This notice of receipt of applications for modification of exemptions and for party to an exemption is published in accordance with Part 107 of the Hazardous Materials Transportations Act (49 U.S.C. 1806; 49 CFR 1.53(e)).

Issued in Washington, DC, on June 13, 1994.

J. Suzanne Hedgepeth,

Chief, Exemption Program, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 94–14863 Filed 6–17–94; 8:45 am]

BILLING CODE 4910–60–M

Office of Hazardous Materials Safety; Applications for Exemptions

AGENCY: Research and Special Programs Administration, DOT.

ACTION: List of Applicants for Exemptions.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, exemptions from the Department of Transportation's Hazardous Materials Regulations (49 CFR Part 107, Subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the applications described herein. Each mode of transportation for which a particular exemption is requested is indicated by a number in the "Nature of Application" portion of the table below as follows: 1—Motor vehicle, 2—Rail freight, 3—Cargo vessel, 4—Cargo aircraft only, 5—Passenger-carrying aircraft.

DATES: Comments must be received on or before July 20, 1994.

ADDRESS COMMENTS TO: Dockets Unit, Research and Special Programs Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the exemption application number.

FOR FURTHER INFORMATION CONTACT: Copies of the applications are available for inspection in the Dockets Unit, Room 8426, Nassif Building, 400 7th Street, SW., Washington, DC.

NEW EXEMPTIONS

Application No.	Applicant	Regulation(s) affected	Nature of exemption thereof
11256–N	Great Lakes Chemical, Corporation, McFarland, CA.	49 CFR 174.67(i)+(j)	To authorize rail cars containing hazardous materials, Class 2.3 and 6.1 to remain connected without the physical presence of an unloader. (mode 2.)
11257–N	Praxair, Inc., Danbury, CT	49 CFR 173.163, 173.201, 173.202, 173.203, 173.226, 173.227.	To authorize the transportation of non-DOT Specification full removable head, steel salvage cylinder for overpacking damaged or leaking packages of pressurized and non-pressurized hazardous materials Classed in Class 3 and 8, Class 2.1, 2.2, 6.1 or Class 2.3. (mode 1.)
11260–N	VIZ Manufacturing Company, Philadelphia, PA.	49 CFR 173.306(a)(1)	To authorize the transportation of argon, compressed gas, Division 2.2, in low pressure airbag pressure switches, containing .021 cubic inch of argon at a pressure between 2500 and 3000 psi in specially designed packaging. (mode 1.)
11261–N	Assmann Corporation of America, Garrett, IN.	49 CFR Part 173(D)(E)(F)	To manufacture, mark and sell a 400 gallon rational molded polyethylene tank of titanium construction equipped with metal frame work for use in transporting various classes of hazardous materials. (modes 1, 2, 3.)
11262–N	Caire, Inc., New Prague, MN	49 CFR 178.57–12(a), 178.57–14, 15, 16, 17, 178.57–8(c).	To authorize the transportation of non-DOT Specification welded insulated cylinders comparable to DOT Specification 4L for use in transporting oxygen, refrigerated liquid, Division 2.2. (mode 1.)
11263–N	American Coke & Coal Chemicals Institute, Washington, DC.	49 CFR 172.101(SP8, B45)	To authorize the transportation of solid coal tar pitch compounds, Class 9, in open-top and closed-top sift-proof metal cans in amounts that exceeds reportable quantities. (mode 1.)
11264–N	David Sarnoff Research Center, Princeton, NJ.	49 CFR 173.416	To authorize the transportation of radioactive material, special form, n.o.s., Cobalt-60, Class 7, Type B, in the form of metal pellets and unsheathed slugs in stainless steel capsule assemblies. (mode 1.)
11265–N	American Sterilizer Company, Erie, PA.	49 CFR 172.101, 172.504, 173.323, 174.81 and 77.848.	To authorize the shipment of ethylene oxide contained in aluminum cannisters overpacked in fiberboard boxes to carry a Division 2.1 label instead of a Division 2.3 label. (modes 1, 2.)
11266–N	Amersham Corporation, Burlington, MA.	49 CFR 173.416(e)	To authorize transportation of certain radioactive materials in a 20–WC overpack that has an alternative inner packaging. (modes 1, 2, 4.)
11267–N	The University of New Mexico, Albuquerque, NM.	49 CFR Part 173	To authorize the transportation of Space Nuclear Power systems (Topaz II), containing various hazardous material, to be shipped in a specially designed transport container. (mode 1.)
11268–N	Elf Atochem North America, Inc., Philadelphia, PA.	49 CFR 173.225(d)(2)	To authorize the transportation of solid organic peroxides, Division 5.2 in 4H2 solid plastic boxes equipped with polyethylene film bags. (modes 1, 2.)

This notice of receipt of applications for new exemptions is published in accordance with Part 107 of the Hazardous Materials Transportation Act (49 U.S.C. 1806; 49 CFR 1.53(e)).

Issued in Washington, DC, on June 13, 1994.

J. Suzanne Hedgepeth,

Chief, Exemption Programs, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 94–14864 Filed 6–17–94; 8:45 am]

BILLING CODE 4910–60–M

Federal Aviation Administration

Civil Tiltrotor Development Advisory Committee, Infrastructure Subcommittee

Pursuant to Section 10(A)(2) of the Federal Advisory Committee Act Public Law (92–362); 5 U.S.C. (App. I), notice is hereby given of a meeting of the Federal Aviation Administration (FAA) sponsored Civil Tiltrotor Development Advisory Committee (CTRDAC) Infrastructure Subcommittee to be held June 30, 1994 from 10 a.m. to 4 p.m. The meeting will take place at the Chicago O'Hare International Airport, Terminal No. 1, Executive Conference Room, Mezzanine Level, Department of Aviation City Offices, Chicago, IL 60666.

The agenda for the initial Infrastructure Subcommittee meeting include two primary objectives:

(1) Receive briefings on civil tiltrotor infrastructure analyses conducted by the Federal Aviation Administration, the Volpe National Transportation Systems Center, and the National Aeronautics and Space Administration.

(2) Begin drafting of the Infrastructure Subcommittee Work Plan targeted for completion by the end of July.

Persons who plan to attend the meeting should notify Ms. Lenora Harris on 202–267–8787. Attendance is open to the interested public, but limited to space available. With the approval of the Chairperson, members of the public may present oral statements at the meeting.

Members of the public may provide a written statement to the Subcommittee at any time.

Persons with a disability requiring special services, such as an interpreter for the hearing impaired, should contact Ms. Lenora Harris at least three days prior to the meeting. Issued in Washington, D.C., June 14, 1994.

Richard A. Weiss,

Designated Federal Official, Civil Tiltrotor Development Advisory Committee.

[FR Doc. 94–14941 Filed 6–17–94; 8:45 am]

BILLING CODE 4910–13–M

Sunshine Act Meetings

Federal Register
Vol. 59, No. 117
Monday, June 20, 1994

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday, July 1, 1994.

PLACE: 2033 K St., N.W., Washington, D.C., 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Matters.

CONTACT PERSON FOR MORE INFORMATION: Jean A. Webb, 254–6314.

Jean A. Webb,
Secretary of the Commission.
[FR Doc. 94–15027 Filed 6–16–94; 11:37 am]
BILLING CODE 6351–01–M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday, July 8, 1994.

PLACE: 2033 K St., NW., Washington, DC, 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Matters.

CONTACT PERSON FOR MORE INFORMATION: Jean A. Webb, 254–6314.

Jean A. Webb,
Secretary of the Commission.
[FR Doc. 94–15028 Filed 6–16–94; 11:37 am]
BILLING CODE 6351–01–M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday, July 15, 1994.

PLACE: 2033 K St., N.W., Washington, D.C., 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Matters.

CONTACT PERSON FOR MORE INFORMATION: Jean A. Webb, 254–6314.

Jean A. Webb,
Secretary of the Commission.
[FR Doc. 94–15029 Filed 6–16–94; 8:45 am]
BILLING CODE 6351–01–M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday, July 22, 1994.

PLACE: 2033 K St., NW., Washington, DC, 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Matters.

CONTACT PERSON FOR MORE INFORMATION: Jean A. Webb, 254–6314.

Jean A. Webb,
Secretary of the Commission.
[FR Doc. 94–15030 Filed 6–16–94; 11:37 am]
BILLING CODE 6351–01–M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday, July 29, 1994.

PLACE: 2033 K St., NW., Washington, DC, 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Matters.

CONTACT PERSON FOR MORE INFORMATION: Jean A. Webb, 254–6314.

Jean A. Webb,
Secretary of the Commission.
[FR Doc. 94–15031 Filed 6–16–94; 11:37 am]
BILLING CODE 6351–01–M

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 59 FR 30980, June 16, 1994.

PREVIOUSLY ANNOUNCED TIME AND DATE OF MEETING: 2:00 p.m. (Eastern Time) Tuesday, June 28, 1994.

CHANGE IN THE NOTICE:

Open Session

The title of the item listed below has been changed:

3. Proposed Internal Guidance for EEOC Investigators for Communicating and Interacting with Persons with Disabilities.

CONTACT PERSON FOR MORE INFORMATION: Frances M. Hart, Executive Officer on (202) 663–4070.

This Notice Issued June 16, 1994.

Frances M. Hart,
Executive Officer, Executive Secretariat.
[FR Doc. 94–15067 Filed 6–16–94; 2:19 pm]
BILLING CODE 6750–06–M

federal register

Monday
June 20, 1994

Part II

Architectural and Transportation Barriers Compliance Board

36 CFR Part 1191

Americans With Disabilities Act (ADA) Accssibility Guidelines for Buildings and Facilities; State and Local Government Facilities; Interim Final Rule

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

36 CFR Part 1191

[Docket No. 92-2]

RIN 3014 AA12

Americans With Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; State and Local Government Facilities

AGENCY: Architectural and Transportation Barriers Compliance Board.

ACTION: Interim final rule.

SUMMARY: The Architectural and Transportation Barriers Compliance Board (Board) is issuing interim final guidelines to provide additional guidance to the Department of Justice and the Department of Transportation in establishing accessibility standards for new construction and alterations of State and local government facilities covered by title II of the Americans with Disabilities Act (ADA) of 1990. The guidelines will ensure that newly constructed and altered State and local government facilities are readily accessible to and usable by individuals with disabilities in terms of architecture, design, and communication. The standards established by the Department of Justice and the Department of Transportation must be consistent with and may incorporate the guidelines.

In addition to the provisions for State and local governments, the Board has also made some editorial changes to the Americans with Disabilities Act Accessibility Guidelines to further clarify the guidelines. These editorial changes are not substantive.

DATES: *Effective date:* December 20, 1994.

Comment date: New comments responding to this Interim Final Rule, which have not already been sent in response to the Notice of Proposed Rulemaking for State and Local Government Facilities published on December 21, 1992, should be received by December 20, 1994. (See Comments, SUPPLEMENTARY INFORMATION). Comments received after this date will be considered to the extent practicable.

ADDRESSES: Comments should be sent to the Office of the General Counsel, Architectural and Transportation Barriers Compliance Board, 1331 F Street NW., suite 1000, Washington, DC 20004-1111. Where possible, the comments should reference specific section in the interim final guidelines. Comments which are six (6) pages or less may be faxed to (202) 272-5447. Comments will be available for inspection at this address from 9 a.m. to 5:30 p.m. on regular business days.

FOR FURTHER INFORMATION CONTACT: Elizabeth A. Stewart, Office of the General Counsel, Architectural and Transportation Barriers Compliance Board, 1331 F Street NW, suite 1000, Washington, DC 20004-1111. Telephone (202) 272-5434 ext. 52 (Voice) or (202) 272-5449 (TTY). This is not a toll-free number. This document is available in accessible formats (cassette tape, braille, large print, or computer disc) upon request.

SUPPLEMENTARY INFORMATION:

Comments

Comments received in response to the Notice of Proposed Rulemaking for State and Local Government Facilities published on December 21, 1992 (57 FR 60612) will be considered along with new comments received in response to this Interim final rule. It is not necessary therefore to resubmit comments which were forwarded in response to the previous notice of rulemaking.

Statutory Background

The Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. 12101 et seq.) extends to individuals with disabilities comprehensive civil rights protections similar to those provided to persons on the basis of race, sex, national origin, and religion under the Civil Rights Act of 1964.

Title II of the ADA, which became effective on January 26, 1992, prohibits discrimination on the basis of disability in services, programs and activities provided by State and local government entities, and the National Railroad Passenger Corporation (Amtrak). Section 202 of the ADA extends the nondiscrimination policy of section 504 of the Rehabilitation Act of 1973, as amended, (29 U.S.C. 794) which prohibits discrimination on the basis of disability in Federally assisted programs and activities to all State and local governmental entities regardless of whether such entities receive Federal funds. Most programs and activities of State and local governments are recipients of financial assistance from one or more Federal agencies and are already covered by section 504 of the Rehabilitation Act of 1973.

Title III of the ADA, which also became effective on January 26, 1992, prohibits discrimination on the basis of disability by private entities who own, lease, lease to, or operate a place of public accommodation. Title III establishes accessibility requirements for new construction and alterations in places of public accommodation and commercial facilities.

Section 504 of the ADA requires that the Architectural and Transportation Barriers Compliance Board (Board) issue minimum guidelines to assist the Department of Justice and the Department of Transportation in establishing accessibility standards under titles II and III. Under sections 204(a) and 306(b) of the ADA, the Department of Justice is responsible for issuing final regulations, consistent with the guidelines issued by the Board, to implement titles II and III (except for transportation vehicles and facilities). Sections 229 and 306(a) of the ADA provide that the Department of Transportation is responsible for issuing regulations to implement the transportation provisions of titles II and III of the ADA. Those regulations must also be consistent with the Board's guidelines.

Rulemaking History

On July 26, 1991, the Board published the Americans with Disabilities Act Accessibility Guidelines (ADAAG) to assist the Department of Justice in establishing accessibility standards for new construction and alterations in places of public accommodation and commercial facilities. See 56 FR 35408, as corrected at 56 FR 38174 (August 12, 1991) and 57 FR 1393 (January 14, 1992), 36 CFR Part 1191. ADAAG contains scoping provisions and technical specifications generally applicable to buildings and facilities (sections 1 through 4.35) and additional requirements specifically applicable to certain types of buildings and facilities covered by title III of the ADA: restaurants and cafeterias (section 5); medical care facilities (section 6); mercantile and business facilities (section 7); libraries (section 8); and transient lodging (section 9).[1]

On July 26, 1991, the Department of Justice published its final regulations implementing title III of the ADA which incorporated ADAAG as the accessibility standards for newly constructed and altered places of public

[1] On September 6, 1991, the Board amended ADAAG to include additional requirements specifically applicable to transportation facilities (section 10). See 56 FR 45500, 36 CFR 1191.1. On that same date, the Board also published separate final guidelines to assist the Department of Transportation in establishing accessibility standards for transportation vehicles. See 56 FR 45530, 36 CFR Part 1192. The Department of Transportation has incorporated ADAAG and the Board's guidelines for transportation vehicles and facilities in its final regulations. See 56 FR 45584 (September 6, 1991), 49 CFR Parts 37 and 38.

accommodation and commercial facilities covered by title III. See 56 FR 35544, 28 CFR Part 36. On that same date, the Department of Justice published its final regulations implementing title II of the ADA. See 56 FR 35694, 28 CFR Part 35. The Department of Justice's title II regulations give State and local governments the option of choosing between designing, constructing or altering their facilities in conformance with the Uniform Federal Accessibility Standards (UFAS)[2] (Appendix A to 41 CFR 101–19.6) or with ADAAG (Appendix A to 28 CFR Part 36), except that if ADAAG is chosen, the elevator exemption contained in title III of the ADA does not apply.[3] See 28 CFR 35.151.

When the Department of Justice published its title II regulations, it noted that the Board would be supplementing ADAAG in the future to include additional guidelines for State and local government facilities. The Department of Justice further stated that it anticipated that it would amend its title II regulations to adopt ADAAG as the accessibility standards for State and local government facilities after the Board supplemented ADAAG. 56 FR 35694, 35711 (July 26, 1991). Adopting essentially the same accessibility standards for titles II and III of the ADA will ensure consistency and uniformity of design in the public and private sectors throughout the country.

To further the goal of uniform standards, the Board intends to use ADAAG as the accessibility guidelines for Federally financed facilities covered by the Architectural Barriers Act of 1968 (42 U.S.C. 4151 et seq.) since the Federal government owns or operates many of the same type of facilities as State and local governments which are addressed in this interim final rule. Under section 502 of the Rehabilitation Act of 1973 (29 U.S.C. 792), the Board is responsible for establishing guidelines for accessibility standards issued by other Federal agencies pursuant to the Architectural Barriers Act of 1968. See note 2 supra. The Board anticipates initiating action to adopt ADAAG with special provisions as appropriate for Federal buildings (e.g., post offices, military facilities) in place of its current guidelines for Federally financed facilities. Standards issued by other Federal agencies pursuant to the Architectural Barriers Act must be consistent with the Board's guidelines. Those Federal agencies responsible for issuing accessibility standards under the Architectural Barriers Act will initiate separate rulemaking to adopt standards consistent with ADAAG as supplemented in place of UFAS. Commenters, including Federal agencies, were encouraged to comment on the notice of proposed rulemaking for State and local government facilities in the context of how the proposed guidelines will also affect Federal facilities and to specify any particular Federal building types which would require special provisions. A number of the comments received in response to the NPRM supported having a single standard for all facilities, including State, local and Federal.

[2] UFAS was developed by the General Services Administration, Department of Defense, Department of Housing and Urban Development, and the United States Postal Service to implement the Architectural Barriers Act of 1968 (42 U.S.C. 4151 et seq.) which requires certain Federally financed buildings to be accessible. Most Federal agencies reference UFAS in the accessibility standards for buildings and facilities constructed or altered by recipients of Federal financial assistance for purposes of section 504 of the Rehabilitation Act of 1973, as amended. (29 U.S.C. 794).

[3] In new construction and alterations, title III of the ADA does not require elevators if a facility is less than three stories or has less than 3000 square feet per story, unless the facility is a shopping center or mall; a professional office of a health care provider; or a terminal, depot or other station used for specified public transportation or an airport passenger terminal. See 28 CFR 36.401(d) and 36.404.

Proposed Guidelines

On December 21, 1992, the Board published a notice of proposed rulemaking (NPRM) in the **Federal Register** which proposed to add four special application sections to the Americans with Disabilities Act Accessibility Guidelines specifically applicable to certain types of buildings and facilities covered by title II of the ADA:

11. Judicial, Legislative, and Regulatory Facilities.
12. Detention and Correctional Facilities.
13. Accessible Residential Housing.
14. Public Rights-of-Way.

The NPRM also proposed requirements and asked questions regarding the addition of miscellaneous provisions specifically applicable to State and local government facilities, including swimming pools, text telephones, automatic doors, airport security systems, entrances, elevator exemptions, building signage, assistive listening systems, and sales and service counters.

Public Hearings and Comments

The Board held five public hearings in various locations between February 22, 1993 and March 15, 1993. A total of 148 people presented testimony on the proposed guidelines at the hearings. In addition, 447 written comments were submitted to the Board by the end of the comment period on March 22, 1993. Another 127 comments were received after March 22, 1993. Although those comments were not timely, the Board considered them to the extent practicable. In all, the Board received nearly 7000 pages of comments and testimony on the proposed guidelines.

The Board received comments and testimony from a broad range of interested individuals and groups, including individuals who identified themselves as having a disability; organizations representing persons with disabilities; State or local code administrators; State, local and Federal government agencies; manufacturers; design professionals; and national professional and trade associations.

The comments and testimony were sorted by section and analyzed. A large number of commenters expressed support for the guidelines as proposed. Some comments requested changes and others requested clarifications. As a result of the comments, a number of provisions were revised. In particular, ADAAG 14 (Public Rights-of-Way) was extensively reorganized. With respect to those commenters who recommended changes, a few submitted data or studies in support of their recommendations. Some commenters asked questions regarding the application of the guidelines to specific situations. The application of those provisions is discussed in the section-by-section analysis which follows.

Due to the large number of comments received, it is not possible for the Board to respond to each comment in this preamble. The Board has made every effort to respond to significant comments in the general issues and section-by-section analysis. As discussed under general issues and in ADAAG 14 (Public Rights of Way), the Board has reserved action in some areas pending further study or research. The Board has an on-going research and technical assistance program and plans to periodically review and up-date the guidelines to ensure that they remain consistent with technological developments and changes in model codes and national standards, and meet the needs of individuals with disabilities.

Interim Final Rule

As discussed above, the Board's guidelines provide guidance to the Department of Justice and the Department of Transportation in establishing accessibility standards for new construction and alterations of State and local government facilities

covered by title II of the Americans with Disabilities Act (ADA) of 1990. The standards established by the Department of Justice and the Department of Transportation must be consistent with and may incorporate the guidelines. The Department of Justice and the Department of Transportation are each publishing notices of proposed rulemaking to incorporate the Board's guidelines as the standards for State and local government facilities in this issue of the **Federal Register**. The notices published by the Department of Justice and the Department of Transportation seek comment from the public on its proposal to incorporate the Board's guidelines. Consistent with the requests by the Department of Justice and the Department of Transportation for comment on its proposed actions, the Board has chosen to issue these guidelines as an interim final rule and is also soliciting comment. All three agencies have requested in their notices that comments on the amendments to ADAAG be forwarded to the Board for consideration. The simultaneous publication of rules and the coordination of the review process between the three agencies is expected to both facilitate and expedite the review process.

In finalizing the guidelines, the Board, the Department of Justice and the Department of Transportation will consider all comments previously received in response to the Board's Notice of Proposed Rulemaking for State and local government facilities published on December 21, 1992, as well as comments received on this interim final rule. Accordingly, those commenters who have previously responded to the Board's Notice of Proposed Rulemaking need only submit new comments on the interim final rule.

Editorial Amendments

In order to further clarify the guidelines, the Board has made a number of editorial revisions to ADAAG. The editorial changes are not substantive and therefore do not require the issuance of an additional proposed rule.

General Issues

Chemical and Environmental Sensitivities

The Board received a number of comments relating to chemical and environmental sensitivities. The Board is studying this issue and will be issuing a report before undertaking the next major rulemaking on ADAAG Buildings and Facilities.

Unisex Toilet and Bathing Facilities

The Board received several comments regarding the need to include requirements for unisex toilet and bathing facilities to accommodate people using personal assistants of the opposite sex. The Board and the Department of Justice will be examining the issue of unisex facilities in the near future.

Automatic Door Openers

The NPRM asked whether automatic or power assisted doors should be required at entrances to State and local government facilities and if so, whether this provision should be limited to specific types of State or local government facilities. The NPRM also asked for information regarding alternative methods of providing accessibility at exterior doors; power assisted door activating mechanisms; automatic doors and maneuvering clearances during power failures; and maximum opening forces.

Comment. The majority of commenters supported a requirement for automatic or power assisted doors at entrances. Several commenters including the National Park Service, the National Conference of State Historic Preservation Officers, and the New York State Office of Parks, Recreation, and Historic Preservation supported a requirement for automatic or power assisted doors as a means for making historic buildings with heavy doors more accessible. Responses varied on whether the requirement should apply to one primary entrance, or to all doors in State or local government buildings and facilities.

Many commenters stated that, rather than requiring automatic or power assisted doors, the Board should establish technical provisions for acceptable door opening pressure and allow State and local government entities flexibility in meeting the provision. Commenters suggested that allowing entities the flexibility to choose the means by which they achieve this door pressure may lead to the development and application of new technology and prevent reliance on electronic devices. Commenters' views on the location and type of operating mechanisms to be used varied greatly. Other commenters indicated that there may be security problems with requiring automatic or power assisted doors for detention and correctional facilities.

Response. Recently, the Board sponsored a research project to provide recommended scoping and technical provisions for automatic or power assisted doors applicable to both State and local government facilities and private entities. The Board has decided not to consider issuing guidelines in this area until the results of the study have been analyzed. The final report is available from the Board. Currently, State and local government facilities and private entities are encouraged to exercise the option, consistent with ADAAG 4.13.12 (Automatic Doors and Power Assisted Doors), to use automatic or power assisted doors to increase accessibility.

Alterations

Based on comments received in response to the initial rulemaking for ADAAG, the NPRM proposed that ADAAG 4.1.6(2) apply to facilities subject to title II of the ADA. (See 56 FR 2319, January 22, 1991). ADAAG 4.1.6(2) requires that where alterations affect or could affect the usability of or access to an area containing a primary function, the entity shall make the alteration in such a manner that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area are accessible to the extent that the costs of these accessibility features are not disproportionate to the overall alterations in terms of cost and scope as determined under criteria established by the Attorney General.

Comment. The Disability Rights Education and Defense Fund and a few other commenters requested a change to the path of travel requirement that would combine the requirements of ADAAG and UFAS. The commenters noted that UFAS 4.1.6(3) contains minimum accessibility requirements for a building or facility that is substantially altered, regardless of disproportionate costs. These commenters also noted that the Department of Justice title III regulations provide a list of priorities that should be followed when choosing which accessible elements to provide in the event of disproportionality. Since the Department of Justice title II regulations do not contain such a priority list for providing accessible elements, the commenters requested that the title III priority list be incorporated into ADAAG so that the priorities would apply to State and local government entities.

Response. ADAAG 4.1.6(2), by itself, yields a substantial level of accessibility. The addition of the UFAS provision to the requirements of ADAAG 4.1.6(2), will not, in most cases, result in greater accessibility than that currently required by the Department of Justice's title III regulations. Further, incorporating the UFAS provision into

ADAAG 4.1.6(2) would result in a requirement for State and local government entities which is different from the ADAAG requirements for private entities. The requirements for public and private entities should be uniform unless there is a compelling reason for them to be different. With regard to setting priorities for accessible elements in the event of disproportionality, the Department of Justice has proposed to amend its title II regulations to address this and other issues. See 28 CFR Part 35. Based on these reasons, no changes to the requirements of ADAAG 4.1.6(2) have been made.

Polling Places, Voting Booths, and Equipment

The NPRM asked whether polling places operated by State or local governments utilize fixed voting booths and equipment and how these fixed voting booths and devices currently meet the accessibility needs of persons with visual impairments, reach range limitations, and limitations in manipulating or operating controls. In addition, the NPRM requested information regarding existing and new technologies which would enable people with disabilities to use voting equipment and booths without assistance. The NPRM also requested comment on the cost information of such technologies.

Comment. A large number of commenters recommended various means which may be used to make voting booths and equipment accessible. These include such auxiliary aids as computers, touch tone phone systems, touch screen technology with voice output through earphones, tactile markings, voting equipment with audio capabilities, and the use of push-button controls instead of levers. Other suggestions for providing access to the voting process include the use of taped, brailled, or large print ballots. None of the comments indicated that technology is currently in use to provide independent access for individuals who are blind. No information was provided regarding the costs associated with the recommended technology.

Some commenters noted that access to the voting process could be achieved through absentee balloting procedures. A large number of commenters pointed out that existing Federal and many State laws allow people who are blind or visually impaired who need assistance to choose their own personal assistants to help them in the voting process. Several commenters stressed the importance of an accessible area which surrounds the voting equipment and an accessible route to the polling place. Only one commenter knew of a jurisdiction which had fixed voting booths.

Response. To the degree fixed voting booths are constructed and altered, they are subject to ADAAG requirements. In addition, as buildings and facilities covered by ADAAG are newly constructed or altered, accessibility will be required in these buildings and facilities, thereby improving access to polling places which may occupy these buildings or facilities.

Although portable booths and equipment would not be covered by the construction and alteration requirements contained in ADAAG, such portable items and the voting process is subject to the Department of Justice regulations implementing title II of the ADA. These regulations require program accessibility and auxiliary aids and services (see 28 CFR 35.149 and 35.160).

Assembly Areas

The NPRM sought comment on the design issues associated with providing integrated and dispersed accessible seating locations in arenas, stadiums or other sports facilities. In September 1992 the Board initiated a research project on assembly area accessibility. Through post-occupancy evaluations of sports and performing arts facilities, the Board is examining numerous issues related to current ADAAG provisions. The Board intends to address issues associated with assembly areas in a separate rulemaking once this research is completed.

Comment. One commenter requested that the Board clarify whether the required number of wheelchair locations in the chart at ADAAG 4.1.3(19)(a) refers to one or two wheelchair spaces.

Response. The chart at ADAAG 4.1.3(19)(a) refers to the required number of single wheelchair spaces. ADAAG 4.33.2 (Size of Wheelchair Locations) references Figure 46 (Space Requirements for Wheelchair Seating Spaces in Series) which illustrates two wheelchair spaces and specifies the clear floor space required depending on whether a side, rear, or forward approach is provided. Figure 46 is only illustrative of wheelchair seating spaces in a series and does not require that all wheelchair locations provide two wheelchair spaces. No changes were made to this provision.

Audible Announcements and Effective Communication for Persons With Hearing Impairments

ADAAG 10.3.1(14) and 10.4.1(6) (Transit Facilities) require that when transportation facilities provide information through a public address system, equivalent information be provided to persons who are deaf or hearing impaired. In the NPRM, a similar requirement was considered for State and local government facilities which also provide audible announcements to the public. The NPRM sought information on what types of State and local government facilities typically provide audible announcements to the public and what alternative means are available for providing this information to persons who are deaf or hearing impaired. Information on the costs of audible systems and alternatives was also sought.

Comment. Commenters indicated that a broad range of facilities such as public schools, welfare and motor vehicle departments, correctional and medical facilities, and convention centers often use audible announcements. Commenters from State and local governments indicated that the use of a system of audible announcements depends on the programs and services provided, the nature of the information, and the number of people served by the facility.

Self Help for Hard of Hearing People (SHHH), which represents persons with hearing impairments, noted that in order to determine which announcement system best serves the public, the information being provided must be evaluated and the methods of communication selected accordingly. Another commenter indicated that it may be necessary to provide a number of methods to ensure effective communication. Some commenters suggested providing video monitors, electronic message boards, or tactile pagers as a means of providing equivalent information to persons with hearing impairments. Commenters suggested that if a provision requiring equivalent information is added to ADAAG, the requirement should be flexible enough to facilitate compliance with the Department of Justice regulations requiring effective communication and program access. Little cost data on audible announcement systems and other alternatives was received.

Response. The comments suggested that the nature of the information provided in State and local government facilities differs from the information

provided in transit facilities. In the view of commenters representing State and local governments, the information provided by the audible announcements in State and local government facilities varies depending on the programs and services provided and may be primarily directed to the employees, not to the public. On the other hand, the information provided through the public address system in transit facilities is integral to the use of the transit system. Audible announcements in transit facilities provide critical information on arrivals, departures, boarding, destinations, and delays or cancellations. Although commenters recommended various methods for providing equivalent information to persons with hearing impairments when audible announcements are used, there was no consensus as to the most effective means of providing such information to the public. Therefore, no ADAAG provision has been included.

The Department of Justice regulations implementing title II of the ADA, however, does require State and local government entities to ensure that communications with applicants, participants, and members of the public with disabilities are as effective as communications with others, unless the public entity can demonstrate that action would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. See 28 CFR 35.160(a) and 35.164.

Assistive Listening Systems

ADAAG 4.1.3(19)(b) requires permanently installed assistive listening systems to be provided where audible communications are integral to the use of an assembly area, if the assembly area accommodates at least 50 people or has an audio-amplification system, and has fixed seating. ADAAG 11.9 requires that permanently installed assistive listening systems be provided in certain rooms in judicial, legislative and regulatory facilities, regardless of the number of persons accommodated or whether there is an amplification system and fixed seating is provided. The NPRM asked whether there are additional types of State and local government facilities where requirements for permanently installed assistive listening systems should be based on the type of room rather than the criteria in ADAAG 4.1.3(19)(b).

Comment. Commenters responded that assistive listening systems should be provided in educational facilities, large public waiting rooms, job-applicant testing and professional-licensing testing facilities, gymnasiums and emergency shelters. Many other commenters recommended that assistive listening systems be provided in all facilities available to the general public for meetings, hearings and other facilities available for public use. In addition, a few commenters requested that ADAAG 11.9(2) be clarified so that rooms used for public policy hearings are considered legislative or regulatory facilities.

A number of commenters stated that the criteria of ADAAG 4.1.3(19)(b) should be applied and that no additional requirements for assistive listening systems are necessary. However, other commenters recommended a change to ADAAG 4.1.3(19)(b) so that assistive listening systems are provided in rooms without fixed seating.

Many commenters recommended that portable devices be permitted to allow for more flexibility, less cost and retrofitting. No supporting documentation on portable systems or cost information was provided.

Response. Certain rooms and spaces recommended by commenters such as job applicant testing sites and gymnasiums are already required to provide assistive listening systems if they meet the criteria in ADAAG 4.1.3(19)(b). As commenters pointed out, facilities that do not have fixed seating do not meet these criteria. However, those facilities listed in ADAAG 11.9 are required to provide permanently installed assistive listening systems even if they do not have fixed seating. Some of those areas recommended by commenters in judicial, legislative and regulatory facilities are addressed in ADAAG 11.9. For example, one of each type of hearing room is required to be equipped with an assistive listening system. Rooms in other types of facilities are not required to provide assistive listening systems based on the occupancy or type of room. However, all State and local government entities are subject to the Department of Justice's title II regulations requiring that programs and services provide effective communications, including auxiliary aids unless it can be demonstrated that such action would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. See 28 CFR 35.160(a) and 28 CFR 35.164. To facilitate the use of portable systems, ADAAG 11.8 requires electrical outlets, wiring, and conduit for communications systems in judicial, legislative and regulatory facilities. No changes were made to ADAAG 4.1.3(19)(b).

Comment. The NPRM asked questions regarding areas or spaces in State or local government facilities which require protection from electronic eavesdropping. The NPRM also sought technical options for solving security-related problems and asked whether one type of system is more secure than another. Commenters were requested to provide cost information for providing a secure assistive listening system. Finally, the NPRM asked whether any areas should be exempt from the requirement of an assistive listening system due to risks associated with electronic eavesdropping.

Many commenters expressed general concern about assistive listening systems in areas where sensitive communications require strict security. The commenters provided programmatic and technical solutions including training people to turn assistive listening systems on or off, installing hard-wired communications systems, constructing soundproof areas that require security and confidentiality and using computer aided transcription or real-time captioning. The installation of an infrared listening system which cannot penetrate the confines of a room was a highly recommended solution. Some commenters noted that since infrared signals can travel through windows, solid window coverings would be necessary for total confidentiality.

Very little cost information was provided. A few commenters stated that the cost of a secure assistive listening system would vary due to the type of areas or space and the number of transmitters required to serve the space.

In the view of many commenters, certain spaces such as control centers, armories, legal visiting areas, pharmacies and medical service areas should be exempt from the assistive listening system requirement due to the risk of electronic eavesdropping. An equal number of commenters stated that no areas should be exempt because technology is available that satisfies the accessibility requirement and provides protection from electronic eavesdropping. Several commenters noted that legislatures and similar types of facilities employ safeguards such as monitoring hallways and establishing procedures for checking out receiver units to ensure that electronic eavesdropping does not take place. One commenter pointed out that equipment unrelated to assistive listening devices is readily available to persons wishing to eavesdrop.

Response. Based on the comments received, sensitive communications can be protected from electronic

eavesdropping through existing technology, careful design of the facility, and operational policies. No provisions or exemptions were added.

Section by Section Analysis

This section of the preamble contains a concise summary of the significant comments received on the NPRM, the Board's response to those comments, and any changes made to the guidelines.

1. Purpose

This section was amended to delete the reference to specific special application sections currently in ADAAG and replace it with a general reference to special application sections.

3. Miscellaneous Instructions and Definitions

3.5 Definitions

Alterations

The proposed reference to a State or local government entity, as well as the existing reference to a place of public accommodation or commercial facility, has been deleted from the definition of an alteration. This definition now applies to any facility covered by ADAAG. An alteration is defined as a change to a building or facility that affects or could affect its usability. Normal maintenance, cosmetic changes, or changes to mechanical systems are not alterations unless they affect the usability of the building or facility. New language has been added to the definition to clarify that alterations include changes to pedestrian facilities within the public right-of-way. Such changes may include, but are not limited to, the alteration or reconstruction of pedestrian routes, or the addition of street furniture, landscaping, or other fixed elements along a pedestrian route. These changes were added to be consistent with the addition of ADAAG 14 (Public Rights-of-Way).

The original preamble to ADAAG stated: "If a parking lot is resurfaced and does not have the number of accessible parking spaces required by 4.1.2(5) or the parking spaces do not comply with 4.6.3, those requirements must be met with unless it is technically infeasible." See 56 FR 144 at 35427. The addition of the word resurfacing to this definition is not intended as a new interpretation of what constitutes an alteration, but rather to reinforce the original intent that the resurfacing of streets, sidewalks, parking lots, and other outdoor surfaces is considered an alteration.

Although commenters generally supported the application of the alteration definition to State and local government entities, several commenters requested that language be added in ADAAG "stating that usability is to be interpreted broadly". The preamble to the Department of Justice's title III regulation states that: "The Department remains convinced that the Act requires the concept of 'usability' to be read broadly to include any change that affects the usability of the facility, not simply changes that relate directly to access by individuals with disabilities." 56 FR 144 at 35581.

Continuous Passage

This definition remains in ADAAG 14.1.1. See the discussion of this definition and appendix material at ADAAG 14.1.1 (Definitions).

Curb Ramp

A reference to ADAAG 14.1.1 (Public Sidewalk Curb Ramps) has been added to the definition for the convenience of the reader.

Dwelling Unit

This term is defined in ADAAG 13.1(1). See the discussion of this term and appendix material at ADAAG 13.1 (General.)

Principal Public Entrance

A new definition for principal public entrances has been added to ADAAG 3.5 (Definitions). See the discussion of this new definition at ADAAG 4.1.3(8) (Entrances).

Public Right-of-Way

A reference to this new definition has been added to ADAAG 3.5 (Definitions). See the discussion of this new definition at ADAAG 14.1.1 (Definitions).

Public Sidewalk

The word "public" has been added to this definition for clarification. The definition remains in ADAAG 14.1.1. See the discussion of this definition and appendix material at ADAAG 14.1.1 (Definitions).

Public Sidewalk Curb Ramp

A reference to this new definition has been added to ADAAG 3.5 (Definitions). The definition remains in ADAAG 14.1.1. See the discussion of this definition at ADAAG 14.1.1 (Definitions).

Site Infeasibility

This definition remains in ADAAG 14.1.1. See the discussion of this definition at ADAAG 14.1.1 (Definitions).

Technically Infeasible

A reference to the definition of "technically infeasible" in ADAAG 4.1.6(1)(j) has been added here for the convenience of the reader.

Transient Lodging

Comment. In the NPRM, the words "one or more dwelling units" were deleted from the ADAAG definition for transient lodging because "dwelling unit" only refers to residential facilities covered in ADAAG 13. Transient lodging includes facilities used on a transient basis and excludes residential facilities or medical care facilities. Resorts, hotels, motels, and dormitories used on a transient basis are examples of transient lodging. Some commenters requested that the guidelines distinguish between the terms transient lodging and dwelling unit.

Response. The definition of dwelling unit in ADAAG 3.5 has been deleted to reduce confusion and a new definition of dwelling unit has been added at ADAAG 13.1(1). For clarification of the term dwelling unit, see ADAAG 13.1. As proposed in the NPRM, the definition of transient lodging has been changed to clarify that a transient lodging facility is not considered a residential facility. With respect to the operation of certain types of facilities, either ADAAG 9 (Accessible Transient Lodging) or ADAAG 13 (Accessible Residential Housing), or both, may be applicable. An appendix note has been added to clarify that the Department of Justice's policy and rules will further define what is covered as transient lodging.

