operate.	2.77	2.65	2.51
3. The door (or single leaf of a double door) is not wide enough.	2.63	2.47	2.43
4. Electronic door openers are not in the right location.	1.94	1.88	1.85
5. Electronic doors close too quickly.	2.12	2.07	2.07
6. The only doors are pocket doors or sliding doors.	1.78	1.68	1.65
7. The only doors are revolving doors.	1.48	1.45	1.53
8. There is not enough room between two doors in a series (e.g. vestibules).	2.45	2.44	2.33
9. Security systems are accessible only through voice communication.	2.22	2.13	2.16
10. Security system cannot be operated by a person with a visual impairment.	2.58	2.53	2.46
11. Security system controls are mounted too high.	2.43	2.30	2.25
12. Doors controlled by a security system close too quickly.	2.32	2.22	2.23
13. Other (please specify):			
14. Other (please specify):			

**Appendix III
Survey Findings**

4. Consider the times you have used stairs of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. The stairs have open risers (that is, they have open backs).	1.98	1.92	1.93
2. The stairs have protruding nosings that my toes get caught on.	2.00	1.88	1.89
3. The stairs do not have uninterrupted handrails on both sides.	2.60	2.51	2.42
4. The stairs are too steep.	2.37	2.18	2.25
5. The stairs are too narrow.	2.15	2.06	2.08
6. The presence of stairs is difficult to detect with proper caning.	2.17	2.05	2.16
7. Other (please specify):			
8. Other (please specify):			

**Appendix III
Survey Findings**

5. Consider the times you have used building hallways, rooms and retail spaces of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. Pathways are too narrow.	2.74	2.61	2.46
2. There are obstacles in the hallways.	2.72	2.57	2.53
3. Carpet is too thick.	2.33	2.38	2.16
4. Carpet pile or padding does not allow straight tracking in a wheelchair.	2.65	2.62	2.46
5. Carpet pile catches canes.	2.23	2.17	2.17
6. Aisles in stores are too narrow.	3.18	3.01	2.90
7. There are low-hanging objects undetectable by canes.	2.26	2.25	2.27
8. Drinking fountains cannot be accessed from a wheelchair.	3.05	2.80	2.73
9. There are not enough signs indicating the location of accessible features (elevators, telephones, restrooms, etc.).	3.14	2.94	2.88
10. Signs are not large enough to read.	2.41	2.43	2.37
11. The contrast of the signs is not sharp enough to read.	2.25	2.33	2.21
12. There are not enough signs with raised print or Braille.	3.40	3.38	3.15
13. Service counters are too high.	3.20	3.05	2.91
14. Service counters are too narrow.	2.66	2.56	2.39
15. Other (please specify):			
16. Other (please specify):			

**Appendix III
Survey Findings**

6. Consider the times you have used seating in a public establishment in the past 6 months. How often, if at all, you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. Accessible seating is not integrated throughout the business.	2.99	2.88	2.74
2. Accessible seating does not permit seating next to a person who does not have a disability.	2.71	2.70	2.55
3. Tables are not high enough.	2.57	2.51	2.37
4. Tables legs get in the way of full entry under the table.	3.30	3.18	3.01
5. Bars are too high.	3.53	3.33	3.19
6. Other (please specify):			
7. Other (please specify):			

7. Consider the times you have used elevators in a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. The elevators are broken.	1.58	1.53	1.54
2. The elevator buttons are too high to reach.	2.03	1.93	1.88
3. The elevator buttons are obstructed.	1.55	1.49	1.52
4. The elevator buttons are hard to read (and there is no raised print or Braille lettering).	2.23	2.21	2.17
5. There is no audible signal to indicate elevator location.	2.87	2.76	2.67
6. There is no raised print or Braille on the wall next to the elevator doors to indicate elevator location.	3.14	2.96	2.85
7. The doors close too quickly.	2.89	2.79	2.68
8. The floor of the elevator is slippery.	1.56	1.59	1.52
9. Other (please specify):			
10. Other (please specify):			

**Appendix III
Survey Findings**

8. Consider the times you have used the public restrooms of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. The bathroom or stall is too small	3.29	3.19	2.91
2. The toilet is located too far from the grab bars.	2.56	2.53	2.41
3. There is not enough room to close the door behind you.	3.32	3.21	2.97
4. The toilet seat is too low.	2.55	2.47	2.38
5. The hardware on the door is difficult to operate.	2.66	2.56	2.48
6. The dispensers are not accessible.	2.75	2.67	2.53
7. The hardware on the sink is difficult to operate.	2.59	2.52	2.40
8. The sink is not accessible.	2.55	2.48	2.32
9. Other (please specify):			
10. Other (please specify):			

