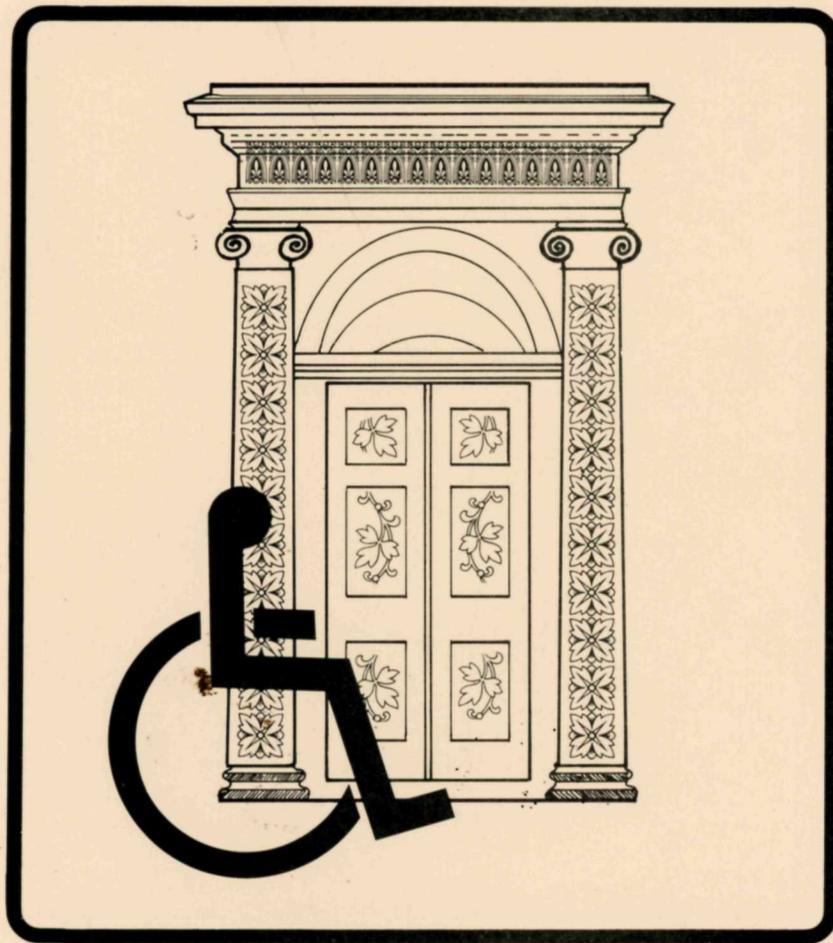


ACCOMMODATION
of
HANDICAPPED VISITORS
at
HISTORIC SITES



Volume 1
GUIDE



U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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Prepared under Contract No. CX-2000-8-0021
from the National Park Service
U.S. Department of the Interior
by
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Preface

Historic sites can be made more accessible to handicapped visitors, while at the same time preserving the historic features for future generations. The population who benefits are not only handicapped individuals, but also elderly visitors and those with limiting physical conditions; altogether totaling approximately 42% of the general population. This Guide helps managers understand the physical barriers that limit the enjoyment of the site by handicapped visitors and describes some positive steps that can be taken.

The emphasis is on creative physical changes which achieve access to the site with minimum impact on the historic fabric. Some administrative and interpretive alternatives are suggested when full access is difficult to achieve in the context of historic preservation. Background information on related laws, the nature of certain disabilities and typical accessibility problems and possible solutions is presented.

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Introduction

This Guide has been prepared to assist managers and technical staff in meeting an important, continuing goal of the National Park Service: giving handicapped citizens the opportunity to share in the cultural, educational, and inspirational values embodied in our nation's historic sites.

As much as seven percent of our population--physically and mentally handicapped individuals--have been unable to enjoy our historic sites to the fullest. For certain segments of the handicapped population such as those in wheelchairs and those who walk with difficulty, the configuration or architecture of a site makes physical access to the structures and interpretation programs difficult or impossible. For other disabled persons (e.g., those who are mentally handicapped, deaf or blind), physical access is not a problem, but access to interpretation programs may be difficult or impossible because the programs were not designed with these handicapped individuals in mind. Fully thirty-five percent of our population--those with limiting physical conditions of a temporary nature (such as pregnancy) and those who are limited in strength and agility as a result of the aging process--would benefit from a more accessible environment.

While access to interpretation programs is a concern of the Park Service, this guide focuses on physical access to historic sites. It is an attempt to resolve the differences between the needs of physically handicapped visitors and the need to preserve the historical integrity of Park Service sites and structures. The answer to resolving this difference is accommodation. Accommodation means all changes (architectural, administrative and interpretive) made for the benefit of handicapped visitors.

The goal of the Park Service is to provide handicapped visitors with the highest level of accommodation, i.e. free and independent access to the site and its facilities, with the least impact on the historic fabric.

When the highest level of accommodation cannot be achieved without significantly altering the historic fabric, other levels of accommodation, i.e., administrative or interpretive changes may be the solutions of choice.

A short accessibility checklist is included first to give the reader an overview of the areas and features which need to be accessible. The chapters that follow contain information for understanding and dealing with accommodation and historic preservation. Chapters 1 and 2 deal with an overview of accommodation and basic information about handicapped individuals. Chapter 3 deals with historic preservation and its implications. The manager's role and the legal context are discussed in Chapters 4 and 5. Chapter 6 presents some priority problem areas along with typical solutions. There is also a bibliography for further reading.

This Guide is one of several resources entitled "Accommodation of Handicapped Visitors at Historic Sites." Also available is a slide-tape presentation, which is a companion to this Guide; and Volume II: A Technical Manual, which deals with accommodation on a more technical and detailed level.

Brief Accessibility Checklist

A complete and comprehensive survey checklist is available in Volume II: A Technical Manual and from the Denver Service Center.

This checklist, however, is provided to give the reader an overview of the areas and features of a site which need to be accessible. It will be helpful for managers to use this checklist while making a brief survey of a site and its structures.

The brief survey will probably show many areas in need of improvement; thereby demonstrating why this Guide can become important to the task of upgrading the accessibility of historic sites.

			YES	NO
<u>PARKING</u>	<u>Special Spaces</u>	Reserved for handicapped visitors? Extra-wide?	—	—
<u>WALKS</u>	<u>Paths of Travel</u>	Level, paved or stabilized, wide enough for a wheelchair, free from curbs, steps and obstacles?	—	—
	<u>Walkways</u>	Level, paved or stabilized, wide enough for a wheelchair, free from curbs, steps and obstacles?	—	—
<u>ENTRANCE</u>	<u>Primary Entrance</u>	Accessible to wheelchairs? Railings?	—	—
	<u>Alternate Entrance</u>	Accessible to wheelchairs? Railings?	—	—
<u>MAIN FLOOR</u>	<u>Floors</u>	Non-slip finish?	—	—
	<u>Carpeting</u>	Anchored securely?	—	—
	<u>Doorways</u>	Allow wheelchairs to pass through?	—	—
	<u>Thresholds</u>	Negotiated safely by wheelchairs and those with mobility impairments?	—	—
	<u>Paths of Travel</u>	Free from obstacles to wheelchairs and visually impaired people?	—	—