4. Accessible Elements and Spaces: Scope and Technical Requirements

4.1 Minimum Requirements.

4.1.1 Application.

4.1.1(1) General.

4.1.1(2) Application Based on Building Use.

As proposed in the NPRM, specific references in ADAAG 4.1.1(1) to the scoping requirements for accessible sites and exterior facilities (4.1.2), newly constructed buildings (4.1.3), and alterations (4.1.6) have been deleted. ADAAG 4.1.1(2) has been amended to delete the reference to specific special applications sections currently in ADAAG. These modifications do not change the substance of this provision but merely remove unnecessary references for clarity.

4.1.1(5) General Exceptions

ADAAG 4.1.1(5)(b), as revised, exempts from the requirements for accessibility prison guard towers, fire

towers, fixed life guard towers, and other areas raised for purposes of security or life or fire safety; non-occupiable spaces accessed only by tunnels and frequented by service personnel for maintenance or occasional monitoring of equipment; and single-occupancy structures accessed by passageways above or below grade.

Comment. The NPRM asked for comment on the basis or rationale for any recommended exception. There was no clear consensus among commenters responding to this question. Recommendations were made for exceptions based on the nature, use, or size of the facility, the cost of providing accessibility, occupancy load, and the safety and security of occupants. Some commenters, including several disability organizations, noted that certain facilities may merit exemption. For example, the Disability Rights and Education Defense Fund, stated that "very small occupancy facilities * * * which house only one or two persons could be treated differently (possibly exempted)." Several commenters, however, cautioned that any exception should be carefully and specifically written so as not to be interpreted more broadly than was intended. A few comments suggested that exceptions list specific facilities and structures while others recommended exceptions that would allow facilities to be considered for exception on a case-by-case basis. Some comments urged that no further exception be provided.

Response. Exceptions that list specific facilities are more easily interpreted than exceptions stated in general terms. However, exceptions based on specific facilities may exclude other facilities of a more unique nature that were not noted in comments or considered during rulemaking. Consequently, exceptions have been provided in ADAAG 4.1.1(5) (General Exceptions) according to the structural limitations that make accessibility infeasible. These exceptions contain examples of specific facilities.

Comment. Prison operators and corrections officials recommended that prison guard towers and other raised security posts be exempt. In addition, it was recommended that access not be required to upper level prison cells where multi-tier housing is provided since elevator and other confined spaces present security risks.

Response. Prison guard towers and other elevated security areas are similar in nature and use to "observation galleries used primarily for security purposes" currently exempt in ADAAG 4.1.1(5)(b)(i) and have been incorporated into this exception. With respect to upper level prison cells, ADAAG 12 (Detention and Correctional Facilities) requires that only a percentage of prison cells be accessible. An accessible route is not required to all cells, including those that may be located on upper tiers accessed only by stairs. See ADAAG 12.

Comment. The NPRM asked whether design solutions are available for making certain structures accessible such as fire towers and fixed life guard stands. These facilities are typically not considered to be "multi-story" according to building codes or the definition of "story" in ADAAG 3.5 (Definitions) and thus are not subject to the requirement in ADAAG 4.1.3(5) for a passenger elevator. However, such facilities are otherwise subject to the requirements for accessibility, including the requirement for an accessible route in ADAAG 4.1.3(1). Ramps and, in some cases platform lifts, may be part of an accessible route. A majority of commenters recommended that fire towers and life guard stands be exempt due to the lack of design solutions to provide access.

Response. The standard design and elevation of fire towers typically prohibit installation of a ramp or elevator in accordance with appropriate local or State building codes. Similarly, fixed life guard stands by their design and construction cannot easily sustain platform lifts or ramps. The exception in ADAAG 4.1.1(5)(b)(i) which addresses "raised areas used primarily for purposes of security" has been revised to cover those areas that are raised for purposes of life or fire safety, such as fire towers and fixed life guard towers which are listed in this provision as examples.

Comment. ADAAG 4.1.1(5)(b)(ii) exempted "non-occupiable spaces accessed only by ladders, catwalks crawl spaces, very narrow passageways, or freight (non-passenger) elevators, and frequented only by service personnel for repair purposes." Commenters recommended that this exception be revised to address certain limited use utility facilities often found in the public sector. Such facilities include water and sewage treatment pump rooms and stations, electric substations, transformer vaults, and highway and tunnel utility facilities. These facilities do not qualify for the existing exception because they may be frequented not only for repair purposes but for maintenance and monitoring of equipment as well. Further, some of these facilities may be accessed by tunnels instead of ladders, catwalks, crawl spaces, very narrow passageways, or freight elevators.

Response. The existing exception has been revised to include non-occupiable spaces accessed by tunnels. In addition, the phrase "frequented only for repair purposes" has been modified to include "maintenance" and "occasional monitoring of equipment." Water and sewage treatment pump rooms and stations, electric substations, transformer vaults, and highway and tunnel utility facilities are listed as examples of the exception.

Comment. The NPRM asked whether design solutions exist for providing access to toll booths. The response to this question was mixed. Several commenters indicated that toll booths are currently required to be accessible in the State of California. In addition, the Institutional and Municipal Parking Congress noted that cashier booths, such as those found in large parking facilities, are "virtually indistinguishable" from toll booths, and have been made accessible according to ADAAG. However, other commenters noted that some toll booths are accessed from below through underground tunnels so that toll booth operators need not cross vehicular traffic. While access is considered feasible from grade level, access from tunnels or passageways below grade would be difficult according to existing toll booth design. Some State transportation departments noted that requiring grade-level access would compromise employee safety.

Response. An exception has been provided in ADAAG 4.1.1(5)(b)(iii) for single occupant structures accessed only by passageways above or below grade, such as toll booths that are required to be accessed from tunnels below grade. This exception does not apply to toll booths accessed at grade level.

Comment. Other facilities recommended by commenters for exception include: cashier booths, border station inspection booths, guard booths, and portable classroom structures.

Response. These recommendations did not point to specific structural conditions that would make access infeasible. Consequently, such facilities would not be exempt unless the conditions listed in ADAAG 4.1.1(5) (General Exceptions) are met.

Comment. A few comments recommended exceptions for remote outdoor structures such as research stations and observation posts used by naturalists, hikers, and researchers.

Response. The Board is addressing various outdoor recreational facilities in separate rulemaking. However, raised observation posts may qualify for exception under ADAAG 4.1.1(5)(b)(i)

only if their primary use is for purposes of security or life or fire safety.

4.1.3(5) Elevators

ADAAG 4.1.3(5) contains exceptions from the requirement for a passenger elevator in certain facilities and circumstances. Exception 1 has been modified to address State and local government facilities that are less than three stories and not open to the public where the floor above the accessible ground floor houses no more than five persons and is less than 500 square feet. In addition, an exception to the requirement that elevators serve each level of multi-story buildings is provided for at air traffic control towers. Under Exception 5, elevator access is not required to serve the cab and the floor immediately below the cab since an elevator serving such levels would obstruct the required 360 degree clear view. While commenters noted that lifts may provide a feasible alternative means of access to these levels, the Board wishes to further assess the impact a requirement for vertical access, such as a platform lift complying with ADAAG 4.11 (Platform Lifts), would have on these facilities. Under NFPA 1010—1991 Life Safety Code section 30–2.4.1, air traffic control towers are required to provide only one means of egress. According to the Federal Aviation Administration (FAA), a vertical means of access to the cab will require the provision of a second means of egress from the cab to the ground level of the tower. Since air traffic control towers are typically built or operated by the FAA, a Federal entity, the Board plans to further consider this issue during adoption of ADAAG as the accessibility guideline for Federally financed facilities covered by the Architectural Barriers Act of 1968 (42 U.S.C. 4151 et seq.)

Title III of the ADA states that elevators are not required in facilities that are less than three stories or that have less than 3000 square feet per story unless the building is a shopping center or mall, the professional office of a health care provider, or another type of facility as determined by the Attorney General. Title II of the ADA does not specify a similar exception for State and local government facilities. The NPRM asked whether an exemption from the requirement for an elevator based on the presumed physical abilities of occupants is justified for certain State and local government facilities, such as firehouses with upper floors that are used only by firefighters.

Comment. A majority of commenters opposed an elevator exception based on the presumed physical capabilities of employees or other occupants of the facility. Most of these commenters argued that such an exception would limit the employment opportunities of persons with disabilities. The Equal Employment Opportunity Commission (EEOC), which enforces title I of the ADA, stated that:

> Title I of the ADA stresses a case-by-case determination of whether an individual with a disability can perform the essential functions of the job. Myths, fears, and stereotypes about disability are irrelevant to this determination. Consistent with this premise, blanket exclusions of individuals based on disability will be closely scrutinized under Title I of the ADA and in most cases, will probably be struck down as discriminatory * * * As a practical matter, a case-by-case determination of whether an individual with a disability can perform the essential functions of a job with reasonable accommodation will be moot if the employer can show that providing the reasonable accommodation will impose an undue hardship. While it will always depend on the particulars of the case, where certain levels of accessibility are not built in at the design stage of new construction, an employer is more likely to be able to prove an undue hardship defense based upon the need to make significant structural changes to the relevant work area.

Some commenters also noted that exemptions based on physical qualifications of facility occupants or employees can be confusing or difficult to interpret. Several commenters argued against such an exception because the occupancy of a facility may change or because access may be needed by other persons, such as supervisory personnel.

Response. Exceptions based on essential job requirements may not only be inconsistent with the ADA, as noted by the EEOC, but are also inconsistent with existing ADAAG provisions applicable to public accommodations and commercial facilities in the private sector. While full accessibility is not required in employee work areas, ADAAG 4.1.3 does require in section 4.1.1(3) access so that persons with disabilities can "approach, enter, and exit" such areas. Neither this provision nor existing ADAAG exceptions exempt accessibility based on the physical capabilities of employees or occupants. Exceptions based on structural factors or limitations are more consistent with ADAAG and the ADA. Thus, the NPRM asked whether design solutions exist for providing access to certain multi-story facilities where installation of an elevator may be infeasible or impractical. Examples include drawbridge and boat traffic towers, lock and dam control stations, and air traffic control towers, which require a clear 360 degree view that cannot be obstructed by an elevator shaft.

Comment. Most commenters identified lifts, including vertical and incline lifts, as feasible alternatives to elevators, particularly with respect to air traffic control towers. The response concerning drawbridge and boat traffic towers and lock and dam control stations was less conclusive, although a slight majority recommended that such facilities not be exempt. Several other comments noted that limited use or limited access elevators may provide a solution since they require less space than do passenger elevators meeting the requirements of ADAAG 4.10 (Elevators). Other comments considered available solutions as cost prohibitive or impractical and recommended further study.

Response. Existing exceptions in ADAAG 4.1.3(5) allow the use of platform lifts complying with ADAAG 4.11 (Platform Lifts) in lieu of an elevator in limited circumstances, such as "incidental spaces and rooms which are not open to the general public and which house no more than five persons" or "where existing site constraints or other constraints make use of a ramp or elevator infeasible." (See Exception 4(c) and (d)). While platform lifts may be an effective solution in addressing changes in level of a certain distance, their use in providing access between floors may not always be feasible. For example, platform lifts complying with ADAAG 4.11 (Platform Lifts) must meet the ASME A17.1 Safety Code for Elevators and Escalators, Section XX, 1990, which prohibits vertical wheelchair lifts from traveling more than twelve feet or from penetrating floors (Rule 2000.7a).

The existing exception for facilities subject to title III of the ADA that are less than three stories or that have less than 3000 square feet per story is contained in ADAAG 4.1.3(5) Exception 1. As noted in the NPRM, the applicability of this exception to places of public accommodation and commercial facilities was clarified. In addition, as part of this rulemaking, this provision has been lettered (a). An exception has been added in Exception 1, paragraph (b) for facilities subject to title II of the ADA. This exemption is narrower in scope than the existing exception for title III facilities in paragraph (a) and applies only to facilities that are less than three stories and not open to the general public where the floor above the accessible ground floor houses no more than five persons and is less than 500 square feet. Examples include drawbridge towers, boat traffic towers, lock and dam control stations, and train dispatching towers.

The maximum occupancy of five persons is derived from ADAAG 4.1.3(5) Exception 4(c) which allows the use of a platform lift instead of an elevator in providing access to incidental occupiable spaces. Since a platform lift may not always be a feasible alternative to an elevator in providing access between floors, Exception 1(b) does not contain a requirement for platform lifts in exempting elevator access. The 500 square foot maximum is based on a floor area allowance of 100 square feet per occupant, which is consistent with model building code requirements for business and industrial occupancies used in determining the occupant load for purposes of egress.

In addition, an exemption is provided for air traffic control towers in Exception 5. Under this exception, elevator access is not required to serve the cab of air traffic control towers since an elevator serving the cab would obstruct the necessary 360 degree clear view. This exception also applies to the floor immediately below the cab since the machinery above the elevator may obstruct the 360 degree clear view required in the cab. However, with respect to the floor immediately below the cab, this exception applies only where maintenance of the 360 degree clear view is not feasible. For example, a hydraulic elevator, which may be used in air traffic control towers up to a certain height, will enable an elevator car to serve the floor immediately below the cab without obstructing the 360 degree clear view in the cab. Thus, the exemption from elevator access to the floor immediately below the cab applies only to those air traffic control towers that cannot accommodate a hydraulic elevator. While relieved of the requirement for elevator access to the cab and possibly the floor immediately below the cab, air traffic control towers must be designed to be adaptable under this exception so that an accessible vertical means of access, such as a platform lift complying with ADAAG 11 (Platform Lifts), can be installed after construction as an adaptable feature when needed by a person with a disability to serve the cab and, where necessary, the floor immediately below the cab.

4.1.3(5) Exception 4 (Platform Lifts)

This exception permits the use of platform lifts or wheelchair lifts complying with 4.11 and applicable State or local codes in new construction specific conditions. As further discussed in ADAAG 11 (Judicial, Legislative and Regulatory Facilities) and ADAAG 13 (Accessible Residential Housing), this exception has been revised to allow platform lifts or wheelchair lifts to provide access to raised judges' benches, clerks' stations, speakers' rostrums, and raised daises, jury boxes and witness stands and to connect levels within an individual dwelling unit.

4.1.3(8) Entrances

ADAAG 4.1.3(8) requires that, at a minimum, 50 percent of all public entrances be accessible. In addition, where provided, one direct entrance to an enclosed parking garage and one entrance to a pedestrian tunnel or elevated walkway, must be accessible. The provision also states that, "where feasible, accessible entrances shall be those used by the majority of the people visiting or working in the building" (i.e., a principal entrance). The interim final guidelines provide that facilities subject to title II of the ADA must include all principal public entrances when meeting this requirement. This provision does not require that the number of accessible entrances exceed 50 percent of all public entrances or require an increase in the total number of principal public entrances planned for a facility. ADAAG 3.5 (Definitions) defines principal public entrances as any public entrance to a building or facility which is designed and constructed to accommodate a substantial flow of pedestrian traffic to a major function in the facility. For example, entrances of facilities subject to title II of the ADA which are designed to be heavily used by the public and connect exterior facilities with interior amenities and services must be included in the calculation of accessible entrances. This definition includes criteria to consider when determining which entrances are principal public entrances.

Comment. A few commenters stated that a clear definition of "principal entrance" should accompany the requirement if one were adopted.

Response. The guidelines define a "principal public entrance" as any public entrance to a building or facility which is designed and constructed to accommodate a substantial flow of pedestrian traffic to a major function of the facility. For example, an entrance with multiple doorways is generally intended to accommodate a greater flow of pedestrian traffic. The definition also provides criteria for distinguishing principal public entrances from other entrances (e.g., the embellishment of an entryway, the size of the doorway or any other design strategy which would make one entrance stand out prominently from another entrance).

Comment. The NPRM presented eight options for requiring accessible entrances in facilities which are subject to title II of the ADA. The options ranged from no additional requirements to the existing ADAAG to requiring all entrances to be accessible. The NPRM sought comment on these options and asked that commenters state their preference and justification for a particular option.

The majority of comments favored some modification of ADAAG for State and local governments. State and local government agencies and code officials favored options one and two, which are described below. Organizations representing persons with disabilities and State and local government agencies representing persons with disabilities favored options six and eight, which are described below. Design professionals and national professional organizations were divided between these two groups of options.

Option one was to retain the requirements of ADAAG 4.1.3(8) as written without any additional requirements for principal entrances. Commenters supporting option one were concerned that providing additional accessible principal entrances would result in problems with site constraints (e.g. sloping streets in urban areas) and increase construction costs.

Option two required that at least one principal entrance must be among those entrances required to be accessible by ADAAG 4.1.3(8). Commenters supporting this option acknowledged the importance of at least one accessible principal entrance. These commenters favored this option because it also allowed for greater design flexibility.

Option six required all principal entrances to be accessible and allowed those principal entrances to be counted toward satisfying the requirements of ADAAG 4.1.3(8). Commenters supporting this option stated that relegating persons with disabilities to the "side", "back", or even basement entries does not afford them the same choice in accessing a building as other individuals, and that the use of these other entrances might force them to use a long and isolated route to gain entry to a building.

Option eight required that all entrances be accessible. Commenters supporting this option considered it to be the best option to satisfy the intent of the legislation to stop discrimination against persons with disabilities while at the same time improving emergency egress. However, other commenters stated that this option would create difficult design problems when

constructing new facilities on existing sites with steep terrain or restricted boundaries. Additionally, commenters pointed out that to require more public entrances to be accessible would decrease the design flexibility in constructing a facility.

Response. The Board has adopted option six which requires facilities subject to title II of the ADA to include all principal public entrances when meeting the 50% requirement for accessible entrances in ADAAG 4.1.3(8)(a)(i). This option provides greater assurance that persons with disabilities will have access to the "front" entrance and may prevent excessive travel distances along isolated routes. The provision does not require an increase in the number of entrances planned for a facility. The number of planned entrances will be determined by the design of the facility. For example, if a new facility is planned with four principal public entrances, then ADAAG 4.1.3(8)(a)(i) would require only two of the four principal public entrances to be accessible.

It would be unreasonable to require all entrances to be accessible in cases where new construction, within existing urban areas, had to contend with existing slopes and other site considerations, such as existing sidewalks and nearby property lines. 56 FR 35419. The legislative history makes clear that not every feature of every building needs to be accessible but rather a high level of convenient access is contemplated. H. Rept. 101–485, pt.2, at 118. ADAAG § 4.1.1(5)(a) describes the conditions when structural impracticability due to terrain would prevent full compliance with requirements for accessibility. Structural impracticability is a very narrow exception and, as explained in the legislative history, does not apply to situations where a building is constructed on "hilly" terrain or on a plot of land with steep slopes. H. Rept. 101–485, pt.2, at 120. This provision will provide a greater level of convenient access as contemplated in the legislative history.

Comment. Several commenters thought these options would require expensive remodeling or destruction of historically significant elements of existing buildings and facilities. Other commenters wanted clarification that the existing sections of ADAAG covering alterations and historic preservation would prevail over these options with regard to existing buildings.

Response. The requirements of ADAAG 4.1.3(8) apply only to new construction. Alterations to existing buildings are covered by ADAAG 4.1.6 (Alterations) and alterations to qualified historic structures are covered by ADAAG 4.1.7 (Accessible Buildings: Historic Preservation). No changes have been made to either section.

Comment. The NPRM proposed guidelines for restricted and secured entrances in judicial, legislative, and regulatory facilities, and in detention and correctional facilities. The NPRM asked whether there were other types of State and local government facilities which have restricted and secured entrances, and if so, whether the guidelines should require that one or more of the restricted or secured entrances in those facilities be accessible. The NPRM also requested information on the cost impact of such a requirement. Commenters recommended several facilities where restricted and secured entrances should be accessible such as colleges, universities, museums, libraries, performing areas in auditoriums, laboratories in research facilities, police stations, social service offices, and National Guard weapons storage areas.

Response. The restricted and secured entrances of the facilities recommended by the commenters generally are public entrances already covered by ADAAG 4.1.3(8) (Entrances) and are addressed by existing requirements for accessibility. Additionally, some of the commenters were referring to interior doors and accessible routes, not exterior entrances covered by this section. The interim final rule contains appendix language recommending that accessible entrances be distributed among all types of entrances. Additional appendix material has been included to clarify some of the different types of entrances that should be considered. Specific requirements for restricted and secured entrances are addressed in ADAAG 11.5 (Restricted and Secured Entrances).

Comment. The NPRM asked whether the guidelines should include a distribution requirement for accessible entrances and, if so, should such a provision require that an accessible entrance be located on each side of the building where entrances are provided. The NPRM suggested a requirement based on criteria such as proximity to elevators, information centers or public streets, and asked whether a distribution requirement should apply only to buildings above a certain size. Finally, the NPRM asked whether such a distribution provision should apply to all types of State and local government facilities and what additional cost, if any, would be associated with such a requirement.

Commenters were divided on the question of whether a distribution requirement should be added to the guidelines. Several of the commenters favoring a distribution provision stated that accessible entrances should be provided on each side of a building where entrances are provided. Some commenters stated that accessible entrances should be provided close to exterior facilities and building amenities and services. Other commenters stated that the function and occupancy of a building should be the determining factors in the location of accessible entrances, and that architectural programming should be used to determine those locations. The majority of commenters stated that size should not be a determining factor for such a requirement and that any requirement for distribution should apply to all State and local government facilities. Very few commenters offered specific criteria for determining the minimum size of a building to be included in such a provision.

Response. ADAAG 4.3.2 (Accessible Route: Location) currently requires that an accessible route connect public transportation stops, parking, passenger loading zones, public streets and public sidewalks to an accessible entrance and accessible spaces within a building. ADAAG 4.6.2 (Parking and Passenger Loading Zones: Location) requires that parking spaces be located closest to an accessible entrance.

Numerous variables must be considered when establishing a distribution requirement. These variables include: the size of the building, planned entrances on more than one side of the building, the distance between accessible entrances, the distance from entrances to exterior facilities, and the distance from entrances to interior amenities and services. The provision for principal public entrances may achieve distribution of accessible entrances around large buildings with multiple entrances. Appendix language has been added recommending that accessible entrances be included on each side of a facility where entrances are planned.

4.1.3(16) Building Signage

Comment. The NPRM asked whether State and local government facilities should be required to provide tactile or audible directories, audible signs, or other wayfinding devices for persons with vision impairments. Comment was sought on the types of facilities that should provide such directories and signs. Additionally, cost information and information about the reliability of currently available technologies was

sought. The majority of commenters supported providing equal access to information about the accessible services, activities and facilities for persons with vision impairments. However, there was no clear consensus on the best means of achieving access. Numerous commenters, including individuals with vision impairments and sign manufacturers, considered tactile directories impractical. Commenters noted that although audible directories and audible signs for wayfinding may be viable options, there may be capital and maintenance costs associated with this technology. Commenters raised concerns regarding vandalism, maintenance, and updating temporary information, as well as the time required to read tactile directories. Very little cost data was received. Some manufacturers and researchers responded that the technology for providing effective communication is available and it has many applications such as listing stations in new transportation facilities.

A majority of commenters suggested that alternatives to requiring audible or tactile directories such as providing a fully staffed information or security desk, a telephone in lieu of an accessible directory, and a hand-held Braille directory should be included in the guidelines. Commenters representing State and local governments, local organizations representing people with disabilities, and design professionals suggested that establishing a performance standard for providing effective communication would provide greater flexibility. In their view, a performance standard would permit a number of options to be considered depending on the type, level of public access to, and use of buildings and facilities.

Finally, a number of groups representing persons with vision impairments suggested that no further requirements should be added. They commented that merely asking directions was the most efficient and convenient means of obtaining needed information for both blind and sighted individuals.

Response. Although commenters favored various options which may have the potential for providing effective communication, no provisions for audible directories, audible signs or other wayfinding devices are included at this time. The Department of Justice regulations implementing title II of the ADA require State and local governments to ensure that persons with vision impairments can obtain information about the existence and location of accessible services, activities, and facilities unless it can be demonstrated that such action would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. See 28 CFR 35.163(a) and 28 CFR 35.164.

Comment. The NPRM asked about individuals' experiences with raised and incised characters on tactile signs. An overwhelming majority of commenters, including signage manufacturers, stated that raised characters are more readable than incised characters and the guidelines should not be revised to include a provision permitting incised characters. Persons with vision impairments stated that incised characters are very difficult to read.

The American Foundation for the Blind was concerned that changes to the technical requirements for tactile signage were being contemplated solely on the basis that raised characters, as opposed to incised, may be more costly. In the view of designers, certain manufacturers, State and local governments, and persons with vision impairments, the technical requirements for tactile signage should be based on the readability of signs. A commenter representing the engraving industry encouraged the Board to sponsor further research to evaluate appropriate technical specifications for incised characters.

The NPRM also asked questions regarding the impact of current ADAAG requirements on engraving businesses that primarily manufacture building signage. Comments from industry representatives indicated that the technologies for producing tactile signs are readily available and that the acquisition costs are not prohibitive, even for small to medium-sized business. A number of manufacturers pointed out that they could supplement or modify existing equipment to produce tactile signs for $50 to $2000, and that minimal training was required. With respect to the signs, one commenter estimated that the costs of certain custom tactile signs with raised characters could equal or double the cost of the same sign with incised characters. Building owners and design professionals commented that signs with incised characters are more difficult to maintain than signs with raised characters.

Response. Comments received confirm that incised characters are not generally readable and therefore do not provide an acceptable level of accessibility. Additionally, sign manufacturers indicated that they incurred little financial hardship in retrofitting equipment to produce raised rather than incised character signs. Although certain custom signs may cost more, the cost of most signs with raised characters is sufficiently comparable to the cost of signs with incised characters. No change to the technical provisions for tactile signage have been made.

Comment. The Department of Justice issued technical assistance letters stating that the only signs subject to the tactile sign requirements of ADAAG 4.1.3(16)(a) are room numbers, exit signs, and signs designating men's and women's rooms and locker rooms containing men's and women's rooms. In light of this interpretation, the NPRM asked whether State and local government facilities should be required to provide tactile signs when signs are provided which give information about the function or use of a room or space. A few commenters suggested that all building signs should be tactile to ensure unassisted access to buildings and facilities. Many commenters requested that a sign such as "Courtroom" also be required to be tactile even when it does not include a room number. The Awards and Recognition Association, which represents members of the engraving industry, commented that a tactile room number, alone, is of little use unless one has prior knowledge of the room's function. A number of commenters stated that they interpreted ADAAG 4.1.3(16)(a) to require that signs be tactile even if only a name or single character, such as "A", is the designation of a permanent room or space. In their view, permanent rooms and spaces often are designated by names, in which case, these signs are required to be tactile.

Other commenters urged that the scope of the tactile provisions not be expanded to cover signs, or portions of signs, which provide information about a room's function. They responded that information about room function is ancillary to room designation, and therefore should not be required to be tactile.

Comments from design professionals, trade associations, sign manufacturers, and organizations representing persons with vision impairments strongly urged that the signage requirements covering title II and title III entities be the same.

Response. Commenters interpreted ADAAG to require tactile signs even where permanent signs use only characters (names or letters) to designate a permanent room or space. The current scoping language in ADAAG 4.1.2(7) and 4.1.3(16)(a) require that those permanent rooms or spaces that are designated by permanent signs comply

with the technical provisions in ADAAG 4.30.1 and 4.30.4 through 4.30.6 for raised and Brailled characters, finish and contrast, and mounting height and location. No changes have been made to the scoping requirements in this section of ADAAG.

In response to the comments received in this rulemaking, the Department of Justice has reconsidered its policy regarding tactile signs, particularly whether to include room names in addition to room numbers, exit signs, and signs designating men's and women's rooms and locker rooms containing men's and women's rooms. Because the NPRM addressed entities covered by title II, the Department of Justice plans to include room names for title II facilities. The Department of Justice will consider amending its title III policy to apply the broader interpretation to title III facilities in the future.

4.1.3(17)(c) TTYs

ADAAG 4.1.3(17)(c) (ii) requires that in stadiums, arenas and convention centers subject to title II of the ADA, at least one public TTY shall be provided on each floor level having a public pay telephone. ADAAG 4.1.3(17)(c)(iv) provides that if an interior public pay telephone is provided in a public use area of a facility covered by title II of the ADA, then at least one interior public TTY shall be provided in at least one public use area. ADAAG 4.1.3(17)(c)(v) requires that if an interior public pay telephone is provided in a secured area of a detention or correctional facility, then at least one public TTY shall be provided in at least one secured area. ADAAG 4.1.3(17)(d) provides that where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone in each such bank shall be equipped with a shelf and outlet in compliance with ADAAG 4.31.9(2). This provision contains an exception for the secured areas of detention or correctional facilities where outlets are prohibited for purposes of security or safety.

Comment. The NPRM proposed that at least one interior public TTY be provided in the public areas of judicial, legislative and regulatory facilities, and in detention and correctional facilities, if one interior public pay telephone is available. The NPRM asked whether these provisions were adequate to address the need for public TTYs in these facilities. Information on the cost impact of these requirements was also requested. A large number of commenters supported the proposed provisions for TTYs in judicial, legislative and regulatory facilities and in detention and correctional facilities. Several commenters requested that each level of security in correctional and detention facilities having a pay telephone, be equipped with a TTY. A few commenters regarded the proposed provisions as too restrictive and inflexible, citing high costs and problems such as TTY equipment being used as weapons in secured areas. Numerous commenters stated that portable TTYs should be permitted. Commenters noted that permanent pay TTYs are now accessible, secure, and vandal resistant. Commenters reported that the cost for portable and permanently installed pay TTYs ranges from $239 to $995.

Several comments were received regarding ADAAG 4.1.3(17)(d) which was referenced in the NPRM. ADAAG 4.1.3(17)(d) requires that interior phone banks with three or more public pay telephones must have at least one phone that is equipped with a shelf and outlet for use of a portable TTY. The NPRM proposed to exempt secured areas in detention and correctional facilities from the requirement for outlets and shelves due to security reasons. A few commenters asked that the exemption be limited to outlets but not to shelves, and two other commenters requested that both an outlet and shelf be required to accommodate portable TTYs.

Response. ADAAG 4.1.3(17)(c)(iv) requires that at least one public TTY be provided in facilities subject to title II of the ADA where a public pay telephone is provided in a public use area. The requirement that at least one public TTY be provided in at least one secured area in a detention or correctional facility has been retained.

ADAAG 4.31.9(3) includes a provision for equivalent facilitation which permits the use of portable devices, in lieu of permanently installed public TTYs, if the portable device is readily available to users. This provision ensures equal access, and allows the entity greater flexibility in selecting a secure and cost effective method of providing access. The exemption for secured areas from the requirement of shelves and outlets has been retained since a detached shelf and an electrical outlet may be security hazards in detention and correctional facilities.

Comment. The NPRM asked whether the existing scoping requirements for TTYs in ADAAG 4.1.3(17)(c)(ii) which covers stadiums, arenas, convention centers, hotels with a convention center and covered malls, and ADAAG 4.1.3(17)(c)(iii) which covers emergency, recovery and waiting rooms in hospitals, are sufficient with respect to TTYs in State and local government facilities. Commenters generally supported the existing ADAAG requirements for State and local government facilities. Other commenters stated that the requirement would be sufficient if a TTY is also required on each floor level that has public pay telephones. A few commenters stated that ADAAG 4.1.3(17)(c) (ii) and (iii) are too restrictive for State and local government facilities. Commenters did not suggest any alternative scoping requirements or provide justification data for alternative scoping. A few commenters asked that the rule clarify whether stadiums, arenas, convention centers, hotels with a convention center, covered malls, areas serving a hospital emergency room, a hospital recovery room or a hospital waiting room which are owned or operated by State or local government entities are subject to the same requirements as the facilities of private entities.

Response. ADAAG 4.1.3(17)(c)(ii) provides that stadiums, arenas, convention centers, covered malls and hotels with a convention center subject to title III of the ADA shall provide at least one public TTY in the facility if a public pay telephone is provided. Where stadiums, arenas, and convention centers are subject to title II of the ADA, at least one public TTY on each floor level having a public pay telephone shall be provided. ADAAG 4.1.3(17)(c)(iii) requires that if a public pay telephone is provided at areas serving hospital emergency, recovery or waiting rooms, then at least one public TTY shall be provided at each such location. This requirement includes those facilities which are subject to titles II or III of the ADA.

Comment. The NPRM asked whether there are other specific State and local government buildings which should be required to have a public TTY. The NPRM also asked whether all State and local government facilities should be required to provide a public TTY if an interior public pay telephone is available. Over half of the commenters requested that public facilities be equipped with a public TTY whenever a public pay telephone is available. Several commenters recommended that each floor and/or pay phone location be equipped with a public TTY. A few commenters requested that a public TTY be required in schools, dormitories, student unions, libraries and State archives. Many of these commenters expressed concern that there is a greater need for telecommunication access in the public sector than in the private

sector because public entities are frequented on a daily basis by the general public. Some of the commenters noted that public TTY technology has recently improved and is now available at a much lower cost. Commenters reported similar improvements for portable TTYs.

Response. Over half of the commenters requested that public TTYs be provided in all State and local government facilities. Without a public TTY, an individual with a hearing impairment or speech impairment, would not be able to make the important calls others make from public telephones in State and local government facilities. The intent of the Americans with Disabilities Act is to provide the accessibility necessary to enable every individual to be independent. For these reasons, a requirement has been added to ADAAG at 4.1.3(17)(c)(iv) that at least one interior public TTY be provided in a public use area of a State or local government facility when an interior public telephone is provided in a public use area of that facility.

Comment. The NPRM asked whether the scoping for public TTYs should take into account the size of buildings or facilities. Some commenters suggested that scoping be based on the size of the facility, but others stated that scoping should take building occupancy, quantity and dispersion of public telephones, or program accessibility into account. The various suggestions included providing public TTYs at a ratio of 1 per 4 telephones, or one per each 1,000 building occupants, whichever is greater; providing public TTYs at a ratio of 1 per 3 telephones; and requiring at least 10 percent of all public telephones, but not less than one to be equipped with a TTY. A number of commenters requested that directional signage for public TTYs be required.

Response. Commenters' recommendations varied as to which factors should be taken into account to determine scoping. Therefore, no provisions based on building or facility size have been included. Directional signage is required by ADAAG 4.30.7(3). Although commenters recommended that scoping provisions be based on program access, the guidelines do not address program access, but only new construction and alterations of buildings and facilities.

4.1.3(22) Swimming Pools

This provision requires at least one means of access into the water in swimming pools covered by title II of the ADA if such swimming pools are intended for recreational purposes and are not intended solely for diving or wading.

Comment. The NPRM asked whether guidelines should require access into swimming pools subject to title II of the ADA. Also, the NPRM asked whether there is a single means of access into swimming pools that would be usable by a range of individuals with disabilities. If such a single means does not exist, the NPRM asked whether more than one means of access should be required.

A majority of the commenters stated that ADAAG should require access into swimming pools subject to title II of the ADA. Local jurisdictions and several States (Oregon, California, New Jersey, and Massachusetts) indicated that they require access into swimming pools. Other commenters supporting such a provision noted that the technology for providing access into swimming pools is currently available and is being used by individuals with disabilities.

Commenters varied greatly on what means of access into swimming pools should be required. Most maintained that there is no single means of access that meets the needs of a range of individuals with disabilities. Some commenters recommended that swimming pools have permanently-installed manual lifts, wide stairs, low risers, and handrails. Other commenters recommended pool ramps and pool lifts, stairs with raised transfer platforms, broad-stepped areas, zero-grade entry, moveable floors, and raised pool copings with grab bars. While some commenters favored requiring more than one means of access into a swimming pool, others favored a provision requiring a single means of access, but allowing for flexibility in determining the specific means. Commenters from State and local governments along with groups representing individuals with disabilities expressed the need to ensure "independent" access when requiring a means of access into the water.

Response. The majority of commenters supported the need to require access into swimming pools. A provision has been added which requires that a means of access be provided for those swimming pools subject to title II of the ADA. This provision applies to pools which are intended for recreational purposes and not designed solely for diving or wading. This application is consistent with certain definitions contained in ANSI-NSPI-1 1991 (American National Standard for Public Swimming Pools) and therefore does not include diving and wading pools, spas, and therapy tanks. These and other types of facilities will be considered in future rulemaking.

While commenters addressed the need to ensure "independent" access into the water, this has not been included in the provision since many of the currently available means of access cannot be used independently by all persons with disabilities. For example, some pool lifts must be operated by an attendant due to the location of controls or because the lift is not permanently installed.

Specific technical provisions regarding the means of access are not included. This will allow covered entities flexibility to determine which means is most appropriate based on the specific design and use of the swimming pool. Additionally, the Board has established a Recreation Access Advisory Committee which will provide recommendations for the development of accessibility guidelines for swimming pools, other recreational facilities, and outdoor developed areas. The advisory committee is evaluating various means of access into the different types of swimming pools and aquatic facilities.

The Board will consider the advisory committee's recommendations when it conducts a separate rulemaking in the future to address recreational facilities. These future guidelines will apply to entities covered by both titles II and III of the ADA and may specify a particular means of access for each application. At this time, ADAAG does not include a specific requirement for access into swimming pools for entities covered under title III of the ADA. Entities covered by title III, however, have an obligation to ensure "equal opportunity" for individuals with disabilities to participate in and benefit from the services offered by places of public accommodation such as places of recreation. With respect to newly constructed facilities, both the ADA and the Department of Justice title III regulation require that newly constructed facilities be "readily accessible to and usable by individuals with disabilities." That phrase means that a facility or a portion of a facility must be constructed so that "it can be approached, entered, and used by individuals with disabilities . . . easily and conveniently." When a particular type of facility is not specifically addressed by the guidelines, the preamble to Department of Justice title III regulation states that the language of section 36.401 (a) (i.e., "readily accessible to and useable by individuals with disabilities") "is the safest guide." (56 FR 35576, July 26, 1991). The Department of Justice has taken the

position that, in cases where ADAAG does not contain requirements for a particular type of facilities, ADAAG or other appropriate technical standards should be applied to the extent possible.

4.1.6 Accessible Buildings: Alterations

4.1.6(1)(k) Elevator Exception

This paragraph states that the exception to the requirement for an elevator in ADAAG 4.1.3(5) for newly constructed facilities also applies to altered facilities. The existing language has been clarified by adding a reference to ADAAG 4.1.3(5).

4.1.7 Accessible Buildings: Historic Preservation

4.1.7(1)(a) Exception

Comment. During the initial rulemaking for ADAAG, the Board received comments recommending that an exception be established in ADAAG 4.1.7(1)(a) where compliance with the alternative minimum requirements in ADAAG 4.1.7(3) would threaten or destroy the characteristics that qualify the building as a historic property. In response to these comments, the Board stated that it would consult with the National Park Service and Advisory Council on Historic Preservation on this issue and propose an exception in the next rulemaking. Consequently, ADAAG 4.1.7(1)(a) was reserved for an exception. See 56 FR 35430 (July 26, 1991). However, the Department of Justice issued its final regulations for titles II and III of the ADA which included sections in each of those regulations on alterations to historic properties. These regulations permitted alternative methods of access to be provided where compliance with the alternative minimum requirements in ADAAG 4.1.7(3) would threaten or destroy the historic significance of a building or facility. See 28 CFR 35.151(d)(2) and 28 CFR 36.405(b). In effect, the Department of Justice regulations have created exceptions. The NPRM proposed to incorporate these provisions as an exception in ADAAG 4.1.7(1)(a).