9. Consider the times you have used telephones of a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. There are not enough wheelchair-accessible public telephones.	3.26	3.08	2.98
2. Signage on phones (e.g., which accept coins versus calling cards) is difficult to read.	2.73	2.64	2.60
3. There are not enough public phones with amplification systems.	3.50	3.27	3.16
4. There are not enough public TTYs.	3.71	3.66	3.57
5. Businesses do not have TTY numbers to call for information.	3.60	3.53	3.51
6. Other (please specify):			
7. Other (please specify):			

**Appendix III
Survey Findings**

10. Consider the times you have used hotel rooms in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. Switches and controls are mounted too high.	2.62	2.46	2.33
2. Toilets are not accessible for wheelchairs.	3.35	3.22	3.06
3. Sinks are not accessible for wheelchairs.	3.33	3.15	3.04
4. Showers and/or bathtubs are not accessible for wheelchairs.	3.84	3.64	3.51
5. There are no assistive devices for the deaf (fire alarm, phone indicator, alarm clock, door knocker, TTY).	3.90	3.73	3.56
6. There are no maps of rooms or room location in raised print.	3.70	3.51	3.35
7. Other (please specify):			
8. Other (please specify):			

**Appendix III
Survey Findings**

11. Consider the times you needed service assistance in a public establishment in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. Services refuse to pay for sign language interpreters.	3.16	2.88	3.01
2. Sign language interpreters are not available when needed.	3.19	3.01	3.19
3. I'm refused service because of my disability.	1.49	1.43	1.42
4. Personal assistance is required (e.g. locating or retrieving items at a grocery store or other retail store, reading a menu, locating different departments or features of the site, etc.).	2.65	2.38	2.28
5. The wait for personal assistance is too long.	2.38	2.21	2.16
6. Personal assistance is provided incorrectly.	2.06	1.87	1.91
7. Requests for personal assistance are refused.	1.48	1.36	1.42
8. There is not enough information available in large print, Braille, or on cassette (e.g. museum brochures, hospital information, transit schedules, etc.).	3.32	3.21	3.00
9. Other (please specify):			
10. Other (please specify):			

**Appendix III
Survey Findings**

12. Consider the times you have used public transit in the past 6 months. How often, if at all, have you encountered the following barriers? (Check one column per barrier).

BARRIERS	Mean Score		
	January 1992	August 1992	April 1993
1. There are not enough accessible cars on subways, or buses with lifts.	3.48	3.21	3.04
2. Public address announcements are not also provided in a visible format.	3.36	3.23	3.15
3. Written announcements are not also provided in a clear audible format.	3.19	3.05	2.96
4. Buses do not stop at accessible locations.	2.75	2.68	2.48
5. Buses only stop if signaled from the street.	2.32	2.31	2.23
6. Buses do not announce stops when requested.	2.43	2.44	2.37
7. Transit schedules are not available in large print, Braille, or on cassette.	3.57	3.25	3.17
8. Transit systems do not have TTY numbers to call to request scheduling or other information.	2.76	2.73	2.45
9. Other (please specify):			
10. Other (please specify):			

Federally Funded Resources

Questions about ADA compliance and requests for additional information about the ADA may be directed to one of the federal agency numbers listed below.

U.S. Department of Justice
Civil Rights Division
Coordination and Review Section
P.O. Box 66118
Washington, DC 20035-6118
(202) 514-0301 Voice
(202) 514-0383 TDD

U.S. Architectural and Transportation Barriers Compliance Board
Suite 1000
1331 F Street, N.W.
Washington, D.C. 20004-1111
(800) USA-ABLE Voice
(202) 272-5449 TDD

Regional Disability and Business Technical Assistance Centers
(800) 949-4232 Voice/TDD

Equal Employment Opportunity Commission
1801 L Street, N.W.
Washington, DC 20507
(800) 669-4000 Voice
(202) 275-7518 TDD

Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554
(202) 632-7260 Voice
(202) 632-0485 TDD

President's Committee on Employment of People With Disabilities
1331 F Street, N.W.
Washington, DC 20004
(202) 376-6200 Voice
(202) 376-6205 TDD