<u>OTHER FLOORS</u>	<u>Stairways</u>	Have railings which can be grasped for stability? Carpeted or otherwise free from projected nosings (i.e., extensions of tread beyond risers)	___	___
	<u>Other Access</u>	Provided for those in wheelchairs?	___	___
<u>CONVENIENCE FACILITIES</u>	<u>Toilet Rooms</u>	Permit entry by wheelchairs? One wide toilet stall? Sink, mirror, soap and towel dispenser at height for wheelchairs? One low urinal for wheelchairs?	___	___
		<u>Water Fountains</u>	One low enough for wheelchairs?	___
	<u>Telephones</u>	One low enough for wheelchairs? Equipped with amplifying device for hearing impaired?	___	___
	<u>ELEVATORS</u>	Conform to modern specifications? Provide room for wheelchair and attendant?	___	___
<u>WARNING SIGNALS</u>	<u>Emergency Alarms</u>	Both audible and visual?	___	___
	<u>Doors leading to dangerous areas</u>	Properly identified?	___	___
<u>IDENTIFICATION</u>	<u>Signs</u>	Large letters on contrasting background, raised or recessed and located within reach?	___	___
	<u>Paths of travel</u>	Indicated by International Symbol of Accessibility?	___	___
<u>VISITOR INTERPRETATION</u>	<u>Exhibits</u>	Able to be viewed from wheelchair? Appreciated by visually impaired persons?	___	___
	<u>Recordings</u>	Have amplifying device for hard-of-hearing visitors?	___	___
	<u>Standard Verbal Interpretation</u>	Also available in written transcript?	___	___
	<u>Written Visitor Information</u>	Also available in simple terms for those with reading difficulties?	___	___
	<u>Alternate Accommodation</u>	Provided if physical access is not possible?	___	___
	<u>Park Guide for Handicapped Visitors</u>	Available which describes facilities--what, how and where?	___	___

Chapter 1

Accommodating Physically Handicapped Visitors: An Overview.

INTRODUCTION

Independent physical access for handicapped visitors--that is, access without the assistance of others--while using the same facilities as non-handicapped visitors is the highest level of accommodation. Direct exposure to a historic site is generally crucial to visitor appreciation. Therefore, any limitation of this exposure, or off-site alternative program, is less desirable than touring the historic site in its entirety.

LEVELS OF ACCOMMODATION

A. PHYSICAL ACCESS: THE HIGHEST LEVEL OF ACCOMMODATION

Physical access can generally be achieved on three levels: IDEAL, STANDARD and BELOW STANDARD.

Standard Physical Access

The "American National Standards Specifications For Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped", or as they are commonly referred to, the "ANSI Standards", (ANSI A117.1-1961(1971) constitute the STANDARD level. They are the minimum federal standards required by the General Services Administration concerning buildings constructed or altered by, or on behalf of, the federal government. (See Chapter 4).

Ideal Physical Access

In May 1977, the General Services Administration issued a set of standards entitled "Design Criteria: New Public Building Accessibility". In addition, several states have adopted their own accessibility rules and regulations. In certain areas, these recent standards exceed the current ANSI standards. Managers have a choice of adopting one or more of these standards as the IDEAL level.

Below Standard Physical Access

BELOW STANDARD is less than the federal ANSI minimum standards, or STANDARD level, and involves a judgement as to whether acceptable physical access is achieved. There is no standard for acceptability or reasonableness here. At this level, it is important to involve handicapped staff or citizens to ensure that the level is acceptable. It is important to clearly demonstrate that this lesser standard provides a level of physical access which is acceptable in practice as well as in theory.

BELOW STANDARD applies only to historic structures. Modern facilities should be made accessible according to the IDEAL or STANDARD levels.

EXAMPLE

To illustrate the three levels, consider the standards related to doors and doorways. The IDEAL standard, as stated in several rules and regulations, is a clear opening of 35 inches wide. The STANDARD ANSI width is 32 inches. Most wheelchairs are no wider than 27 inches. Wheelchairs for large people may exceed this width. A space 27 1/2 inches wide may allow most wheelchairs to pass through. However,

another consideration is the space needed for the wheelchair user's hands as they propel the wheelchair. The 27 1/2 inch wide doorway should be tested by having an individual try to propel himself by hand through the doorway in a standard wheelchair. If the BELOW STANDARD level is adopted here, visitors in wheelchairs may require assistance from staff or a companion in getting through the doorway.

B. ALTERNATE ACCOMMODATION:

Administrative Accommodation

Where physical access cannot be achieved according to one of the three levels described above, managers may resort to administrative changes and modified visitor interpretation programs. Administrative changes, can be defined as those actions which involve staff assistance, modified visitor patterns, the use of aids and devices, and special policies for handicapped visitors.

Examples include:

- Allowing individuals in wheelchairs to enter the building through an accessible non-public entrance.
- Rerouting a tour for a handicapped visitor so that a physical barrier (e.g. a narrow doorway) is by-passed.
- Personally assisting handicapped individuals over thresholds, helping individuals in wheelchairs up one or two stairs. (Lifting and carrying individuals is not recommended for safety and liability reasons.)
- Furnishing a special narrow wheelchair for use by visitors if needed.
- Using a modified vehicle to provide access to the grounds over gravel or uneven terrain.
- Moving an exhibit to an accessible location at the site.

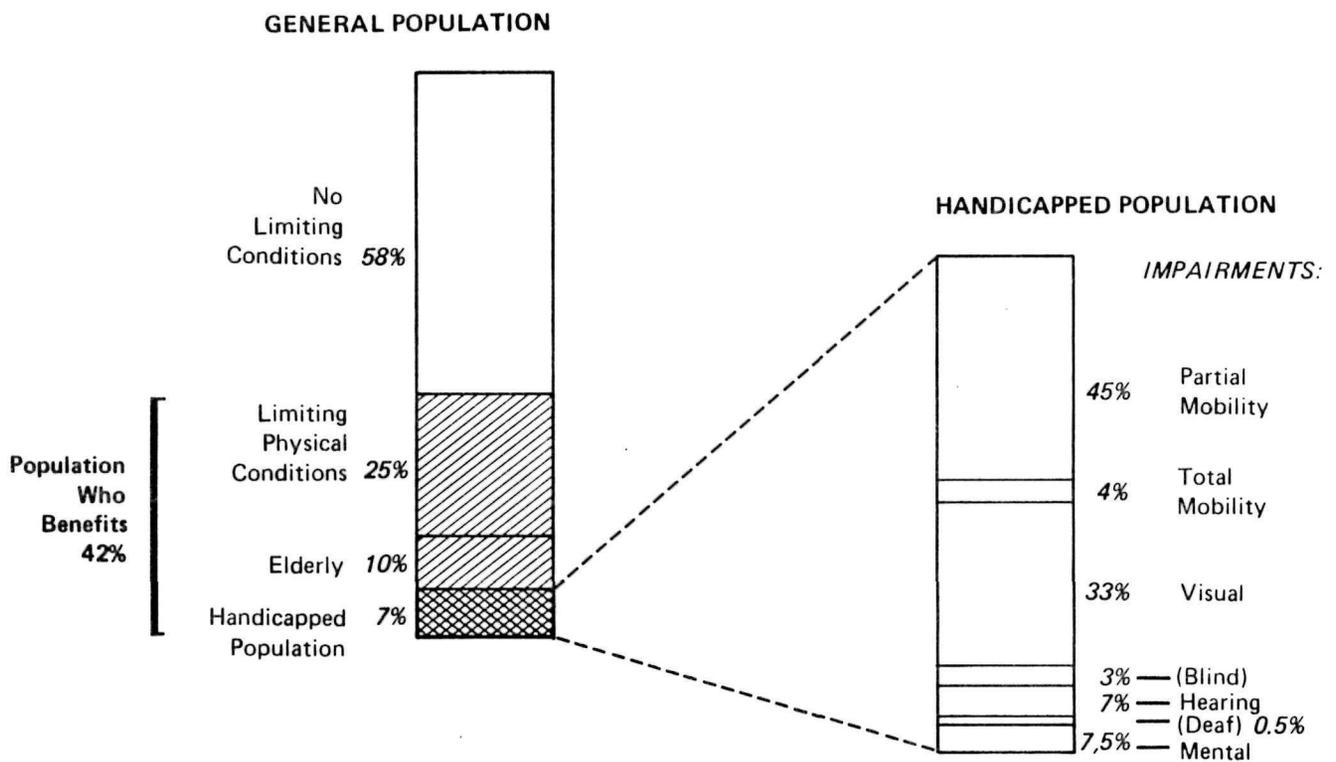
Accommodation Using Interpretive Materials