Many commenters, including State historic preservation organizations, supported this exception for certain historic properties and its inclusion in ADAAG. Some commenters expressed concern that the exception in proposed ADAAG 4.1.7(a) did not accurately reflect the distinction between "program access" requirements for "historic programs" in the Department of Justice title II regulations (see 28 CFR 35.150(b)(2)) and the alterations provisions for historic buildings and facilities in ADAAG. In these commenters' view, the "program access" requirements for "historic programs" in the Department of Justice title II regulations is more stringent than the alteration provisions for historic properties in ADAAG.

Response. The exception incorporated in ADAAG 4.1.7(1)(a) retains the reference to the Department of Justice regulations but has been clarified as applying to entities covered by title II and title III of the ADA. The Department of Justice title II regulations also contain requirements for "program access" to "historic programs" which are in addition to ADAAG. No other change has been made to this provision.

7. Business, Mercantile and Civic

The word "civic" has been added to the title of this section to clarify that this section applies to buildings and facilities or portions thereof that are civic administration facilities such as departments of motor vehicles, licensing bureaus, or social service agencies. The Uniform Federal Accessibility Standards (UFAS), as well as certain model building codes, include this term under business occupancy classifications.

7.2 Sales and Service Counters, Teller Windows, Information Counters

ADAAG 7.2(3) provides for access at sales and service counters, teller windows and information counters for State and local government facilities where goods or services are sold or distributed to the public.

Comment. There was general support from a majority of commenters for providing access to such counters. The NPRM asked questions regarding the appropriateness of applying the examples of equivalent facilitation contained in ADAAG 7.2.(2)(iii) to State and local facilities. Those examples included a folding shelf or space on the side of a counter in lieu of a lowered counter. Commenters were divided on this issue. The commenters who favored including the examples viewed the examples as effective alternatives for access to sales and service counters, teller windows, and information counters. Some commenters stated that a great deal of writing may be required at counters in some State and local government facilities. For example, testing, licensing and, applications for building permits require completing forms and other paperwork. In these instances, commenters viewed a folding shelf and certain other alternative means as not constituting equivalent facilitation. Many commenters opposed including the examples for new construction. They recommended they be applied only where alterations are made to existing counters.

Response. Many commenters did not support including specific examples of equivalent facilitation and no such examples have been included for sales and service counters, teller windows and information counters in State and local government facilities. While counters in State and local government facilities may physically resemble those in places of public accommodation and in commercial facilities, specific examples of equivalent facilitation in 7.2.(3)(iii) have not been included because activities at counters covered in this section may require more writing or face-to-face contact with personnel on the opposite side of the counter. However, it should be noted that ADAAG 2.2 provides an option for equivalent facilitation which applies to all technical and scoping provisions including those in this section. A folding shelf, in certain circumstances, may provide equal or greater access while it will not in others. The reference to ADAAG 7.2(2) was removed from proposed ADAAG 7.2(3) and the text was rewritten so as not to include examples of equivalent facilitation.

Comment. The NPRM also proposed that where counters or teller windows have solid partitions, a method for facilitating voice communication such as a grille, talk-through baffle, or an intercom be provided. The majority of commenters supported the provision and regarded it necessary to facilitate voice communication at counters or windows with solid partitions. The NPRM asked whether there were other design solutions that could facilitate voice communication. Commenters offered a number of options including portable or hardwired assistive listening systems and TTYs for meeting this requirement.

Response. No substantive changes were made to ADAAG 7.2(3)(iii). Language has been added to the appendix to clarify that where counters are used only by persons in a seated position a method to facilitate communication for standing persons is not necessary.

Comment. The NPRM asked whether there should be specific requirements for mounting equipment that displays information. It further asked whether an eye level range of 43 inches to 51 inches would be sufficient in providing access for persons using wheelchairs or mobility aids. Few commenters provided specific information regarding the effect of a requirement for mounting equipment.

Response. Requirements for the mounting height of equipment have not

been included in the absence of supporting technical data.

10. Transportation Facilities

10.4 Airports

10.4.1 New Construction

10.4.1(8) Security Systems

This provision requires an accessible route complying with ADAAG 4.3 to be provided at each single security barrier or group of security barriers (i.e., two or more security barriers, adjacent to each other, at a single location) in airports covered by title II of the ADA.

Comment. Commenters from national, State, and local organizations representing persons with disabilities supported the provision as written. Airport operators and State governmental agencies also generally supported the provision. One designer suggested that providing an accessible route could increase cost, but did not provide any cost information. One comment recommended that the provision cover non-fixed security systems.

The NPRM sought comment on the availability of any technologies which would accommodate more persons with disabilities and limit the need for individual security searches. Commenters who responded to the question supported the use of metal detector "wands" and hand searches but did not have any information on alternative technologies. An airport operator pointed out that the screening devices are specifically designed to react to metal, such as might be found in braces and wheelchairs; and that, if devices did not so react, it would not be long before a terrorist pretended to be a person with a disability to circumvent security.

Response. ADAAG contains design and construction requirements for accessibility and does not cover equipment. This does not mean, however, that portable or non-fixed equipment is not covered by the ADA. Equipment and operational issues are covered by the Department of Justice regulations implementing titles II and III (28 CFR Parts 35 and 36) and by the Department of Transportation regulations implementing the Air Carrier Access Act (14 CFR Part 382). No changes were made to this provision.

11. Judicial, Legislative and Regulatory Facilities

This section addresses those facilities where judicial, legislative, and regulatory functions occur. Judicial facilities consist of courthouses. Legislative facilities include town halls, city council chambers, city or county commissioners' meeting rooms, and State capitols. Typically, a State capitol would contain Senate and House chambers if bicameral, or one chamber if unicameral; and committee rooms, public meeting rooms, and other assembly areas. Regulatory facilities are those which house State and local entities whose functions include regulating, governing, or licensing activities. For example, this section would address those rooms where school board meetings, zoning appeals, and adjudicatory hearings (e.g., drivers license suspensions) are held.

Comment. In the proposed rule, the Board discussed tradition and the symbolic relationship of elements that pose unique design challenges peculiar to courtrooms. In its comment, the Design Guide Subcommittee of the U.S. Judicial Conference Committee on Space and Facilities (Design Guide Subcommittee) added that there are other factors involved, apart from symbolism, which give rise to the requirements for the distinctive design features of courtrooms:

> To understand properly courtroom design, and ultimately the design of any structure devoted to court facilities, it is essential to recognize that the judicial process in the United States courts is purposefully adversarial and confrontational. * * *
>
> It is the nature of controlled adversarial conduct used to find the truth that dictates much of courtroom design. The judge's pre-eminent physical position at trial, robed and on a raised bench in an imposing high-ceilinged room, distanced from the other participants, is, indeed, an aspect of symbolism. But these design features also are important types of visual cues which significantly reinforce and enhance the ability of the judge to deal effectively with the often emotional drama played out in federal and State courts. Real life dramas involving the lives, freedom, fortune, and fundamental rights of the litigants.
>
> The practical need for the visual identification of the judge's authority requires a deliberate use of space and scale for psychological impact. This psychological element is extremely critical. It is perhaps the major factor in aiding the judge to control the activities of trial participants and spectators in the courtroom.

Response. The Board recognizes the symbolic and the psychological elements in the courtroom as well as the fundamental right of all citizens to participate equally in the legal process. The Board believes that accessibility can be incorporated into the design of the courtroom without adversely affecting the spatial, symbolic, or psychological relationship between the participants.

Comment. Several organizations representing persons with vision impairments requested that the Board develop guidelines for lighting levels in public spaces. Other organizations representing persons with hearing impairments requested that the Board develop guidelines for acoustics.

Response. The Board acknowledges that lighting and acoustics are important issues that affect the accessibility of all facilities, not just those covered in this section, for persons with hearing and vision impairments. Additional information is needed before the Board can consider establishing guidelines in these areas.

11.1 Judicial, Legislative and Regulatory Facilities

This section is a scoping provision which applies all the provisions of ADAAG 4 (Accessible Elements and Spaces: Scope and Technical Requirements) for buildings and facilities to judicial, legislative and regulatory facilities, in addition to the applicable requirements of this section.

Comment. Few comments were received regarding this provision. One commenter noted the lack of requirements in section 11 for visible alarms. Another commenter noted the lack of requirements for counters for the filing of deeds, wills or other public documents.

Response. This section is a scoping provision which applies all the provisions of ADAAG 4 (Accessible Elements and Spaces: Scope and Technical Requirements) for buildings and facilities to judicial, legislative, and regulatory facilities, in addition to the applicable requirements of this section. All public and common use areas would be subject to the applicable requirements contained in section 4 and examples of public and common use areas are given in appendix note A11.1. Accordingly, the scoping provisions for visible alarms contained in ADAAG 4.1.3(14) and the technical provisions contained in ADAAG 4.28 (Alarms) would apply. Likewise, the scoping and technical provisions for counters referenced in ADAAG 7.2 (Sales and Service Counters, Teller Windows, Information Counters) would apply.

11.2 Courtrooms, Hearing Rooms, and Chambers

ADAAG 11.2.1 requires that where doors or gates, jury boxes, witness stands, fixed seating, speakers' rostrums, raised daises, litigants', court reporters', and bailiffs' stations, and lecterns are provided, each must be

accessible and on an accessible route complying with ADAAG 4.3 (Accessible Route). It allows judges' benches and clerks' stations to be either accessible or adaptable. This provision further requires that the accessible route to each element coincide with the circulation path provided for all persons using the elements.

Comment. One commenter requested that the guidelines allow a witness with a disability to enter the witness stand from a restricted corridor outside the courtroom. Concern was raised that a jury, watching a witness with a disability wheel up a ramp within the courtroom, would not treat the witness in the same manner as a witness without a disability.

Response. Since all witnesses enter the witness stand from the courtroom, it would be inappropriate to require a witness with a disability to access the witness stand from a restricted corridor. No changes were made to this provision.

Comment. One commenter requested clarification on the requirement that all elements except judges' benches and clerks' stations be on an accessible route.

Response. As stated above, ADAAG 11.2.1 requires that where doors or gates, jury boxes, witness stands, fixed seating, litigants', court reporters', and bailiffs' stations, lecterns, speakers' rostrums and raised daises are provided, each must be accessible and on an accessible route complying with ADAAG 4.3 (Accessible Route). ADAAG 11.2.1(4) allows fixed judges' benches and clerks' stations to be either accessible or adaptable. Language has been added at ADAAG 11.2.1 to clarify that fixed judges' benches, and clerks' stations are not required to be on an accessible route if those elements are designed to be adaptable. If those elements are designed to be adaptable, they are not required to be on an accessible route until they are modified at a later date. For example, in new construction, a judge's bench may be designed with appropriate maneuvering clearances so that a ramp can easily be provided at a later date. Therefore, the judge's bench is not required to be on an accessible route until the ramp is installed.

11.2.1(1) Doors or Gates

This paragraph requires doors or gates designed to allow passage into the well of the courtroom, the witness stand, the jury box, and the speaker's rostrum and other areas to comply with ADAAG 4.13 (Doors). Few comments were received regarding this provision and no changes were made to this section.

11.2.1(2) Jury Boxes and Witness Stands

This provision requires all jury boxes and witness stands to be accessible and provide an unobstructed turning space complying with ADAAG 4.2.3 (Wheelchair Turning Space). It further requires controls and operating mechanisms where provided for use by the witness or juror to be mounted at a maximum height of 48 inches and comply with 4.27.3 (Height) and 4.27.4 (Operation). It also contains an exception for alterations where it is technically infeasible to provide a fixed means of vertical access to the witness stand or jury box.

Comment. The NPRM sought comment on whether maneuvering space should be required in the jury box, witness stand, judge's bench, clerk's station, speaker's rostrum, raised dais, bailiff's station and court reporter's station and the costs associated with such a requirement. The majority of commenters supported a requirement for maneuvering space in all areas. Included in these was the City of New York who submitted architectural plans designed by the New York Department of General Services showing how they have provided full accessibility in new construction. A few commenters felt the requirement for full maneuvering clearances was excessive. Other commenters supported a requirement for maneuvering space only in public areas (i.e., jury box, witness stand, litigant stations and spectator area) and providing an exception for work stations which would be covered under title I of the ADA. One architecture firm experienced in designing judicial facilities, thought that requiring maneuvering space would expand the well of the courtroom and result in reduced sight and hearing intelligibility of the participants.

Response. As further discussed under 11.2.1(4), due to the complexity of courtroom and legislative chamber design and the difficulty of providing an accommodation which may require a structural change, requiring maneuvering clearances will significantly increase the accessibility and usability of the element and, in some cases, facilitate a reasonable accommodation for an employee in the future. The interim final rule contains a requirement for maneuvering clearances complying with ADAAG 4.2.3. The provision requires that the maneuvering space serve each area and allows either a 60 inch diameter turning radius or a 60 inch by 60 inch T-shaped space for a pivoting 180-degree turn. For example, maneuvering space for the witness box may be provided within the witness box or at a landing outside the witness box.

Comment. The proposed rule required the wheelchair accessible space in a jury box or witness stand comply with ADAAG 4.33.2 (Size of Wheelchair Locations). One commenter questioned whether the 60 inch depth illustrated for a side approach to a wheelchair accessible space in an assembly area is appropriate to apply to the accessible space in a jury box.

Response. ADAAG 4.33.2 references Figure 46 which illustrates different clear floor space requirements depending on the direction of approach to the wheelchair accessible space. If a forward or rear approach is provided to the accessible space, the minimum depth of the space is 48 inches. If a side approach is provided to the accessible space, the minimum depth of the space is 60 inches. The extra depth for a side approach is needed to accommodate the turn required to maneuver into and out of the space. These clear floor space requirements apply whether seating is in assembly areas, spectator seating in a courtroom, a witness stand, jury box, or other similar areas.

Comment. One commenter suggested that portable lifts be included in the exception.

Response. Language has been added in the exception to allow the use of portable lifts complying with ADAAG 4.11 (Platform Lifts (Wheelchair Lifts)) in alterations where it is technically infeasible to provide a fixed means of vertical access. ADAAG 4.11 references ASME A17.1 Safety Code for Elevators and Escalators, Part XX, 1990 to incorporate its safety requirements for platform lifts (wheelchair lifts). The Board recognizes that ASME A17.1 does not apply to portable equipment other than portable escalators. However, in requiring portable lifts to comply with this standard, a minimum level of safety will be ensured. Furthermore, the applicable exception under 4.1.3(5) (Accessible Buildings: New Construction) has been revised to permit the use of platform lifts or wheelchair lifts to provide access to raised judges' benches, clerks' stations, speakers' rostrums, raised daises, jury boxes and witness stands.

Comment. The Design Guide Subcommittee recommended that the witness box be exempt from the requirements for accessibility as accommodations could be made on an as needed basis through such alternatives as a portable witness box, portable lift or ramp. The commenter further stated that, at the discretion of the presiding judge, any witness may testify from the well of the courtroom as

opposed to within the defined area of the witness box. The commenter felt that an alternative location does not inherently carry an implication of non-accommodation.

Response. A fixed means of vertical access to the witness stand via ramp or lift can easily be provided in new construction without adversely affecting the spatial or psychological relationship between the participants. In alterations, the provision allows the use of a portable ramp or portable lift where it is technically infeasible to provide a fixed means of vertical access to the witness stand or jury box as long as jurors or witnesses with disabilities are inside the defined area of the jury box or witness stand. The provision does not prohibit the use of portable witness boxes. However, if portable witness boxes are used, they should be used by all witnesses, not just those with disabilities.

Comment. With respect to the exception for alterations to jury boxes and witness stands, one commenter questioned how clear floor space can be provided in alterations for a portable ramp and yet be technically infeasible to provide a permanently installed ramp. Other commenters requested that the technical specifications for portable ramps be clarified.

Response. In altering existing courtrooms it may be technically infeasible to provide a fixed means of vertical access to the jury box or witness stand. For example, if providing a permanent ramp to a witness stand would result in reducing seating needed to meet the minimum legal requirements for jurors in a criminal case, only clear floor space to accommodate a portable ramp would be required. In the above example, the clear floor space provided for the portable ramp may result in the ramp projecting into the well of the courtroom. It may be inconvenient and, in some cases, hazardous to have a permanently installed ramp project into the well of the courtroom at all times. In allowing the exemption in alterations, the interim final rule is accommodating structural conditions while ensuring that accessibility is provided. Portable ramps stored under the witness box is one solution for alterations as long as such ramps meet all the technical specifications in ADAAG 4.8 (Ramps).

All ramps, whether portable or permanently installed, are required to meet the technical specifications in ADAAG 4.8 (Ramps). However, in existing buildings or facilities where space limitations prohibit the use of a 1:12 slope, ADAAG 4.1.6(2)(a) (Accessible Buildings: Alterations) does allow a slope between 1:10 and 1:12 for a maximum rise of 6 inches and a slope between 1:8 and 1:10 for a maximum rise of 3 inches. This provision has been clarified by referencing ADAAG 4.8 (Ramps).

Comment. One commenter stated that control of the microphone is maintained by the judge or other court employees and that the reference to ADAAG 4.27.3 (Height) and 4.27.4 (Operation) should be eliminated.

Response. The provision has been clarified to require controls and operating mechanisms to comply with ADAAG 4.27.3 (Height) and 4.27.4 (Operation) where provided for use by the witness or juror.

11.2.1(3) Spectator, Press and Other Areas with Fixed Seats

This provision specifies the number of wheelchair spaces required where spectator, press, or other areas with fixed seats are provided. Where spectator seating capacity exceeds 50 and is located on one level that is not sloped or tiered, the accessible spaces must be provided in more than one seating row.

Comment. A number of commenters from organizations representing individuals with disabilities felt that spectator seating areas should be required to have dispersed seats regardless of the number of seats.

Response. ADAAG 4.1.3(19)(a) (Assembly Areas) requires two wheelchair spaces where the seating capacity is 26–50 but does not require dispersal. The interim final rule does not require dispersal where only two accessible spaces are provided to allow persons with disabilities to sit next to each other. No changes were made to this provision.

11.2.1(4) Fixed Judges' Benches, Clerks' Stations, Speakers' Rostrums, and Raised Daises

This provision requires that fixed judges' benches, and clerks' stations be either accessible or adaptable and clear floor space for a forward position be provided at each space. As discussed in 11.2.1(2), a requirement for maneuvering clearances has been added.

Comment. Several commenters were concerned about the feasibility of providing a front approach to the judge's bench, and clerks' stations, and requested clarification of the requirement.

Response. The circulation route to the judge's bench and clerks' stations will either be from a restricted corridor behind the courtroom or from the side of these work areas. The requirement for clear floor space for a front approach does not refer to the circulation route to these areas. However, clear floor space must be provided within each work area to allow a person using a wheelchair to position themselves at the work station in a forward position. The interim final rule clarifies the location of the clear floor space requirement for a front approach.

Comment. Several commenters requested clarification of whether all or only a percentage of judges' benches are required to be adaptable. Other commenters recommended a requirement for 100 percent accessible judges' benches in new construction as required by the State of California. Commenters stated that once a design is proposed for providing adequate space for full accessibility, there is no reason to require adaptability. Several commenters requested that the provision should provide examples of adaptability and require the purchase of lifts or ramps for future installation to ensure that it is not an undue burden to make judges' benches fully accessible at a later date.

Response. The legislative history of the ADA states that areas used only by employees as work areas are covered by the guidelines, but individual work stations are not required to be constructed in a fully accessible manner. H. Rept. 101–485, pt. 3, at 63. The requirement for adaptability for judges' benches and other work areas is consistent with the legislative history and ADAAG 4.1.1(3) (Areas Used Only by Employees as Work Areas) which requires areas used only by employees as work areas be designed and constructed so that individuals with disabilities can approach, enter, and exit the area. This provision requires all judges' benches and clerks' stations to be either accessible or adaptable and describes how adaptability is applied to these areas. Adaptability means that maneuvering clearances and other features (e.g., fixed controls) shall be designed into the space so that accessibility can easily be provided at a later date. For example, an adaptable judge's bench which is designed for a future installation of a ramp or lift would have the required maneuvering clearances to approach, enter, and exit the ramp or lift, to maneuver at the bench (e.g., knee clearance), and to reach any fixed controls (e.g., alarm buttons) already designed into the space. If adaptability is provided, the installation of a ramp or lift at a later date should not require any additional structural modifications and therefore should not be an undue burden. An

appendix note further recommends that equipment such as a ramp be available so that accessibility can be accomplished to at least one judge's bench and clerk's station to accommodate court proceedings. Unlike typical office work stations, judges' benches and clerks' stations are typically elevated 6 inches to 21 inches. Due to the complexity of courtroom and legislative chamber design and the difficulty of accommodating subsequent physical change, the Board believes that requiring either accessible or adaptable judges' benches and clerks' stations will significantly facilitate a reasonable accommodation for an employee in the future.

Comment. One commenter requested clarification that where doors or gates are provided at a lift, maneuvering space is required by ADAAG 4.13 (Doors), and controls and operating mechanisms must comply with the reach ranges in 4.2 (Space Allowance and Reach Ranges).

Response. As previously discussed, ADAAG 11.2.1(1) requires doors or gates designed to allow passage into the well of the courtroom, the witness stand, the jury box, and the speaker's rostrum and other areas to comply with ADAAG 4.13 (Doors). Gates provided at lifts must also comply with the applicable provisions of ADAAG 4.13 (Doors). Additional maneuvering clearances may need to be provided to ensure that the lift is accessible and usable by persons with disabilities. For example, many persons using wheelchairs entering and exiting a platform lift in one direction can be accommodated on a minimum 30 inch by 48 inch lift. However, if a person is required to make a 90 degree turn either entering or exiting the platform lift, additional maneuvering clearances at the lift gate, and an increase in the platform size will need to be provided. Applying the minimum maneuvering clearances at doorways and gates illustrated in Figures 25 and 26 show that the required clear floor space depends on whether the lift door can be approached straight on or at right angles, and whether the door has both a latch and a closer. For a direct approach, straight through the lift, Figure 26 shows that a lift platform with a minimum clear space of 48 inches in the direction of travel is required. If a right angle turn must be made on the platform to exit, Figure 25(b) shows that a minimum clear width of 54 inches perpendicular to the direction of approach is needed to accommodate the turn. However, these minimum clearances only illustrate the clearances needed to operate the gate from a front approach, assuming the gate has an operating mechanism. A front approach is preferred but would not necessarily be required at lift doors that automatically unlatch, since they do not have operating mechanisms. However, the referenced clearances above do not take into account the difficulty of making a 90 degree turn while backing out of the lift, a particularly difficult maneuver for a person who uses a motorized wheelchair. Ideally, the platform lift should allow sufficient space for a person to make a 360 degree turn in order to approach the gate from a forward position. Widening the gates to provide a 36 inch to 42 inch clear width will provide additional maneuvering clearance.

Comment. One commenter thought that providing accessible judges' benches might "significantly alter the nature or design of the facility" and therefore should be exempt.

Response. Several commenters provided architectural plans illustrating fully accessible courtrooms. Accessible judges' benches do not significantly alter the nature or design of the facility. No changes were made to this provision.

Comment. One commenter preferred the T-shaped space for 180 degree turns rather than the 60 inch diameter turning radius.

Response. This provision references maneuvering clearances complying with ADAAG 4.2.3 (Wheelchair Turning Space) which allows either a 60 inch diameter turning radius or a 60 inch by 60 inch T-shaped space for a pivoting 180-degree turn.

11.2.1(5) Fixed Bailiffs' Stations, Court Reporters' Stations, Litigants' and Counsel Stations

This provision specifies the minimum clear floor space, table height, and knee clearance requirements for fixed or built-in stations including tables for bailiffs', court reporters', litigants' and counsel stations.

Comment. One commenter questioned whether the requirement applied to counsel tables.

Response. Counsel stations were included in the proposed rule by use of the term litigants' stations. The provision has been clarified to specifically reference counsel tables.

11.2.1(6) Fixed Lecterns

This provision requires fixed lecterns to provide adjustable heights. At least one height shall be between 28 inches to 34 inches above the floor and have knee clearance to accommodate litigants and speakers who use wheelchairs.

Comment. One commenter requested clarification on whether portable lecterns can be provided in addition to fixed lecterns in new construction.

Response. The provision does not prohibit the use of portable lecterns. However, if portable lecterns are used, they should be used by all persons, not just those with disabilities. Therefore, there would be no need for an additional fixed lectern. No changes were made to this provision.

11.2.1(7) Fixed Speakers' Rostrums and Daises

This provision requires fixed speakers' rostrums and at least one fixed dais to be accessible and comply with ADAAG 4.32 (Fixed or Built-in Seating and Tables). An unobstructed turning radius and clear floor space for a forward position must be provided serving each area.

Comment. The proposed rule required that fixed speakers' rostrums and at least one dais be adaptable. One commenter questioned why speaker's rostrums are not considered common use areas and required to be fully accessible.

Response. Fixed daises and speakers' rostrums are commonly provided in legislative meeting rooms in a State capitol building, city council chambers and other city and county commission meeting rooms. Such meeting rooms may be made available for use by the public or guests may be invited to address the assembly. In such cases, the speaker's rostrum or raised daises would not be an area used only by employees as a work area. Consequently, the proposed requirement at 11.2.1(4) for adaptable speakers' rostrums and raised daises was deleted and a new provision has been added at ADAAG 11.2.1(7) requiring fixed daises and speakers' rostrums to be accessible.

11.3 Jury Assembly Areas and Jury Deliberation Areas

This provision requires that all jury assembly areas and jury deliberation rooms be accessible. No comments were received on this provision and no changes were made.

11.4 Courthouse Holding Facilities

This section applies a scoping requirement to courthouse holding facilities including central holding cells and court-floor holding cells serving courtrooms. Language has been added to clarify that at least one cell must be accessible where central-holding cells are not separated by age or sex.

11.4.2 Requirements for Accessible Cells

This section contains the minimum requirements for accessible cells.

11.4.2(1) Doors and Doorways

Paragraph (1) requires that doors to accessible spaces on an accessible route comply with ADAAG 4.1.3(7) (Doors). However, doors to accessible spaces and on an accessible route are exempt from the requirements pertaining to 4.13.6 (Maneuvering Clearances), 4.13.9 (Door Hardware), 4.13.10 (Door Closers), 4.13.11 (Door Opening Force) and 4.13.12 (Automatic Doors and Power-Assisted Doors).

Comment. Several correctional officials and design professionals indicated that design requirements may necessitate use of 300 to 500 pound doors. Such doors cannot meet the specification for closing and opening forces in ADAAG 4.13.10 (Door Closers) and 4.13.11 (Door Opening Force) without, at a minimum, power-assist devices.

Response. In the interim final rule, a reference to the specifications for door closers (ADAAG 4.13.10) has been added in the exception at ADAAG 11.4.2(1) (Doors and Doorways).

11.4.2(2) Restrooms

Paragraph (2) requires toilet facilities to comply with ADAAG 4.22 (Toilet Rooms) and bathing facilities to comply with ADAAG 4.23 (Bathrooms, Bathing Facilities, and Shower Rooms).

Comment. The NPRM sought comment on grab bar design, security concerns, and the potential for suicides in holding cells and detention and correctional facilities. A majority of the commenters indicated that grab bars in accessible cells do not pose any more of a suicide or security risk than other cell features such as cell grills, bed frames and air circulation vents. The Nebraska Commission on Law Enforcement and Criminal Justice stated that:

> Effective suicide prevention is not accomplished solely by rendering a cell protrusion-free. A jail's physical plant cannot be designed, constructed or altered to ensure it is "suicide-proof". Effective suicide prevention is a function of screening at admission, appropriate classification, adequate staff training and vigilant staff supervision as well as physical plant design.

None of the commenters cited a specific case in which an inmate used a grab bar to commit suicide. However, at least one commenter stated that this could be a result of the under-reporting of jail suicides throughout the country and the fact that grab bars are not yet predominantly provided. Several commenters were less concerned about persons with disabilities misusing the grab bars than other detainees or inmates who, due to overcrowding, could be occupying the accessible cells. Most commenters felt grab bars can be designed and installed in new construction without posing a security risk. Commenters provided several examples such as designing an infill welded plate to close the gap between the grab bar and wall and using "embeds with welded connections or embeds with security screws." The latter method would allow the removal of the grab bars when a person with a disability was not using the cell. One commenter further suggested that where an infill welded plate is used, the outside diameter should be enlarged to two inches to compensate for the inability to totally wrap one's fingers around the bar's surface. Several commenters added that clustering the accessible cells would enhance the ability to effectively monitor detainees and inmates and further minimize security risks. Other suggestions included limiting the accessible cells only to detainees or inmates with disabilities; locating the accessible cell in the infirmary or other health care unit; or requiring grab bars only in institutions with sentenced inmates where behavior is more predictable.

Response. Based on the responses to this provision, grab bars can be properly designed and installed in new construction without posing a security risk. No changes were made to this provision.

Comment. Several commenters suggested that an exemption be provided for alterations. One commenter stated that the use of steel embeds is structurally impracticable insofar as the installation of embeds would require reconstruction of the entire wall into which the embed was installed. The commenter further stated that a grab bar could be welded to a steel plate bolted through an existing wall to another steel plate on the back of the wall. However, several factors would determine the feasibility of this solution including whether the back of the wall is available to hold a steel plate as well as the type of existing wall upon which the steel plate is installed.

Response. If compliance with alterations requirements is technically infeasible, ADAAG 4.1.6(1)(j) requires that the alteration provide accessibility to the maximum extent feasible. Technically infeasible means, with respect to an alteration of a building or a facility, that it has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility. Any elements or features of the building or facility that are being altered and can be made accessible are required to be made accessible within the scope of the alteration. There may be circumstances in an alteration to holding cells where grab bars cannot be securely attached to meet security requirements due to structural conditions in an existing wall. In such cases, the installation of grab bars would not be required because it would be technically infeasible.

Comment. Several combination stainless steel water closet and lavatory units are available that cannot incorporate a 36 inch grab bar behind the water closet. The NPRM asked whether standard combination units are available which meet the requirements of the proposed guidelines and whether combination units are required to the exclusion of separate fixtures by any State, local or other codes. Manufacturers acknowledged that the standard design of combination units, including those otherwise considered accessible by the industry, do not fully meet ADAAG specifications. One commenter stated that combination units are preferred because only one wall opening is required for plumbing connections, rather than two wall openings if separate fixtures are provided. Another commenter added that a typical cell design provides a single plumbing chase which will serve two cells. These chases are built on an angle in order to maximize the space available and can easily accommodate a combination unit. One manufacturer stated that although the combination unit does not fully comply with the proposed guidelines, the design of combination units provides maximum strength and security within the practical limits of manufacturing. The commenter was concerned that lengthening the combination unit to accommodate a 36 inch long grab bar would make the unit less able to withstand the stresses it may be subjected to through vandalism. The commenter further noted that a shorter grab bar can be provided. Several correctional agencies commented that combination units are used primarily because they require less space than separate fixtures. The only source identified as actually requiring

combination units was Virginia's "Guide of Minimum Standards in Design and Construction of Jail Facilities" which requires such units in maximum security cells. A few commenters took the position that if combination units are not accessible, then separate fixtures should be required. A number of commenters recommended that an exception be provided for a reduced grab bar length in alterations to mitigate the structural and plumbing chase modifications required in making the cell accessible.

Response. Comments indicated that although the use of combination units are preferred for space efficiency and security and required by at least one State's guidelines for jail facilities, they are not mandatory. An exception for the length of the rear grab bar on combination units has not been provided in new construction or alterations since separate, accessible lavatories and toilets are readily available.

In an alteration to toilet and lavatory fixtures, ADAAG 4.1.6(1)(b) requires that accessible fixtures be provided in compliance with the applicable provisions for new construction. However, as described above, if compliance with the alteration requirements is technically infeasible, ADAAG 4.1.6(1)(j) requires that the alteration provide accessibility to the maximum extent feasible. For example, if providing separate accessible fixtures would necessitate combining two cells to create one accessible cell or where the existing plumbing chase construction would preclude recessing connections for separate fixtures, combination units may be utilized. ADAAG 4.1.6(1)(j) still requires that the alteration provide accessibility to the maximum extent feasible. Therefore, the combination unit that most closely complies with the technical provisions for toilets and lavatories should be provided.

11.4.2(3) Beds

11.4.2(4) Drinking Fountains and Water Coolers

11.4.2(5) Fixed or Built-in Seating and Tables

ADAAG 11.4.2(3) requires that accessible clear floor space be provided on one side of beds. ADAAG 11.4.2(4) requires drinking fountains and water coolers serving accessible cells to be accessible to individuals who use wheelchairs and those who have difficulty bending or stooping. ADAAG 11.4.2(5) requires fixed or built-in seating to be accessible. No comments were received regarding these provisions and no changes were made.

11.4.2(6) Fixed Benches

This provision requires that fixed benches be mounted between 17 inches and 19 inches above the finish floor and meet minimum structural requirements.

Comment. The proposed rule required that fixed benches be a minimum of 24 inches by 48 inches. One commenter noted that benches with excessive depth force a slouched posture, and place an uncomfortable pressure on the backs of the knees. The commenter further stated that commercial benches are typically 18 to 21 inches deep.

Response. The Board agrees with the commenter and recognizes that the proposed dimensions were derived from specifications for dressing room benches in ADAAG 4.35 (Dressing and Fitting Rooms) which take into account the use of benches for dressing and undressing. Since benches in holding cells are not specifically intended for this purpose, the proposed requirement for a minimum size has been deleted. The interim final rule has retained the requirements for mounting height and structural strength.

11.4.3 Visiting Areas

This section requires that where fixed cubicles are provided, at least 5 percent, but not less than one, must have the maximum counter height and knee clearance underneath as required by ADAAG 4.32 (Fixed or Built-in Seating or Tables) on both the public and detainee sides. It also requires a method to facilitate voice communication if solid partitions or security glazing separates visitors from detainees.

Comment. The NPRM asked whether at least one cubicle should be accessible on both sides to accommodate those situations where both the detainee and visitor require accessible features. The majority of commenters supported a requirement that at least one cubicle be accessible on both sides. Several commenters from organizations representing persons with disabilities proposed that all cubicles be accessible. One commenter felt accommodations should be mandated, but discretion should be given to the facility to design the best remedy.

Response. The Board agrees with the majority of the commenters. This provision has been changed to require that at least one cubicle be accessible on both sides.

Comment. One commenter thought the scoping of 5 percent was excessive considering most visiting areas use non-fixed tables and chairs and that the percentage of the inmate population that have disabilities is low.

Response. The scoping and technical specification is consistent with ADAAG 4.1.3(18) (Fixed or Built-in Seating) which requires that 5 percent, but not less than one, of the built-in seating areas or tables and counters in public and common use areas have a maximum height of 34 inches and knee clearance underneath. A visiting area would have to have twenty built-in cubicles to trigger a second accessible cubicle. No changes were made to this scoping provision.

Comment. One commenter recommended that the reference to "safety glass" be substituted with "safety glazing".

Response. The interim final rule has been modified to reference "security glazing". The change in terminology is more inclusive and includes, but is not limited to, glass, safety glass, and polycarbonate.

Comment. The proposed rule required that the accessible cubicle be identified on each side by the international symbol of accessibility. Several commenters were concerned about vandalism and pointed out that such signage was unnecessary as visitors and detainees are escorted to the cubicle area.

Response. The Board agrees with the concern raised by the commenters. The requirement for signage identifying the accessible cubicle has been deleted in the interim final rule.

11.5 Restricted and Secured Entrances

This provision requires that, where provided, at least one restricted and at least one secured entrance be accessible. Restricted entrances differ from public entrances in that they are used by judges, court personnel and other authorized parties, such as jurors, on a controlled basis. Secured entrances are used by detainees and detention officers.

Comment. The NPRM sought comment on the cost impact of requiring at least one restricted entrance and at least one secured entrance to be accessible. The majority of commenters considered the cost negligible. One commenter stated that cost was not relevant as separate entrances are a mandatory program requirement. Two commenters recommended that all secured entrances be accessible. Several correctional officials and design professionals indicated that design requirements may necessitate use of 300 to 500 pound doors. Such doors cannot meet the specification for closing and opening forces in ADAAG 4.13.10 (Door Closers) and 4.13.11 (Door Opening

Force) without, at a minimum, power-assist devices.

Response. The NPRM included an exception at 11.6 for doors on an accessible route through fixed security barriers. Under this exception, doors operated only by security personnel were exempt from the requirements for maneuvering clearance at doors (4.13.6), accessible door hardware (4.13.9), opening forces (4.13.11), and specifications for automatic doors (4.13.12) if provided. This exception has been moved to ADAAG 11.5 (Restricted and Secured Entrances) to apply to secured entrances. In addition, a reference to the requirements for door closers (4.13.10) has been added to the exception.

Comment. In the NPRM, at least one restricted and secured entrance was required to be accessible according to ADAAG 4.14 (Entrances). ADAAG 4.14.1 requires, in part, that accessible entrances "shall be connected by an accessible route to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks if available * * *" One comment indicated that entrances used by inmates or detainees and not the public should not be required to be connected by an accessible route to such elements since inmates usually arrive from system-operated vehicles and not from public transportation stops, parking spaces, or public streets and sidewalks.

Response. ADAAG 4.14 requires accessible entrances to be connected by an accessible route to public transportation stops, accessible parking, passenger loading zones and public streets or sidewalks if available. The interim final rule contains an exemption at secured entrances for a connecting accessible route to public transportation stops, parking spaces, or public streets and sidewalks but not passenger loading zones. An example of a passenger loading zone at a secured entrance would be where detainees arrive or depart from a system-operated vehicle. The provision clarifies that such passenger loading zones, where provided, must comply with ADAAG 4.6.6 (Passenger Loading Zones).

11.6 Security Systems

This provision requires an accessible route complying with 4.3 (Accessible Route) to be provided through fixed security barriers at required accessible entrances. Where security barriers incorporate equipment such as metal detectors, fluoroscopes, or other similar devices which cannot be made accessible, an accessible route is required adjacent to such security screening devices to facilitate an equivalent path of travel. Few comments were received regarding this provision and no changes were made.

The interim final rule has been clarified to require an accessible route through fixed security barriers at required accessible entrances. Where additional accessible entrances with security systems are provided, it is recommended that an accessible route be provided through those security systems as well. As discussed under section 11.5 (Restricted and Secured Entrances) the exception for doors and doorways has been moved to section 11.5.

11.7 Two-way Communication Systems

This provision requires that where a two-way communication system is provided to gain admittance to a facility or to restricted areas within the facility, the system shall provide both visible and audible signals and shall comply with 4.27 (Controls and Operating Mechanisms). Few comments were received regarding this provision and no changes were made.

11.8 Electrical Outlets, Wiring and Conduit

This provision requires that electrical outlets and appropriate wiring, conduit, or raceways be provided in specific areas to support communication equipment for persons with disabilities. State and local codes may contain provisions for the number and general placement of convenience outlets. This provision would require additional outlets to accommodate specific use requirements for communication access. Examples of current technology which assists persons with hearing impairments include assistive listening systems, or computer assisted real-time transcription. Examples of current technology which assists persons with vision impairments includes computerized reading devices with braille or magnification capability or closed circuit television reading or viewing devices. Where State and local codes specifically require outlets to support communication equipment, this provision would be satisfied if such outlets are provided in the specific locations required by this provision.

Comment. The NPRM sought comment on the cost of providing wiring, conduit or raceways in new construction. Several commenters considered the cost minimal in new construction. The majority of commenters supported the provision. A few comments from individuals with disabilities and their organizations recommended including spectator areas, bailiffs' stations, speakers' rostrums, raised daises and all meeting rooms, not just those designated for public use, to the provision. Other commenters questioned the need for this provision as future technology may utilize infrared/wireless or fiber optics.