Appendix IV
Federally Funded Resources

U.S. Department of Labor
Office of Federal Contract Compliance
200 Constitution Ave., N.W.
Washington, DC 20210
(202) 219-9428 Voice
(800) 326-2577 TDD

U.S. Department of Transportation
Federal Transit Administration
400 Seventh St., S.W., Room 9315
Washington, DC 20590
(202) 366-1656 Voice
(202) 366-2979 TDD

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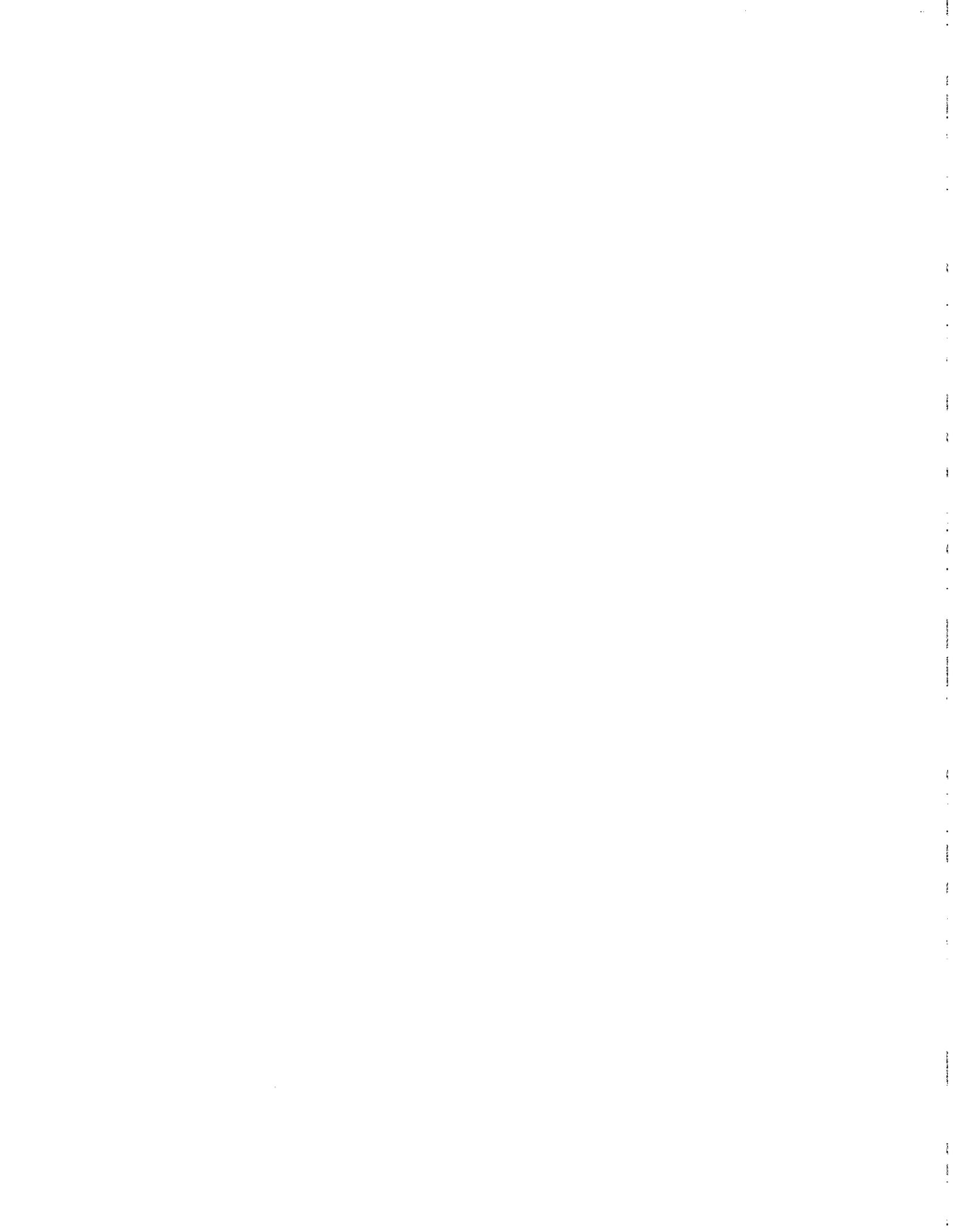
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