In some cases full physical access cannot be achieved without significant damage to historic features. Alternate accommodation using interpretive materials allows the handicapped visitor to experience inaccessible parts of the site through exhibits, audio-visual presentations, staff briefings and printed materials. On-site interpretive accommodation is always preferable to off-site alternatives since physical presence is essential to enjoyment of a site and the handicapped visitor remains integrated with other visitors. (Managers should refer to the NPS Interpreters Guidebook for additional information.) Accommodation may include, but is not limited to:

- Creating a mock-up of a historic room and locating it in a visitor center.
- Providing pictures of inaccessible second floor rooms.
- Developing an audio-visual presentation of the site and showing it in an accessible location.
- Providing movies with subtitles for deaf persons.
- Providing braille materials or audio versions of written material.

Who Benefits from Accommodation

WHO BENEFITS FROM ACCOMMODATION



All Approximate %

Summary: The population benefitting from accommodation are not only handicapped individuals, but also elderly visitors and those with limiting physical conditions; all together totalling *approximately 42% of the general population.*

There are over fourteen million Americans who are considered handicapped. The National Center for Health Statistics estimates that an additional fifty-one million Americans have limiting physical conditions and therefore, would benefit from a more accessible environment. These figures do not include those who are elderly, obese, pregnant or temporarily disabled.

Perhaps as many as thirty percent of the visitors to historic sites could benefit from accommodation. This percentage includes visitors who are not severely handicapped, but those who may walk insecurely, lack stamina and strength or have difficulty in seeing or hearing. There could be a visitor-use increase of as much as seven to ten percent if certain accommodations are made for the severely handicapped.

Managers are encouraged to use the percentage breakdown of the handicapped population in the chart below to predict the annual number of potential visitors with various disabilities.

The following information describes the kinds of functional limitations distributed throughout the handicapped population:

Total Mobility Impairments

This term as it is used here, refers to persons who use wheelchairs. It is important to remember that many persons in wheelchairs have lost upper body movement as well as lower body movement.

The basic accessibility problems encountered by persons in wheelchairs include maneuvering through narrow spaces, going up or down steep paths, moving over unsmooth surfaces, making use of conventional toilet and convenience facilities, and reaching and seeing things placed at a conventional height.

Partial Mobility Impairments

This term as it is used here, refers to persons who walk with difficulty, do not have full use of their arms or hands, or who lack coordination. The kinds of impairments and their causes vary within this category but do include persons who use some mobility aid (e.g. crutches, braces), amputees, arthritic persons and those who may be partially paralyzed.

Managers should be aware of the problems partial mobility impaired persons have. They include walking, climbing steps or slopes, and standing for extended periods of time.

Visual Impairments

This term, as it is used here, refers to persons who are totally blind, as well as those who have lost a significant degree of normal vision.

The basic accessibility problems for visually impaired persons include maneuvering passed obstacles in a path of travel, going up or down steps, reading signs and printed materials, and understanding exhibits that can be seen, but not touched.

Hearing Impairments

This term, as it is used here, refers to persons who are totally deaf, as well as those who are hard of hearing.

The basic accessibility problems for hearing impaired persons include understanding audio presentations, and communicating with site personnel.

Learning Impairments

Included here are mentally retarded individuals, those with learning disabilities and others who have difficulty comprehending written or spoken material. Managers should be aware of the need to modify interpretive materials, signs and visitor instructions so that they are simple and direct.

Chapter 3

Values of Historic Structures

The Park Service has a special obligation to locate, identify, evaluate, preserve, manage, and interpret qualified cultural resources in every park in a way that they may be handed on to future generations unimpaired. This obligation is spelled out in federal laws, an Executive Order and guidelines which are summarized in Chapter 5.

After learning about accommodation of handicapped visitors and its levels, it is important to understand the limitations on alteration and use of historic structures that are imposed by laws and Park Service policies and how these apply to accommodation of handicapped visitors.

NPS Management Policies dated 2-78 indicates that requirements of structural preservation, protection of historic fabric and contents, and public safety take primacy over all uses of historic structures. Safety devices such as handrails shall be designed and installed to minimize visual and structural intrusion on original fabric. It goes on to state that visitation shall be limited to structures or portions of structures that permit immediate evacuation in the event of fire or natural catastrophe. (pages V-23, V-24) This limits access for some handicapped visitors to upper floors of structures containing only one staircase.

Given the requirements of historic preservation and limitations imposed for reasons of safety, managers have an important task of assessing the value of each historic structure in order to understand the accommodation options which should be considered. Management policies require that no structure be significantly altered without professional evaluation of its historical, architectural, and archeological value according to National Register criteria. Such actions shall also comply with the "Procedures for the Protection of Historic and Cultural Properties" (36 CFR Part 800) promulgated by the Advisory Council on Historic Preservation.

There are a number of factors that should be taken into account when considering independent physical access to historic structures or, administrative and interpretive accommodation. There is no formula for using the following factors. Instead they must be evaluated in as objective a manner as possible. Most importantly, superintendents should be prepared to indicate why a particular factor was considered important and how it affected a recommendation or decision.

Each structure at a site must be evaluated separately because structures at a historic site may differ in their historic value and thus be treated differently when accommodations are made.

Category of Significance

The List of Classified Structures (LCS) identifies all historic structures that meet the criteria of the National Register of Historic Places and lists their Category of Significance.

Those structures listed as Category Ia-Resources that individually possess national significance, receive the greatest protection from alteration or loss. Structures categorized as Ib, IIa, and IIb may allow greater flexibility when making physical changes to achieve accommodation.

When judging just how sacred various structures are, superintendents should refer to a document titled "Questions to be Answered in Assessing LCS Entries for Management Categories" (See Bibliography). This document sets forth a more definitive approach to categorization of structures.

Reason for Significance

A historic structure's reason for significance defines why it should be preserved and aids in determining how accommodation can be accomplished. The National Register should be consulted to confirm the reason for significance of the structure.