Response. Language has been added to this provision to include spectator areas. While technology such as infrared/wireless or fiber optics is rapidly developing, it is not yet readily available. However, this provision would not prohibit the use of technology utilizing infrared, wireless or fiber optics when it is readily available.

Comment. One commenter requested clarification on whether the recommendations for duplex outlets in the U.S. Courts Design Guide satisfies the ADAAG requirements in section 11.8 (Electrical Outlets, Wiring and Conduit).

Response. The U.S. Courts Design Guide recommends that adequate power outlets be provided to support a wide variety of automated and regular office equipment. This provision specifically requires electrical outlets to support communication equipment for persons with disabilities.

Comment. One commenter requested that persons with speech/language disabilities be mentioned as benefiting from this provision as augmentative or alternative communication devices may need recharging.

Response. The Board agrees with the commenter that persons other than those with hearing and vision impairments will benefit from this provision. The interim final rule deletes the specific reference to persons with hearing and vision impairments.

11.9 Permanently Installed Assistive Listening Systems

This section requires certain areas in judicial, legislative and regulatory facilities to have a permanently installed assistive listening system.

Comment. The NPRM asked whether the proposed requirement for 50 percent permanently installed assistive listening systems met the needs of persons with hearing impairments and on the costs associated with providing permanently installed assistive listening systems. One commenter requested clarification that the other 50 percent must be accessible with portable assistive listening systems. Several commenters recommended a requirement for 100 percent permanently installed assistive listening systems. These commenters cited operational problems such as scheduling and the inability of staff to

locate and set up portable systems. Other commenters preferred portable systems because they believe them to be more flexible, cost effective and easier to replace as technology evolves. Other commenters were concerned that other methods to facilitate communication would not be provided.

Response. The guidelines facilitate greater flexibility in the types of assistive listening devices a facility may offer by requiring 50 percent permanently installed assistive listening systems and requiring electrical outlets in 11.8 (Electrical Outlets, Wiring, and Conduit for Communication Systems) and allowing the remaining 50 percent of the rooms to utilize portable devices. The provisions for permanently installed assistive listening systems in this section and for electrical outlets, wiring, and conduit in ADAAG 11.8 is intended to enable a facility to maximize its choices in selecting the most effective method of assistive communication equipment to accommodate persons with disabilities. However, the requirement for 50 percent permanently installed assistive listening systems should not be interpreted as the only method of communication a facility is required to provide. For example, computer-aided transcription might be a more appropriate auxiliary aid for a person who is deaf or has a severe hearing loss. The Department of Justice regulations implementing title II of the ADA require public entities to take such steps as may be necessary to ensure effective communication for individuals with hearing impairments, unless it would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. (28 CFR 35.160(a) and 28 CFR 35.164). No changes were made in the interim final rule.

Comment. One commenter suggested that language be added to ensure that 50 percent of each type of hearing room designated for public use in regulatory facilities be required to have a permanently installed assistive listening system. The commenter thought that different departments such as zoning or motor vehicles may have their own hearing room. One commenter suggested that mediation rooms be required to have a permanently installed assistive listening system. Several commenters recommended a requirement for assistive listening systems with two channel receiver units to allow a second channel to be used for real time video description for persons with vision impairments.

Response. Different departments in regulatory facilities may have their own hearing rooms. If the interim final rule required 50 percent of each type of hearing room designated for public use in regulatory facilities to have a permanently installed assistive listening system, it may result in 100 percent coverage. For reasons cited above, the interim final rule allows some degree of flexibility in accommodating persons with hearing impairments. Mediation rooms would be covered under the requirement for hearing rooms. A hearing room or mediation room is a room where deliberation occurs.

In most instances, court proceedings are primarily verbal. However, in those instances where an accommodation needs to be provided to both a person with a hearing impairment and a person with a vision impairment, an additional portable system can be provided.

Comment. One commenter requested clarification on what type of alteration in judicial facilities would trigger a permanently installed assistive listening system.

Response. If existing elements, spaces, or common areas are altered, ADAAG 4.1.6(b) requires that each such altered element, space, feature, or area meet the new construction requirements. For example, an alteration replacing the public announcement system in a courtroom would require the installation of an assistive listening system. An alteration limited to replacing the judge's bench would not trigger the requirement for a permanently installed assistive listening system. However, if alterations of single elements, when considered together, amount to an alteration of a room or space in a building or facility, ADAAG 4.1.6(c) requires that the entire space meet the new construction requirements. Facilities are encouraged to consider each project as an opportunity to further the accessibility of its facility and should not unnecessarily restrict the scope of work so as to avoid the requirements for new accessible elements or construction.

Comment. One commenter thought the language "designated for public use" was confusing.

Response. As provided in the appendix note at A11.9(2), this section does not require permanently installed assistive listening systems in conference rooms restricted to use by employees, consultants and other invited guests. Nor does this section require such systems in a space which is only occasionally or sporadically used for legislative or regulatory business such as a town meeting held in a high school cafeteria. The term "designated for public use" refers only to those areas of a facility in which public debate, discussion or regulation takes place. Examples of hearing rooms or meeting rooms in regulatory facilities would include rooms in which hearings are held on zoning applications or waivers or where town council meetings or school board meetings are conducted. On the State level, a hearing or meeting room might be the committee room in a State legislative facility. In judicial facilities, a hearing or meeting room might be the judge's chambers or a mediation room. No changes were made to this provision.

Comment. Several comments were received regarding the number of required receivers. Some commenters felt the required number of receivers should not be tied to the occupant load of each covered room. Other commenters were concerned that the proposed four percent may not accurately reflect the size of the population that may use assistive listening systems and cited a paper on "Hearing Impairment and Elderly People" issued in 1986 by the Office of Technology Assessment.

Response. The four percent figure is based on a Bureau of the Census estimate of the number of persons aged 15 and over who have difficulty hearing what is said in a normal conversation with another person, excluding those who cannot hear at all. See "Bureau of Census, Disability Functional Limitation and Insurance Coverage" (1984-85). However, it should be noted that the guidelines are minimum requirements. If there is a greater demand for more receivers, the Department of Justice regulations implementing title II of the ADA requires public entities to take such steps as may be necessary to ensure effective communication with individuals with hearing impairments, unless it would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. See 28 CFR 35.160(a) and 28 CFR 35.164. No changes were made in the interim final rule.

Comment. Several commenters stated that many people do not know what an assistive listening system is or how to use it. The commenters suggested that in addition to indicating the availability of such equipment, signage should also be required to indicate an office where persons can receive additional information and instructions on the use of the equipment.

Response. The provision requires an informational sign to be posted in a prominent place indicating the availability of assistive listening systems, computer-aided transcription systems, or other communication

equipment for persons with vision or hearing impairments. This sign must include the international symbol of access for hearing loss. It is recommended that signage also indicate the location of such systems and that instructions be provided on how to use the equipment. No changes were made to this provision.

Comment. The National Center for Law and Deafness recommended that the chart in Table A2 of the appendix (Summary of Assistive Listening Devices) be changed to reflect recent technological developments.

Response. The Board agrees with the commenter and has included a more recent comparison chart.

Comment. The NPRM sought comment on how issues of confidentiality and privacy can be addressed while providing accessibility for persons with vision and hearing impairments. The majority of the commenters did not consider confidentiality a problem. The Design Guide Subcommittee expressed concern that assistive listening systems in jury deliberation and grand jury suites pose potential problems of improper and illegal remote monitoring, but did not recommend that such areas be exempt from providing assistive listening systems. Commenters offered several solutions such as requiring transcriptions to be destroyed by proper authorities (similar to the current practice of requiring jurors to return writing tablets); confiscating disks or utilizing security programs in computers. For example, one commenter stated that State telecommunications relay services use software which deletes the message typed by the communication assistant at the end of each page or wherever designated. Similar software can be utilized for a judicial setting.

Response. Solutions to concerns regarding confidentiality and privacy are available and can be addressed by the facility. No changes were made to this provision.

12. Detention and Correctional Facilities

This section addresses detention facilities where persons apprehended or arrested for alleged violations of law are temporarily detained and correctional facilities where persons convicted and sentenced for such violations are housed. Facilities covered by this section include holding areas in police stations and sheriff's offices and facilities housing persons for security reasons, including jails, prisons, reformatories, and juvenile detention centers. This section specifies minimum requirements for accessible cells or rooms and non-contact visiting areas.

State and local government agencies, particularly those that oversee or operate detention and correctional systems, comprised a significant proportion of the commenters on this section. Extensive comments were received from a number of State correctional agencies, including those from the Illinois Department of Corrections, which were supported by correctional agencies of 22 other States and the Commonwealth of Puerto Rico. In addition, the Association of State Correctional Administrators (ASCA) submitted the results of a survey it conducted based on questions and issues raised in the NPRM. A total of 30 State correctional officials responded to the ASCA survey. All together, the views of 44 different States were expressed either in comments submitted directly to the Board, through the ASCA survey, or through the Illinois Department of Corrections. These comments focused primarily on State prison systems and facilities.

Comments addressing local and county facilities were also received. Responses from the operators of local detention or correctional systems represented a more modest portion of the comments and ranged from the cities of New York and Las Vegas to the villages of Arlington Heights and Schaumburg in Illinois. In addition, several State agencies that oversee or regulate local and county detention and correctional facilities provided information.

Although this section applies to facilities owned or operated by State and local governments, information and comment was submitted by Federal government agencies, including the Bureau of Prisons, which operates the Federal prison system, and the National Institute of Correction, which provides leadership and assistance in the field of corrections.

Besides agencies involved in the detention or corrections field, comments were also received from individuals, State and local government agencies (including those concerned with accessibility), code administrators, local and national disability groups, such as the Paralyzed Veterans of America, design professionals, and various trade or professional associations.

An overall concern raised by many State and local correctional administrators both in written comments and at the public hearings addressed the degree to which these guidelines rely on specific design requirements in establishing a minimum level of accessibility. These guidelines, many correctional authorities maintained, should not address accessibility solely in terms of design criteria but should take into account operational and program alternatives and considerations that are inherent within State and local detention and correctional systems. Further, commenters argued that these guidelines should afford operators the flexibility and discretion considered necessary to effectively and efficiently provide access. Many correctional systems already have certain procedures and policies in place that determine how and where access is provided within the system. Thus, many corrections administrators considered it important that the guidelines acknowledge existing alternatives, including those of an operational nature, instead of mandating access strictly in terms of architectural specifications for buildings and facilities. This point was emphasized in relation to the required number and location of accessible cells and is further discussed below in ADAAG 12.4 (Holding and Housing Cells or Rooms: Minimum Number and Dispersion).

It is understood that correctional administrators may oversee an entire State- or city-wide system and are responsible for its programs and services, not just its buildings and facilities. Accessibility is not solely a matter of architectural design. However, the Board's statutory mandate is to ensure accessibility of the built environment in the case of new construction or alterations. Consequently, these and other guidelines the Board has issued under the ADA must address accessibility in terms of architectural design in new construction and alterations. The ADA does not give the Board the authority to address programs or services or existing buildings, except in the case of alterations. The Department of Justice is responsible under the ADA for addressing programs and services in the public sector. See 28 CFR part 35. The Department of Justice's regulation, consistent with the statute, focuses on program access and allows the level of flexibility and discretion desired by detention and corrections operators in providing accessibility in existing buildings and facilities.

Still, some comments stressed that flexibility was essential in new construction as well. For example, some corrections officials were concerned about the guidelines requiring accessibility in new jails or prisons that, under current assignment policies or procedures, would not be intended to house inmates with disabilities. The

Board's statutory mandate severely limits the degree to which operational or procedural alternatives can be addressed in guidelines that must specify a minimum level of architectural accessibility. Existing inmate assignment or placement policies may have to be reconsidered in relation to general prohibitions of discrimination based on disability set forth in the ADA and the Department of Justice's regulation.

Some comments recommended that these guidelines outline a minimum level of accessibility in general terms by specifying the desired result or "end" and allowing operators the opportunity to determine the "means" or methods of meeting it. Such an approach would be inconsistent with the requirements of other special application sections of this rule as well as those guidelines previously issued for the private sector under title III of the ADA. Furthermore, incorporating flexibility into a design guideline must be weighed against clearly and precisely detailing the requirements for building access for the benefit of architects and designers.

12.1 General

This section covers both detention facilities, such as holding cells in police stations, and correctional facilities, such as prisons and reformatories. Generally, detention facilities are used to hold persons apprehended or arrested for alleged violations of law, whereas correctional facilities typically house those persons who have been found guilty of a crime and have been incarcerated.

Comment. Several comments called attention to the differences that exist between the types of facilities covered by this section. Basic differences between detention facilities and correctional facilities in their mission and use lead to differences in fundamental aspects of their design, as well as their size, and the populations they serve.

Response. In both proposing and issuing these interim final guidelines, the Board recognized the wide range of facilities covered by this section, from small jails in rural areas to major prisons in extensive State systems such as California's which, according to its Department of Corrections, house over 100,000 inmates and feature large self-contained sites that operate like a "small city." Comments on how a requirement may impact facilities of a certain type in particular were carefully considered and proposed provisions altered accordingly. For example, specifications for certain elements, such as beds, which are typically provided in correctional housing cells but not detention holding cells, are applicable only where the element is provided; additionally, exceptions to certain requirements based on necessary security considerations are stated generally even though in practice they may be applicable only to correctional facilities, or portions thereof, with a significant level of security. Consequently, this section has not been subdivided according to facility type.

Comment. The types of facilities covered by this section include those institutional occupancies where occupants other than employees are under some degree of restraint or restriction for security reasons. The NPRM asked whether certain mental institutions, such as those housing persons considered to be criminally insane, should be addressed by this section or by ADAAG 6 (Medical Care Facilities), which contains a reference to "psychiatric facilities." A majority of the responses recommended that these facilities should be covered by ADAAG 6. This opinion was shared by State and local government agencies, the National Institute of Corrections, and several design professionals. Some State correctional authorities indicated that inmates may receive psychiatric treatment in State hospital facilities that are clearly medical care occupancies.

A slightly smaller number of responses recommended that the guidelines address mental institutions in both ADAAG 6 and ADAAG 12 or allow use of either section. For example, the Paralyzed Veterans of America recommended using ADAAG 6 for such occupancies in general and ADAAG 12 for institutions serving persons found criminally insane.

Several comments from the operators of correction systems and the Bureau of Prisons recommended coverage of these facilities in ADAAG 12 due to certain security considerations more typical of a detention or correctional facility than of a medical occupancy. The City of New York shared this opinion and noted that its Department of Corrections has jurisdiction over such facilities.

Response. The mixed response among commenters suggests that there may be facilities or portions of facilities that are operated or used by correctional systems to provide psychiatric care to inmates or that have levels of security appropriate for the restraint and confinement of persons determined to be criminally insane. ADAAG 6 would not adequately cover these areas since issues of security are addressed in ADAAG 12. While psychiatric facilities are subject to ADAAG 6, certain facilities or areas within them may require higher levels of security and thus more closely approximate the definition of detention and correction facilities of ADAAG 12.1 than the definition of medical care facilities of ADAAG 6.1. In such instances, ADAAG 12 may be used for those specific areas or portions of a facility. This is consistent with the use of other special application sections where facilities contain areas subject to different sections. For example, a hotel is subject to ADAAG 9 (Accessible Transient Lodging) but may also contain retail space subject to ADAAG 7 (Business, Mercantile and Civic) and dining areas covered by ADAAG 5 (Restaurants and Cafeterias).

Comment. ADAAG 12.1 notes that public and common use areas are to be accessible. A corresponding appendix note clarifies the application of "common use" areas to detention and correctional facilities by listing various examples, such as exercise yards and recreation areas, workshops and areas of instruction and vocational training, counseling centers, cafeterias, commissaries, and medical facilities. Although this list was meant to be illustrative and not exhaustive, the NPRM asked whether further clarification was needed on this subject and if there were other types of common use areas that should be specifically addressed in the appendix note. A slight majority of the comments recommended further clarification, usually by naming certain specific types of rooms or spaces that should be considered "common use areas." Most of these recommendations fall within the types listed in the appendix note. For example, comments recommended specifying classrooms, work areas and job sites, which would fall under the term "areas of instruction or vocational training" or recommended day rooms, television rooms, libraries, and multi-purpose rooms which would be covered by "exercise yards and recreation areas." The Board sought to list more generalized and inclusive terms. Areas recommended by comments but not referenced in the proposed list include areas for fingerprinting and booking, intake and release, questioning and hearing or meeting rooms; laundry facilities; religious areas, such as chapels; and barber or beauty shops.

Response. Various administrative areas, such as those used for intake and release, are common areas used by inmates. However, only that portion of such areas used by inmates would be considered common use space as defined in this section. In many cases these areas are comprised primarily of employee work areas. In view of this,

areas of this type have not been specifically listed as common use areas although spaces within them may be commonly used by inmates and thus be required to be accessible. Many of the other areas recommended for inclusion in the list but not originally covered in the appendix note should be considered common use areas. Since an almost equal number of commenters felt that further clarification was not necessary, these areas have been addressed by including a reference to "any other rooms, spaces, or elements that are made available for the use of a group of inmates or detainees." This language is derived from the existing ADAAG definition of "common use."

Comment. Typical prison design often includes some common use areas, such as dayrooms, that in the restricted and secured environment serve a specific group of cells and are used only by the inmates of those cells. Thus, the proposed requirement for the accessibility of common use areas was limited to those "serving accessible cells or rooms." Several comments supported this provision as proposed but almost an equal number expressed concern about visitors or staff members, such as social workers or clergy, who may need access to such areas, including those serving inaccessible cells or rooms.

Response. ADAAG 4.1.1(3) requires that areas used only by employees as work areas be accessible to the extent a person with a disability can "approach, enter, and exit the areas." Detention and correctional facilities are not exempt from this provision. Thus, common use areas that contain work areas would have to be on an accessible route. This requirement also applies to common use areas that do not serve accessible cells or rooms. For example, a counseling center serving a portion of a facility with no accessible cells would have to be on an accessible route so that the area used by counselors as a work area can be approached, entered, and exited by persons with disabilities. Language has been added to the appendix note to 12.1 emphasizing that common use areas that contain or function as work areas or public use areas are still subject to applicable ADAAG requirements.

Areas that serve members of the public, such as waiting rooms and contact and non-contact visiting areas, are considered public use areas and are subject to the requirements for accessibility. This provision has been clarified so that the reference to "areas serving accessible cells or rooms" applies only to common use areas and not public use areas.

Comment. Several commenters were concerned about the applicability of certain existing ADAAG requirements to detention and correctional facilities. Corrections officials recommended an exemption to the requirement for areas of rescue assistance in ADAAG 4.1.3(9) since inmates do not evacuate the facility independently. Further, areas of rescue assistance may also compromise security. Several commenters noted that signage, particularly that which is raised and brailled, can pose a security risk since it can be removed from walls. Consequently, it was recommended that the requirements for signage apply only to public use areas.

Response. An exception to the requirement for areas of rescue assistance has been provided. This exception references both scoping requirements in ADAAG 4.1.3(9) and technical requirements in ADAAG 4.3.10 and 4.3.11 for areas of rescue assistance. This exception applies only to the requirement for areas of rescue assistance in ADAAG 4.1.3(9) and not to the requirement for accessible means of egress. With respect to signage, the exception clarifies that the scoping requirements for accessible signage in ADAAG 4.1.3(16) apply only to public use areas.

Comment. The American Public Communications Council, a trade association representing the manufacturers, distributors, and operators of pay telephone equipment, expressed concerns about requirements applicable to inmate-use telephones. Such telephones are typically provided in common use areas and must be properly secured to withstand vandalism and removal. Additional features, such as a volume control, which is highly vulnerable to vandalism, can dramatically increase the cost, perhaps up to 66 percent. The Council correctly assumed that general scoping requirements for telephones in ADAAG 4.1.3(17) would apply only to those common use areas serving accessible cells. The Council also raised concern about ADAAG technical requirements for telephones. Specifically, ADAAG 4.31.2 requires sufficient clear floor space at telephones, and ADAAG 4.31.8 requires handset cords to be at least 29 inches long. However, according to the Council, phones for inmate use may be located near cell bars and thus not provide adequate clear floor space. In addition, security requires that the length of handset cords not exceed 15 inches. Thus, the Council recommended that the guidelines allow other alternatives, such as providing phones that are accessible at supervised locations.

Response. The requirements for accessible telephones and volume control in ADAAG 4.1.3(17) would apply only to public use areas and to those common use areas serving accessible cells or rooms. Certain security considerations, such as short phone cord lengths, underscore the request for allowable alternatives to ADAAG scoping and technical requirements for telephones. Under ADAAG 2.2 (Equivalent Facilitation) alternatives to ADAAG requirements are allowed as long as greater or equal access is provided. This provision may allow flexibility in providing access to inmate-use telephones.

12.2 Entrances

ADAAG 4.1.3(8) primarily addresses those entrances serving the public. Other entrances not intended for public use are not required to be accessible under ADAAG in most cases. Correctional and detention facilities may contain entrances that inmates or detainees must use for security purposes and that are not open to the public. In order to ensure facility access to inmates with disabilities, this section contains, as originally proposed, a requirement that at least one such entrance be accessible. The proposed requirement had referred to these entrances as "secured entrances" defined as "those entrances used only by inmates or detainees and security personnel and not the general public." This was intended to distinguish such entrances from public entrances already addressed by ADAAG.

Comment. Several correctional administrators indicated that the proposed definition and use of the term "secured entrances" is inconsistent with industry usage of the term. Specifically, entrances located within secured perimeters, and thus considered "secured" by corrections officials, may in fact serve visitors and other members of the public. Basically, the terms "secured entrance" and "public entrance" are defined to be mutually exclusive in the guidelines when this is not necessarily the case in practice.

Response. The Board considers distinction between entrances used by the public and those used by inmates or detainees necessary to ensure an accessible route into the facility for inmates, particularly in those cases where visitors and inmates use separate entrances. ADAAG 12.2.1 has been revised to clarify that entrances serving the public, including those that are secured, are required to be accessible by ADAAG 4.1.3(8). Security requirements at such entrances have been taken into account as further discussed below.

The requirement for the accessibility of entrances used by inmates and detainees but not the public has been relocated to ADAAG 12.2.2 to distinguish them from entrances considered public entrances covered in ADAAG 12.2.1. The provision's heading has been changed from "Secured Entrances" to "Other Entrances." The requirement that, where entrances serving inmates or detainees only are provided, at least one be accessible is substantively similar to the proposed provision. Thus, while the term "secured" has been removed from this provision it still covers the same type of entrances as the proposed requirement. The term "secured" has been retained in ADAAG 11 which covers judicial, regulatory, and legislative facilities since commenters did not express any concern about its usage with respect to such occupancies.

12.2.1 Public Entrances

Comment. A design firm discussed certain security considerations that may conflict with full compliance for doors and entrances. According to this commenter, secured entrances or sallyports may be equipped with swinging doors weighing between 300 to 500 pounds that would need power assist openers and closers to meet the requirements for door closers in ADAAG 4.13.10 (Door Closers) and the maximum 5 lbf opening force required in ADAAG 4.13.11 (Door Opening Force). In addition, this commenter noted that some accessible types of door hardware used to meet ADAAG 4.13.9 (Door Hardware), such as lever handles, are considered a security threat in that they can be more easily removed or broken and used as a weapon.

Response. In the proposed rule, the requirement for access through or around security systems or screening devices included an exception for doors at such locations. Under this exception, doors operated only by security personnel were exempt from the requirements for maneuvering clearance at doors (4.13.6), accessible door hardware (4.13.9), opening forces (4.13.11), and specifications for automatic doors if provided (4.13.12). This exception has been revised to apply to both entrances used by the public and those entrances used by inmates or detainees. This revision is consistent with an exception in ADAAG 11.5 (Restricted and Secured Entrances).

In addition, a reference to the requirements for door closers (4.13.10) has been added to the exception. While the exception as proposed was limited only to doors operated by security personnel, it is implicit that the security considerations raised by comments also apply to those doors that may not be operated by security personnel. Consequently, the exception has been broadened to cover not only doors and doorways operated by security personnel, but also those doors and doorways subject to security requirements that prohibit full compliance with these provisions. This would apply to those doors that may be operated by visitors or inmates, as well as security personnel. The independent use of doors is, of course, a critical component of accessibility. This exception applies only where security requirements prohibit compliance with the specific provisions listed. Where security requirements prohibit full compliance, the applicable specifications are to be met to the maximum extent feasible.

12.2.2 Other Entrances

This provision requires that where entrances serving only inmates or detainees are provided, then at least one must be accessible.

Comment. One commenter stated that the entrance required to be accessible under this provision should count as part of the total number of entrances required to be accessible under ADAAG 4.1.3(8). Also, the Illinois Department of Corrections noted that State correctional facilities typically do not provide entrances used only by inmates and recommended clarification that in such instances, an additional accessible entrance for inmates or detainees is not required.

Response. The requirement that at least one accessible entrance used by detainees or inmates be accessible applies only where such entrances are provided. It does not require that such an entrance be provided where none is intended for a facility. Entrances that are used by both inmates or detainees and the public are considered public entrances and subject to ADAAG 4.1.3(8).

Comment. Entrances covered by ADAAG 12.2.2 must be accessible according to ADAAG 4.14 (Entrances) which requires, in part, that entrances "be connected by an accessible route to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks if available * * *" As noted in ADAAG 11.5, one corrections official indicated that entrances used only by inmates or detainees should not be required to be connected by an accessible route to such elements since inmates usually arrive from system-operated vehicles and not from public transportation stops, parking spaces, or public streets and sidewalks.

Response. As discussed under ADAAG 11.5 (Restricted and Secured Entrances), language has been added to the exception indicating that entrances used only by inmates or detainees are not required to be connected by an accessible route to public transportation stops, accessible parking, or to public streets or sidewalks. However, such entrances are subject to a requirement in ADAAG 4.14 that accessible entrances be connected to passenger loading zones if provided. Language has been added to this provision clarifying that where passenger loading zones are provided at such entrances, they must comply with ADAAG 4.6.6 (Passenger Loading Zones).

Comment. In existing or altered facilities, it was recommended that public entrances or alternative entrances be allowed to serve as entrances for inmates or detainees.

Response. These guidelines apply only to new construction or alterations. In either case, an entrance serving only inmates or detainees is not required to be provided. Rather, if such entrances are provided, then at least one is required to be accessible under ADAAG 12.2.2. In the case of alterations, this requirement would be triggered only where such an existing entrance is to be altered or where a new one is to be installed as part of the planned scope of work. If so, then at least one entrance of this type would have to be accessible to the extent technically feasible under alteration provisions in ADAAG 4.1.6. In addition, under ADAAG 4.1.6(3), such an entrance may be required to be accessible if it is part of the path of travel to an altered primary function area.

Comment. The NPRM asked for information on the new construction cost of making accessible at least one entrance used only by inmates or detainees. Almost all responses to this question characterized the cost as either "minimal," "negligible," or "insignificant." Several operators of correctional systems, including New York City and the State of California, indicated that this requirement would have little or no impact on their facilities since the accessibility of such entrances is already required. Few comments provided actual cost estimates. One State disability organization estimated a new construction cost of $450, and a local government entity estimated a cost of $3,000 for "altering" a secured entrance but did not provide a new construction cost estimate.

Response. A more detailed discussion of the cost involved is contained in the Regulatory Impact Analysis.

12.2.3 Security Systems

This section requires that an accessible route be provided through or around security screening devices. These devices, which may be similar to those used at airports, may not allow passage of certain mobility aids, such as wheelchairs. This provision originally addressed only those systems located at public entrances required to be accessible.

Comment. The NPRM asked whether there were any existing security or screening procedures that could not be effectively carried out under this requirement. Practically all comments, including those from correction or detention officials and the Bureau of Prisons, indicated that there were no existing security or screening procedures that could not be carried out under this requirement. Some indicated that security systems may already have an adjacent route around the system for staff use. Also, several commenters noted that hand-held metal detection devices are used to screen persons using wheelchairs or other mobility aids that cannot pass through the system.

Response. This provision remains substantively unchanged. However, it has been clarified to apply to security systems located at either public entrances covered by ADAAG 12.2.1 or inmate or detainee entrances covered by ADAAG 12.2.2. As noted above, the exception originally proposed for doors and gates at security systems has been revised and is applicable to entrances themselves, not just the doors or gates that may be provided along alternative routes around security systems.

12.3 Visiting Areas

The requirements of this section for visiting areas are similar to those addressed in ADAAG 11 (Judicial, Legislative, and Regulatory Facilities). The section requires that in non-contact visiting areas, a minimum of 5 percent, but not less than one, of fixed cubicles be accessible on both the visitor and the inmate or detainee sides.

Comment. As discussed under ADAAG 11.4.3 (Visiting Areas), the NPRM asked whether this provision should further specify that an accessible cubicle on each side be paired in order to accommodate those situations in which both the inmate or detainee and the visitor need an accessible cubicle. A majority of the comments to this question, including its applicability to visiting areas in detention and correctional facilities, supported such a requirement.

Response. As discussed under ADAAG 11.4.3 (Visiting Areas), this provision clarifies that counters and cubicles must be accessible on both the visitor side and on the inmate or detainee side.

Comment. Several commenters recommended that the guidelines address contact visiting areas.

Response. Both contact and non-contact visiting areas, as public or common use areas, are required to be accessible under ADAAG 12.1. Non-contact visiting areas are addressed in this section since they contain elements, such as safety glass or security glazing, that may pose barriers to communication. Requirements for fixed cubicles are based on ADAAG 4.32 (Fixed or Built-in Seating and Tables) which is referenced in this section for clarity.

Comment. One commenter considered the five percent scoping requirement to be excessive.

Response. The five percent scoping is consistent with ADAAG requirements for fixed seating in ADAAG 11.4.3 (Visiting Areas). However, since the secured side of a visiting area functions as a common use area among inmates or detainees, an exception has been added that is consistent with ADAAG 12.1 which states that only those common use areas serving accessible cells or rooms are required to be accessible. Under this exception, non-contact visiting areas serving areas of a facility where no accessible cells or rooms are located are not required to have accessible cubicles on the inmate or detainee side.

Comment. Non-contact visiting areas typically have safety glass or security glazing to separate visitors and inmates or detainees. ADAAG 12.3(2) references ADAAG 7.2(3) which covers a similar situation at teller windows or counters and requires that at least one provide a method to facilitate voice communication. ADAAG 7.2(3)(iii) indicates that various methods may include grilles, talk-thru baffles, intercoms or telephone handset devices. If telephone handset devices are used, this provision further requires that at least one such device be equipped with a volume control complying with ADAAG 4.31.5. One State correctional agency noted that it currently uses hand-held intercoms that are equipped with telephone-style volume controls, which is preferred over the use of an assistive listening system.

Response. Telephone handset devices are acceptable under this provision so long as at least one is equipped with a volume control. Assistive listening devices are not required at these locations. The appendix note to ADAAG 12.3 indicates that if an assistive listening system is provided, consideration should be given to the intended users and the setting in determining the most suitable type of system. The use of assistive listening systems is not recommended over other communication methods. Also, as noted in ADAAG 11.4.3 (Visiting Areas), "security glazing" has been substituted for "safety glass" as was recommended by one correctional authority.

Comment. The proposed rule contained a requirement that accessible cubicles be identified with the International Symbol of Accessibility. As noted in ADAAG 11.4.3, several comments questioned the need for such identification since users are typically escorted to visiting areas by security personnel. Further, signage which can be vandalized or removed may pose a security hazard.

Response. The requirement for identifying signage has been removed in this section, consistent with ADAAG 11.4.3.

12.4 Holding and Housing Cells or Rooms: Minimum Number and Dispersion

12.4.1 Holding Cells and General Housing Cells or Rooms

Questions and issues raised in the NPRM about the minimum number and dispersion of accessible cells evoked more comment than any other in this section. The NPRM requested survey data on the percentage of inmates with disabilities in State and local prisons and jails. Most of the comments providing survey data were submitted by State correctional agencies. Among those State agencies responding to the NPRM, the percentage of inmates with mobility impairments or who used wheelchairs in State prisons systems ranged from .12 to 1.35 percent with an average of .46 percent. The Illinois Department of Corrections also shared the results of a national survey it completed in 1990 which indicate that among 27 responding States and the Bureau of Prisons, the percentage of the inmate population with "ambulation problems" ranged from .04 to 1.2 percent and also averaged .46 percent. In addition, the Association of State Correctional Administrators (ASCA) surveyed its members on this question but did not specify a breakout according to disability type. The results of this survey contained significantly higher percentages, suggesting that a wider range of disabilities, not just mobility or

ambulatory impairments, were included in the percentages. Among 23 responding States, the average percentage of the inmate population identified as having a disability was 3.39 percent.

Survey data were also received on local prison and jail populations. Three State agencies that oversee local or county jails and prisons provided survey results. A survey of 10 Nebraska county jails identified .07 percent of the 1991 population as having a mobility impairment. In a survey of 204 county facilities, the Texas Commission on Jail Standards determined that on average .48 percent of the daily population has a mobility impairment. According to California Board of Corrections, a daily average of 1 to 1.5 percent of the population "requires a physical accommodation" in county facilities among a representative sampling of 11 counties. In addition, several comments from county correctional authorities estimated that less than 1 percent of the population in their systems have mobility impairments, and one other noted that 2 percent of the population has a disability. At the local level, the City of New York submitted data indicating that .25 percent of the population in its system use wheelchairs.

The Bureau of Prisons indicated that a 1992 survey of inmates in the Federal prisons system identified 1.25 percent of the inmates as having some type of disability and approximately .5 percent as having "manual" impairments.

To further assess the need for accessible cells, the NPRM asked whether there are any instances in which inmates with disabilities are not housed among the general population but are housed in other areas, such as infirmaries, or are located to another facility entirely, such as a halfway house, due to a lack of accessible cells or rooms.

Most comments from State correctional systems noted that inmates may be housed in other areas of facilities but that this was not necessarily due to the absence of accessible cells. A comment made by the Illinois Department of Correction is representative of many of these comments:

> There are instances where inmates with disabilities are housed in areas other than [the] general population. This is a reflection not as much of whether an accessible cell is available in [the] general population, but rather of the Department's conclusion that in many instances programs and services can be more effectively delivered to disabled inmates who are clustered, rather than dispersed. In some instances disabled inmates are housed in infirmaries where the level of supervision is generally greater and where medical services are more readily available.

A majority of the States responding to the ASCA survey indicated that inmates with disabilities are housed in areas other than housing for the general population because accessible cells are not available. Like the Illinois Department of Corrections, some States base this practice on what they believe is a more effective provision of services, including medical care. Several States noted that the area used was an infirmary or medical unit.

Information received on county facilities indicates that there are instances where detainees or inmates have been transferred to other facilities due to the insufficient number of accessible cells. Of 11 counties surveyed by the California Board of corrections, four expressed a need for more accessible cells, and the operators of Texas county jails surveyed indicated that inmates with disabilities are relocated when accessible cells are full.

The NPRM also asked whether there are instances in which persons with a disability are sentenced or assigned to facilities other than a prison or jail due to a lack of accessibility. A few comments indicated that this does occur. One State agency noted that some prison operators may house persons with disabilities in State or local hospitals or medical centers. Among States responding to the ASCA, only one State noted that persons with disabilities are housed in facilities other than jails or prisons.

The issues of scoping and dispersion are closely related. For clarity, however, this discussion first addresses the minimum number of accessible cells and then addresses issues of dispersion.

The NPRM sought recommendations on the minimum number or percentage of general housing cells in correctional facilities and holding cells in detention facilities that should be accessible.

Comment. A strong majority of the comments, most from State correctional agencies, recommended minimum percentages of either one percent or two percent. The Illinois Department of Corrections, whose comments were supported by 22 States and Puerto Rico, recommended a maximum of two percent scoping for general housing cells. A few comments recommended less than one percent, and several commenters recommended either three, four, or five percent. The Bureau of Prisons recommended that three percent of the cells be adaptable, which means that the cell can be easily converted to an accessible cell when needed, but which is not fully accessible as part of new construction. Information provided by commenters on existing State codes indicates that the minimum percentage among States varies, ranging from Washington State's one percent to Wisconsin's five percent. The Florida Department of Corrections noted that its facilities are designed so that two percent of the housing cells are accessible, which it considers adequate, if not excessive, for the determined need.

Comments concerning detention facilities, most at the local level, recommended one cell for each facility, such as a police station, or recommended percentages of one or two percent.

Response. The Board has specified in ADAAG 12.4.1(1) that a minimum of three percent, but not less than one, of holding or general housing cells or rooms be accessible in new construction. This requirement is consistent with the recommendation made by the Bureau of Prisons, although it had recommended adaptable, as opposed to fully accessible, cells. The Board has not specified adaptable cells or rooms because it considers the concept of adaptability impractical in the jail or prison environment. Even if adaptability were required, the clear floor space necessary for accessible cells would most likely be provided as part of new construction due to the structural requirements of cells. Further, other elements often provided as adaptable features in other types of facilities, such as grab bars, would most likely be installed as part of construction so that they could be secured to the degree necessary in the prison environment. A few commenters stated that while grab bars are easy to secure in new construction, to do so as an alteration or retrofit may necessitate reconstruction of cell walls.

The three percent scoping requirement, which is slightly higher than the percentage recommended by a majority of commenters, is also based on certain additional considerations. One consideration involves the aging of the prison population and existing data demonstrating that the prevalence of disability increases with age. A few comments, including one from a State disability agency, called attention to this consideration, but they did not provide any survey data or documentation on the aging of the prison population. One State correctional authority commented: "There are very few instances where the inmate's disability occurred while incarcerated * * * [but] because of lengths of sentences, we are beginning

to deal more and more with an aging population."

Another concern stems from comments made on retrofit and alterations in detention and correctional occupancies. These comments, which are further discussed below under ADAAG 12.4.5 (Alterations to Cells or Rooms), raised concerns about the significant structural difficulties that exist in making existing jail or prison cells accessible. Consequently, it is particularly essential that a sufficient level of access be provided in such occupancies as part of new construction. A guideline that ensures that the need for accessible holding or general housing cells is met in new construction will undoubtedly facilitate detention and corrections operators in fulfilling their obligations under the ADA.

The dispersion of accessible cells is another issue of strong concern to many detention and corrections officials. The Board indicated in the NPRM that it may require cells to be dispersed within facilities consistent with ADAAG requirements for the integration of accessible spaces and elements. The concept of an integrated environment may be limited in the restricted environment of prisons and jails. The NPRM sought information in this area in order to determine whether dispersion of accessible cells or rooms was necessary or justified and, if so, to what degree. The NPRM asked questions about dispersion within an entire facility and within individual housing units or buildings. A third level of dispersion, raised by many corrections officials, concerned dispersion within an entire prison system at the State or local level.

Comment. Many State and some local correctional officials felt that flexibility and discretion were necessary in determining where inmates with disabilities are housed within a correctional system. It was recommended that these guidelines take into account existing assignment policies or practices, including those that determine which facilities will house inmates with disabilities. Some systems have certain locations or facilities which are considered more suitable for such inmates because programs, services, supervision, and necessary medical treatment are more effectively provided in some locations. Certain assignment policies could make it unlikely that an inmate with a disability will be assigned to a specific facility, including one that is newly constructed. A corrections system may have a policy of assigning persons with certain severe disabilities to a prison more fully served by, or in closer proximity to, a major medical center. Representative of this concern was a comment from the City of New York indicating that its correctional system already has or is in the process of constructing facilities that will accommodate inmates with disabilities. They indicated that other facilities, including those that may be constructed in the future, should not be required to provide accessible cells since inmates with disabilities will not be assigned to these locations under current policy. Many of these commenters argued that accessibility should be addressed in regard to a city or State's correctional system as a whole instead of at each building or facility.

Response. The Board under its ADA mandate is responsible for developing a minimum level of accessibility in the construction and alteration of buildings and facilities, including those of a detention or correctional system. The programs and services of such a system lie beyond the Board's legislative mandate and the scope of these guidelines. This is also true of a system's existing buildings and facilities, except in cases of alteration. As previously noted, the operational aspects of State or local systems, and its existing buildings, are subject to regulations issued by the Department of Justice. See 28 CFR part 35. Consistent with the ADA, the Department of Justice's regulations prohibit discrimination on the basis of disability in a public entity's programs and services but may well afford some of the flexibility and discretion desired by corrections operators in addressing accessibility through operational or programmatic methods. Under its statutory authority, the Board finds that it can only address these concerns with respect to the location of accessible cells in new construction or alterations.

The ADA and its legislative history require a level of accessibility in new construction that ensures that the features, elements, and amenities of a facility are available to all, including persons with disabilities, in an integrated setting. Thus, in developing ADAAG, the Board has sought to ensure that various facility elements and spaces are not only accessible, but integral to the overall design. Similar requirements for integration are found in ADAAG requirements pertaining to the dispersion of accessible seating in assembly areas, restaurants and cafeterias and accessible rooms in transient lodging. The restricted environment of detention and correctional facilities may bring into question the concept of an integrated setting with respect to accessibility, but it is an important principle of the ADA. Consequently, the NPRM sought information on various issues critical in determining whether accessible cells should be dispersed throughout a facility. A dispersion requirement was not proposed although the NPRM noted that such a requirement might be included in the final rule. Since issues of safety and security may have bearing on the question of dispersion, the NPRM also asked whether inmates with disabilities are generally at greater risk of violence in the general population than are other inmates.

Comment. A majority of comments stated that inmates with disabilities could be at greater risk among the general population, although many admitted to a lack of evidence or documentation to support this. Still, some of these comments argued against any requirement to "mainstream" inmates with disabilities into the general population. On the other hand, a significant number of comments, many from State corrections officials, stated that inmates with disabilities are not considered to be less safe in the prison environment. It was noted that assessing an inmate's degree of safety depends on a variety of factors and should not be based solely on disability.

The NPRM also asked whether inmates with disabilities present less of a security risk. A majority of the responses felt that inmates could not be considered less of a security risk based solely on their physical condition or level of disability. Assessing the potential threat to security, posed by inmates, must take into account other factors, such as their personality and criminal history. Furthermore, some correctional authorities noted that inmates with disabilities may present more of a threat to security since mobility aids may be used as weapons or to hide contraband.

A comment from the California Department of Corrections (CDC), is representative of many comments on safety and security risks:

> The CDC finds that disabled inmates are not necessarily at a greater risk. However, dependent upon their degree and type of disability a security or safety problem could exist which places them in jeopardy . . . The Department has not found that disabled inmates, as a whole, can be considered to be less of a security risk. Rather, the degree of an individual inmate's security risk must be determined by classification on a case-by-case basis taking into consideration the inmate's criminal history, commitment offense, individual case factors, medical/psychological history and overall institutional behavior. Disabled inmates, although they may appear to be less of a

security risk, have assaulted staff and other inmates.

Response. It is clear from comments that generalizations regarding risk factors associated with inmates with disabilities cannot be substantiated. Such assumptions do not provide sufficient rationale for fully exempting accessible cells or rooms from any kind of dispersion.

Comment. In addition to questions regarding safety and security risks, the NPRM asked whether accessible cells should be required to be dispersed among all categories of housing or levels of security. The NPRM further asked whether housing of a certain security level, such as maximum security, should be exempt from a requirement to contain accessible cells.

A majority of the responses supported some kind of exception to a requirement for dispersion. Most of these comments, represented by the Illinois Department of Corrections and the 22 States that endorsed its comments, supported an exception that would be applicable to all categories of housing, not just maximum security areas. Several commenters, including the Bureau of Prisons, supported an exception limited to maximum security. Support for an exception was based on the supervision and safety of inmates with disabilities, effective provision of programs and services, security, and cost. The Paralyzed Veterans of America regarded the importance of dispersion of accessible cells as secondary to the safety of inmates.

Some corrections officials, as well as several State and local government agencies, local disability groups, and a design professional supported a requirement for accessible cells in all categories or security levels. Since assumptions on an inmate's safety or perceived risk to security cannot be made on disability alone, the California Department of Corrections recommended that accessible cells be required among all categories of housing. Several State correctional agencies in responding to the ASCA survey supported dispersion, including South Dakota which stated that: "a majority of inmates move to different classification levels over time, which necessitates accessibility at each level," and Kansas, which stated that: "Inmates should be mainstreamed with the general population as much as possible. Once the disabled inmates are released from prison they must interact with the general population in society."

Some comments supported dispersion with respect to county or local facilities. The California Board of Corrections, which oversees all city and county correctional agencies and facilities, surveyed operators of 11 county systems and found that eight considered accessible cells necessary in all classification categories while three did not.

Response. In view of recommendations from some correctional authorities that accessible cells be provided among all housing categories or security levels, as well as the information received on safety and security issues concerning inmates with disabilities, a provision has been added that requires accessible cells to be located in all categories or types of cells. However, this requirement does not specify the amount or percentage that must be provided in each category or security level. Dispersion is not required to be proportionate to the total number of cells in each category or security level. Thus, at facilities with multiple levels of security, at least one accessible cell or room must be located in each security level. For example, a 300-cell prison that is evenly divided into three categories or levels of security would be required to have three percent or nine of its cells accessible with at least one accessible cell, not necessarily three, in each security level; one cell could be provided in maximum security while the remaining eight could be distributed among the other two security levels. However, this flexibility would not extend to those facilities comprised of only one security level.

Comment. Regarding local detention and correctional facilities, several commenters were concerned about the effect of dispersion on small facilities. The Nebraska Commission on Law Enforcement and Criminal Justice supported an exception based not on security factors, but on facility size for temporary holding facilities in local jails. In Nebraska, three housing separations are mandated for county facilities by code: male/female, adult/juvenile, and intoxicated/non-intoxicated. In small holding facilities, dispersion among each holding category or classification would in many instances require 100 percent accessibility among cells, thus causing a disproportionate impact.

Response. The requirement for the dispersion of accessible cells or rooms among all "categories and types" in ADAAG 12.4.1(2) is required only to the extent possible under the minimum percentage required to be accessible for the facility overall. The provision states that dispersion does not require an increase in the minimum three percent scoping specified for the facility overall. For example, if a small jail is required under the three percent specification to have one accessible cell, but has four holding classifications or "types," only one accessible cell is required. An appendix note clarifies that the minimum number required for the facility overall overrides the requirement for dispersion among all categories or types of holding or housing cells.

Comment. The NPRM asked whether accessible cells should be required to be dispersed throughout individual housing units or buildings that are of the same housing category or security level. A majority of responses to this question were against dispersion of cells within a unit or building. This includes comments from individuals with disabilities, State and local government agencies, correctional authorities, the Bureau of Prisons, several designers and associations. Reasons given by commenters for not dispersing cells and allowing them to be clustered within a unit or building included: safety of inmates with disabilities especially during emergency evacuation, more effective supervision of inmates with disabilities, more efficient provision of programs and services including proximity of accessible cells to certain common use areas, as well as cost and administrative benefits for prison operators. One correctional agency noted that the inmates with disabilities interviewed preferred being housed in the same area as inmates with similar disabilities.

Several disability groups argued against an exception to dispersion. The Paralyzed Veterans of America, while urging safety considerations over dispersion, also felt that there should be a firm test for an exception so that it functions as an exception, not the rule. Otherwise, inmates with disabilities would be "located in one cluster of cells or on a designated tier, thereby effectively segregating them from the rest of the prisoner/inmate population."

Response. The reasons outlined by commenters for clustering cells make a compelling case for not requiring dispersion of accessible cells among a building or housing unit. Unlike cells in different housing categories or security levels, those within the same category or housing unit would most likely all share the same amenities or features. Consequently, a requirement for the dispersion of accessible cells or rooms within buildings or housing units of the same category or security level has not been included.

12.4.2 Special Holding and Housing Cells or Rooms

Detention and correctional facilities typically have cells used for special purposes such as protective custody, disciplinary detention, detoxification, and medical isolation. Since inmates with disabilities might require or need the services provided in these cells, it is essential that some of each type be accessible. The NPRM requested additional information on these cells, including whether special housing cells should be held to the same level of scoping as general housing cells.

Comment. A majority of commenters recommended using the same level of scoping as specified for general housing cells. Other commenters recommended at least one of each type or one percent should be accessible. The Bureau of Prisons indicated that it rarely places inmates with disabilities in such cells and recommended that only one such cell per institution be required to be adaptable, not fully accessible.

Response. The number of special housing cells required to be accessible is in addition to the three percent required for general housing cells. In view of this and the fact that special housing cells are occupied for shorter periods of time, ADAAG 12.4.2 specifies that at least one special holding or housing cell serving each purpose be accessible in a facility. However, constructing more than one of each type to be accessible will facilitate access at large facilities which may have a number of each type serving different holding areas or housing units.

Comment. The NPRM asked whether space and cost impacts of accessibility could be limited if one accessible cell served a variety of special purposes. Some commenters, including a few prison operators and several disability groups, supported the use of one cell for multiple purposes. One commenter indicated that small jail facilities usually have one cell serving different uses such as protective custody, administrative segregation, and detoxification. However, a majority of the comments, most from the operators of State correctional systems and designers, considered the idea impractical if not infeasible. In some cases, for example, special housing cells may be located in different locations of the facility according to their use.

Response. It is clear from the comments that using special housing cells for different uses may not be practical at all facilities, especially those in State correctional systems. Since this may be a viable alternative in other facilities, and since the period of stay in these cells is limited, ADAAG 12.4.2 notes that accessible special housing or holding cells may serve more than one purpose. Where multiple use is not feasible, then at least one special housing or holding cell serving each purpose is required to be accessible.

12.4.3 Accessible Cells or Rooms for Persons with Hearing Impairments

This section requires that, where applicable, a minimum percentage of cells or rooms be accessible to persons with hearing impairments and comply with 12.6 (Visible Alarms and Telephones). ADAAG 12.6 includes specifications for visible alarms and telephone volume controls where alarm systems and permanently installed telephones are provided to serve inmates of holding or housing cells.

Comment. Several commenters questioned the need for such a requirement since holding or housing cells or rooms are rarely equipped with telephones or alarms. They were concerned that alarms within cells may be vandalized or tampered with by inmates or detainees. Moreover, since emergency evacuation is done under controlled or supervised circumstances, alarms directly serving inmates or detainees are usually unnecessary.

Response. Many detention or correctional facilities may not have cells equipped with the type of devices, such as alarms and permanently installed phones, that would trigger the requirements of ADAAG 12.6. The NPRM noted:

> Generally, most correctional facilities do not provide these kinds of elements in cells, but some facility types, such as minimum security prisons, may in fact be equipped with such devices. If permanently installed phones are provided in one category of housing, the minimum number or percentage, if specified, would be based on the total number of cells or rooms provided within that category of housing, not on the total number of cells or rooms of the facility. 57 FR 60632

As noted previously, this section covers a wide variety of facilities, including those facilities with lower levels of security that may have cells or rooms containing telephones or alarms.

Comment. The NPRM asked for information on the number or percentage of persons with hearing impairments in detention and correctional facilities. A number of State correctional authorities provided survey data with results that ranged from .01 percent to 5 percent. Most figures, including several estimates, fell below 1 percent and the average among them was .65 percent. At the local level, one corrections official indicated that .5 percent of jail inmates have hearing impairments, and among county facilities, one State agency provided a figure of .10 percent. From its survey, the Bureau of Prisons found that .5 percent of inmates within its system were identified as having a hearing impairment.

Two organizations provided information on studies that suggest that this percentage is considerably higher. According to the National Center on Law and Deafness, "[i]ndependent studies have identified from 8.9 to 47 percent of inmates as having some degree of hearing impairment." The American Speech-Language Hearing Association stated that studies place the range from between 15 to 50 percent depending on the age group, and that the prevalence of hearing, speech, and language impairments is two to five times higher among the inmate population than among the general population.

Response. Information received from the comments does not account for the wide discrepancy between survey results submitted by detention or correctional authorities and studies referenced by certain organizations. One reason may be a variable working definition of hearing impairment used in different studies and surveys. Based on this information and considerations that were taken into account with respect to fully accessible cells or rooms covered in ADAAG 12.4.1, ADAAG 12.4.3 requires that a minimum of three percent of holding or general housing cells or rooms be accessible to persons with hearing impairments. This percentage, as noted in the appendix, is not based on the total number of cells or rooms provided at a facility but on the total number of cells or rooms equipped with permanently installed telephones or audible emergency warning systems. If cells or rooms of this type are not provided at a facility, the requirements of ADAAG 12.6 do not apply. Additionally, this requirement only applies to housing or holding cells equipped with permanently installed telephones or alarms. These elements are typically located in common use areas, such as dayrooms, instead of individual cells. In this case, permanently installed telephones and alarms are required to be accessible according to ADAAG requirements for common use areas. See ADAAG 12.1 and the appendix note at A12.4.3.

12.4.4 Medical Care Facilities

This section applies the requirements of ADAAG 6 (Medical Care Facilities) to medical care facilities in detention and correctional facilities. Facilities covered

by ADAAG 6 are defined as those "in which people receive physical or medical treatment or care and where persons may need assistance in responding to an emergency and where the period of stay may exceed twenty-four hours." ADAAG 12.4.4 is intended to address the same range of medical facilities covered by ADAAG 6. Other medical facilities that do not meet this definition, such as physicians' offices, must be accessible to the extent required for common use areas. ADAAG 6 contains scoping and technical requirements for patient bedrooms and toilet rooms. Medical care facilities in detention and correctional facilities covered by ADAAG 12.4.4 are subject to the scoping requirements of ADAAG 6.1. For example, ADAAG 6.1(1) requires that 10 percent of patient bedrooms be accessible in certain facilities, including those used for detoxification. The patient bedrooms of a prison detoxification unit would be subject to this 10 percent scoping requirement.

Comment. The NPRM asked whether further clarification was needed in applying the requirements of ADAAG 6 to detention or correctional medical care facilities or whether there were certain kinds of medical care facilities that are not clearly addressed by the requirements of ADAAG 6. A majority of comments felt that further clarification was unnecessary and that the requirement, as stated by the National Institute of Corrections, "adequately addresses the kinds of medical facilities found in detention and correctional facilities." Those comments recommending further clarification identified specific types of medical facilities, such as first aid rooms, that are not clearly addressed by ADAAG 6.

Response. Those areas recommended for specific consideration, including first aid rooms, do not typically provide overnight care or patient bedrooms and thus would not meet the definition of "medical care facilities" in ADAAG 6. Medical care units not covered by ADAAG 6 would be considered common use areas and would be required to be accessible under ADAAG 12.1.

Comment. A few commenters felt clarification was necessary with respect to small detention facilities which may not contain medical care facilities.

Response. This provision does not require that jails or prisons provide medical care units. Thus, detention and correctional facilities not containing the type of medical care facilities addressed by ADAAG 6 would not be subject to this provision.

Comment. ADAAG 6.1 requires that in general purpose hospitals, psychiatric facilities, and detoxification facilities, at least 10 percent of patient bedrooms shall be accessible. Several comments, including those from the Illinois Department of Corrections, considered this scoping excessive for medical care facilities in detention and correctional facilities.

Response. The minimum number of accessible patient bedrooms required in ADAAG 6.1 recognizes that the incidence of disability, either permanent or temporary, is greater in medical care facilities. While information and survey data received in this rulemaking suggests that the prevalence of disability is lower among the inmate population than the general population, none was received indicating that the incidence of disability is lower in detention or correctional medical care facilities. In fact, in view of certain existing policies of housing inmates with disabilities in infirmaries, it may be greater. Consequently, the reference to ADAAG 6.1, which includes the 10 percent scoping requirement for patient bedrooms, has been retained. One corrections official stated that the scoping requirements of ADAAG 6.1 are "an affirmation of good architectural practice."

Comment. ADAAG 6.2 addresses entrances to medical care facilities and requires that at least one accessible entrance "be protected from the weather by canopy or roof overhang." In addition, this provision requires that such entrances also be served by an accessible passenger loading zone. One State correctional agency indicated that canopy or roof overhangs may compromise security by obstructing surveillance. This commenter further recommended an exception for required clear floor space alongside beds in existing facilities and an exception allowing the location of toilet and bathing facilities within patient cells instead of separate toilet or bathrooms.

Response. This provision has been revised to reference all sections of ADAAG 6 (Medical Care Facilities) except ADAAG 6.2, which requires canopy or roof overhangs. An exception has not been provided for clear floor space alongside beds in existing facilities since these guidelines pertain only to new construction and alterations. In the case of an alteration, the necessary clear floor space required in ADAAG 6.3 would be required only to the extent technically feasible. Regarding the requirement in ADAAG 6.4 for accessible patient toilet rooms and bathrooms, the references to ADAAG 4.22 (Toilet Rooms) and ADAAG 4.23 (Bathrooms, Bathing Facilities, and Shower Rooms) do not preclude placement of toilet or bathing fixtures within patient cells or rooms as long as the requirements for toilet rooms and bathrooms, including maneuvering space, are met.

Comment. Special holding or housing cells required to be accessible by ADAAG 12.4.2 may include those used for purposes of medical isolation. Since cells used for this purpose may be located within medical care facilities, the NPRM asked whether they should be counted as part of, or in addition to, the number of patient bedrooms or cells required to accessible under ADAAG 6. A majority of the responses to this question felt that medical isolation cells should be accessible in addition to the percentage of patient bedrooms or cells required to be accessible by ADAAG 6. In fact, several comments from corrections officials indicated that all medical isolation cells should be accessible.

Response. In view of the response to this question, language has been added to the provision and the appendix clarifying that medical isolation cells required to be accessible by ADAAG 12.4.2 shall not be counted as part of the minimum number of patient bedrooms or cells required to be accessible under ADAAG 6.1. Thus, if a medical care facility has both types of cells, at least one medical isolation cell must be accessible under ADAAG 12.4.2 in addition to the number of patient bedrooms or cells, in most cases 10 percent, required to be accessible by ADAAG 6.1. Consistent with the requirement for special purpose cells in ADAAG 12.4.2, at least one medical isolation cell per facility is required to be accessible. However, in view of the opinion expressed by some prison operators, it is recommended that consideration be given to ensuring the accessibility of all medical isolation cells.

12.4.5 Alterations to Cells or Rooms

ADAAG 4.1.6 requires that if existing spaces or elements are altered, then each such altered element or space shall be made accessible. ADAAG 12.4.5 clarifies that the percentage of cells that must be made accessible as part of an alteration is based on the total number of cells altered and not on the total number of cells in the facility. This would apply to all subsequent alterations until such time as the minimum percentage required in new construction for the facility overall is met. The three percent figure is consistent with the minimum

percentage specified for new construction.

Comment. Similar to a concern raised with respect to new construction, some State correctional agencies requested that the guidelines be flexible in requiring accessible cells or rooms as part of an alteration. Some correctional systems contain prisons that under current policies or assignment procedures are not intended to house persons with disabilities.

Response. The concern raised by corrections officials is understandable in light of current policies, but the underlying rationale involves operational considerations, such as inmate placement and assignment procedures, that lie beyond the Board's purview. As noted previously, the Board's statutory mandate requires a minimum level of accessibility in alterations and new construction. Operators of correctional systems may question the practicality of making cells accessible as part of an alteration at certain facilities not intended to house inmates with disabilities. However, the ADA and its legislative history recognize alterations as opportunities for providing access. Such opportunities are to be taken even in situations where the altered element or space may not be made fully accessible to or usable by persons with disabilities. Further, additional alterations may eventually lead to full accessibility of an existing facility, and, with respect to correctional systems, assignment policies may change. Such policies are subject to review by the Department of Justice under title II of the ADA which prohibits discriminatory policies, practices, and procedures.

Comment. In discussing requirements for accessible cells, various commenters expressed concern about compliance in cases of alteration. For example, requirements for toilet and bathing facilities include specifications for grab bars. Commenters indicated that grab bars may be properly mounted and secured to the degree necessary in new construction but not necessarily as part of an alteration. In fact, one commenter noted that the proper securement of grab bars in prison cells may actually necessitate reconstruction of cell walls.

Response. The concerns raised about specific requirements in cases of alteration involve issues already addressed by existing provisions in ADAAG 4.1.6 (Accessible Buildings: Alterations). ADAAG 4.1.6 states that where compliance is "technically infeasible, the alteration shall provide accessibility to the maximum extent feasible." "Technically infeasible," as defined in ADAAG 4.1.6, recognizes "existing structural conditions [that] require removing or altering a load-bearing member which is an essential part of the structural frame" and "other existing physical or site constraints [that] prohibit modification or addition of elements, spaces, or features" in compliance with ADAAG. Technical infeasibility, which is specific to alterations, is intended to cover various situations that often must be considered on a case-by-case basis. The specific concerns shared by commenters, including those with respect to grab bars, may constitute "technical infeasibility" in many cases.

12.5 Requirements for Accessible Cells or Rooms

This section contains the minimum requirements for accessible cells or rooms. These requirements, which are similar to those for holding cells in judicial facilities in ADAAG 11.4.2, are based in part on specifications in ADAAG 9 for rooms in transient lodging. The NPRM asked whether any of these requirements, as proposed, conflicted with existing security requirements inherent in cell design. Relatively few commenters responded to this question. Most comments addressed requirements for doors in ADAAG 12.5.2(1) or responded to specific issues raised in the NPRM concerning toilet and bathing facilities addressed in ADAAG 12.5.2(2) which are discussed below.

Comment. In the NPRM, the requirements of ADAAG 12.5 were intended to apply to those elements or spaces that may be provided within cells or in adjacent common use areas such as dayrooms. These requirements have been clarified to apply only to those elements or spaces provided within housing or holding cells or rooms. Elements and spaces provided in common use areas, such as dayrooms, are subject to ADAAG requirements for common use areas according to ADAAG 12.1.

12.5.2(1) Door and Doorways

This provision requires that all doors and doorways on an accessible route comply with ADAAG 4.13 (Doors). As proposed, this requirement contained an exemption from the requirements for maneuvering clearances (4.13.6), door hardware (4.13.9), opening force (4.13.11), and automatic or power-assisted operation (4.13.12) where detainees or inmates are escorted by security personnel at all times.

Comment. As discussed in ADAAG 11.4.2, corrections officials and several design professionals indicated that design requirements may necessitate use of 300 to 500 pound doors. Such doors cannot meet the specification for closing and opening forces in ADAAG 4.13.10 (Door Closers) and 4.13.11 (Door Opening Force) without, at a minimum, power-assist devices. In addition, commenters noted that security requirements may prohibit the use of certain door hardware often used in meeting the specifications for door hardware in ADAAG 4.13.9 (Door Hardware). Accessible door hardware, such as lever handles, may be more easily removed than doorknobs and other types of door hardware.

Response. Consistent with provisions for entrances in ADAAG 12.2, the exception has been revised to include doors and doorways subject to security requirements that prohibit full compliance with ADAAG 4.13.6 (Maneuvering Clearances at Doors), 4.13.9 (Door Hardware), 4.13.11 (Door Closers), and 4.13.12 (Automatic Doors and Power-Assisted Doors). In addition, a reference to the specifications for door closers (ADAAG 4.13.10) has been added.

12.5.2(2) Restrooms

This provision requires that toilet facilities comply with ADAAG 4.22 (Toilet Rooms) and that bathing facilities comply with ADAAG 4.23 (Bathrooms, Bathing Facilities, and Shower Rooms). This provision further notes that privacy screens, where provided, not encroach upon the clear floor space required at fixtures.

Comment. One commenter recommended that this provision reference ADAAG 4.16 (Toilets) and 4.19 (Lavatories) instead of ADAAG 4.22 (Toilet Rooms) since such fixtures are often located within housing or holding cells and not separate toilet rooms.

Response. References to ADAAG 4.22 and 4.23 do not preclude the installation of either toilet or bathing fixtures within cells as long as the specifications, including those for clear floor space, are met. These references clarify that the maneuvering space and other requirements found in ADAAG 4.22 and 4.23 apply even if the room functions primarily as a housing or holding cell. Since requirements for the cell itself, including necessary maneuvering space, may be used to meet the maneuvering space required by ADAAG 4.22 or 4.23, these references do not have substantially greater impact than do references to the specifications for specific fixtures. This is clarified in an appendix note to this provision.

As discussed under ADAAG 11.4.2, many holding and housing cells are equipped with a combination toilet and lavatory unit. These combination units

maximize space and are easier to install than separate fixtures. The NPRM asked whether these type of units are actually required in cells and whether combination units that fully meet ADAAG requirements are available.

Comment. Several corrections officials indicated that they were unaware of any combination unit that fully complies with ADAAG. Corrections officials of some States, such as California, Florida, and Michigan, noted that separate fixtures are used in accessible cells. Manufacturers confirmed that the standard design of combination units, including those otherwise considered accessible by the industry, do not fully meet ADAAG requirements. Specifically, the standard design of these units cannot easily incorporate the 36 inch long rear grab bar required by ADAAG. Several commenters, including a design firm, thought that it may be possible to install a grab bar of shorter length, perhaps up to 24 to 26 inches, on some units. According to one correction official, however, mounting a 26 inch grab bar on the unit would double the amount of space required and quadruple the cost.

Several corrections agencies indicated that combination units are not required but are used frequently, primarily because they require less space than separate fixtures. One design professional noted that their use is preferred in police station holding cells for security reasons. The only source identified as actually requiring combination units was Virginia's "Guide of Minimum Standards in Design and Construction of Jail Facilities" which requires such units in maximum security cells.

Response. Based on the comments, it is apparent that the use of combination units are generally not required, but they are often preferred for more efficient use of space and greater security. The requirement for toilet rooms complying with ADAAG 4.22 remains unchanged.

Comment. One corrections official expressed concern about installing combination units that meet ADAAG specifications or separate toilet and lavatory fixtures in existing cells as part of a renovation. Installation of these elements would require converting two standard cells into one accessible cell in order to provide the necessary clear floor space at fixtures.

Response. Structural conditions and site constraints that prohibit compliance with ADAAG in the case of alterations are addressed by ADAAG 4.1.6 (Accessible Buildings: Alterations). ADAAG 4.1.6 notes that where it is "technically infeasible" to comply with ADAAG as part of an alteration, compliance is only required "to the maximum extent feasible." Compliance with ADAAG that necessitates the removal of walls may constitute "technical infeasibility" in many cases. The term "technical infeasibility" is further discussed under ADAAG 12.4.5 (Alterations to Cells or Rooms).

Comment. The specifications for toilet rooms in ADAAG 4.22 and for bathing facilities in ADAAG 4.23 include requirements for grab bars at toilets, showers, and tubs. In the prison environment, such elements must be properly secured so that they cannot be removed and used as weapons. As discussed in ADAAG 11.4.2, the NPRM asked whether grab bars can be installed without creating a security risk. A majority of comments, including those from corrections officials, indicated that grab bars do not pose a risk to security if mounted properly. Several State corrections agencies offered certain methods of securement, such as the use of steel imbeds. Some of these suggestions were qualified as being able to reduce, but not necessarily eliminate, risks to security. Several commenters considered grab bars more of a security risk in maximum security facilities.

Response. Based on the comments, various alternatives do exist for mounting grab bars so that they do not pose a risk to security.

Another question raised in the NPRM was whether grab bars can facilitate suicide attempts among inmates or detainees. The NPRM asked about the experiences detention and correctional authorities have had with respect to grab bars and suicide attempts. This issue was raised with respect to holding cells in judicial facilities covered by ADAAG 11.4.2 and to holding and housing cells in detention and correctional facilities addressed by this section.

Comment. No information was received indicating that grab bars had indeed been used in any recorded suicide attempt. However, the National Center on Institutions and Alternatives notes that this "could have more to do with not only the problem of under-reporting of jail suicides * * * but also the fact that grab bars are not yet predominantly found in jails throughout the country." Several comments did consider grab bars a suicide risk, particularly in police holding cells, maximum security cells, and psychiatric facilities.

Most of the comments, however, particularly those from State corrections officials, indicated that while they may pose some risk, suicide prevention cannot be based solely on cell design. Some comments considered it impossible to design a cell that is "suicide-free" and noted that the risk posed by grab bars is not very different from the risk already posed in many existing prisons or holding cells by cell grillage, bed frames, and air circulation vents. Many of these commenters stressed the importance of appropriate supervision and classification of inmates and detainees in curbing the risk of suicide. The California Board of Corrections, which oversees local and county facilities, stated that:

> The best deterrent to such activity is staff supervision and appropriate classification of inmates to identify possible suicide candidates. Another consideration is that grab bars are often located in open areas where staff visibility is optimum. Finally, California requires grab bars adjacent to all water closets in detoxification cells due to the potential for injury to intoxicated arrestees and there is no information to indicate an increase[d] suicide potential in these cells due to grab bars.

Response. The response from a majority of corrections officials indicates that supervision and classification of inmates are necessary in preventing suicide. The operators of correctional facilities may rely on these methods since correctional systems utilize extensive evaluation and classification of inmates. However, this may not be the case in detention facilities which may house persons immediately after arrest. Information gathered by the Board indicates that, in general, the chance of suicide is greatest during the first 24 or 48 hours following arrest. This is consistent with the opinion expressed by a few commenters that the suicide risk is greater in detention facilities such as police station holding cells. However, commenters indicated that appropriate supervision is necessary in these facilities in order to effectively reduce the risk of suicide, especially since holding cells may already contain elements, such as cell bars, that can facilitate suicide attempts. An exception to the requirement for grab bars in ADAAG 4.22 and 4.23 has not been included. The specifications for grab bars in ADAAG 4.26 (Handrails, Grab Bars, and Tub and Shower Seats) allow various design alternatives, and some designs were suggested in the NPRM as possible alternatives. These included grab bars that are recessed into the wall or that have infill welded plates attached to the bottom. Several corrections officials stated that such designs may help reduce but would not necessarily eliminate the risk of suicide. Further, they may compromise security

by providing space in which contraband can be hidden. One State correctional agency advised that operators "should retain the flexibility of determining the grab bar design suitable for a particular application." Current ADAAG specifications do provide some degree of flexibility in the design of grab bars. In addition, ADAAG 2.2 (Equivalent Facilitation) allows departures from, or alternatives to, specific technical requirements in ADAAG so long as equal or greater access is provided.

12.5.2(3) Beds

This provision requires that clear floor space 36 inches wide be provided along one side of beds. The specifications for beds do not preclude the use of upper bunks, which may be installed particularly in cases of overcrowding. However, sufficient clearance must be provided between bunks so that the transfer from wheelchairs to lower bunks is not restricted. ADAAG does not currently specify such clearances, but an appendix note recommends consideration of the standard human dimensions associated with the use of wheelchairs in Appendix Fig. A3.

Comment. One comment from an individual with a disability considered the clear floor space specified alongside beds to be insufficient, while a corrections official considered the 36 inch width excessive and recommended that 32 inches be the minimum. Further, this commenter felt that certain cell elements, such as writing desks and storage units, should be allowed to encroach upon this space up to 18 to 24 inches.

Response. The 36 inch wide specification is based on requirements for patient bedrooms in ADAAG 6 (Medical Care Facilities). This is in addition to the wheelchair turning space and connecting accessible route required for the cell. Clear floor space required at fixed elements, such as writing desks, may overlap the maneuvering space required at beds; however, the fixed elements themselves may not obstruct or reduce this maneuvering space. This provision remains unchanged except for editorial revisions made for further clarification.

Comment. A design professional questioned what the height of beds should be in order to facilitate a transfer from wheelchairs.

Response. ADAAG specifies a range of 17 to 19 inches for the height of toilet seats and shower seats in order to facilitate the necessary transfer. This height is appropriate for beds as well. However, determining this height for fixed beds should include non-fixed elements such as bedding or mattresses so that the bed surface to which one transfers is within the range of 17 to 19 inches from the finish floor. Where upper bunks are provided, the height of the beds is particularly important in ensuring sufficient headroom for transfer. This information, including the recommended 17 to 19 inch height for beds, has been added to the appendix.

12.5.2(4) Drinking Fountains

This provision requires that drinking fountains be accessible for persons using wheelchairs and to those that may have difficulty bending or stooping. This provision is consistent with ADAAG 4.1.3(10)(a).

Comment. One design professional disapproved of ADAAG 4.1.3(10)(a) since it contains a performance standard. Another comment from a State corrections authority supported the requirement for drinking fountains accessible at both "hi-lo" heights.

Response. This provision allows use of "hi-lo" fountains, water coolers, or "other such means as would achieve the required accessibility" for both wheelchair users and persons who have difficulty bending or stooping. This provision has not been revised.

12.5.2(5) Fixed Seating and Tables

This provision requires fixed seating and tables be accessible according to ADAAG 4.32. This applies to fixed seating and tables provided within, or serving, accessible cells. This requirement is intended to address seating that may be provided in adjacent common use spaces such as dayrooms.

Comment. One comment noted that this provision, if it is to apply to areas such as dayrooms, should be stipulated in ADAAG 12.1 which covers common use areas.

Response. As previously noted, this section has been revised to apply to elements, including fixed seating and tables, that are installed within housing or holding cells or rooms. Under ADAAG 12.1, common use spaces, including dayrooms, serving accessible cells are required to be accessible according to the applicable requirements of ADAAG 4.1 through 4.35. This would include the five percent scoping requirement and technical specifications for accessible fixed seating and tables in ADAAG 4.1.3(18) and ADAAG 4.32, respectively.

12.5.2(6) Benches

This provision requires that benches be 17 to 19 inches high and meet existing structural strength requirements in ADAAG 4.26.3 (Structural Strength). This requirement as proposed specified that benches be a minimum of 24 inches in depth and at least 48 inches long. As discussed in ADAAG 11.4.2(6), the specified minimum dimensions have been removed.

12.5.2(7) Storage

This provision requires that fixed or built-in storage units be accessible according to ADAAG 4.25 (Storage).

Comment. One commenter recommended coverage of inmate lockers.

Response. Under this provision, lockers that are fixed or built-in would be subject to the applicable requirements of ADAAG 4.25. This provision has been clarified to apply to fixed or built-in storage units located within housing or holding cells or rooms.

12.5.2(8) Controls

This provision requires that controls intended for operation by inmates be accessible according to ADAAG 4.27 (Controls and Operating Mechanisms). This provision has not been revised.

12.5.2(9) Accommodations for Persons With Hearing Impairments

Under this provision, accessible cells are also required to be accessible to persons with hearing impairments and comply with ADAAG 12.6. Cells or rooms addressed by this section are required to comply with ADAAG 12.6 in addition to the three percent of cells or rooms addressed by ADAAG 12.4.3. This provision is intended to address access for those persons with both mobility and hearing impairments. The NPRM asked whether this provision was necessary or appropriate with respect to detention and correctional facilities.

Comment. A majority of the commenters, most from disability organizations, supported this requirement. However, corrections officials and the Bureau of Prisons recommended that this requirement be removed. Most of these comments indicated that the elements required to be accessible under this provision, alarms and permanently installed telephones, are typically not provided or needed in cells. These comments noted that staff supervision and controlled means of egress preclude the need for alarms serving inmates.

Response. As discussed under ADAAG 12.4.3, alarms and permanently installed telephones are not typically provided to serve individual cells. Thus, the specifications referenced by this provision apply only where such devices are provided. In addition, the requirement for auxiliary visible alarms, as discussed under ADAAG 12.6

(Visible Alarms and Telephones), does not apply where inmates or detainees are not allowed independent egress. No changes were made to this provision.

12.6 Visible Alarms and Telephones

This section contains technical requirements for cells that are accessible to persons with hearing impairments. ADAAG 12.6.1 requires that if audible emergency warning systems serving cells or rooms are provided, a visible alarm complying with ADAAG 4.28.4 (Auxiliary Alarms) shall also be provided. Further, permanently installed telephones, where provided within housing or holding cells or rooms, are required to have volume controls complying with ADAAG 4.31.5 (Hearing Aid Compatible and Volume Control Telephones). TTYs in detention and correctional facilities are not addressed by this section but by requirements at ADAAG 4.1.3(17)(c)(v). ADAAG 12.6 clarifies that portable devices may be used in lieu of permanent devices if necessary wiring and outlets are provided.

Comment. As discussed under ADAAG 12.4.3, some corrections officials, including the Bureau of Prisons, stated that such specifications are unnecessary since the type of alarms and telephones addressed by this section are typically not provided in cells. These comments further stated that supervision of inmates and controlled evacuations obviate the need for visible alarms and that, since alarms may be vandalized or tampered with, their placement should not be required within cells.

Response. These requirements, as stated in the corresponding scoping provision at ADAAG 12.4.3 and reiterated in this section, apply only where alarms and permanently installed telephones are installed within housing or holding cells or rooms. With respect to the need for alarms where evacuation of inmates is controlled, the proposed rule noted that visible alarms are only required where "inmates or detainees . . . are allowed independent means of egress." For clarity, this language has been restated as an actual exception to the requirement for visible alarms. Thus, where independent egress is not allowed, visible alarms would not be required even if an audible emergency warning system is provided. With respect to alarms being vandalized or tampered with, ADAAG 12.6.2 allows the use of portable, instead of permanent, alarms as long as the necessary wiring and outlets are provided. Operators can then install portable devices according to need as required by the Department of Justice title II regulation, which addresses the provision of auxiliary aids and services. See 28 CFR part 35. This information is provided in an appendix note to ADAAG 12.6.2.

Comment. An almost equal number of comments, primarily from disability groups and State and local government agencies, supported these requirements. Some commenters recommended additional requirements, such as specifications for vibrating alarms, signals of announcements or summons, and other notification devices.

Response. Auxiliary aids and devices, such as vibrating alarms are not within the purview of these guidelines since such devices are typically not built-in or addressed as part of facility design and construction. Such devices, however, are not precluded by these guidelines and, as noted above, are addressed by the Department of Justice title II regulation as noted above.

13. Accessible Residential Housing

13.1 General

ADAAG 13.1 outlines the types of residential facilities addressed by this section. These facilities include newly constructed or altered single-family and multifamily dwelling units which are subject to title II of the ADA. The term "dwelling unit" is defined in this section and has been incorporated here to apply only to residential housing and not transient lodging. The term "dwelling unit" as used in ADAAG 13 specifically applies only to those facilities used as a residence which contain rooms and spaces for living, bathing, and sleeping and may provide a kitchen or food preparation area. An appendix note at A13.1 clarifies that this section does not obviate responsibility for compliance with Federal laws such as the Fair Housing Amendments Act of 1988 (42 U.S.C 3604 et seq.) and section 504 of the Rehabilitation Act of 1973 (29 U.S.C 794). The appendix also discusses certain characteristics that distinguish residential dwelling units addressed by this section from those considered transient lodging. Specifically, residential dwelling units typically contain accommodations, including kitchens, bathrooms, living and sleeping areas. A discussion of the definition of transient lodging is found in ADAAG 3.5.

ADAAG 13 contains specific requirements for accessible residential housing which are in addition to those contained in ADAAG 4.1 through 4.35. This section defines "public use areas" and "common use areas." The definition of "public use area" is consistent with ADAAG 3.5. The definition of "common use area" is consistent with the definition in ADAAG 3.5, but is more specific to residential facilities covered by this section and applies to rooms, spaces or elements used by residents or their guests, such as hallways, lounges, lobbies, laundry rooms, refuse rooms, mail rooms, storage facilities, areas used for official functions, recreational areas and passageways among and between buildings. The term "common use" excludes spaces wholly within a dwelling unit. An appendix note has been added to clarify this requirement. An exception provides that elevators are not required in residential facilities that are less than four stories if the requirements of 13.1(2), 13.2 and 13.3 are met. A second exception has been included for common use areas that serve a recreational purpose. Under this exception, where multiple recreational facilities, such as tennis courts, are provided, at least one of each type must be accessible. An appendix note encourages that a sufficient number of accessible multiple common use recreation facilities should be provided to ensure equitable opportunities for persons with disabilities.