The installation of a permanent ramp at the front entrance of a structure preserved primarily as an example of period architecture may be a major intrusion. On the other hand, if a structure contains the workplace of a famous person, then access to the workplace may be essential to enjoyment of the resource and a ramp may be justified at an appropriate entrance.

Thus, even within structures of a particular category of significance, there may be a difference as to the aspect of the structure that accounts for the significance.

Managers should ask such questions as:

- Must a visitor enter the structure to enjoy its value?
- Are all rooms or locations in the structure equally important?
- Must historic objects be enjoyed in their original setting to gain full appreciation of their value?
- Does the structure have intrinsic architectural value or is it valuable primarily because it houses a particular scene or object, or commemorates an important event?

Treatment

A structure that has been preserved entirely in its original condition should be treated with care and respect. Continued preservation may preclude irreversible physical accommodations or those accommodations which jeopardize future preservation, e.g. regrading a site around an entrance may cause damage to the walls or foundation of a building.

Where the exterior of a structure has been preserved, but the interior has been subjected to adaptive use, there are more options available when achieving access within the structure. Modern toilet facilities in such structures should be made accessible according to the IDEAL OR STANDARD levels.

In some cases, a portion of a structure was added after the period which established the structure's historic value. In such cases, this more recent addition may allow more options for accommodation, because it is not as essential to portraying the architecture of the historic period. In other cases, the addition may be essential to showing the evolution of the use of the structure over a longer historic period.

Use or Function

When a historic structure serves as a visitor center in addition to being a cultural resource, then it is especially important to provide access for handicapped people. Such visitors may rely on visitor center facilities such as toilets, drinking fountains and telephones. In addition, it may be necessary to gain access to a structure to enjoy an interpretive program and to obtain assistance from Park Service staff. Where visitor centers are provided in inaccessible locations of a structure, and it is not desirable to alter the structure, serious consideration should be given to moving the visitor center to another location.

If a structure houses a significant statue such as the Lincoln Memorial, then access to the statue is essential to its enjoyment. There is no equivalent to experiencing the statue. This is why alterations were made by the Park Service at considerable expense to install an elevator in the base of the monument.

If, on the other hand, the structure is the reason for significance and it is used strictly as a house museum, e.g. Lincoln's Home, preservation is essential and alterations should be avoided. This may not, however, preclude reversible physical accommodations or portable means of accommodation such as ramps.

Yearly Visitation

Accommodations at a site which is visited by 500,000 visitors will likely benefit more handicapped individuals than accommodation at a site with a visitation of 50,000. Generally, however, such popular sites are highest in order of significance, and most carefully preserved. The goal of enjoyment of the structure by the public seems to be at odds with preservation for present and future generations. Park Service managers have the difficult task of weighing these factors and at the same time, keeping within the legal mandates of preservation and accessibility.

As indicated in Chapter 2, managers are encouraged to estimate the number of handicapped individuals that might visit a site. This will give some idea of how many visitors will be affected by a particular accommodation decision.

Location

Where there are a cluster of historic structures in the same locality, the seriousness of one particular structure's inaccessibility may be mitigated by the accessibility of others in the area. This causes managers to consider structures in relation to their surroundings. If two comparable house museums are located in the same city, it may be acceptable to make accommodations at one structure and keep the other intact to show the difference in treatment.

Example

Lincoln's Home in Springfield, Illinois illustrates the interplay of these factors. The Park consists of Lincoln's Home, the Corneau House, several houses which add to the historic scene and a modern visitor center. The home faithfully preserved through generations, is listed as Category Ia and is regarded as sacred. A historic structure of such importance and unquestioned reason for significance must be treated with extreme care. Consistent with this, little physical access has been provided for visitors in wheelchairs i.e., ramps, lifts, elevators. Such accommodations would constitute a major intrusion on the historic scene, jeopardize historic fabric and detract from the experience of all visitors. The Corneau House, diagonally across the street from the home, does not have nearly the same significance.

Its historic exterior and adaptive interior make it far more adaptive to accommodation, both outside and inside the structure. The houses nearby which add to the historic scene are most able to be adapted for use by handicapped visitors because they do not possess significance themselves. Accommodations at one or more of these structures would give handicapped visitors an idea of the community in which Lincoln lived.

The visitor center is not historic and should be made accessible at the highest level.

The entire complex receives high visitation annually and the structure is in danger of damage, so much so that serious consideration is being given to limiting the number of visitors who enter the home. Because of the visitor center facilities, alternate interpretive accommodation is a viable alternative to physical access for all visitors.

Thus, we see that accommodation varies with the significance, treatment, use and visitation of a structure. How these factors interrelate and affect accommodation of handicapped visitors is a matter of judgement. Such a judgement should be made carefully and with consultation from Park Service staff and the Advisory Council on Historic Preservation as appropriate.

Chapter 4

Manager's Role

Park Service managers play a central role in accommodating handicapped visitors. This chapter presents some recommended steps that should be taken to accomplish this task effectively.

RECOMMENDED ACTIONS DURING NPC PROCESSESA. INCLUDE ACCOMMODATION IN PLANNING DOCUMENTSGeneral Management Plan (GMP)

The GMP should include objectives in the visitor-use section for upgrading facilities for use by handicapped people and involving interested community representatives.

Development Concept Plan (DCP)

The DCP should include all preliminary plan concepts for the handicapped and identify those structures which could provide physical access for an alternate level of accommodation.

The Interpretive Prospectus (IP)

The IP should address general methods of accommodation and methods of interpretation that meet the needs of various handicapped visitors. Individuals with learning, hearing and vision impairments should be included in addition to those with mobility or coordination disabilities.

B. INCLUDE ACCOMMODATION IN DESIGN DOCUMENTSThe Historic Structures Report (HSR)

The HSR should specifically address accessibility. It should be used to assess the impact of proposed accommodations on the historic fabric.

Construction Documents (CD)

Working drawings, specifications and contract documents should specify solutions for accessibility.

RECOMMENDED ANALYSIS PROCEDURES FOR ACCOMMODATIONA. CLASSIFY THE HISTORIC SITE

Chapter 3 discusses some factors which should be used to classify the historic site. The factors are, category of significance, reason for significance, treatment, use or function, visitation and location. Managers should evaluate the site according to these factors to understand the constraints placed by historic preservation on accessibility. Staffing should also be considered here to understand the alternatives which may be available for administrative and interpretive accommodation.

B. SURVEY THE SITE

This involves a systematic tour of the building and surrounding site. The tour identifies physical barriers which affect handicapped visitors. It should be done by managers as the first action step in evaluating accommodation for handicapped visitors.

Some key actions to be performed here are:

- Survey the site following the order of a typical tour.
- Invite handicapped employees or other persons to accompany you, to obtain their perspective.
- Distinguish between modern features and historic features of a site.

A detailed Survey Checklist is included in the Technical Manual for use by managers and specialists when conducting this thorough evaluation.

C. BE AWARE OF TYPES OF PROBLEMS WHICH MAY ARISE

After surveying the site, it is important to understand the type of problems presented at the site prior to attempting to accommodate handicapped visitors.