Comment. A commenter asked whether a facility which provides a single room occupancy, is a dwelling unit. The commenter noted that meals are provided on a congregate basis at these facilities, if at all. Other commenters, including some colleges and universities, requested a clarification as to whether the accommodations they provide are dwelling units or transient lodging.

Response. Where a tenant rents only a sleeping room on a transient basis it is not a dwelling unit as defined in ADAAG 13. Some sleeping rooms have modest food storage facilities. However, these rooms are not generally intended to be dwelling units. Such accommodations are more similar to hotels and motels and if so, would be considered transient lodging subject to ADAAG 9 (Accessible Transient Lodging). Language has been added to ADAAG 13.1 which states that this section does not apply to transient lodging. An appendix note makes it clear that other residential housing for live-in employees or apartments for students would be covered by ADAAG 13.1 if they contain dwelling units as defined by this section.

Comment. A large number of commenters including, the Camden County Office for the Disabled, the State of Washington Building Code Council, the National Conference of States on Building Codes and Standards, the

Montgomery County, (Maryland) Housing Opportunities Commission and, the State of New Jersey Department of Community Affairs, expressed concern regarding the application of these guidelines to single-family dwelling units constructed or altered "by or on behalf of" a State or local government entity. New Jersey noted that "this requirement would have an adverse impact on governmental single-family housing programs that include low rate mortgages, zero down payment, closing cost assistance, and construction financing to developers of for-sale single-family homes." Other commenters supported coverage of single-family residences such as official residences, those provided for governors and State university presidents, and single-family housing provided as public housing. The City of Chicago Mayor's Office commented "The fact that the ATBCB guidelines now require State and local governments to apply access standards to single-family dwellings is highly commendable."

Response. Section 202 of the ADA prohibits public entities from discriminating on the basis of disability. "Public entity" includes any State or local government, any department, agency, special purpose district, or instrumentality of a State or local government. See 42 U.S.C. 12131 and 12132. Thus, facilities which are subject to title II of the ADA are covered by these guidelines. Single-family dwellings such as a president's house at a university are included in this definition and such dwellings are addressed in these guidelines. This provision has been revised to indicate that these guidelines apply to residential housing subject to title II of the ADA.

Comment. The NPRM asked whether an exemption for National Guard facilities and other similar dwelling units in addition to dwelling units for unaccompanied personnel should be included. The majority of commenters did not support such an exception. A few suggested that the Board might contemplate an exemption if there was clear linkage between employee job descriptions which preclude persons with disabilities and employee housing. One State's department of fish and game requested an exemption for very remote cabins and dwellings used by seasonal employees. They stated:

* * * the nature of the work at these remote sites is such that employees must be 'able-bodied' * * * Common sense dictates the Department not assign employees with mobility or sight impairments to these facilities for the safety of the employee as well as the safety of his/her coworker(s).

A number of commenters, including the National Conference of States on Building Codes and Standards, the State of Hawaii Architectural Access Committee, and the City of New York, opposed such an exemption since the facility occupancy and use may change. The Hawaii Commission for People with Disabilities and the Kentucky Office of the Governor both pointed out that National Guard facilities are used to house the general public in the event of a disaster and neither supported an exemption.

Response. The guidelines do not contain an exemption for National Guard housing facilities or other similar dwelling units for unaccompanied personnel. The majority of the commenters did not support such an exception. Several commenters pointed out that in times of disaster, these facilities are used to shelter or provide other assistance to the public. This is a compelling reason to require accessibility.

Additionally, the Board has not provided any exceptions based on the presumed physical capabilities of building occupants or employees. The Equal Employment Opportunity Commission (EEOC), commented that such exceptions may be inconsistent with title I of the ADA as it pertains to access for employees with disabilities. Title I of the ADA states that employers must accommodate employees with disabilities unless doing so would impose an undue hardship. Issues relating to other exceptions are further discussed in relation to ADAAG 4.1.1(5) (General Exceptions).

Comment. A few commenters, including the University of California and the National Association of Home Builders suggested that in lieu of the proposed rule, the Board should adopt the Fair Housing Accessibility Guidelines issued by Housing and Urban Development (HUD) pursuant to the Fair Housing Amendments Act of 1988 (42 U.S.C. 3604 et seq.). Commenters were concerned that overlapping federal guidelines would cause confusion among facility owners and developers. The New Jersey Department of Community Affairs suggested that the Board adopt "the reasonable and effective approach" in the Uniform Federal Accessibility Standards (UFAS). A number of commenters including the Disability Rights Education and Defense Fund (DREDF) and the World Institute on Disability strongly supported the proposed rule. DREDF commented: "It is highly commendable that the Board has chosen to apply ADAAG and UFAS to housing for its basic requirements * * * This approach must remain unchanged in the final standards."

Response. Nothing in ADAAG 13 obviates the necessity for compliance with the Fair Housing Accessibility Guidelines. This section, although generally more stringent than the Fair Housing Accessibility Guidelines, is compatible with those guidelines. Furthermore, this section is consistent with standards referenced by HUD's regulations implementing section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) which reference UFAS (24 CFR 8.32). A discussion of the relationships between these regulations and their applicable standards is contained in the NPRM. (See 57 FR 60633).

Comment. The NPRM asked if an exception should be included similar to that in UFAS for elevators in low-rise structures. The NPRM did not include such an exception. UFAS 4.1.3(1) provides that all the accessible dwelling units may be located on one accessible level if at least one of each type of common area and amenity provided for use of residents and visitors is available on the accessible level. Most commenters supported such an exception. They noted that certain model building codes require elevators in multifamily structures that are four stories or more. These commenters also cited cost and maintenance factors as reasons for supporting an exception. The Eastern Paralyzed Veterans Association noted that the cost of each elevator provided in a three story walk-up apartment would approximate the cost of one dwelling unit, potentially resulting in the construction of fewer units. If elevators are required in low-rise residential facilities, the National Association of State Facilities Administrators expressed concern that "* * * public sector housing could lose much of its cost advantage over exempt private sector housing, driving designs back to high density, high rise dwellings."

A few commenters objected to an elevator exception on the basis of ensuring integration, security, and choice for people with disabilities. One commenter strongly urged that smaller facilities be required to have an elevator since the trend in development of publicly owned housing is toward smaller facilities. Otherwise, the commenter reasoned, accessible units will be provided only on the ground floor in smaller facilities. Ground floor units, according to several other commenters are more susceptible to burglary and other criminal activities.

Some of the commenters who favored an elevator exception suggested that it should be narrowly drawn so as not to

include larger buildings. In the interest of integration, the City of New York offered a compromise provision under which buildings with less than twenty-five dwelling units would not be required to have an elevator.

Response. While the concerns for greater choice and integration are very important, requiring elevators in low-rise residential facilities is likely to result in fewer affordable dwelling units due to the added cost. The Board is well aware of the problems of all homeless persons, including those with disabilities. While elevators facilitate integration, there are associated costs. Requiring elevators in smaller buildings will force redesign of the typical walk-up garden apartment building, and the capital cost for each elevator is roughly equivalent to one dwelling unit. Balancing social goals and economic realities benefits all homeless people. Therefore, a provision has been added to ADAAG 13.1(2) exempting residential facilities that are less than four stories from the requirement for an elevator, provided that the requirements of ADAAG 13.1(2) (Public and Common Use), 13.2 (Minimum Number and Dispersion) and 13.3 (Requirements for Accessible Dwelling Units) are satisfied. An elevator may be required if the requirements of ADAAG 13.1(2), 13.2 and 13.3 cannot be met without providing vertical access. For example, in a facility having only one building, a designer may elect to locate all one bedroom units on the first floor and all two bedroom units on the second floor. In this case, if more than one accessible dwelling unit is required, an elevator may be necessary to meet the dispersion requirements in ADAAG 13.2.2. This exception does not decrease the minimum number of dwelling units that must be accessible in a facility.

Comment. EPVA recommended inclusion of the 1993 BOCA National Building Code requirement that where there are multiple facilities of one type, 25 percent, but at least one, must be accessible.

Response. The proposed rule has been revised by deleting the term "public use" so that all newly constructed and altered recreational facilities for use by the general public must comply with ADAAG 4. In addition, at least one of each type of common use recreational facility provided must be accessible. This provision is written to be consistent with the Fair Housing Accessibility Guidelines which state: "Where multiple recreational facilities (e.g., tennis courts) are provided, sufficient accessible facilities of each type to assure equitable opportunity for use by persons with handicaps is required". See 24 CFR Ch. 1, App. II, sec. 5, req. 2. An appendix note indicates that one accessible recreational facility may be insufficient to ensure equitable opportunity by persons with disabilities.

13.2 Minimum Number and Dispersion

13.2.1 Minimum Number

This section outlines minimum scoping guidelines for accessible residential dwelling units. Five percent of the total number of dwelling units in a facility (*i.e.* on a common site) shall comply with ADAAG 13.3 and 13.4. In a facility with more than two dwelling units, 25 percent, but not less than one of the accessible units complying with ADAAG 13.3 and 13.4, shall have a roll-in shower. In addition, where special purpose residences are provided for specific employee positions and are not interchangeable (*e.g.*, Governor's mansions and university President's residences) each shall comply with 13.2.1(1). Where special purpose residences are interchangeable, five percent, or at least one shall be accessible. Examples of special purpose residences that are interchangeable include, but are not limited to, housing set aside for university faculty having similar rank and live-in residences for museum curators and other professional staff. In addition to these units, two percent of the total number of dwelling units in a facility shall comply with ADAAG 13.4. This section also provides that, when the total number of dwelling units is one, that dwelling unit shall meet the requirements of ADAAG 13.2.1(1). An appendix note clarifies that at least one of each type of unit size, according to the number of bedrooms provided must be accessible according to 13.2.2(2). Even when the minimum number requirements of 13.2.1 must be exceeded, access to all types of units, particularly according to the number of bedrooms provided, will ensure a minimum level of program access and may reduce future costs associated with accommodating individuals with varying needs. Because existing units can be made accessible to persons with hearing impairments with little or no structural alteration, a similar provision is not included for those units required to be accessible by 13.2.1(2).

Comment. The NPRM asked whether the scoping provisions were appropriate and sought any information or survey results on the need for accessible units in existing residential facilities which are owned or operated by State or local governments, especially those that have complied with UFAS. Although a number of commenters supported the provision, many requested an increase in the percentages specified at ADAAG 13.3.2(1). The City of New York recommended 8.5 percent accessible dwelling units for New York based on recent census data. DREDF, Independent Housing Services of San Francisco, California, and others recommended ten percent accessible dwelling units under ADAAG 13.3.2(1). Conversely, a few commenters took the position that even five percent accessible dwelling units is too great a burden. The City of Boston, Public Facilities Department reported that where data are available, the demand has consistently been between two and three percent. They noted that accessible housing is not always occupied by people with disabilities and that the demand does not support the five percent requirement. On the other hand, a number of commenters suggested that a lack of outreach to people with disabilities was the reason for low occupancy rates of accessible units by persons with disabilities.

With respect to ADAAG 13.3.2(2), the National Center for Law and Deafness pointed out that the two percent scoping for dwelling units accessible to persons with hearing impairments was less than the scoping for transient lodging.

Response. The requirement for five percent accessible dwelling units, is consistent with the requirements of HUD's regulation implementing Section 504 of the Rehabilitation Act of 1973 for multifamily facilities. Also, the legislative history of the ADA directs the Board not to set lesser accessibility requirements than those included in the Minimum Guidelines and Requirements for Accessible Design (MGRAD). H. Rept. 101–485, pt. 2, at 139. MGRAD requires five percent of the total number of units of a facility, or at least one dwelling unit, whichever is greater, to be accessible. See 36 CFR 1190.31(u)(2).

As with ADAAG 9.1.3 (Sleeping Accommodations for Persons with Hearing Impairments), some dwelling units are required to be accessible only to persons with hearing impairments. Where possible, consistency with HUD's section 504 regulation is preserved. HUD's regulation requires that an additional two percent of the dwelling units be "accessible for persons with hearing or vision impairments." See 24 CFR 8.22.

Comment. The NPRM requested comment on the percentage of roll-in showers that should be required. In addition, the NPRM asked whether the requirement for roll-in showers in residential housing should parallel the

provision for transient lodging found in ADAAG 9.1.2. The majority of the commenters supported a requirement for roll-in showers. While some commenters such as the City of Pasadena, California suggested that most persons with disabilities do not prefer roll-in showers, commenters in support of requiring roll-in showers noted that roll-in showers allow greater independence and may be used by a wide range of persons. A few commenters raised concerns that roll-in showers might cause water damage if improperly drained. Suggestions for scoping ranged from no scoping to one hundred percent of the accessible units in a facility. Most of those who recommended roll-in showers supported requiring 25 percent of the accessible dwelling units have roll-in showers. Regarding whether the scoping should parallel that for transient lodging, there was clear consensus for applying the requirement for roll-in showers to facilities with fewer than fifty dwelling units. However, a number of commenters noted that a facility having one single-family dwelling unit should not be required to provide a roll-in shower.

Response. The guidelines do not apply the requirement for roll-in showers to facilities having only one or two dwelling units. Doing so might cause these facilities to be less desirable to persons who have a need or preference for a bathtub. In a facility with more than two dwelling units, requiring a roll-in shower to be provided in only 25 percent of the dwelling units complying with ADAAG 13.2.1(1) means that a facility must have more than 80 dwelling units before a second roll-in shower is required. For example, a facility with 81 dwelling units is required to have five percent accessible units, which is five. Therefore, of these five accessible units, 25 percent, or two, must have a roll-in shower. The provision is similar to ADAAG 9.1.2 (Accessible Units, Sleeping Rooms and Suites) in that only very large facilities are required to have more than one roll-in shower. It differs in that the requirement for at least one roll-in shower applies to smaller facilities. As for the issue of water damage caused by improperly drained roll-in showers, roll-in showers can be designed, installed, and maintained without presenting such drainage problems.

Comment. The NPRM asked whether a provision for bathtubs complying with ADAAG 4.20 should be included. The NPRM also asked what percentage of a facility's accessible dwelling units should contain such bathtubs. There was no clear consensus among commenters regarding the need for accessible bathtubs. Percentages suggested by commenters ranged from zero to fifty. A number of commenters noted that bathtubs are particularly useful to persons needing to immerse joints and muscles. A very few commenters suggested that the guidelines require a particular adaptable tub which can be made into a roll-in shower. One commenter pointed out that adaptable dwelling units which are covered by the Fair Housing Amendments Act are likely to have bathtubs.

Response. Experience suggests that roll-in showers are not provided unless they are required. Where roll-in showers are not provided in accessible units, accessible bathtubs or accessible shower stalls are required by ADAAG 13.3.2(11). Further, adaptable dwelling units covered under the Fair Housing Amendments Act are likely to have bathtubs and are required to have support for grab bars. Therefore a specific scoping provision for bathtubs is viewed to be unnecessary.

Comment. The NPRM asked whether basing the minimum number of accessible dwelling units on the number of dwelling units in each "facility" is the most appropriate means of determining an adequate level of accessibility. A very few commenters recommended that each building in a facility or on a site should have accessible units. Most commenters recommended using "facility." Some preferred "site" because they believed that use of that term would affect dispersion of accessible dwelling units giving the designer more flexibility in determining the location of required accessible dwelling units within a facility. A few commenters recommended scoping according to dwelling units owned by a State or local government and used for a specific program. Most of these commenters were concerned that scattered site single-family housing which is used for certain social service programs such as residential group homes would be required to be one hundred percent accessible. Although many noted that they did not oppose such a scoping requirement for new construction, they were concerned that accessibility requirements, when applied to renovated or existing housing, would be cost prohibitive.

Response. ADAAG 3.5 defines "facility" as "[a]ll or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on a site." The term "site" is defined at ADAAG 3.5 as "[a] parcel of land bounded by a property line or a designated portion of a public right of way." Given that these definitions are so similar, there is no rationale for departing from the use of "facility" when referring to buildings on a single parcel of land. A change from "facility" to "site" would not affect the dispersion of accessible dwelling units.

13.2.2 New Construction: Dispersion

This provision requires that accessible dwelling units be dispersed throughout a facility so as to provide people with disabilities the housing choices comparable to and integrated with those available to other members of the public. The provision also requires certain factors to be considered when dispersing accessible units. These factors include: vertical dispersion in buildings where elevators are provided; unit size; rental or sale price; amenities provided within dwelling units; and the availability and proximity of amenities serving dwelling units. In addition, when units of different size in terms of number of bedrooms are provided, at least one of each such unit must be accessible. This provision may necessitate that the minimum number of units required to be accessible by 13.2.1(1) be exceeded. Additionally, if the minimum number has not been met, units shall be dispersed throughout the facility according to the number of bedrooms provided to the maximum extent feasible.

Comment. The NPRM asked whether there were overriding factors which are more significant than a dispersed location for certain types of facilities. Commenters were also asked whether accessible units should be located close to entrances, amenities such as parking, or common use areas. Most commenters supported the dispersion provisions included in this section. They expressed a number of preferences for the location of accessible units including: proximity to parking, recreation, and laundry facilities; more secure areas; and more remote and secluded areas. A few commenters noted that clustering accessible units in large facilities with centrally located amenities may be preferable to dispersing them in a manner that would not necessarily provide greater geographic separation between units but would result in great travel distances to those amenities for some occupants.

Some commenters were concerned that dispersion according to unit configuration would force construction of accessible multi-story dwelling units where multi-story units such as

townhouses are provided. Similarly, others were concerned that a requirement for dispersion according to configuration would be interpreted strictly and that accessible units would be required to have exactly the same footprint as inaccessible units.

Response. The proposed requirement that units be dispersed according to configuration has been deleted. Multi-story dwelling unit construction is not uncommon and dispersion according to unit configuration could limit viable design solutions such as constructing one "flat" unit between two multi-story units. Provided that the single-story unit includes the same elements and spaces as the multi-story unit, it is an acceptable design. In light of commenters' diverse preferences, especially concerning the location of accessible dwelling units, the guidelines generally do not limit or restrict the method used to achieve dispersion except that vertical dispersion must be considered in elevator buildings.

13.2.3 Alterations: Minimum Number and Dispersion

ADAAG 13.2.3(1) provides that the minimum number of dwelling units required to be accessible be based on the requirements of 13.2.1 in relation to the total number of units being altered. This requirement remains in effect and applies to each subsequent alteration until such time as the total number of accessible dwelling units required by ADAAG 13.2.1 for the entire facility is achieved. An appendix note illustrates this requirement. ADAAG 13.2.3(2) takes into account that existing conditions or the scope of the alteration may limit full dispersion of accessible units throughout the facility. This provision only requires altered units that are made accessible to be dispersed to the maximum extent feasible in accordance with ADAAG 13.2.2. An appendix note clarifies that merely replacing an oven is not generally considered an alteration, unless the oven in an accessible apartment is replaced. In that case, the oven must meet the requirements of ADAAG 13.3.4(7) (Ovens).

Comment. Few comments were received for this section. Most of the commenters were concerned with the application of these guidelines to renovation of older existing single-family dwellings. The State of New York Office of Mental Retardation and Developmental Disabilities noted that accessible features "result in an 'institutional looking' home". They were concerned that such homes would not serve the goal of community integration of people with developmental disabilities. Further, some commenters expressed concern that the cost of complying with these guidelines would limit the selection of homes purchased for renovation. A commenter requested assurance that the provisions of ADAAG 4.1.7 are applicable to renovations of historic properties such as a governor's residence.

Response. References in this provision to proposed ADAAG 13.5 (Dwelling Units Accessible to Persons with Vision Impairments) have been removed because that reserved section has been deleted. As regards aesthetics, application of these guidelines does not necessarily result in institutional looking facilities. Architects and designers have demonstrated the ability to incorporate accessible features in a manner that reflects the overall style of the neighboring community. A number of factors must be considered in the selection of homes purchased for renovation. Although certain styles of existing dwellings lend themselves more readily to renovations for accessibility, ADAAG contains no requirement that these be selected. In fact, ADAAG 4.1.6(1)(j) contains an exception from full compliance with these guidelines if alteration work is technically infeasible. Additionally, the Department of Justice regulations implementing title II of the ADA require that alterations to each facility covered under title II be made in a manner that the facility is readily accessible to and usable by individuals with disabilities, to the maximum extent feasible. See 28 CFR 35.151(b). Renovation of historic properties is covered in ADAAG 4.1.7.

13.3 Requirements for Accessible Dwelling Units

13.3.1 General

13.3.2 Minimum Requirements

This section provides that dwelling units required to be accessible by ADAAG 13.2.1(1) shall comply with ADAAG 13.3.

13.3.2(1) Ancillary Areas

This provision applies the requirements of ADAAG 4.1 through 4.35 to those spaces and facilities serving accessible dwelling units which comply with 13.2.1(1). These include entry walks, trash disposal facilities, storage areas, and mail boxes. Few comments were received on this provision. However, a change has been made to clarify that these requirements apply only to fully accessible dwelling units and not to those accessible only to persons with hearing impairments.

13.3.2(2) Maneuvering Space

This provision requires both wheelchair turning space complying with ADAAG 4.2.3 and ground and floor spaces complying with ADAAG 4.5 in accessible spaces. Few comments were received on this provision and no changes have been made.

13.3.2(3) Accessible Route

This provision requires an accessible route complying with ADAAG 4.3 to connect all accessible spaces and elements within accessible dwelling units. The provision emphasizes that an elevator is not required within multi-level dwelling units as long as required accessible elements are provided on an accessible level. Few comments were received on this provision and no changes have been made.

13.3.2(4) Parking

This provision provides the minimum requirements for accessible parking spaces regardless of whether they are connected to dwelling units or provided in a lot or other facility. The provision requires one accessible parking space complying with ADAAG 4.6, or the universal parking space design, for each accessible dwelling unit if resident parking is provided. If more than one parking space is provided for each dwelling unit, accessible parking spaces must be distributed among all types of parking spaces. An exception provides that where parking spaces are assigned to specific dwelling units, the parking sign identifying the accessible space is not required to be provided until the dwelling unit is occupied by a resident with a disability. The provision further provides that two percent of the total parking provided on a site in excess of one parking space per dwelling unit shall be accessible.

Comment. The NPRM asked whether the guidelines should include a requirement for accessible van parking and a requirement that every accessible parking space in tenant lots be van accessible. Most commenters supported a requirement for tenant parking spaces to be one hundred percent accessible to tenants driving vans. A few suggested a lower percentage. The Minnesota Council on Disability recommended providing van parking for every dwelling unit having a roll-in shower. Others, including the National Parking Association, suggested that an adjacent parking space might be used as an access aisle for a van if needed by a tenant. The National Conference of States on Building Codes and Standards and a few other commenters supported

the existing scoping for van parking at ADAAG 4.1.2(5)(b).

Response. Although the need for tenant van parking could be greater than the need for van parking for other occupancies covered by ADAAG 4.1.2(5)(b), commenters did not provide a rationale for a scoping provision exceeding that already in ADAAG. Although some commenters felt the costs were minimal, little cost information was provided. For this reason, the scoping for van spaces in ADAAG 4.1.2(5)(b) has been included for residential facilities.

Comment. The NPRM asked whether it should specify the universal parking space design or the van accessible type for tenant parking. Responses were divided among the two options. Very little cost data or other information was provided for the choices selected. The Illinois Department of Rehabilitation Services reported that accessible parking spaces in Illinois are required to be sixteen feet wide and that access aisles are not shared.

Response. ADAAG permits a designer to elect to provide a combination of accessible car and van spaces or universal design parking spaces. As commenters were so divided regarding design choices, and because some States and localities have established code requirements consistent with existing ADAAG, the guidelines do not limit the options, but have retained the flexibility of choosing which design option is preferred.

Comment. One commenter was concerned that signs identifying accessible parking spaces would expose tenants to greater risk of crime. The commenter noted that signs which identify spaces by apartment or other identification number would serve the same purpose as those which identify accessible reserved spaces since they both restrict parking by unauthorized people.

Response. It is possible that signs designating spaces as reserved for particular units are as effective as those signs which indicate that spaces are reserved for accessible parking only. However, many States and localities strictly enforce violations of properly designated accessible spaces and law enforcement personnel may find it more difficult to control misuse of spaces merely reserved for tenants. Regarding concerns that parking signs will increase the potential for crime, accessible spaces are configured differently from inaccessible spaces and there already is an indication that the space serves an accessible dwelling unit. For these reasons, signs are required.

Comment. The NPRM proposed that where parking is provided for visitors, two percent of the spaces, but not less than one, must be accessible. Very few comments were received regarding this provision. However, the National Conference of States on Building Codes and Standards and the New Mexico Governor's Committee on Concerns of the Handicapped recommended clarifying the provision so that two percent of all parking on a site in excess of one parking space per dwelling unit be accessible.

Response. This provision is modified by dropping the term "visitor" parking and including a provision requiring two percent of parking in excess of one parking space per dwelling unit to be accessible.

13.3.2(5) Elevators

This provision requires that, if provided, elevators shall comply with ADAAG 4.10. In addition, there are exceptions allowing the installation of an accessible private residence elevator or a platform lift complying with ADAAG 4.11 to connect levels within an individual dwelling unit.

Comment. Commenters generally supported requiring elevators in public spaces to comply with ADAAG 4.10. However, with regard to a means of accessing different levels within a dwelling unit, a number of commenters noted that they find platform lifts undesirable. Most objected to their use in new construction. The California Department of Rehabilitation noted that lifts should not be allowed in new construction and that there are other alternatives such as elevators and ramps. In addition, EPVA objected to viewing platform lifts used in lieu of an elevator complying with ADAAG 4.10 as "equivalent facilitation." They noted, however that ". . . economic and space constraints suggest equivalent facilitation can be provided within individual dwelling units by private residence elevators * * *" No commenters suggested that an elevator complying with ADAAG 4.10 should be required within a single dwelling unit.

Response. The use of platform lifts in dwelling units is consistent with the limited circumstances in which they may be used in other types of facilities addressed in ADAAG 4.1.3(5) EXCEPTION 4. However, accessible private residence elevators are also a viable design alternative for dwelling units. Application of each of the exceptions must be considered carefully during the design of the dwelling unit. For example, inclined platform lifts may not reduce the width of an exit stair and their use may greatly increase the space consumed by a stair complying with State and local codes. Alternatively, private residence elevators may require less square footage. Generally, the initial costs of platform lifts are lower than those of accessible private residence elevators. Finally, applicable State and local codes should be considered when selecting a means of vertical access.

With regard to commenters' concerns regarding the equivalent facilitation provision in the NPRM, ADAAG 2.2 does not invite elements to be used in lieu of other required elements unless they provide equal or greater access. For this reason, the provision allowing platform lifts has been revised and is included as an exception. The new text permitting accessible private residence elevators is also an exception to this provision because elevators complying with ADAAG 4.10 are designed for public, not residential, use.

13.3.2(6) Doors

This provision requires doors provided for passage in and to accessible spaces to comply with ADAAG 4.13. In addition, where peepholes are provided in other dwelling units, entry doors to dwelling units are required to have a peephole for use by a seated person.

Although comments were received regarding bathroom door swing, few comments were received on this provision. A commenter noted that persons with hearing impairments would benefit from a peephole for security purposes. This requirement has been added. Doors in bathrooms are addressed at ADAAG 13.3.3(1).

13.3.2(7) Entrances

This provision requires at least one principal entrance to the dwelling unit to comply with ADAAG 4.14. Where provided, additional entrances should also be accessible.

Comment. There were few comments on this provision. Of the comments received, the majority supported requiring all of the entrances to be accessible. An architect noted that the guidelines should specify that the accessible entrance be the "primary" entrance to the dwelling unit. Independent Housing Services of San Francisco, California supported requiring all entrances to be accessible, unless technically infeasible. One commenter indicated that a dwelling unit with only one means of egress is a fire hazard.

Response. Entrances to dwelling units usually serve as means of egress. An appendix note at A13.3.2 indicates that a second means of egress from a dwelling unit is recommended for

emergency evacuation purposes. In addition, language has been added to this provision indicating that additional entrances, where provided, should be accessible. This does not require these additional entrances to be accessible, but rather urges designers to consider both the safety and convenience of residents.

A requirement that all entrances be accessible may be extremely costly. For example, the designer of a single-family dwelling unit may wish to access a basement from the exterior by a flight of stairs. In this example, the designer might have to forego an exterior entrance to the basement. A multifamily dwelling unit may have a secondary entrance or exit from the kitchen. If this secondary entrance is required to be accessible, a latch side clearance of eighteen inches is required adjacent to a door with a 32 inch clear width. In this example, a galley kitchen might have to be significantly wider than planned due to the added requirement for latch side clearance. As for technical infeasibility, this term applies only to alterations, not new construction. Technical infeasibility is very narrowly applied to existing structural or site constraints.

13.3.2(8) Storage

This provision requires that at least one of each type of fixed or built-in storage facility in accessible spaces in dwelling units, including cabinets, shelves, closets, and drawers comply with ADAAG 4.25. No comments were received on this provision and no changes have been made. Comments regarding kitchen storage are addressed at ADAAG 13.3.4(10).

13.3.2(9) Controls

This provision requires that controls in accessible spaces and controls requiring regular or periodic maintenance or adjustments by residents and electric circuit breaker panels comply with ADAAG 4.27. This provision clarifies that controls may be inaccessible as long as accessible redundant controls are provided in close proximity. An exception to this provision provides that controls such as those on air distribution registers that are placed on or close to ceilings or floors are not required to be accessible.

Comment. EPVA recommended that the guidelines permit inaccessible redundant controls such as switches for range hoods. They noted that certain building codes require range hood switches to be built into the unit face. In addition, they suggested that the guidelines specify that circuit breaker panels are "controls" as defined by this provision.

Response. Redundant controls are permitted so that certain building codes are not violated by these guidelines. Additionally, electric circuit breaker panels are controls that must be accessible. The interim final guidelines have been amended to reflect these changes.

13.3.2(10) Alarms

This provision requires that where emergency warning systems are provided, they must include both audible alarms complying with ADAAG 4.28.2 and visible alarms complying with ADAAG 4.28.3.

Comment. The NPRM proposed to require auxiliary visible alarms complying with ADAAG 4.28.4. The National Center for Law and Deafness urged consideration of the fact that single station alarms, including smoke detectors, generally are provided in residential dwelling units. They suggested that the provisions of ADAAG 4.28.3 which address both single station alarms and building-wide systems are more appropriate for this section. They noted that the term "auxiliary visible alarm" implies that the alarm appliance is used in conjunction with or to supplement a building's alarm system.

Response. Auxiliary visible alarms are used more appropriately to supplement another alarm system. They have particular characteristics that make them desirable in sleeping rooms in transient lodging facilities where the room occupant is presumed to be asleep during much of the time the room is occupied. This, however, is not the case in residential dwelling units where persons are awake much of the time. For this reason, the section is revised to reference ADAAG 4.28.3 (Visible Alarms). In addition, reference to single station alarms has been removed from this provision because ADAAG 4.28.3 covers both building-wide alarm systems and single station alarms which are not integrated into a building's alarm system. There appears to be some confusion regarding the difference between an emergency warning system and a building-wide alarm. Both a building-wide alarm system and an individual single station alarm are considered emergency warning systems and providing either would require compliance with this provision.

13.3.2(11) Bathrooms

This provision requires at least one full bathroom to comply with ADAAG 13.3.3. It defines a full bathroom as having, at a minimum, a water closet, a lavatory, and a bathtub, a shower, or a combination tub and shower.

Comment. A number of national, State and local organizations representing persons with disabilities indicated that all full bathrooms on accessible floors should be accessible. One commenter noted that two people using wheelchairs might share one dwelling unit which has two bathrooms.

Response. Providing only one accessible full bathroom where more than one bathroom is provided inconveniences some families. However, where the Fair Housing Accessibility Guidelines are applicable, blocking is required in the walls to support grab bars and doors are required to provide sufficient clearance for entry into those additional bathrooms that are not covered by this provision.

13.3.2(12) Kitchens

This provision requires kitchens to comply with ADAAG 13.3.4. No comments were received on this provision and no changes have been made. Comments regarding technical provisions for kitchens are discussed at ADAAG 13.3.4.

13.3.2(13) Living Spaces

This provision requires the following spaces to be accessible and to be on an accessible route: living areas; dining areas; sleeping areas; and, if provided, patios, terraces, balconies, decks, carports, and garages. With respect to sleeping areas in a dwelling unit with one bedroom, that bedroom must be accessible. In dwelling units with more than one bedroom, at least two bedrooms must be accessible. An exception allows for a higher threshold at doors on patios, decks, terraces, or balconies when it is necessary to protect the integrity of the unit from wind or water damage if equivalent facilitation is provided.

Comment. Some commenters requested that all living spaces on accessible floors be required to be on an accessible route. Other commenters requested that all bedrooms be required to be on an accessible route. Commenters reasoned that persons with disabilities should have full use and enjoyment of their dwelling units. Commenters cited the example that parents with disabilities would need to access children's bedrooms for a variety of reasons.

Response. With respect to new construction of certain multifamily housing, ADAAG overlaps the requirements of the Fair Housing Accessibility Guidelines. Those guidelines address requirements for an accessible route into and through the

covered dwelling unit. See 24 CFR 100.205. Elements and spaces which are addressed in ADAAG meet or exceed the requirements of the Fair Housing Accessibility Guidelines. Accessible living spaces should be designed to provide the required clearances when the dwelling unit is furnished. For example, the required accessible route in a master bedroom should not be obstructed by a full size bed. In addition, the design of the unit will, to a great degree, dictate furniture placement. If no wall space accommodates a sofa or couch in a living room due to the placement of doors then the furniture may, of necessity, obstruct maneuvering clearances.

Comment. A number of commenters representing persons with disabilities, including DREDF, objected to the exception for patios, decks, terraces, or balconies. Independent Housing Services of San Francisco, California urged that these guidelines not allow an exception which gives people with disabilities less access than others to the open air portion of dwelling units.

Response. The exception did not intend that access would not be provided. It did, however, intend to permit higher thresholds where equivalent facilitation using ramps, raised decking, or other means is provided. This provision is based on ADAAG 9.2.2(6)(d) and the exception has not been changed.

Comment. The proposed rule included carports and garages along with patios, decks, terraces, and balconies in the list of spaces which were required to be accessible. The exception for level changes however, did not include carports and garages which are on an accessible level and which serve the dwelling unit. A few commenters felt that this needed clarification.

Response. Carports and garages are listed separately to clarify that the exception for level changes does not apply to all these spaces. Carports and garages serving accessible dwelling units as well as their routes or connections to the dwelling unit must be accessible.

13.3.2(14) Laundry Facilities

This provision requires laundry facilities to be accessible in compliance with ADAAG 13.3.5. Few comments were received on this provision and no changes have been made.

13.3.3 Bathrooms

This section establishes minimum requirements for accessible bathrooms within dwelling units.

13.3.3(1) Doors

This provision requires that bathroom doors comply with ADAAG 4.13. The door swing may overlap required clear floor space for fixtures provided that maneuvering clearance is beyond the arc of the door swing.

Comment. The NPRM proposed a provision based on ADAAG 4.22.2 that would prohibit the door swing from intruding on clear floor space required for any fixture. A number of commenters opposed this requirement based on the rationale that bathrooms in dwelling units are for individual use. They reasoned that the additional space required to accommodate a door swing outside of the clear floor space could be as much as twelve square feet. Several commenters noted that the ANSI A117.1–1992 standard for Accessible and Usable Buildings allows the door to swing into the clear floor space in single user toilet rooms provided that maneuvering clearance is provided beyond the arc of the door swing. One commenter believed that in order to reduce costs, a person using a wheelchair or other mobility device should back out of a residential bathroom.

Response. The Board agrees that fixtures in residential bathrooms are still usable if doors are permitted to swing into the required clear floor space. However, residents with disabilities should not be required to back out of their bathrooms. This would require that they must use the facility with the door open. Permitting this design alternative would constitute an intrusion into the privacy of individuals with disabilities. In order to facilitate a turn within the bathroom, and to accommodate commenters' concerns, the original language in the NPRM prohibiting doors from swinging into required clear floor space has been revised. The new language is consistent with ANSI A117.1–1992 section 4.16.2 in that the arc of the door swing may overlap required clear floor space at fixtures as long as it does not intrude into required maneuvering clearance within the room. This change allows greater flexibility in the layout of a residential bathroom and does not greatly compromise its usability.

13.3.3(2) Water Closets

This provision requires water closets to be accessible in compliance with ADAAG 4.16 and allows a water closet height range of 15 to 19 inches measured to the top of the seat. ADAAG 4.16 includes requirements for a grab bar 36 inches in length behind the water closet and a grab bar 42 inches in length beside the water closet and contains requirements for toilet paper dispensers and requirements for flush controls.

Comment. Several commenters raised concerns over the provision allowing the height of toilet seats to range from 15 to 19 inches. Some commenters supported the use of lower water closets noting they have difficulty using higher water closets and others felt they would find lower water closets less accessible.

Response. Because there was no clear consensus among commenters for a specific height, no changes were made to this provision.

13.3.3(3) Lavatories and Mirrors

This provision requires lavatories and mirrors to be accessible in compliance with ADAAG 4.19. If medicine cabinets are provided, at least one must have a usable shelf no higher than 44 inches and provide clear floor space complying with ADAAG 4.2.4.

Comment. A few commenters suggested that removable base cabinets should be permitted under lavatories.

Response. These guidelines provide requirements for accessible dwelling units. Adaptability, which permits removable base cabinets, is provided in all units covered by the Fair Housing Accessibility Guidelines.

13.3.3(4) Bathtubs

This provision requires that bathtubs, where provided, comply with ADAAG 4.20. Few comments were received regarding this provision and no changes were made.

13.3.3(5) Showers

This provision requires that showers, if provided, comply with ADAAG 4.21.

Comment. A few commenters noted that the California State building code uses different dimensions for accessible showers. Several commenters were particularly concerned that 30 by 60 inch roll-in showers were too shallow to properly contain water. No comments were received regarding the relative usability of roll-in showers complying with ADAAG versus other designs such as those complying with California's requirements.

Response. The 30 by 60 inch dimensions of roll-in showers are a minimum dimension. Nothing prohibits a designer from making a deeper shower. Furthermore, ADAAG 2.2 allows equivalent facilitation where alternative designs provide substantially equivalent or greater access to and usability of an element of a facility. No changes were made to this provision.

Comment. One commenter recommended that bathtubs and

showers have a means of preventing scalding from hot water surges.

Response. Such devices may be beneficial to all residents. However, there is no reason to believe that these devices are more desirable in an accessible dwelling unit than in other units.

13.3.3(6) Bathtub and Shower Enclosures

This provision provides that enclosures for bathtubs or shower stalls do not obstruct controls or the transfer from wheelchairs onto shower or bathtub seats. In addition, it provides that enclosures on bathtubs shall not have tracks mounted on the tub's rims.

Comment. One comment was received that recommended minor rewording of the provision for clarity.

Response. The provision has been amended to clearly indicate that tracks shall not be mounted on the tub's rims. No substantive changes have been made to this provision.

13.3.3(7) Fixtures and Controls

This provision notes that the clear floor space at fixtures and controls and the accessible route may overlap. The provision also reiterates that those fixtures and controls required in accessible bathrooms must be on an accessible route.