CATEGORY 1 - SIMPLE PROBLEMS - NO MAJOR IMPACT

This category includes those minor barriers where the possible solutions present no negative impact on the site (i.e., no destruction of historic materials, minimum visual intrusion). The changes may be reversible and accomplished without long and involved planning. Quite often the barriers can be removed by maintenance staff at modest cost. Examples of such barriers include sidewalk curbs, curbs along the path of travel, parking areas without reserved parking, high drinking fountains and telephones, and one or two steps at a visitor entrance. Such problems could likely be addressed by modifying non-historic aspects such as a city sidewalk, by lowering modern features, or by providing ramps and other assistive devices.

Remember, modern visitor facilities, where modification does not affect the historic fabric, should be modified to conform to the current ANSI standards (A117.1 1961 (R1971)) in conformance with NPS Staff Directive 77-4. This directive requires immediate action to be taken on such minor barriers within existing budget constraints.

CATEGORY 2 - MODERATE PROBLEMS - SOME IMPACT

Actions to remove certain barriers may affect the historic materials physically or visually. Solutions to such barriers may involve building alterations, site modifications, and installation of non-historic materials or devices. The changes are often reversible.

Examples of CATEGORY 2 problems are:

- three or more steps at an entrance;
- the lack of external railings;
- inaccessible toilet facilities in a historic building;
- narrow or uneven walks;
- narrow entrances and doorways;
- high thresholds;

Some remedial action possibilities include:

- installation of mechanical lifts;
- regrading of certain portions of the site;
- installation of modern railings;
- modification of toilet stalls and fixtures;
- modification of moldings and thresholds.

Once a CATEGORY 2 problem is identified, consultation with the Regional Historic Architect should follow to assess the impact of alternative accommodation strategies on the historic site. Staff of the Denver Service Center may also assist.

CATEGORY 3 - SERIOUS PROBLEMS - MAJOR IMPACT

This category includes problems which may require major building alterations and structural modifications which in turn, may result in destruction of historic fabric or significant visual intrusion.

- the installation of a new or larger elevator in a building;
- installation of a major external elevator;
- permanent ramping;
- removal of structural walls in a toilet room;
- widening of a doorway.

Solutions to problems requiring extensive investigation and analysis by the Regional Historic Architect and/or Denver Service Center staff. Specific clearance is required before any such actions are undertaken.

Administrative and interpretative solutions to architectural barriers may be considered in place of physical modification. These alternatives will be discussed briefly in Chapter 6.

D. OBTAIN THE ADVICE OF EXPERTS

Regional Historic Architects and staff of the Denver Service Center are available to assist managers in researching accessibility problems, developing alternative strategies and evaluating each

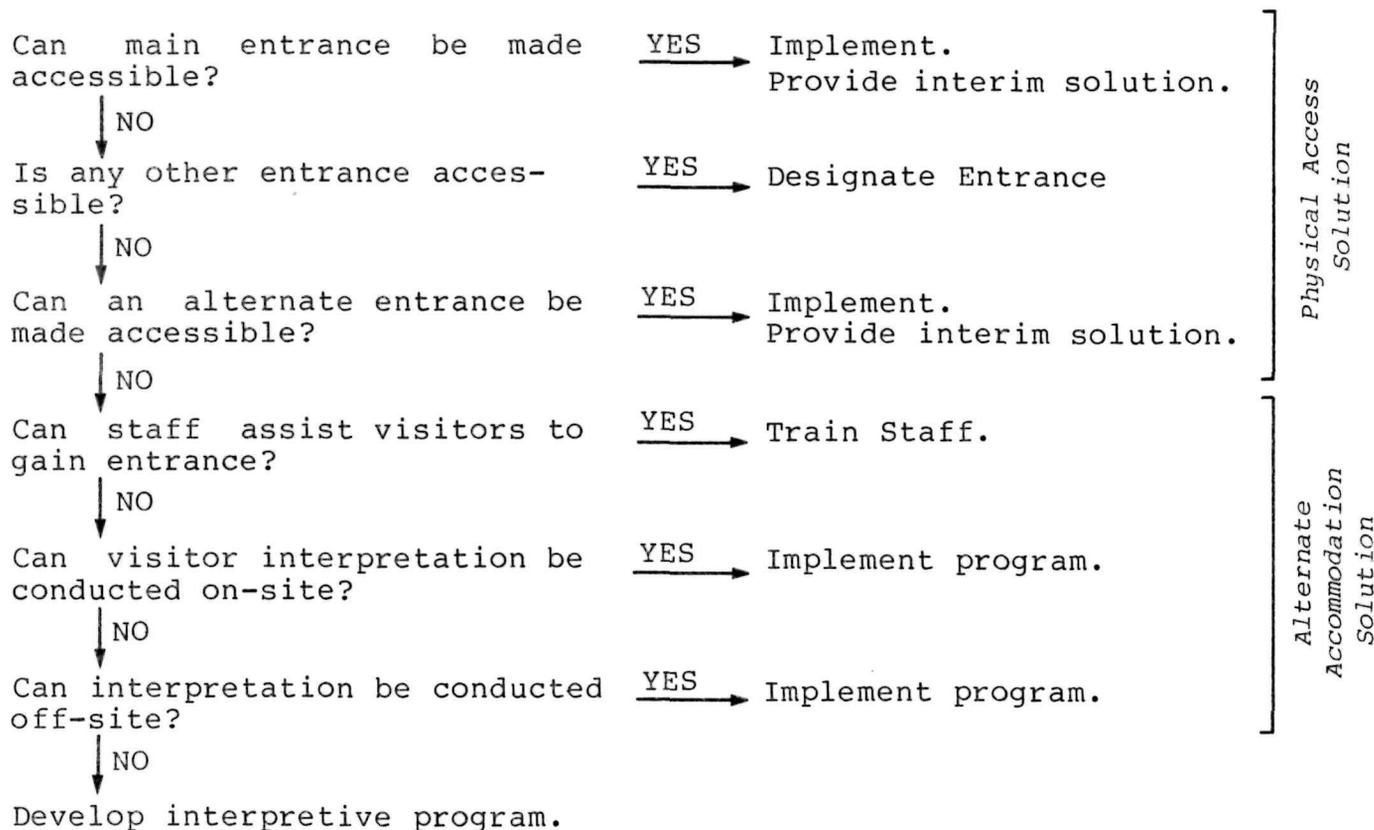
strategy. The Technical Manual described earlier is available to provide background information and guidance on evaluating strategies. The staff of the Harper's Ferry Center is also available to assist managers with visitor interpretation alternatives to accommodation. Handicapped employees of the Park Service or handicapped visitors can provide valuable advice in defining problems and in suggesting practical solutions.

E. CONSIDER ALL ALTERNATIVE SOLUTIONS

The key to accommodating handicapped individuals is consideration of all alternatives.

In the case of a site with multiple steps at a main visitor entrance, consideration of alternate entrances may be necessary. The following decision diagram describes a series of questions which might be asked. A YES answer indicates a solution while a NO answer requires that the next option be considered.

DECISION DIAGRAM



F. EVALUATE ALTERNATIVES

Each alternative should be evaluated using the same criteria.

- benefit to handicapped visitors;
- effect on historic fabric;
- availability on NPS staff;
- time required to make changes;
- possible safety hazards;
- cost.

Because there is no formula for evaluating each alternative according to the criteria, it is important to make notes which explain the basis of the evaluation. The Technical Manual includes an Accommodation Worksheet for use in recording the evaluation.