Comment. One commenter objected to the provision's redundancy with respect to the required accessible route.

Response. With respect to redundancy, experience has shown that accessible route requirements frequently are overlooked. Therefore, this provision has been retained as proposed.

13.3.3(8) Maneuvering Space

This provision requires a turning space complying with ADAAG 4.2.3 which requires that accessible spaces have a maneuvering space complying with ADAAG 4.2.3. Under ADAAG 4.2.3 either a sixty inch diameter turning space or a T-shaped space is allowed. See ADAAG Figure 3.

Comment. Few comments were received on this provision. However, as noted at ADAAG 13.3.3(1), a small minority of commenters felt that the maneuvering space could be eliminated.

Response. The guidelines address the issue of unobstructed maneuvering clearance within a bathroom at ADAAG 13.3.3(1). Maneuvering space is a prerequisite for access within and use of any space.

13.3.4 Kitchens

This section contains requirements for accessible kitchens, which are required to be located on an accessible route. Accessible kitchens and their components shall be designed to allow for the operation of cabinet and/or appliance doors. This section has been clarified to cover kitchens that are located within accessible dwelling units as well as those that serve accessible dwelling units.

13.3.4(1) Maneuvering Clearance

This provision specifies clearances between all opposing base cabinets, counter tops, appliances, or walls depending on the kitchen layout.

Comment. Several commenters noted that the minimum 40 inch clearance between base cabinets in a galley kitchen is insufficient for maneuvering if the clear width of at least one work surface is less than 36 inches. They pointed out that ADAAG 4.2.3 requires a minimum 36 inches in each portion of a T-shaped space to facilitate maneuvering. Other commenters noted that the State of California requires a minimum 48 inches between base cabinets.

Response. Commenters' concerns regarding the width of the adjoining portion of a T-shaped maneuvering space are addressed at ADAAG 13.3.4(4). This provision does not increase the 40 inch dimension between base cabinets since doing so would then exceed the requirements of ADAAG 4.2.3 with respect to that portion of a T-shaped turn.

Comment. A few commenters asked for clarification regarding the definition of a U-shaped kitchen.

Response. Language has been added to clarify that a U-shaped kitchen is a closed end space having fixtures, storage or other usable elements on three sides. A kitchen that is open at both ends, or, closed at one end which has no fixtures, storage, or other usable elements at the closed end is not a U-shaped kitchen. In a U-shaped kitchen, a person will need a 60 inch clear floor space for maneuvering between elements located on three sides of a kitchen, while a T-turn should provide sufficient maneuvering space if elements are only located on two sides.

13.3.4(2) Clear Floor Space

This provision requires clear floor space that allows either a forward or a parallel approach at fixtures and appliances in the kitchen, including, but not limited to, the range or cooktop, oven, refrigerator/freezer, dishwasher, and trash compactor. The provision also requires that sinks shall have a forward approach. The provision also requires that laundry equipment located in the kitchen comply with ADAAG 13.3.5.

Comment. Very few comments were received on this provision, however, an architect noted that some of the dimensions are redundant. The commenter felt that dimensions should not be repeated unless they are "an exception to the referenced standard." Also, it was noted that sinks should be required to have a forward approach. In addition, the commenter noted that the requirement for maneuvering space in compliance with ADAAG 4.2.3 duplicates requirements already stated in ADAAG 13.3.2(2). The commenter recommended that redundant provisions be deleted.

Response. Some redundancy is necessary as it is not uncommon for requirements for maneuvering space to be overlooked. However, repeating the dimensions along with the referenced section is unnecessary and the provision has been changed accordingly. Further, language has been added to clarify that accessible sinks must have a forward approach.

Comment. An architect requested that the guidelines clarify that the provision also applies to kitchen fixtures. In addition, the commenter recommended adding a number of fixtures to the list with an indication that the list of fixtures and appliances is not exhaustive.

Response. The guidelines have been revised to add "fixtures" to the requirement and indicate that the list is not exhaustive. Counter work surfaces and sinks have not been added to the list because both require knee clearance for a front approach. This provision allows either a front or parallel approach. Adding kitchen sink or work surfaces to this provision might be interpreted to mean that knee clearance is not required at sinks or work surfaces. See ADAAG 13.3.4(4) and ADAAG 13.3.4(5).

13.3.4(3) Controls

This provision requires that all controls in kitchens comply with ADAAG 4.27. No comments were received on this provision and no changes have been made.

13.3.4(4) Counters

This provision requires at least one 36 inch section of a counter for an accessible work surface. The provision allows the accessible work surface to be either adjustable within a range from 28 to 36 inches or mounted at a fixed height not exceeding 34 inches. It also requires that the counter thickness and supporting structure be two inches maximum over the required knee clearance. Clear floor space at the accessible work surface allowing for a

forward approach is required. This provision limits the amount of clear floor space that may be provided under the work surface to 19 inches, and specifies that knee space must be 30 inches wide and 19 inches deep.

Comment. The NPRM proposed to require a work surface 30 inches long. As noted in ADAAG 13.3.4(1), a number of commenters pointed out the inconsistency of requiring a T-shaped maneuvering clearance in a kitchen when the clearance under the work surface is less than 36 inches. Further, an architect pointed out that ADAAG 7.2(1) requires a 36 inch wide counter for "incidental use" and only 30 inches for spaces that affect a "person's ability to be self-sufficient."

Response. The Paralyzed Veterans of America conducted informal research which may suggest that a T-turn is possible if corridors are wider than 36 inches to compensate for doorways which are slightly narrower than 32 inches clear. However, further study is necessary before changes are made in this area. Although the work surface is not required to be part of a T-shaped turn, it seems probable that it will serve that purpose. Because a T-shaped turn is required by ADAAG 13.3.2(2) in accessible spaces, the required kitchen work surface should be a minimum 36 inches in width. In addition, no other usable surface required in ADAAG, including those for incidental use, is only 30 inches in width. It is likely that food preparation will require some room for elbows in order to have adequate room to perform standard kitchen operations. A change has been made to require a 36 inch work surface.

13.3.4(5) Sinks

This provision requires that the sink and surrounding counter comply with ADAAG 4.24. This provision allows for the sink to be capable of being adjusted to alternative heights.

Comment. A few commenters suggested that the sink should be required to be adjustable and not fixed. They reasoned that individuals vary greatly in their seating, height, and reach ranges. One commenter noted that the proposed guidelines, in specifying adjustable mounting heights, had left out an option for 30 inches.

Response. The original proposal has been changed to specify that the sink, if adjustable, must be adjustable at two inch increments from 28 to 36 inches. The Board recognizes that sinks that are adjustable are preferred over those that are fixed by many people with disabilities. However, very little information was received regarding this option. The Board is reluctant to depart from UFAS 4.34.6.5(1) in the absence of more detailed information, including costs and availability.

Comment. EPVA and a few other commenters suggested that removable base cabinets should be permitted under sinks to increase storage and for aesthetics. They further suggested that "the Department of Justice can require that removal costs be assumed by the government landlord, not the tenant."

Response. ADAAG 13 requires fully accessible dwelling units. Tenants often experience difficulty with elements that require adaptation by the landlord. For this reason, cabinets are not permitted to be constructed under sinks.

13.3.4(6) Cooktops

This provision requires that cooktops have accessible controls which do not require reaching across burners. Cooktops with knee space underneath must be insulated or otherwise protected on the exposed contact surface to prevent burns, electrical shock, and abrasion.

Comment. Few comments were received on this provision. However, one commenter did recommend that the cross-references to ADAAG 13.3.4(2) and 13.3.4(3) be deleted.

Response. This change has been made since the referenced provisions are in the same section.

13.3.4(7) Ovens

This provision requires ovens to be of the self-cleaning type or to be located adjacent to an adjustable height counter with knee space below. For side opening ovens, the door latch side is required to be configured so that the oven interior is accessible to the counter space. This provision requires a pull-out shelf under a side opening oven extending the full width of the oven which can be pulled out not less than 10 inches. Ovens are also required to have controls on front panels or on either side of the door.

Comment. The Greater Burlington Disability Council of Winooski, Vermont noted that the accident history of two Vermont public housing authorities suggested that both floor ovens and wall ovens have serious drawbacks with respect to accessibility. They, and other commenters, characterized both as unsafe. One commenter suggested that wall ovens with knee space under them are particularly hazardous because of risks of being burned by hot items falling in the lap. A commenter suggested that a combination convection/microwave oven was safer and more accessible.

Response. Ovens are difficult for many people to use. However, no safety data has been provided on which to base a requirement for an alternative appliance. Knee space under wall ovens does not enhance their accessibility and invites accidents and therefore, the guidelines provide that wall-ovens shall not have knee space under them.

Comment. One commenter noted that controls on the top of a wall oven may be within reach range, but may not be visible.

Response. There appear to be no reasonable alternatives. Manufacturers offer very limited options for ovens with side controls and the guidelines cannot limit design alternatives so severely at this time. The Board acknowledges that the relationship between reach range and line of sight is a pertinent area of study that may bear on many other ADAAG provisions. For example, the ANSI A117.1 Task Force on Automated Teller Machines is currently studying this issue.

13.3.4(8) Refrigerators and Freezers

This provision requires that refrigerators and freezers be either the side-by-side type or the over and under type, with 50 percent of the freezer within 54 inches. Where 100 percent of the freezer is not within the reach ranges specified in ADAAG 4.2.5 and 4.2.6, it must be a self-defrosting type of mechanism.

Comment. One commenter took the position that side by side refrigerator-freezers were the only truly accessible units. Another commenter felt that side by side units restricted accessibility. In addition, a commenter questioned why bottom-mount freezers were not permitted.

Response. Because very few comments were received regarding this provision, and because only two commenters expressed a preference for a certain style of refrigerator and freezer unit, the guidelines have not restricted choices regarding the type of unit. Proposed ADAAG 13.3.4(8)(b)(ii) which required 100 percent of the refrigerator to be no higher than 54 inches has been deleted to allow greater flexibility. Consequently, refrigerators, especially those with bottom mounted freezers, may have some portion of the refrigerator outside of the reach ranges specified in ADAAG 4.2.5 and 4.2.6. However, a new provision has been added to clarify that controls for refrigerator and freezer compartments must be accessible as required by ADAAG 13.3.4(3).

13.3.4(9) Dishwashers

This provision requires that dishwashers be front loading machines.

Comment. One commenter noted that references to ADAAG 13.3.4(2) and 13.3.4(3) should be removed as they are redundant.

Response. These references have been removed.

13.3.4(10) Kitchen Storage

This provision requires that kitchen storage cabinets, drawers and shelf areas comply with ADAAG 4.25. At least one shelf in all cabinets and storage shelves mounted above work counters must have a maximum height of 48 inches. Additionally, door pulls and handles are required to be mounted at the top of a base cabinet and at the bottom of a cabinet over a counter.

Comment. One commenter understood the reference to ADAAG 4.25 to require all wall cabinets to be mounted with the top shelf no higher than 54 inches.

Response. Reference to ADAAG 4.25 has been removed from this provision for clarity. At least one shelf of each wall cabinet above counters must be mounted at a maximum height of 48 inches. Other shelves in the cabinet may exceed this limit. Other applicable requirements contained in ADAAG 4.25 are duplicated in ADAAG 13.3.4(2) and 13.3.4(3).

Comment. The NPRM noted that the Board was considering requiring that a portion of the kitchen storage cabinets be provided with pull-out shelving and requested comment on this subject. Responses varied widely. Most individuals with disabilities and organizations representing them favored a requirement; a few offered alternatives such as shallow pantries and lazy susan devices. On the other hand, State and local government housing providers felt that costs were too high and several commenters noted that maintenance, not installation costs, were of great concern. Some commenters felt features such as pull-out shelving or lazy susans should be the responsibility of the tenant. The American Society of Interior Designers noted that supplying all base cabinets with pull-out shelving could add as much as one thousand dollars to the cost of a kitchen. However, they added that floor space could be used more efficiently and perhaps fewer shelves would have to be accessible. One commenter suggested that pull-out shelving in wall cabinets could cause injuries from falling objects.

Response. Because so many commenters had reservations about a requirement for pull-out shelving, no provision has been added. This, however, is considered a viable option for providing greater accessibility to kitchen storage.

13.3.5 Laundry Facilities

This section contains requirements for accessible laundry facilities. This provision requires laundry facilities and equipment within or serving accessible dwelling units to be on an accessible route. A minimum of one washing machine and clothes dryer provided in each common use laundry room serving one or more accessible dwelling units is to be front loading. The provision also requires that laundry equipment controls comply with ADAAG 4.27. Few comments were received on this section and no changes have been made.

13.4 Requirements for Dwelling Units Accessible to Persons With Hearing Impairments

This section provides that dwelling units required to be accessible by ADAAG 13.2(1) and 13.2(2) comply with ADAAG 13.4. Dwelling units that are required to be fully accessible, as well as those required to be accessible to persons with hearing impairments, must comply with this section. This section provides that alarms comply with ADAAG 13.3.2(10) which requires that emergency warning systems include both audible alarms complying with ADAAG 4.28.2 and visible alarms complying with ADAAG 4.28.3. An equivalent facilitation provision permits the installation of appropriate electrical outlets or connections so that visible alarms can be provided by the operator of the facility when they are needed by a tenant. An appendix note has been added which provides some alternative methods of alerting residents of emergencies. Such alternative methods may be required by the Department of Justice title II regulation implementing title II of the ADA and by HUD's regulation implementing section 504 of the Rehabilitation Act of 1973. This section also requires permanently installed visible notification devices serving all living, sleeping, dining, kitchen and bathrooms. Notification devices must include visible signals to alert occupants of incoming telephone calls or door knocks or bells. Such devices must have controls for deactivation in sleeping rooms and may not be connected to visible alarms. An equivalent facilitation provision permits telephone and other wiring to be installed at the time of construction to accommodate portable notification devices which are provided by the operator of the facility when needed by a tenant with a hearing impairment. Further, this section requires that permanently installed telephones be hearing aid compatible, have volume controls, and be equipped with a TTY.

Comment. In the NPRM, visible alarms were required to comply with ADAAG 4.28.4 (Auxiliary Alarms) regardless of the type of emergency warning system provided. The National Center for Law and Deafness recommended referencing ADAAG 4.28.3 (Visible Alarms) because either single station alarms, including smoke detectors, or building-wide alarms may be provided in a residential dwelling unit. A few commenters were concerned that single station alarms or smoke detectors would be required to be connected to a facility's central alarm. They stated that there would be a conflict in the technical provisions if no such central alarm system existed and further were concerned that single station alarms would be provided to persons with hearing impairments when a building wide alarm was provided to other residents of the facility. In the NPRM, equivalent facilitation provisions were combined at proposed ADAAG 13.4(2) for all elements required in dwelling units accessible to persons with hearing impairments. Commenters urged that provisions for equivalent facilitation be clarified so that single station visible alarms are provided when single station audible alarms are provided. Further, commenters suggested that the requirement was not clear as to what must be provided at the time of construction and what may be provided as equivalent facilitation. Finally, commenters questioned why permanently installed telephones were not required to be hearing aid compatible or to be equipped with a TTY but are required to have a volume control.

Response. The provisions for visible alarms have been revised to reference ADAAG 13.3.2(10). For a more detailed discussion see ADAAG 13.3.2(10). Provisions for equivalent facilitation have been clarified and relocated to follow applicable requirements. Visible alarm and notification devices may be supplied by the operator of the facility during the tenancy of a person with a hearing impairment provided that appropriate outlets, connections and wiring are installed at the time of construction. A clarification has been added so that electrical outlets for single station visible alarms must be provided when single station audible alarms are provided; and connections to the facility's central alarm system must be provided to accommodate visible alarm appliances where a central alarm system is provided. Language has been added to clarify that an electrical outlet would not be sufficient to accommodate a

visible alarm appliance that is part of a building wide alarm system.

Provisions have been added to the requirement for notification devices so that all primary areas of the dwelling unit are adequately served. This does not require a device in each area provided that the signal is visible in the area. Additionally, for the convenience of the occupant a provision has been added requiring controls for deactivating notification devices in sleeping rooms.

With regard to telephones, this provision has been modified to reference ADAAG 4.31.5(1) and 4.31.5(2) which require that permanently installed telephones be both hearing aid compatible and have volume controls. In addition, a requirement that a TTY be provided has been added so as to ensure equal access by persons who are deaf or hard of hearing.

Comment. A commenter urged that the guidelines include a requirement for peepholes in doors to units that accommodate persons with hearing impairments. The commenter reasoned that if a person cannot hear a spoken greeting through the door it is necessary to open the door to determine who may be seeking entry.

Response. A requirement for peepholes which are accessible to standing individuals has been added to this section. The provision is regarded as necessary to ensure a tenant's safety.

13.5 Requirements for Persons With Visual Impairments

Section 13.5 (Requirements for Dwelling Units Accessible to Persons With Visual Impairments) was reserved in the NPRM. This section has been eliminated in the interim final guidelines.

Comment. The NPRM asked what provisions, if any, are necessary for residential housing to accommodate persons who are blind, as well as those with low vision. The NPRM requested supporting data or other information, including building codes, State or local requirements, and cost information. Individuals and organizations representing persons with disabilities were asked to provide recommendations based on their experience or expertise. Commenters proposed requirements that included: color schemes for baseboards, doors, and windows that contrast with the color of walls and floors; standardizing placement rather than color contrasting; controls to be located on the front, top or side of stoves; lighting fixtures which can accommodate 150 watt bulbs, with highly adjustable dimmers for tenants with residual vision; elevators that have Braille and large print, as well as a voice synthesizer to announce floors; tactile signage for car controls and hoistways in white characters on black background; edged stairs and handrails on both sides; signage in areas such as laundry facilities, garbage areas, restrooms, and lounges; a 10 inch allowable height for unlimited protruding objects rather than the 27 inch currently allowed; and air and heat thermostats, security and fire alarms, and visitor indicators and identifiers equipped with talking systems.

Several State and local chapters of the National Federation of the Blind, other organizations, and many individuals took the position that no adaptations are necessary for dwellings inhabited by persons who are blind. These individuals and organizations maintain that issues such as color contrast and controls with tactile markings are largely a matter of individual preference and need, and that guidelines in these areas could very easily interfere with some individuals' needs and accustomed ways of functioning. These groups and individuals feel that establishing guidelines for dwelling units would only serve to separate blind persons from the rest of society.

Response. For each type of residential housing requirement suggested by commenters, varied and numerous means by which to achieve the requirement were proposed. For example, commenters suggested various methods of providing color contrast. Individual preferences and accommodations vary widely and it would therefore be difficult to accommodate all people with vision impairments using one color. Similarly, on the issue of controls with tactile markings, commenters indicated a variety of individual preferences for controls with tactile markings. Based on commenters' responses, no single tactile marking can reasonably accommodate all individuals with vision impairments. The same rationale is applied to types of lighting fixtures where commenters' responses varied widely and no one type of fixture is viewed as accommodating a significant number of persons with vision impairments. A type of lighting that may be helpful for some persons, may be harmful to others. Individuals with vision impairments may have had different training or have different needs, so that any one requirement may exclude as many people as it may serve. For these reasons, the guidelines do not include provisions for this section. Requirements for elevators, stairs, signage and protruding objects are already addressed in ADAAG 4.1.3 and are applicable to residential housing.

14. Public Rights-of-Way

ADAAG 14 adapts provisions for buildings and facilities to new construction and alterations of pedestrian and related facilities in the public right-of-way. This section covers work that involves elements of pedestrian access, circulation, or use and that is undertaken in the public right-of-way whether by intention or as a consequence of other work. A right-of-way is a legal right of passage and is distinguished from a site by its linear nature and connective function.

Provisions of this section apply to public sidewalks, including those on overpasses and bridges and in underpasses and tunnels, and fixed street furnishings, such as benches, drinking fountains, telephones, toilet facilities, bus shelters, and signage, that are located on or along public sidewalks and to public sidewalk curb ramps and street crossings that complete the pedestrian circulation network. ADAAG 14 also contains provisions for on-street parking spaces, parking meters and crossing controls, passenger loading zones on public streets, and callboxes along roadways.

Modifications and specific requirements respond to the unique nature and function of public rights-of-way. For example, natural terrain, constrained width, the number and complexity of services that must be accommodated within and along the public right-of-way, and the demands of adjacent development offer little opportunity for the establishment of accessible routes along public sidewalks. Thus, ADAAG 14 substitutes the concept of a continuous passage to connect public sidewalks, public sidewalk curb ramps, and street crossings into a pedestrian network that serves both adjacent sites and elements intended for pedestrian use on and along the public sidewalk.

The NPRM addressed the overall framework for a pedestrian circulation network, as well as the elements and components of such a network. Almost 300 commenters responded to the proposed requirements and questions with several thousand recommendations regarding public rights-of-way. One third of these commenters represented State and local governments. Over half of the State and local government comments were submitted by transportation, streets and highways, and public works agencies. Other commenters included: State code administrators, the National Conference of States on Building Codes and

Standards, 10 Federal agencies, 70 individuals with disabilities, State and local organizations representing people with disabilities, and national organizations such as the Disability Rights Education and Defense Fund (DREDF). Detailed comments were also received from the Paralyzed Veterans of America (PVA) and the Eastern Paralyzed Veterans Association (EPVA), as well as from national organizations representing individuals who are blind or have vision impairments and organizations expressing the views of individuals who are deaf or have hearing impairments. Additionally, comments were received from architects, civil and transportation engineers, national trade and professional groups, and manufacturers of products and materials.

Comment. The NPRM proposed a specific set of requirements that would apply to both new construction and alterations where feasible and proposed a series of exceptions for a variety of conditions of site infeasibility. Commenters suggested that such an approach might encourage departures from the guidelines with claims of site infeasibility that might not be warranted and might make enforcement more difficult. Furthermore, opportunities to maximize the usability of newly constructed pedestrian environments might be overlooked because of the availability of lesser options.

Response. The interim final rule has been reorganized and clarified to emphasize that public entities undertaking new work must provide a high degree of accessibility in public rights-of-way. When making alterations to existing work that involves pedestrian elements, entities must provide the maximum feasible degree of compliance with provisions for new construction. This reorganization more clearly distinguishes between new construction and alterations and provides a strong uniform set of accessibility requirements with few exceptions for new construction. For example, the design of a new subdivision, new town, or an expansion of jurisdictional limits to incorporate as yet undeveloped land must be fully accessible according to provisions of this section for new construction. A consistent approach to public sidewalk, public sidewalk curb ramp, and intersection design is described for implementation when such new work is undertaken.

Alterations provisions have been similarly reorganized to contain the exceptions proposed throughout the NPRM. The interim final rule includes special technical provisions for alterations to address existing conditions and constraints. Guided by the new construction requirements, which must be observed when feasible, entities making alterations will be able to craft an alternative which best fits existing conditions. The distinction between new construction and alterations is more fully discussed at ADAAG 14.2 (New Construction) and 14.3 (Alterations) and in appendix notes to these sections.

14.1 General

This section is a scoping provision which applies the requirements of this section and those of ADAAG 4 (Accessible Elements and Spaces: Scope and Technical Requirements) to pedestrian areas, elements, and facilities in the public right-of-way which are subject to title II of the ADA. Where the provisions of this section differ from the requirements of ADAAG 4, the provisions of this special application section prevail. An appendix note distinguishes between the public right-of-way and adjacent sites, provides examples of work covered by this section, and clarifies the application of ADAAG 4 provisions.

Comment. The NPRM proposed to cover only work provided as part of a "public improvement project." Several commenters from the public works agencies of local governments noted that work in the public right-of-way may be accomplished in other ways, as, for example, in urban areas, where public site improvements may be provided by developers of sites adjacent to the public right-of-way. These and other commenters also requested a clarification of the responsibilities of private sector entities (such as utilities) undertaking work in the public right-of-way by franchise or other agreement.

Response. The term "public improvement project" is not used in the interim final rule. This clarifies that all work in the public right-of-way is covered by this section. For example, these guidelines must be applied to work undertaken in the public right-of-way by any entity under contract, agreement, or other arrangement, such as utilities, contractors, or developers. However, because new or altered work in the public right-of-way will be constructed or installed within the physical limits of a project area or the contractual limits of a project scope of work, all elements, areas and facilities in the public right-of-way that are required to be accessible by section 14 retain the concept of the project as the basis for their scoping. For example, the number of new on-street parking spaces required to be accessible by ADAAG 14.2.6(1)(a) will be based upon the total number of new on-street parking provided in the project area. The appendix note has been expanded to include examples of covered projects.

Comment. Many commenters requested clarification of the differences between pedestrian facilities on a site covered by ADAAG 4 (e.g., a park, campus, plaza) and those in the public right-of-way covered by this section (e.g., public sidewalks).

Response. Only work in the public right-of-way is covered by ADAAG 14. The public right-of-way is the strip of land over which a public road and its appurtenances (e.g., shoulders, parkways, and public sidewalks) are built. Most public rights-of-way are coincident with and include roadways; some are established as easements to provide pedestrian access to a public facility through private sites or properties. Public rights-of-way are generally limited in width, occupied below-grade by public services, such as utilities, and above-grade by traffic control devices, signage, and other street furnishings. A public or private site, however, is a parcel of land bounded by a property line or a designated portion of a public right-of-way. For example, a new park or campus containing sidewalks, curb ramps, and street crossings, is a site covered by ADAAG 4.1.2 (Accessible Sites and Exterior Facilities: New Construction), whereas a downtown pedestrian shopping street in the public right-of-way between opposing property lines is covered by ADAAG 14. The appendix note at A14.1 has been expanded to clarify the distinction between a public right-of-way and a site.

In the future, the Department of Justice will consider whether to amend its regulation implementing title III to apply ADAAG 14 to streets and sidewalks within large, privately-developed sites and subdivisions.

Comment. Commenters requested clarification of the differences between ADAAG 14 and the technical provisions of ADAAG 4.2 through 4.35 for the same or similar elements, such as public sidewalk curb ramps, passenger loading zones, parking spaces, and walks and sidewalks.

Response. Generally, the technical provisions in ADAAG 4.2 to 4.35 apply to public rights-of-way unless modified by ADAAG 14. ADAAG 14 modifies some technical provisions of ADAAG 4.2 to 4.35 to address site constraints particular to the public right-of-way. For example, a public sidewalk curb ramp in the public right-of-way is subject to the technical provisions of ADAAG 14.2.4 (Public Sidewalk Curb Ramps),

not to ADAAG 4.7 (Curb Ramps). A public sidewalk in the public right-of-way is subject to the technical provisions of ADAAG 14.2.1 (Public Sidewalks), which substitutes a continuous passage for the accessible route contained in ADAAG 4.3. Some technical provisions, however, such as those contained in 4.2.4 (Clear Floor or Ground Space for Wheelchairs), 4.9 (Stairs), and 4.27 (Controls and Operating Mechanisms) apply without modification to public rights-of-way and are referenced in the interim final guidelines. This has been clarified in an appendix note.

14.1.1 Definitions

This section defines common elements of the public pedestrian environment, including continuous passage, public sidewalk, public sidewalk curb ramp, public right-of-way and site infeasibility. Appendix notes clarify the definitions of continuous passage and public sidewalk and explain that when a public sidewalk is used to satisfy a requirement for an accessible route, the public sidewalk must comply with ADAAG 4.3.

The definitions of marked crossing and walk included in the NPRM have been deleted, as they are defined in ADAAG 3.5 (Definitions).

Comment. The NPRM defined a sidewalk as "[a] walk in the public right-of-way along a vehicular way that is part of a pedestrian circulation network." The City of Portland (OR) urged that the definition include walks in public rights-of-way or easements that may not be contiguous with vehicular ways, noting that they are subject to similar constraints of terrain, width, and adjacent development. Commenters from design and engineering disciplines stated that both paving and separation were integral to the concept of a sidewalk in transportation and public works specifications. One commenter encouraged use of a definition of sidewalk commonly recognized by streets and highway authorities.

Response. Good engineering practice provides that public sidewalks be both paved and separated, either horizontally or vertically, from adjoining roadways. While this may be a more accurate technical definition of public sidewalk, these guidelines are intended also to cover pedestrian walkways that are not raised and separated, as for example, roadway shoulders in rural areas improved for pedestrian use. The definition of public sidewalk has therefore been modified to broaden its application to include such pedestrian routes. Walkways in public pedestrian easements have also been added. The word "public" has been added to clarify the distinction between sidewalks in the public right-of-way and those within sites. The appendix note has been expanded to provide other examples of public sidewalks.

Comment. The NPRM defined continuous passage as "[a] continuous unobstructed pedestrian circulation path within a sidewalk connecting pedestrian areas, elements, and facilities covered by section 14." Several commenters asked if an accessible route was required on public sidewalks or if the continuous passage was required to meet provisions for an accessible route.

Response. The definition of continuous passage has been amended to clarify that it is applied in the public right-of-way in lieu of an accessible route. Continuous passage is discussed further below and in appendix note A14.1.1, to differentiate between the requirements of an accessible route and the requirements of a continuous passage.

Comment. Proposed ADAAG 14.5 (Curb Ramps and Other Sloped Areas) required curb ramps or other sloped areas where pedestrian walkways cross barriers at streets. "Other sloped areas" is found in the Department of Justice regulations implementing title II of the ADA (28 CFR 35.150(d)(2)) and applies to elevation changes within public sidewalks at street crossings that are not accomplished by means of a curb ramp. Several commenters requested clarification of the term "other sloped areas."

Response. ADAAG 14.5 has been moved to ADAAG 14.2.4 (Public Sidewalk Curb Ramps) and a new definition for "Public Sidewalk Curb Ramps" has been added to ADAAG 14.1.1. The definition describes perpendicular public sidewalk curb ramps, including diagonal public sidewalk curb ramps, and parallel public sidewalk curb ramps and clarifies that these are alternative means of achieving the transition between curb height and street crossing. Although ADAAG currently contains a definition and technical provisions for curb ramps on sites, public sidewalk curb ramps must meet different requirements. For example, public sidewalk curb ramps in a public right-of-way are required to have level landings. Language was added to the definition of Curb Ramp in 3.5 (Definitions) referencing Public Sidewalk Curb Ramps. The phrase "parallel public sidewalk curb ramp" has been substituted for "other sloped areas."

Comment. Several commenters requested a definition of vehicular way. Other commenters asked if bicycles were considered vehicles and whether bikeways, which are sometimes shared by pedestrians, were to be considered vehicular ways.

Response. Vehicular way is defined in ADAAG 3.5 (Definitions). Under the Uniform Vehicle Code, bicyclists are considered motorists. When using a public sidewalk, however, a bicyclist has the same rights and duties as a pedestrian (Uniform Vehicle Code and Model Traffic Ordinance, Article XII, National Committee on Uniform Traffic Laws and Ordinances, Revised 1992). If pedestrian use is intended, a bicycle path in the public right-of-way must comply with the requirements for public sidewalks.

Comment. The NPRM proposed a definition of site infeasibility adapted from the definition of technical infeasibility in ADAAG 4.1.6(1)(j). Most commenters supported both the necessity for and the definition of site infeasibility in the NPRM. One commenter asked for a clarification of the difference between extremes of terrain discussed in the NPRM and structural impracticability due to unique characteristics of terrain, described in the preamble to the Department of Justice final regulation implementing title III of the ADA. (56 FR 35577). A FHWA region recommended that constraints arising from common practice in the geometric design of certain street and highway structures, such as bridges and tunnels, be specifically included as examples of site infeasibility.

Response. Site infeasibility is intended to be the basis for exceptions to new construction guidelines for additions and alterations in the public right-of-way. This definition has been clarified by substituting the phrase "site development conditions" for "physical or site constraints" in the NPRM. Extremes of terrain are recognized in both new construction and alterations provisions by permitting public sidewalks to take the running slope of adjacent roadways without invoking an exception. Thus, steeply sloping terrain is not in itself grounds for a finding of site infeasibility. Rather, it is adjacent development and constrained right-of-way width that give rise to exceptions for site infeasibility. Where newly-constructed bridges and tunnels are intended to carry pedestrian traffic, they must incorporate public sidewalks that meet section 14 provisions. This is further discussed at ADAAG 14.2.5(4).

14.2 New Construction: Minimum Requirements

This section addresses the minimum requirements for new construction. An appendix note provides examples of new construction and emphasizes that it requires a high degree of accessibility and usability in pedestrian public right-of-way improvements.

Comment. State and local departments of public works, members of the site planning and engineering professions, and individuals with disabilities and the organizations that represent them recommended that the final rule distinguish between new construction and alterations. Most jurisdictions were concerned that the proposed guidelines were too restrictive for alterations. Commenters noted that provisions limiting cross slope, requiring level landings at public sidewalk curb ramps, or specifying counter slope at street crossings could be achieved in new construction but not in every alteration. Persons with disabilities and organizations representing them commented that the number of exceptions provided in the NPRM to accommodate existing conditions could also be used to excuse compliance in new construction. For example, one commenter noted that although all accessibility standards require that new public sidewalk curb ramps be constructed to the least possible slope, most exceed the 1:12 maximum permitted slope. On the other hand, as noted by one engineer, guidelines that are overly stringent may discourage implementation.

Response. The interim final rule has been reorganized to distinguish between new construction and alterations. The exceptions previously permitted in new construction have been moved to ADAAG 14.3 (Alterations), which has been expanded.

Comment. Several municipalities and members of the Institute of Traffic Engineers (ITE) suggested that a set of fixed requirements could not be applied or enforced under the variety of site constraints commonly encountered along public rights-of-way. Instead, they advocated a performance standard that would allow more flexibility in responding to local conditions. Some jurisdictions, however, requested detailed guidance. The City of St. Louis commented that, "In order to assure access for persons with disabilities, clear and comprehensive regulations are needed."

Response. A performance specification or standard generally describes a desired goal for new construction but does not prescribe a methodology. For example, ADAAG 4.34.5 (Equipment for Persons with Vision Impairments) requires that automated teller machine instructions and information be made accessible to persons with vision impairments, but it does not require a specific solution. A performance standard might be useful in ADAAG 14, where most work will probably be constructed or installed within an already well-developed public right-of-way subject to a variety of differing needs, conditions, and constraints that cannot be fully anticipated. A detailed specification will be useful to public works agencies evaluating alternatives, particularly where site constraints may appear to limit options. Additionally, it might be more difficult to determine compliance with a performance specification in such a complex application. Accordingly, these guidelines establish specific requirements for both new construction and alterations in the public right-of-way.

Comment. The NPRM included exceptions for site infeasibility within specific provisions. Many commenters requested that an overall exception for site infeasibility be included in a general provision.

Response. A blanket exception might have the effect of permitting the least accessible alternative even in new construction when greater accessibility might be achieved. Although the interim final rule includes some limited exceptions for certain conditions in new construction, there is no exception for site infeasibility. However, alterations provisions include both general and specific exceptions for conditions of site infeasibility when strict compliance with new construction provisions cannot be achieved.

Comment. A few commenters misconstrued the preamble discussion in the NPRM to require the construction of public sidewalks or continuous pedestrian routes where none may now exist. Several jurisdictions submitted estimates of costs to retrofit existing pedestrian elements to meet the proposed guidelines. Others voiced concerns about their obligations under section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794). Several commenters asked how the issuance of new guidelines would affect their transition plans required by the Department of Justice regulations implementing title II of the ADA. ITE suggested that work done under a prior standard be exempted from application of the final guidelines.

Response. ADAAG 14 covers newly-undertaken construction, the addition of pedestrian elements, and the alteration of the existing pedestrian environment. It does not require entities covered by title II of the ADA to retrofit existing elements. If new construction, additions, or alterations are undertaken, they must be constructed to be accessible.

However, the Department of Justice regulations implementing title II of the ADA (28 CFR 35.150) and section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) may impose additional requirements. Path of travel obligations arising out of alterations to a public sidewalk, public sidewalk curb ramp, or street crossing may require the construction of accessible connections between these and other pedestrian elements. This is discussed more fully at ADAAG 14.3.

Comment. A few commenters considered the NPRM provisions too costly for the benefits achieved.

Response. Many commenters' concerns resulted from a misunderstanding that the NPRM required a retrofit of existing construction. The requirements of this section are consistent with standard engineering practice in new construction, as detailed in the Standard Plans and Specifications for Public Works Construction, section 1 (American Public Works Association (APWA) and Associated General Contractors (AGC). These provisions apply to alterations of existing public sidewalks only to the extent feasible and therefore excessive cost is not anticipated. A Regulatory Impact Analysis (RIA) has been prepared which examines the monetary and non-monetary costs and benefits to building owners, operators, and users of the guidelines. The RIA is available to the public.

14.2.1 Public Sidewalks

This provision requires that a new public sidewalk and the continuous passage within the public sidewalk connect to the accessible route required on adjacent sites and to pedestrian elements installed or constructed on and along the public sidewalk. Minimum requirements for width, passing space, slope and cross slope, surface characteristics, and separation are provided. Appendix notes provide examples of public sidewalks, clarify the requirement for a continuous passage, and provide guidance for the design of driveway aprons and gratings.

Comment. The NPRM proposed that public sidewalks contain a continuous passage that connects to accessible routes on adjacent sites and to pedestrian elements on the sidewalk. Many commenters interpreted the

proposed rule to require a continuous passage connecting pedestrian elements even when a public sidewalk did not exist. Several asked whether the provision required the interconnection of existing public sidewalk segments within a jurisdiction. A number of persons with disabilities and groups representing persons with disabilities suggested that public sidewalks should be required in all developed zones of a jurisdiction, particularly in residential areas.

Response: As previously discussed at ADAAG 14.1 (General), the construction of new public sidewalks is not required by this section. New public sidewalk construction is typically initiated at the local level, by individual or neighborhood request or as part of a public improvement project.

Comment. Several State and local government jurisdictions asked who was responsible for establishing and maintaining the continuous passage. One commenter asked if the continuous passage needed to be designated.

Response. Under the ADA, State and local government entities are responsible for ensuring that their public pedestrian facilities are accessible. The Department of Justice regulations implementing title II of the ADA cover the maintenance of accessible features (See 28 CFR 35.133). ADAAG 14 does not require the marking of a continuous passage.

Comment. The NPRM proposed that public sidewalks, or a continuous passage within them, connect to accessible routes on adjacent properties. A number of commenters were concerned with the technical difficulties of such connections along steeply sloping public sidewalks. This is especially problematic along undeveloped sites where the location of the accessible route or entrance has not yet been established.

Response. Where entrance elevations can be fixed before public sidewalk construction, a level platform can be provided by careful engineering design. Where connections cannot be anticipated, a level walkway diverging from the public sidewalk running slope can serve a number of potential entrances. An appendix note further describes this approach. Recessed entrances and building setbacks will provide the necessary distance to achieve a smooth blending of the connection from the public sidewalk to the building entrance.

Where walks containing an accessible route on an adjacent site must connect to sloping public sidewalks, some warping and blending may be necessary. This must be accommodated on the site if the public sidewalk has already been constructed. However, when the developer of a property is also responsible for new public sidewalk design and construction, as is often the case in urban construction, the coordination of such connections can be accomplished through careful site engineering.

These public/private interfaces are somewhat analogous to the landlord/tenant responsibilities for accessibility under title III of the ADA; each must comply where he has the authority to operate. The appendix discussion has been expanded to clarify these issues. In many cases, a developer will provide both public sidewalks and private walks as part of the same project. Jurisdictions may require, through the permitting process, that adjacent property owners blend accessible routes at the continuous passage when sites are developed.

14.2.1(1) Width

Paragraph (1) requires that the continuous passage within a new public sidewalk be a minimum of 36 inches in width or as shown in Figures 7(a) and (b) when a turn must be made around an obstruction. It further requires that passing spaces be provided at intervals that do not exceed 200 feet when public sidewalk width is less than 60 inches continuously.