G. JUSTIFY AND DOCUMENT RECOMMENDED SOLUTIONS

Managers should be prepared to justify why a particular solution was chosen, especially if the solution involves alteration or destruction of historic fabric. Construction documents should also be prepared, with the help of specialists, which specifically determine solutions.

H. OBTAIN APPROVALS, IF NECESSARY

Proposed solutions which involve alteration or destruction of historic fabric will require the approvals as prescribed by Chapter 106 of "Procedures for Protection of Historic Properties" as promulgated by the Advisory Council on Historic Preservation.

I. IMPLEMENT FINAL SOLUTION

This involves final planning, budgeting, and supervision as work is being done.

J. IMPLEMENT INTERIM SOLUTIONS

While actions to accomplish final solutions are planned and budgeted, it is important to develop interim solutions which provide temporary or partial access to the maximum extent feasible.

Temporary physical accommodations might include replacing a door to a toilet stall with a curtain, installing a cup dispenser next to a high water fountain, fabricating a wooden ramp over a step, or placing a secure carpet runner over a threshold.

Temporary administrative solutions such as providing assistance to visitors who walk with difficulty, changing the sequence of a tour, or rerouting the path of travel can be effective.

Modest temporary interpretive measures may also be considered such as providing photographs of inaccessible areas, having park guides brief handicapped visitors and providing displays of furniture or equipment at an accessible visitor center.

K. PUBLICIZE ACCOMMODATIONS THAT HAVE BEEN MADE

It is important to inform visitors about the existence of accessible facilities and accommodations that have been made. Each historic site should prepare a Park Guide for Handicapped Visitors which lists accessible buildings and their entrances, toilets, water fountains, telephones and other visitor facilities. If accommodations are not provided on-site, visitors should be referred to nearby public facilities which are accessible.

In the past, many handicapped individuals have avoided historic sites because they assumed that the sites were inaccessible. Managers should modify Park Brochures to comment on accessibility, post the International Symbol of Accessibility to indicate accessible areas, and inform the public of accommodations. Publicity can include newspaper articles, and notices to handicapped consumer and service organizations.

Chapter 5

The Legal and Administrative Context of Accommodation and Accessibility

This Chapter summarizes the laws, regulations and policies which pertain to historic preservation and accommodation of the needs of physically handicapped persons at historic sites. A more detailed summary of these mandates, together with analysis and recommendations entitled "The Impact of Accessibility and Historic Preservation Laws, Regulations and Policies on NPS Historic Sites: Analysis and Recommendations", may be obtained from the National Park Service, Washington Office.

BASIC ACCOMMODATION AND ACCESSIBILITY PROVISIONS

The Architectural Barriers Act of 1968 (Public Law 90-480, as amended):

This law affects buildings intended for use by the public and those buildings which may involve use by physically handicapped individuals as employees or residents. Specifically, buildings or facilities constructed or altered, leased, or financed through a grant or loan made by the United States, since August 12, 1968, are addressed by the statute. The Administrator of General Services, in consultation with the Secretary of Health, Education and Welfare, is required to establish standards for the design, construction or alteration of buildings to insure, whenever possible, that physically handicapped persons will have ready access to, and use of, such buildings. The design, construction, or alteration of any such building after August 12, 1968 must be in accordance with these standards.

Federal Property Management Regulations, "Accommodations for the Physically Handicapped" (41 CFR Subpart 101-19.6

Subpart 19.6 of Chapter 101 of Title 41 of the Code of Federal Regulations implements Public Law 90-480, The Architectural Barriers Act of 1968, as described above. These provisions apply to all federal agencies and instrumentalities, as well as to non-federal entities insofar as the Act provides. Specifically, the regulations address buildings constructed or altered by or on behalf of, the federal government after September 2, 1969. Thus, addressed by these regulations are all buildings owned by the National Park Service or those under the jurisdiction of the General Services Administration used by NPS.

Affected Park Service historic sites, therefore, must have all design, construction, or alteration of buildings performed in accordance with the minimum standards set forth in the American National Standard Specifications For Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, as published by the American National Standards Institute, Inc., or, the "ANSI Standards," as they are commonly known, particularly ANSI A117.1-1969 (1971). Any departure from the ANSI Standards is permissible where equivalent accessibility and usability of a building may be achieved by other methods. (41 CFR 101-19.603). Also, the standards do not apply if alteration of an existing building in accordance with them would be structurally impossible. (41 CFR 101-19.604(c)) the applicability of the standards may be modified or waived on a case-by-case basis upon application to GSA, and a subsequent determination by the Administrator that such modification or waiver is clearly necessary. (41 CFR 101-19.605)

Section 502 of the Rehabilitation Act of 1973, (Public Law 93-112, as amended)

The Rehabilitation Act of 1973 mandates a broad range of services and sets forth certain basic civil rights for handicapped individuals. Section 502 of the Act establishes the Architectural and Transportation Barriers Compliance Board. (ATBCB) One function of ATBCB is to insure compliance with the standards prescribed by GSA and other federal agencies. It also has certain data gathering and reporting requirements.

ANSI A117.1-1961 (1971)

The American National Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, or "ANSI Standards" specify standards for portions of buildings and sites that are used by the public. The standards address grading, walks, parking lots, ramps, entrances, doors and doorways, stairs, floors, toilet rooms, water fountains, public telephones, elevators, controls and signs. As indicated above, these standards form the basis for Park Service compliance with the Federal Property Management Regulations (Title 41, Subpart 101-19.6). Reference to the ANSI Standards is made throughout this Guide and the accompanying materials. It should be noted that the ANSI Standards are in the process of revision. Thus, managers should be alert to changes in the Standards as they make alterations or accommodations for physically handicapped individuals.

OTHER ACCESSIBILITY STANDARDS

The General Services Administration has published Design Criteria: New Building Accessibility for use in new construction. Many standards in this document exceed those contained in ANSI A117.1-1961 (1971). Several states (Massachusetts and North Carolina included) have recently adopted accessibility rules and regulations which contain standards that reflect current thinking and experience in accessibility for handicapped individuals.

Such standards will be used in this Guide, and in the accompanying "Technical Manual: Accommodation of Handicapped Visitors at Historic Sites", to define the IDEAL level of accommodation that might be achieved as opposed to the standard (ANSI) or MINIMUM ACCESS level. No single standard for the IDEAL level is endorsed here, rather management is encouraged to select a standard which best suits individual needs.

NPS MANAGEMENT POLICIES

The 1978 Management Policies demonstrate the commitment of the National Park Service to comply with Public Law 90-480 and other applicable laws and regulations. Chapter III of the Management Policies states:

"To the greatest extent possible, commensurate with their physical limitations, the handicapped should be able to enjoy the park using the same facilities as the non-handicapped visitor. Special interpretive facilities and programs for handicapped people are encouraged where good potential for participation is indicated."

HISTORIC PRESERVATION

The National Historic Preservation Act of 1966 (Public Law 89-665, as amended)

Public Law 89-665 has established a program for the preservation of historic properties throughout the nation. In doing so, it has authorized the Secretary of the Interior to expand and maintain the National Register of Historic Places, established the Advisory Council on Historic Preservation, and accelerated the federal commitment to aiding non-federal efforts to preserve historic sites. Section 106 of the law requires that the head of any federal agency having jurisdiction over a proposed federal or federally assisted undertaking, as well as the head of any federal department or independent agency having authority to license any undertaking, take into account the effect of the undertaking on any entity included in the National Register of Historic Places. The Advisory Council must also be given reasonable opportunity to comment with regard to the undertaking.

Executive Order 11593

Executive Order 11593, May 13, 1979, strengthened the federal government's overall commitment to historic preservation. It required federal agencies to preserve, restore and maintain historic sites "for the inspiration and benefit of the people...", and to inventory their properties for possible placement on the National Register of Historic Places.

The mandate for historic preservation is further established and implemented in certain other laws, policies and memoranda which are listed in the Bibliography.

HISTORIC PRESERVATION AND ACCOMMODATION

The respective mandates for historic preservation and accessibility for physically handicapped people are strong and specific. Nowhere does the intent of one mandate contradict the other. However, the implementation of these mandates may be difficult. Nevertheless, contemplated actions to upgrade accommodation for handicapped visitors which may result in intrusion of the historical characteristics of a building may require management to exercise flexibility and creativity to arrive at an equitable solution. This Guide focuses on a number of ways in which the greatest accommodation benefit can be achieved with the minimum intrusion.

Where handicapped visitors cannot readily enjoy the park using the same facilities as the non-handicapped visitor, pursuant to all possible accommodations, superintendents may have to resort to a modification or waiver process. This process requires careful study and consultation with regional and National Park Service officials. Waiver and modification requests should be employed only when all other alternatives have been considered and rejected.

Chapter 6

Priority Problems and Typical Solutions

The following areas of a historic site are particularly important because they control access to the site or because they concern the physical well-being of visitors.

Primary Areas

Access to:

- 1 - the building
- 2 - the main floor
- 3 - toilet facilities
- 4 - the site

Secondary Areas

Access to:

- 5 - other floors
- 6 - parking
- 7 - drinking fountains
- 8 - telephones

Typical problems connected with each of these areas are discussed below with some typical accessibility, administrative and interpretive solutions. The numbers assigned above are for ease of reference and do not necessarily reflect an order of importance within primary and secondary areas.

PRIMARY AREAS**1.** ACCESS TO THE BUILDING

Most historic buildings have steps at the main entrance. The more elegant buildings - governmental, religious, educational, - have many steps and elegant railings to enhance their prestige. Modest buildings have entrances with at least one or two steps, no platform at the top and often no railings. At the front door there may be one step to the door in combination with the threshold. Such features are essential to the aesthetic effect of the building, and as such, preserving the features and minimizing visual intrusion is of the utmost importance.



The Derby House, Salem, MA., erected in 1861 presents a typical entrance to a private house. Note the four front steps and the absence of railings.

Entry to the Derby House.

Entry for handicapped persons to the Derby House is best accomplished through the rear kitchen entrance, which is at ground level and has no steps. Tours involving handicapped visitors should start at the back entrance.

If an alternate entrance were not available here, a portable ramp would be preferable because of the small number of shallow stairs and the problem of visual intrusion at the front entrance.

Typical Accessibility Problems

Even one step is a barrier to a person in a wheelchair.

Typical Accessibility Solutions

Portable or fixed ramp:



Vertical or inclined lift:



Regrade area around entrance:



Typical Accessibility Problems:

The lack of railings or their design can present safety problems for most persons with mobility and visual impairments.

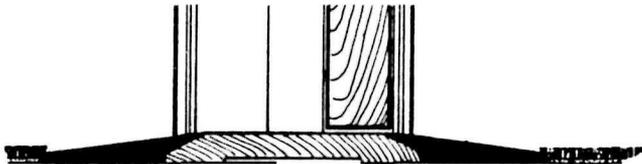
Typical Accessibility Solutions:

Install handrails:



High thresholds present barriers for those in wheelchairs, a tripping hazard for those who walk with instability and problems for those with visual impairments.

Add bevels to the sides of a threshold:



Narrow doors, heavy doors that require more than 15 pounds of pressure to open, and high or difficult to manipulate hardware may present additional problems.

Replace hinges with offset hinges of similar design to provide wider clear opening.

Adjust door closers.

Replace round door knob with lever handle or door pull, or add a lever attachment.

Typical Administrative Solutions

Direct handicapped visitors to alternate accessible entrance.

Have staff assist visitors up steps, open doors, help people over thresholds and push wheelchairs through doorways.

Typical Interpretive Solutions

Develop an audio visual presentation of the inside of the building and show it at an accessible location at the site.

Develop a display which depicts the site and locate in an accessible visitor center.

2. ACCESS TO MAIN FLOOR

Some historic houses were designed with narrow center hallways. Unless wheelchairs can pass through other wider doorways, such a narrow opening presents a difficult accessibility problem.

Larger buildings typically have wider hallways and doorways. Thresholds may be a barrier and slippery floors a hazard for certain handicapped people.



The Derby House has both a narrow hallway and doorway, typical features of an 18th century colonial residence.

Access to the entire first floor of the Derby House can be accomplished by rerouting handicapped visitors through other doorways which are wider and connect all rooms. The rooms are usually roped off, but exceptions can be made for handicapped people.

If wider doorways were not available, a visitor interpretation program depicting inaccessible areas could be located in the kitchen which is accessible by the rear entrance.

Typical Accessibility Problems:

Narrow hallways and corridors may be scratched by wheelchairs attempting to negotiate turns.

Narrow doors may not allow wheelchairs to pass through.

Typical Accessibility Solutions:

See typical administrative solutions.

Remove doors at problem areas.

Replace existing door hinges with offset hinges of same style.

Provide narrow wheelchairs (\pm 23 1/2") for visitors to use, as appropriate.

Typical Accessibility Problems:

High thresholds.

Slippery floors are a hazard to all visitors, especially those who walk with instability.

Carpeting with long loose pile, thick padding, or carpeting not securely anchored is a hazard for everyone.

Signs that are too high, protrude into the path of travel or are difficult to read affect mobility and visually impaired visitors.

Any step or change in level is a barrier to a wheelchair.

Typical Accessibility Solutions:

Add beveled material or remove thresholds before carpeting.

Install non-slip floor mats or runners over slippery floor.

Install carpeting that is thin, dense, and securely anchored with thin padding.

Remove or relocate protruding signs; lower signs where necessary. Signs must have good color contrast and large raised or recessed letters.

Place portable ramps over steps.

Typical Administrative Solutions:

Ask staff to push visitors in wheelchairs through narrow hallways, corridors, doorways, over thresholds.

Reroute handicapped visitor traffic through wider doorways and hallways.

Ask staff to assist those in wheelchairs or those who walk with instability up few steps where ramp is not feasible.

Allow individuals in wheelchairs to enter roped-off areas or to look through narrow doorways.

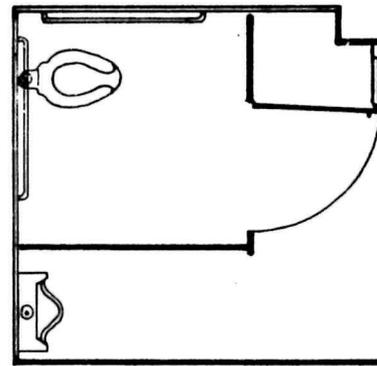
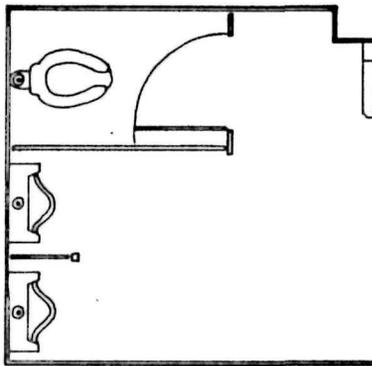
Typical Interpretive Solutions:

Create an audio-visual presentation which depicts inaccessible areas of the building and locate it near the accessible entrance.

Create a display or album which contains pictures of inaccessible rooms and have staff available to explain if necessary.

3. ACCESS TO TOILET FACILITIES

Few toilet facilities at historic sites are part of the historic fabric. Modern toilet facilities should be made fully accessible, (see sketch). If the public toilet is part of an historic building, space must be made for a wheelchair to enter the room, maneuver, and enter one toilet stall. In some cases, such modification may require enlarging toilet rooms. This may result in unacceptable impact on adjacent areas.



These before and after sketches show how two standard stalls can be made into one large stall which is wheelchair accessible.

Typical Accessibility Problems:

Narrow entrance doors may not allow those in wheelchairs to enter the toilet room.

Narrow toilet stalls do not permit those in wheelchairs to enter; maneuver and transfer to toilet seat.

High urinals are not usable by people in wheelchairs.

High mirrors, soap and towel dispensers at sinks are difficult or impossible to use from wheelchairs.

Grab bars are seldom provided.

Vanity partitions at the entrance to a toilet room may restrict access to the room for those in wheelchairs.

Typical Accessibility Solutions:

Widen doorway and install a wider door.

Replace entry door hinges with offset hinges of same style.

Move or eliminate a toilet partition to widen the area around the toilet. A privacy curtain provides a temporary solution if a partition is removed or until a door to the stall is provided.

Lower one urinal or install an additional lower one.

Lower mirrors, soap and towel dispensers at sinks. If sink has legs, install wall-mounted sink.

Install grab bars in the toilet stall.

Remove vanity partitions and lock door so that toilet room may be used privately.



*An accessible toilet room:
note the lowered sink, towel
dispenser and mirror.*

Typical Administrative Solutions:

Create one accessible private lavatory with thumb-turn lock for use by men and women where permitted.

Designate an accessible staff toilet for use by individuals in wheelchairs.

Refer people in wheelchairs to the nearest accessible public facilities.

4. ACCESS TO THE SITE

Access to the site involves getting from the parking area to the visitor entrance. Many historic sites have curbs, steps, narrow walks, with loose or uneven surfaces and steep slopes. With the possible exception of curbs, these features are historic and modification might cause damage to the feature or serious visual intrusion.



The Longfellow House in Cambridge, Massachusetts seems inaccessible from the street. Note the curb, long brick walk and steps up to a terrace at this Georgian mansion.

Access to the Longfellow House is best accomplished using a driveway and small parking area located to the left of the house. Spaces in the parking area could be reserved for handicapped individuals.

Typical Accessibility Problems:

Curbs at the street are barriers.

Steps are wheelchair barriers.

Narrow walks are a hazard to crutches and wheelchairs.

Cobblestones, gravel or other loose uneven surfaces are hazardous to impaired persons.

Obstacles may be present in the path of travel.

Typical Accessibility Solutions:

Install a curb ramp in the path of travel.

Install removable ramps over steps. Railings should be added to ramps over more than 1 step.

Place removable board walk with non-slip surface over narrow and uneven surfaces.

Adapt a golf cart or other vehicle to transport individuals in their wheelchairs over steep or uneven terrain.

Remove and replace existing walkway material to achieve a more uniform pathway.

Remove obstacles.

Typical Administrative Solutions:

Reroute visitor traffic around steps, curbs, steep or uneven surfaces, and obstacles. Appropriate signs or staff assistance should be provided.

Allow mobility-impaired visitors to disembark as close to entrance as possible.

Provide staff assistance to help people in wheelchairs up curbs, few steps and over steep or uneven surfaces.

Typical Interpretive Solutions:

Create an interpretive program, e.g. audio-visual presentation, mock-up of room, visitor center or other accessible location.

SECONDARY AREAS**5. ACCESS TO OTHER FLOORS**

Without an elevator, accessibility alternatives for persons in wheelchairs wheelchair are very limited. Stairs can be modified to some degree for those who walk with instability.

Typical Accessibility Problems:

Stairs present a serious barrier for those in wheelchairs.

Low railings, railings on one side only, and discontinuous railings present hazardous conditions for those who walk with instability or visually impaired persons.

Projecting nosings (steps where tread extends beyond riser) are a hazard to those who use crutches.

Typical Accessibility Solutions:

Install an elevator.

Install a chair lift over the stairs.

Add a handrail.

Modify existing railings.

Carpet stairs.

Install bevels attached to riser.

Typical Administrative Solutions:

Ask staff to assist individuals up stairs.

6. ACCESS TO PARKING

Parking lots need only slight modification to accommodate handicapped visitors. Such change rarely affects historic features.

Typical Accessibility Problems:

No reserved spaces near the accessible entrance to each building.

Narrow or standard spaces do not permit a wheelchair to enter and disembark from a car.

Insufficient number of accessible reserved spaces.

Typical Accessibility Solutions:

See Typical Administrative Solutions.

Use the International Symbol of Accessibility to reserve special spaces.

Rearrange spaces to provide special 13-foot-wide or 9-foot-wide spaces which share a common 4-foot aisle.

Use adjacent walkways as disembarking areas.

Add additional reserved parking spaces as needed.

Typical Administrative Solutions:

Allow individuals with mobility impairments to disembark as close to the entrance as possible.

7. ACCESS TO DRINKING FOUNTAINS

If provided, drinking fountains or coolers must be usable by all, including short people and those in wheelchairs.

Most drinking fountains are not wheelchair accessible and cannot be made so. Merely lowering a wall-mounted unit does not make it accessible because the bottom of the cooler prevents a person from wheeling close enough for use.

Typical Accessibility Problems:

High drinking fountains do not permit use by visitors in wheelchairs.

Button-type controls are difficult for those with hand and arm impairments to operate.

Typical Accessibility Solutions:

Remove and replace with drinking fountain designed for use by those in wheelchairs.

Add proper wheelchair drinking fountain adjacent to existing fountain.

Install a cup dispenser beside inaccessible fountain (interim solution).

Change button controls to lever handles on both sides.

Typical Administrative Solutions:

Have staff assist handicapped visitors in getting water.

8. ACCESS TO PUBLIC TELEPHONES

If provided, public telephone service must be available to all.

Typical Accessibility Problems:

Phones with a coin slot greater than 54" from the floor are difficult or impossible to use by those in wheelchairs.

A telephone without an amplifying device may be unusable for visitors with hearing impairments.

Typical Accessibility Solutions:

The telephone company will lower the telephone for a service charge.

The telephone company will install an induction coil to augment hearing aids.

Conclusion

Reading this Guide is the first step for management and technical staff who are responsible for providing accommodations to handicapped visitors.

By now it should be clear that there are levels of accommodation. When a solution to an accessibility problem cannot achieve an IDEAL, STANDARD, or BELOW STANDARD level of accommodation without intruding upon the historic fabric, then an administrative or interpretive solution will become the solution of choice.

Before any choices are implemented, however, it is important to consult the companion technical manual.

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