Comment. The NPRM proposed that a public sidewalk, or a continuous passage within its width, be a minimum of 36 inches in width. Most commenters recommended that public sidewalks be a minimum of 48 inches wide (and even wider in commercial areas). One county public works agency submitted a copy of standard public works details and specifications that illustrated a minimum sidewalk width of 48 inches throughout. Other jurisdictions indicated similar or greater width requirements for new construction. Most commenters also supported the proposed requirement for passing spaces, although several questioned the need for them in suburban and rural areas.

Response. The interim final rule requires a 36 inch minimum continuous passage to ensure an unobstructed route, clear of street furnishings, equipment, and other items commonly associated with public sidewalks, along the pedestrian walkway. Although common street and public sidewalk engineering practice support a 48 inch minimum width, these guidelines represent minimum requirements. A requirement that the width of the continuous passage be as shown in Figures 7(a) and (b) has been added for consistency with ADAAG 4.3.3 (Width). A 60 inch wide public sidewalk incorporating passing space will generally be provided in commercial areas. Greater widths are recommended in current FHWA guidelines and American Association of State Highway and Transportation Officials (AASHTO) standards for new construction in such areas (AASHTO, "A Policy on the Geometric Design of Highways and Streets", 1990). Residential neighborhoods, where pedestrian volume may be light, and other low-pedestrian-volume zones such as rural and suburban areas, office parks and similar developments, will commonly be served by 48 inch wide walkways, along which passing spaces must be provided. Passing space may be available at intersecting walks, at building entrances, at driveways, or even at bus stops and street crossings. Additional public sidewalk width is commonly provided at regular intervals to provide a structural surface for storm drainage inlets, utility vaults, and similar below-grade construction. This common practice can provide the required passing space, as well. Because these guidelines apply to areas where pedestrian volumes may change radically over time, public sidewalks must be designed to accommodate potential as well as actual levels of use.

Narrow public sidewalks and rights-of-way without parkways will generally require parallel public sidewalk curb ramps rather than perpendicular public sidewalk curb ramps at street crossings because of the lack of width for the landing required at the top of a perpendicular public sidewalk curb ramp. Although the requirements for width have been reorganized, no substantive changes have been made.

In new construction, where public sidewalks must have a consistent cross slope across their full width, the 36 inch continuous passage (or the additional maneuvering space described in Figures 7(a) and (b)) serve only to ensure that passage is not blocked by fixed or movable items. In alterations, the continuous passage may be the only portion of a wider public sidewalk in which cross slope can be maintained within usable limits, as further discussed in ADAAG 14.3 (Alterations). The continuous passage will also be a factor where public sidewalks cross driveways, as only 36 inches must be provided at the 1:50 cross slope. A driveway apron cannot be part of the continuous passage if its slope to the street exceeds 1:50.

Furthermore, where gratings are installed in public sidewalks, a continuous passage must be provided to bypass them. Where large areas of

gratings may be required to ventilate subsurface transformer vaults or similar construction, designers should provide the necessary surface area by increasing the length of a run of gratings so as to minimize its width relative to the public sidewalk width.

Comment. Several comments misconstrued the requirement for a continuous passage, believing that it could assist persons with vision impairments in way finding through parking lots and other large undifferentiated areas.

Response. The concept of a continuous passage applies only to public sidewalks in the public right-of-way. The parking lot of a shopping center, arena, or other facility is part of a site subject to the requirements of ADAAG 4.3 for an accessible route.

14.2.1(2) Slope

Paragraph (2) permits new public sidewalks to have the same slope as that established for adjacent roadways. It further limits cross slope along a new public sidewalk to 1:50. This maximum applies in both directions at intersecting public sidewalks.

Comment. The NPRM proposed that new public sidewalks have the least possible running slope. Commenters noted that this could be interpreted to require grading to a level plane. The NPRM also proposed an exception for slopes steeper than 1:12. Commenters favored excepting running slope limitations for public sidewalks.

Response. This provision has been revised to clarify its intent to require the minimum feasible slope consistent with that of the adjacent roadway. Therefore, the proposed exception is no longer needed and has been eliminated. An appendix note discusses several design options for steeply sloping public sidewalks.

Comment. A number of commenters expressed concerns about pedestrian safety along steeply sloping public sidewalks.

Response. Public sidewalks that meet the provisions of this section allow persons with disabilities to make the choice of whether to use them or not. This is consistent with other applications of the ADA, which clearly prohibit discrimination based upon assumptions about an individual's abilities.

Comment. Individuals with disabilities and commenters from organizations representing them strongly supported maintaining cross slope limitations at 1:50, emphasizing the difficulty of negotiating surfaces with cross and counter slopes. Travel along surfaces with a severe cross slope is difficult for persons using wheelchairs and mobility aids even when the running slope is imperceptible. However, many municipalities requested that exceptions be permitted, citing the infeasibility of achieving a maximum cross slope of 1:50 in alterations to existing construction in the public right-of-way.

Response. Limited exceptions from the requirement for a maximum cross slope of 1:50 have been included in the alterations section. The 1:50 maximum has been well-established in accessibility standards since 1961 and is also well-established in civil engineering standards as the minimum necessary for positive drainage for exterior improved surfaces. New development and adjacent public sidewalks should be planned with this limitation clearly in mind. Providing landings with a minimum cross slope at intersecting public sidewalks is standard design practice in new construction and will simplify the later placement of crossing controls and similar pedestrian elements that require a level area for a wheelchair approach. No substantive changes have been made in this requirement.

Comment. The NPRM asked whether level landings should be required along steeply sloping public sidewalks, citing a requirement in the California Accessibility Standards (title 24 part 2 section 712 (1989)) requiring landings at 400-foot intervals. Many persons with disabilities, organizations representing persons with disabilities, and even a few municipalities supported such a concept. Several noted that this could be accomplished without appreciably increasing the running slope of a public sidewalk. Others recommended level areas adjacent to and along public sidewalks of extreme grade. Such areas would allow persons with mobility impairments or low stamina to pause while ascending or descending. Most municipalities, however, responded negatively, citing excessive cost, custom construction, and limited utility. Several commenters recommended handrails as being more useful along steep slopes. Some commenters suggested that providing landings along steeply sloping sites would be less useful to persons using wheelchairs than would the development of alternative routes or operational solutions.

Response. A requirement for a mid-block level landing where walkway slope is extreme would not be onerous in new construction. However, few commenters recommended specific public sidewalk slope limitations and interval criteria that would help establish provisions. Most new intersections will provide level landings at approximately 200-foot intervals. No provision for intermediate level landings along a public sidewalk has been included in the interim final rule. Operational considerations, such as the development of alternative routes, are not covered by these guidelines.

Comment. The NPRM asked about local accommodation to extremes of terrain from jurisdictions where steeply sloping public sidewalks make accessibility difficult. Little specific information was received in response to this question, although almost every commenter was interested in possible solutions.

Response. An appendix note has been added suggesting design and construction approaches for extremes of slope.

14.2.1(3) Surfaces

Paragraph (3) requires that public sidewalk surfaces be stable, firm, and slip-resistant and lie in a single plane with minimal warping. It applies the requirements of ADAAG 4.3.8 (Changes in Level) to changes in level, such as those that may occur between paving squares or at expansion joints, and references ADAAG Fig. 7(c) to illustrate its application to abrupt changes in level. This paragraph also requires stairs within the public sidewalk to comply with ADAAG 4.9 (Stairs). Paragraph (3) further limits the size of openings in gratings in the public sidewalk in the direction of travel and prohibits gratings in the continuous passage and limits the vertical and horizontal gaps permitted where public sidewalks cross railways at grade.

Comment. The NPRM proposed that public sidewalk surfaces be stable, firm and slip-resistant. Several commenters were concerned about the requirement for slip resistance on public sidewalks, noting that moisture, ice, and snow frequently compromise pedestrian traction on public rights-of-way, particularly on sloping public sidewalks and public sidewalk curb ramps. State and local government agencies were concerned about liability in the event of a pedestrian fall if their public sidewalks were not always slip-resistant because of environmental conditions, particularly snow and ice.

Response. These guidelines cover only new construction and alterations and thus can require only that State and local government entities and their contractors specify slip-resistant surfaces and finishes appropriate for exterior use when new work is put in place. Operational issues are subject to the Department of Justice regulations

implementing title II of the ADA which require that jurisdictions maintain accessible features (28 CFR 35.133). No change has been made to this provision.

Comment. Several commenters raised concerns that the slopes of the continuous passage and the public sidewalk that contains it might not be consistent and noted that differences could be hazardous to pedestrians. The California Accessibility Regulations (title 24 part 2 (1993)) require public sidewalks and public sidewalk curb ramps to have a consistent slope. Standard details and specifications submitted by several commenters contain similar language.

Response. The interim final rule has been changed to include a requirement that new public sidewalks should be consistently graded. This is standard practice in new construction. In alterations, the warping of a continuous passage may be necessary to provide a usable route to elements along an existing public sidewalk. Where a public sidewalk in the right-of-way is contiguous with a paved walk on a site, as is common in urban areas where their design and construction may be undertaken as part of a single project, ADAAG 14 will apply to the public sidewalk only. Transitions must be smoothly blended.

Comment. The NPRM proposed that gratings with elongated openings be placed so that the long dimension is perpendicular to the dominant direction of travel. Several individuals pointed out that gratings in public sidewalks may be located where pedestrians will cross them in two perpendicular directions, noting that those who use wheelchairs can become stuck in the long openings in such situations. Commenters reported on the difficulty of turning a wheelchair on grating surfaces. Several others found gratings hazardous for persons using walkers, crutches, and canes, even when the gratings comply with ADAAG 4.5.4 (Gratings). An architect noted that urban public sidewalks frequently have large expanses of gratings over public sidewalk vaults where transformers, utilities, and subway construction occur below grade. One Department of Transportation regional engineer inquired whether public sidewalk freight elevator covers and similar appurtenances should be prohibited from the continuous passage.

Response. This provision has been revised to prohibit gratings in the continuous passage in new construction. An appendix note clarifies that grating proportions or location can be varied to ensure that gratings do not encroach on the required continuous passage. Openings in gratings can be no greater than ½ inch wide when measured perpendicular to the direction of travel. Where public sidewalks intersect and travel is in two directions, openings may not exceed ½ inch in either direction. Gratings have also been prohibited in landings and public sidewalk curb ramps and in adjacent surfaces at street crossings (see ADAAG 14.2.4(8)). Elevator covers and similar items located in a continuous passage must comply with surface requirements.

Comment. A few commenters requested that the guidelines address public sidewalks that cross railways at grade level, citing projects currently under design.

Response. A provision derived from ADAAG 10 (Transportation Facilities) has been added, limiting the horizontal gap in new public sidewalk construction to the minimum necessary for passage of wheel flanges, not to exceed 2½ inches. Horizontal surfaces must be flush. Although the NPRM did not expressly include this provision, it is taken from ADAAG 10.3.1(13) (New Construction), which was referenced in the NPRM. The provision at ADAAG 14.2.1(3)(d) represents an exception to surface requirements that might otherwise preclude public sidewalk construction across rail lines.

Comment. Several commenters noted that the NPRM did not include a provision requiring edge protection where the back-of-sidewalk edge may be raised above adjacent grade, forming a drop-off.

Response. Edge protection should be provided in such circumstances. A note recommending such practice has been added to the appendix. Codes and standards affecting the design and construction of public sidewalks will generally require a barrier at substantial drop-offs, such as when a public sidewalk crosses a bridge or culvert. For example, the California Accessibility Regulations (title 24 part 2 (1993)) require back-of-sidewalk protection where there is a differential of more than four inches in level.

14.2.1(4) Separation

Paragraph (4) requires that new public sidewalks be raised to curb height or separated horizontally by a parkway or similar setback from an adjacent roadway. An exception permits unseparated public sidewalks along undeveloped frontages of rural roadways.

Comment. The NPRM proposed that all public sidewalks be separated horizontally or vertically from the adjacent roadway with continuous curbing, planted parkways, or other barriers to distinguish streets from public sidewalks. Many suburban and rural jurisdictions were concerned that public sidewalk provisions might be construed to require separation in roadway shoulders, bikeways, and similar surfaces sometimes used by pedestrians. Several commenters asked for clarification of the meaning of "other barrier" and noted that some types of barriers (e.g., guardrails) would make these routes more dangerous for bicyclists and would preclude vehicular use of the shoulder, a common practice in rural communities where oversize equipment or slow moving farm vehicles commonly travel in this area. A few commenters noted that non-pedestrian uses predominated along routes of this type. However, a traffic engineer submitted photographs of public sidewalks without separation at street grade along well-developed commercial strips in Florida and indicated that public sidewalks were still commonly constructed in this way even where pedestrian use is substantial.

Response. This section considers all walkways established for pedestrian use in the public right-of-way to be public sidewalks, including those on roadway shoulders where pedestrian use is intended. Many rural areas, where destinations are widely separated and pedestrian use is low, simply pave a public right-of-way to include an improved shoulder of six to eight feet in width for the use of cyclists and pedestrians. There may be an intervening gutter that makes continuous travel across intersections difficult for persons using wheelchairs or walking aids. Cross slope may be fairly severe where the roadway and shoulder cross-section is designed to drain to a swale or ditch along the back of the public sidewalk. Differentiation between vehicular and pedestrian areas is often no more than a painted line or drainage ditch.

An exception to the requirement for separation has been added for rural areas where roadway frontages are not developed. In other areas, public sidewalks must be separated. The use of unseparated routes is not safe for any pedestrian. Furthermore, curbs and changes in surface material provide cues for pedestrians to distinguish between pedestrian and vehicular areas. Good practice includes the construction of raised or horizontally separated public sidewalks in all commercial areas and along other routes when pedestrian volume is more than incidental.

The term "other barriers" includes material and texture changes, physical barriers, such as planters or guardrails,

or distinguishable edges, such as wheelstops or guidestrips.

14.2.2 Historic and Special Use Sidewalks [Removed]

Comment. The NPRM reserved a section on historic and special use sidewalks and sought comment on how the requirements for historic preservation could be reconciled with provisions for new construction. Organizations representing historic preservation interests generally favored covering public sidewalks in historic neighborhoods and districts in the same way as ADAAG currently covers historic buildings and facilities, noting however that there is no designation for "historic" public sidewalks alone. Other commenters supported a provision for an alternative route, although little information was submitted on how such a route might be provided. Many commenters requested clarification on whether walkways in historic landscapes were covered by this section.

Response. No commenters made specific recommendations on accessibility criteria appropriate to public sidewalks of historic construction. Historic landscapes, parks, and gardens are covered under ADAAG 4 as sites. Existing requirements that public sidewalk surfaces be stable, firm, and slip-resistant are achievable in alterations to public sidewalks of historic interest. Therefore, this section has been removed.

14.2.2 Protruding Objects [14.2.4 in the NPRM]

These provisions parallel those of ADAAG 4.4 (Protruding Objects) and are applied to public sidewalks and the areas adjacent to them. An appendix note clarifies the application of these provisions to the full public sidewalk.

Comment. The NPRM sought comment on the effectiveness of the 27 inch maximum height limitation for protruding objects on public sidewalks and about the discernibility of wall-mounted and post-mounted objects. Most comments on these provisions came from persons with vision impairments, organizations representing persons who are blind or have vision impairments, and from mobility instructors responsible for training persons in wayfinding techniques. A majority felt that current ADAAG requirements for buildings and facilities were not adequate for public sidewalk environments, where pedestrians may be forced to adopt a restricted cane sweep technique in congested areas. Several commenters added that the speed with which people walk outdoors may cause them to encounter protruding objects before the cane sweep can detect them. Although there was considerable support for lowering the maximum height of 27 inches, there was no clear consensus. Many commenters urged further study of this issue.

A majority of commenters were opposed to the provision permitting post-mounted objects to overhang their supports by up to 12 inches. These commenters noted the common practice of installing telephones, signs, and similar objects on poles, rather than projecting them from building faces, where the four inch limitation on wall-mounted elements would apply. Most felt that the determination of what was a protruding object should not be affected by mounting conditions. Many commenters recommended additional study of this issue as well.

However, almost a third of commenters who identified themselves as persons who are blind or have vision impairments or who represented local, State, and national organizations for persons with vision impairments opposed any change in the requirements. They noted that there is no compelling evidence of a need to change current ADAAG provisions nor any data on which to base a change for conditions along a public pedestrian right-of-way.

Commenters addressing the headroom provision recommended that landscaping elements be included in coverage. Several noted that overhanging tree branches are a major hazard along public sidewalks.

Commenters from State and local government jurisdictions were largely concerned with policing and enforcement issues and requested clarification of who would be responsible to ensure that clear headroom was provided along a public sidewalk.

Response. The provision permitting a 12 inch overhang for post-mounted objects is well-established in accessibility regulations and has always been applied to frontal approaches only, as shown in Figure 8(d), and not to parallel or side approaches. Although ADAAG provisions for protruding objects may not adequately serve all segments of the pedestrian population, no data were provided on which to base a change to the provision. The provision remains substantially unchanged, with only editorial modifications. The appendix note has been expanded to reference the provision regarding the maintenance of accessible features in the Department of Justice regulation implementing title II of the ADA (28 CFR 35.133).

14.2.3 Fixed Street Furnishings [14.2.3, 14.3 and 14.2.1(5) in the NPRM]

This section contains scoping and technical provisions for items installed on or adjacent to a public sidewalk. It covers drinking fountains, telephones, toilet facilities, fixed seating, tables, and benches, bus shelters and stops, pedestrian signage, and similar items, where provided as a public improvement or private franchise, and requires a connection to the continuous passage. Such items may not reduce headroom or the width of the continuous passage.

14.2.3(1) Drinking Fountains

14.2.3(2) Public Telephones

Paragraph (1) requires that drinking fountains at a single location provide accessibility both to persons who use wheelchairs and to persons who have difficulty stooping or bending. Paragraph (2) requires that all public pay telephones newly installed on or along public sidewalks be hearing aid compatible and have volume controls. Where a single unit is installed at a location, it must be accessible to a person using a wheelchair. Where a bank of telephones is provided, one unit per bank must be accessible to persons using wheelchairs.

The NPRM proposed that 50 percent of drinking fountains and public telephones provided in a public improvement project be accessible. This would have required that half of all such items installed in a project be accessible and be dispersed throughout a project area. As noted above, the term "public improvement project" has been deleted. When drinking fountains, public telephones, and similar items are installed along a public sidewalk, they are typically dispersed rather than clustered and are considered public and common use elements. Therefore, the scoping provision has been changed to require accessibility at each location where a drinking fountain or public telephone is provided.

Comment. One municipality indicated that its outdoor drinking fountains were largely provided in parks and playgrounds and sought guidance on whether ADAAG 14 applied to such installations.

Response. Drinking fountains in parks and playgrounds are located on public sites and are therefore covered by the scoping provisions in ADAAG 4.1.3 (Accessible Buildings and Facilities: New Construction) and 4.1.6 (Accessible Buildings and Facilities: Alterations) and not by this section.

Comment. The NPRM proposed that 75 percent of public telephones have

volume controls. One municipality and several organizations representing persons with hearing impairments recommended that all public telephones installed along public sidewalks have volume controls because of the high incidence of hearing loss in an aging population. Other commenters noted that the cost of such an adaptation is low. Providing public telephones with volume controls is becoming common practice in noisy environments such as public rights-of-way. Several other comments from organizations representing persons who are deaf recommended that public telephone scoping be expanded to require exterior TTYs. A manufacturer of such units submitted technical data and encouraged the Board to require TTYs on public sidewalks, noting that interior installations in buildings and facilities are not generally available after business hours.

Response. The interim final provision has been changed to require that all public telephones have volume controls and be hearing aid compatible. The requirement for signage in ADAAG 4.30.7 (Symbols of Accessibility) applies only to telephones required to be accessible by ADAAG 4.1.3(17)(b) (Accessible Buildings and Facilities: New Construction) and therefore does not apply to this section. Hearing aid compatibility is already required of these telephones by the Hearing Aid Compatibility Act of 1988. (See 47 CFR part 68). Advances in TTY technology that make exterior installations feasible are being tested in several States. Requirements for exterior installations will be considered in future rulemaking.

14.2.3(3) Single User Toilet Facilities

Paragraph (3) requires that a single user toilet facility installed on or along a public sidewalk at a single location be accessible according to ADAAG 4.22.2 through 4.22.7.

Comment. The NPRM proposed that 50 percent of single user toilet facilities installed on or along a public sidewalk as part of a public improvement project comply with ADAAG 4.22 (Toilet Rooms) and sought comment on whether such scoping was appropriate in light of concerns for public safety, cost, and limited access procedures. The proposed provision would have required that half of all such items installed in a project be accessible and be dispersed throughout a project area.

One manufacturer of single user toilet facilities proposed that only a percentage of units (e.g., one in four) in a "cluster" be accessible and that a definition of cluster be provided that would establish a maximum distance between units in a cluster, such as at the same intersection, within several blocks, or "within sight" of each other. However, almost all comments from persons with disabilities and organizations representing persons with disabilities supported full accessibility to all toilet units placed on public sidewalks, citing the ADAAG requirement that all new public and common use toilet rooms on sites and in buildings be accessible.

Other commenters, including many municipalities and one manufacturer of public toilet units, supported a 50 percent or lesser requirement. These commenters stated that the accessible units, which are larger than inaccessible units, would be quickly vandalized and rendered unusable. Many commenters agreed that the larger accessible units could be used for shelter or illicit activities, but felt that this was not a reason to limit accessibility. Other commenters noted that both accessible and inaccessible units would be subject to vandalism and abuse.

The City of San Francisco required that firms responding to its recent Request for Proposals for public toilet facilities provide only accessible units. Information provided by the City of New York indicates that they will give preference to proposals that provide 100 percent accessible public toilet facilities.

Many commenters were opposed to special access requirements, such as cards and tokens, if they were required only of persons with disabilities. Several suggested that the logistics of a card distribution program would be complex and discriminatory. A number of commenters noted that providing separate adjacent facilities for persons with disabilities and persons without disabilities was wasteful of resources and space and could not ensure maintenance of either unit.

Response. Single-user public toilet facilities are fixed common use elements. ADAAG 4.1.2 (6) requires all fixed public and common use toilet facilities located on a site to be accessible. Therefore, the scoping provision in this section has been changed to require the same degree of accessibility at each location in the public right-of-way where a single user toilet facility is provided on a public sidewalk. The concept of clustering (e.g., units spaced a block or street width apart) suggested by some commenters is not consistent with the current ADAAG concept, which assumes that accessible and inaccessible units are immediately adjacent. As discussed above, the term "public improvement project" has been deleted in the interim final rule.

14.2.3(4) Fixed Seating, Tables, and Benches

Paragraph (4) requires that at least five percent, but not less than one, of fixed seating and tables provided at a single location be accessible. It further requires at least 50 percent of any installation or grouping of sidewalk benches fixed at a single location have a back and armrest and that space for a wheelchair be provided at the end of at least one bench.

Comment. The NPRM proposed that five percent of fixed seating, tables, and benches provided in a public improvement project be accessible and be dispersed throughout a project area. Commenters supported a requirement for both backs and armrests on at least some benches, although a few noted that armrests could interfere with transfer from wheelchairs. Several wheelchair users indicated that they would be unlikely to transfer from their wheelchairs to benches along a public sidewalk, although they might do so in a park or plaza setting. Scoping percentages for benches with arms and backrests between 20 and 50 percent were recommended. The NPRM also sought comment on ADAAG specifications for benches. Many commenters noted that backs and armrests are needed so that ambulatory persons with mobility or stamina impairments can use them. Although there was no consensus about back, seat, or armrest height, most commenters recommended that the reference to ADAAG 4.35.4 (Dressing and Fitting Rooms: Bench) be removed because it is not applicable to benches of the type generally placed along public rights-of-way. A few commenters recommended that a space be required at the end of a bench for the positioning of a wheelchair to allow shoulder-to-shoulder seating. One commenter recommended that benches be located only within a strip reserved for street furnishings along a curb and clear of the pedestrian circulation path.

Response. As discussed above, the term "public improvement project" has been deleted. This provision has been changed to require that 50 percent of benches installed at a single location have both a back and armrests. The reference to ADAAG 4.35.4 has been removed. The requirements for fixed seating and tables are unchanged. Where a group of adjacent benches is provided, 50 percent of the benches must have a back and armrests. A requirement for a wheelchair space has been added. An appendix note

recommends that street furnishing zones be established on public sidewalks to improve the predictability of pedestrian environments.

14.2.3(5) Bus Shelters and Stops

Paragraph (5) requires that bus stop pads comply ADAAG 10.2.1(1) and bus stop shelters comply with ADAAG 10.2.1(2).

This provision has been relocated from proposed 14.2.1 (Sidewalks) in the NPRM. Few comments were received regarding this provision and only editorial changes were made.

14.2.3(6) Street Identification and Other Pedestrian Signage

Paragraph (6) requires that pedestrian signage comply with ADAAG 4.30.2 (Character Proportion), 4.30.3 (Character Height), and 4.30.5 (Finish and Contrast). It further requires that bus route identification signs provided on or adjacent to a public sidewalk comply with ADAAG 10.2.1(3).

Comment. The NPRM sought comment on whether certain types of pedestrian signage should be made accessible to persons who are blind or have vision impairments and what technologies, such as audible signage, are available to provide orientation information. Although many comments were received from individuals with vision impairments and organizations representing them, no clear consensus emerged. Many commenters, including one national organization representing persons who are blind, stated that properly trained individuals with vision impairments did not need and could not use tactile signs in the public right-of-way because of the lack of standardized placement. These commenters also stated that audible signage might mask other environmental cues and strongly opposed any change to current ADAAG requirements. Other commenters, including three national organizations representing individuals with vision impairments, supported both tactile and audible signage and submitted detailed recommendations and data on currently available technologies. Several commenters noted that tactile bus route signage would be useful.

Response. Demonstration projects of audible signage employing fixed transmitters and portable receivers have been well received by persons with vision impairments. Future rulemaking may consider data resulting from such projects. ADAAG 14.2.3(6) has been clarified by adding requirements for bus route identification signs from ADAAG 10.2.1 (New Construction).

14.2.3(7) Other Elements

Paragraph (7) requires that miscellaneous fixed street furnishings and equipment not otherwise covered by prior paragraphs be accessible with respect to approach area, reach ranges, controls, and operating mechanisms and that they be connected to the continuous passage.

Comment. Department of Transportation and FHWA comments requested guidance on items of street furniture not specifically addressed in the NPRM. Several commenters recommended the inclusion of fire alarm boxes and information kiosks.

Response. Any fixed object intended for pedestrian use that is installed in the public right-of-way should be accessible. Therefore, a new provision has been added to cover miscellaneous items, such as fire alarm boxes, information kiosks, fixed vending equipment, and trash cans.

14.2.4 Public Sidewalk Curb Ramps [14.2.5 in the NPRM]

This section requires that newly constructed public sidewalks incorporate a public sidewalk curb ramp at each street crossing where there is a curb or other change in level. This provision clarifies that ADAAG 4.7 (Curb Ramps) and ADAAG 4.8 (Ramps) do not apply to public rights-of-way. It also covers public sidewalk curb ramps provided at other locations (e.g., at accessible on-street parking spaces, passenger loading zones, and similar locations). Technical requirements for location, type, landings, slope, width, edges, surfaces and adjacent surfaces, and obstructions to public sidewalk curb ramp construction are provided. Appendix notes clarify the requirements for landings, the types of public sidewalk curb ramps, and recommendations for uniform applications. A note also explains that application of these guidelines does not require greater right-of-way width than that established by State or local plan or practice.

Comment. The NPRM proposed a series of sequential exceptions for public sidewalk curb ramp construction and an alternative method of measuring ramp slopes to allow for conditions of site infeasibility. Many commenters found the sequence difficult to follow and apply.

Response. As discussed above, this section has been reorganized to place new construction and alterations requirements in separate provisions and to clarify that site infeasibility applies only to alterations.

Comment. Many commenters, including all of those from organizations representing persons with disabilities, supported the approach outlined in the NPRM that requires public sidewalk curb ramps to serve all street crossings, regardless of the slope of the adjacent public sidewalk. As DREDF stated in its response, "Even on steep sites, persons using motorized chairs or receiving assistance can use ramps, and they should be available if there is a pedestrian walkway." Others were concerned about the safety of persons using steeply sloping public sidewalk curb ramps.

Response. Public sidewalks and public sidewalk curb ramps that meet the provisions of this section allow persons with disabilities to make the choice of whether to use them or not. This is consistent with other applications of the ADA, which clearly prohibit discrimination based upon assumptions about an individual's abilities. Therefore, even under extreme site conditions, access must be provided.

14.2.4(2) Types of Public Sidewalk Curb Ramps

Paragraph (2) requires that a new street crossing be served by a perpendicular public sidewalk curb ramp and provides an exception allowing a parallel public sidewalk curb ramp or a combination of the two types where right-of-way width cannot accommodate a perpendicular public sidewalk curb ramp. Diagonal public sidewalk curb ramps, including depressed corners, and built-up (e.g., projected) public sidewalk curb ramps are permitted only in alterations.

Comment. A variety of public sidewalk curb ramp details and standards for their application were submitted by commenters. Detailed technical comments were received from the U.S. Department of Transportation and several of its regional divisions and from the transportation departments of four States. Many of these comments recommended that exceptions be provided for various conditions in existing developed rights-of-way. Commenters from public works agencies noted that a perpendicular public sidewalk curb ramp and landing for a six-inch curb height would require at least 10 feet of public sidewalk width and recommended that other alternatives be permitted. However, most indicated that public pedestrian rights-of-way already established in central business districts and commercial areas were sufficiently wide to accommodate a perpendicular public sidewalk curb ramp and landing. Other jurisdictions indicated that they provide similar or greater right-of-way width in

intensively developed zones. One county submitted a copy of the standard details and specifications for public sidewalk curb ramps developed jointly by APWA and AGC that showed a minimum landing of 48 inches connecting to a perpendicular public sidewalk curb ramp as a basic standard. Perpendicular public sidewalk curb ramps were greatly preferred by people with disabilities, including people with mobility impairments and those with vision impairments. Parallel public sidewalk curb ramp construction was suggested as a secondary option. However, parallel public sidewalk curb ramps were preferred to perpendicular public sidewalk curb ramps without landings or with 36 inch landings when right-of-way width is limited.

Response. A 10 to 15 foot right-of-way between curb face and property line is common in existing commercial districts. A 12 foot minimum can be easily accommodated in new land use planning as a first step in standardizing public sidewalk and street crossing details in areas of significant pedestrian activity. Public sidewalk curb ramps must be perpendicular to the curb where right-of-way width permits their installation. Parallel public sidewalk curb ramps or combinations of parallel and perpendicular public sidewalk curb ramps are permitted where right-of-way width may be narrower, as in residential neighborhoods and other low pedestrian volume zones. Other alternatives suggested by commenters, such as diagonal and built-up public sidewalk curb ramps, will be permitted in alterations. No substantive change has been made to this requirement.

Comment. A diverse group of commenters recommended that a separate public sidewalk curb ramp be required for each crossing direction (e.g., crosswalk) rather than a single diagonal public sidewalk curb ramp serving two perpendicular crossings. One city is discontinuing the installation of diagonal public sidewalk curb ramps in response to the concerns of pedestrians. Several commenters with vision impairments submitted accounts of difficulty with diagonal public sidewalk curb ramps and blended intersections. Other comments noted that diagonal public sidewalk curb ramps at intersections require that a turn be made to use either crosswalk. This is time-consuming for many and makes it difficult to complete a street crossing in the time allotted by crossing signals. Diagonal public sidewalk curb ramps may also require persons using wheelchairs to travel in lanes of moving traffic as they leave the public sidewalk. Depressed corners, as proposed in Figure 58(a) of the NPRM, were considered both hazardous and difficult to drain. Many commenters recommended that each street crossing in a narrow right-of-way be served by a parallel public sidewalk curb ramp instead of a perpendicular public sidewalk curb ramp without a landing. Negotiating two consecutive parallel public sidewalk curb ramps was preferred over negotiating the cross slope of a perpendicular public sidewalk curb ramp that did not have a landing.

Response. Public sidewalk curb ramps that are perpendicular to a street crossing provide direct access to the crosswalk and do not require pedestrians to cross into perpendicular traffic lanes. The interim final rule prohibits diagonal public sidewalk curb ramps and depressed corners in new construction. Diagonal public sidewalk curb ramps are, however, permitted in alterations.

14.2.4(3) Width

Paragraph (3) requires public sidewalk curb ramps to have a minimum width of 36 inches. Few comments were received on this section and no substantive changes were made.

14.2.4(4) Landings

Paragraph (4) requires a 48 inch deep landing at the top of, and equal to the width of, a perpendicular public sidewalk curb ramp. A similar landing, 60 inches in length, is required at the bottom of a parallel public sidewalk curb ramp. Cross slope and surface criteria are also specified. An appendix note clarifies the use of level landings.

Comment. Comments from persons with disabilities supported the requirement for a 48 inch landing at the top of public sidewalk curb ramps. Many objected to perpendicular public sidewalk curb ramps that do not have landings and which require pedestrians to negotiate across a complex cross slope. Commenters cited three major concerns regarding the lack of a level landing at the top of a public sidewalk curb ramp: (1) lack of a space to turn when approaching a public sidewalk curb ramp; (2) lack of a space to bypass the public sidewalk curb ramp, and (3) lack of a level area to rest and turn after ascending the public sidewalk curb ramp. The NPRM provided an exception that would permit a 36 inch deep landing under conditions of site infeasibility. Comments from persons with disabilities did not support the exception, noting that a 36 inch landing was too narrow to be useful.

Response. This provision is consistent with ADAAG 4.2.1 (Size and Approach) specifications for clear floor or ground space for wheelchairs, which requires a 30 inch wide by 48 inch long area for a single wheelchair. Unlike ADAAG 4.8.4 (Ramps), which requires a landing 60 inches in length where ramps change direction, additional space available on and adjacent to a public sidewalk will provide adequate clearance for footrests and longer motorized wheelchairs. While a 36 inch landing would provide an adequate passage for a person using a wheelchair bypassing a public sidewalk curb ramp, it will not accommodate a 90 degree turn with all wheels on level ground. Consistent with comments discussed at 14.2 (New Construction: Minimum Requirements), the exception proposed in the NPRM to allow a 36 inch wide landing in cases of site infeasibility has been limited to alterations.

14.2.4(5) Slope

Paragraph (5) requires that the minimum feasible running slope be used for a public sidewalk curb ramp and establishes a 1:12 maximum slope when measured from a level plane. An exception permits parallel public sidewalk curb ramps constructed along sloping public sidewalks to be steeper than a slope of 1:12 if a ramp at 1:12 would extend more than 96 inches in length.

To simplify field application, the exception proposed in the NPRM to permit an alternative method of measuring public sidewalk curb ramp slope has been replaced by a limitation on the length that might result from strict application of the maximum slope requirement for parallel public sidewalk curb ramps only. Where a running slope of 1:12 would result in a parallel public sidewalk curb ramp more than 96 inches long when measured from a level plane, the public sidewalk curb ramp need not exceed 96 inches in length.

Where public sidewalks intersect, as at corners where public sidewalk curb ramps are necessary to serve street crossings, the cross slope limitation will apply in both directions, thus providing a level landing from which to measure curb ramp slope. Perpendicular public sidewalk curb ramp slope and the slope of the parallel public sidewalk curb ramp segment adjacent to the corner can therefore be measured from a level plane. Thus, where parallel public sidewalk curb ramps are located at public sidewalk intersections, the ramp up or down to the landing from the intersection will be no steeper than 1:12. On the other side of the landing, the slope may be that of the public sidewalk itself, unconstrained along sloping rights-of-way. Where a parallel

public sidewalk curb ramp is constructed at a midblock crossing along a sloping public sidewalk, the parallel public sidewalk curb ramp may be the sloping public sidewalk itself connecting on either side to the landing.

14.2.4(6) Edges

Paragraph (6) requires side flares of perpendicular public sidewalk curb ramps to have a maximum slope of 1:10 if adjacent to a public sidewalk.

Comment. The NPRM limited side flares to a maximum slope of 1:12 where the landing at the top of the perpendicular public sidewalk curb ramp was less than 48 inches in length. Several commenters noted that the 1:12 limitation on side flare slope was unnecessary in new construction since a minimum 48 inch level landing is required at the top of a curb ramp. Two commenters recommended steeper side flares as being more distinguishable by persons with vision impairments and suggested a 1:8 maximum. Others supporting a steeper slope for side flares noted that this would make additional public sidewalk area available for signals, utilities, and street furnishings.

Response. This section of the interim final rule applies only to new construction, where public sidewalk curb ramps must have a minimum 48 inch long landing. Side flares may therefore have a maximum slope of 1:10. This will make curb ramps more distinguishable. In alterations, where a 36 inch long landing is permitted, side flares must have a maximum slope of 1:12.

14.2.4(7) Surfaces

Paragraph (7) requires that the surfaces of public sidewalk curb ramps be stable, firm and slip-resistant and provide a visual contrast to surrounding public sidewalk areas. Each public sidewalk curb ramp and landing surface shall lie generally in a continuous plane. Gratings are prohibited on public sidewalk curb ramps. Detectable warnings provisions have been reserved.

Consistent with comments discussed at ADAAG 14.2.1(3) (Public Sidewalks: Surfaces), provisions have been added to this section requiring that surfaces of public sidewalk curb ramps lie generally in a single plane and prohibiting gratings in public sidewalk curb ramps. An appendix note at A14.1.2(3) clarifies this requirement.

Comment. Several commenters noted that reserving detectable warnings provisions in the NPRM eliminated a requirement for visual contrast on public sidewalk curb ramps. These commenters noted that a visual contrast was helpful to pedestrians, particularly at night.

Response. A provision has been added requiring that the surface of the public sidewalk curb ramp shall contrast visually with adjoining public sidewalk surfaces, either light-on-dark or dark-on-light. An appendix note at ADAAG A4.29.2 (Detectable Warnings on Walking Surfaces) contains recommended contrast values.

Comment. Numerous comments were received on the reservation of detectable warnings on public sidewalk curb ramps in the public right-of-way. On July 9, 1993, the Board, the Department of Justice, and the Department of Transportation issued a joint Notice of Proposed Rulemaking proposing to suspend temporarily the requirement for detectable warnings on curb ramps and at reflecting pools and hazardous vehicle crossings (58 FR 37052). If adopted, the provisions of ADAAG 4.7.7 (Detectable Warnings), 4.29.5 (Detectable Warnings at Hazardous Vehicular Areas), and 4.29.6 (Detectable Warnings at Reflecting Pools) would be suspended until January 1995. The Board is conducting further research on detectable warnings. The requirement for detectable warnings for elements covered by ADAAG sections 4 through 10 remains in effect unless and until the Board, the Department of Justice, and the Department of Transportation adopt the proposed suspension and publish a final rule in the **Federal Register**. Comments on detectable warnings submitted to the docket for this rulemaking were considered along with comments submitted to the docket for the July 9, 1993 NPRM.

14.2.4(8) Transitions

Paragraph (8) requires that counter slopes where gutters and streets connect to public sidewalk curb ramps be limited to 1:20 for a distance of 24 inches and prohibits gratings in the area at the base of the public sidewalk curb ramp. It also requires that transitions be flush and smoothly blended.

Comment. The NPRM proposed that the counter slope of adjacent surfaces be limited to a maximum of 1:20. Many commenters objected to this limitation for existing gutters, which may have a slope as steep as 1:12. A few commenters noted, however, that a 1:20 slope would be achievable in new construction. Other commenters noted that some designs of street cross sections would preclude maintaining this slope consistently across a street crossing and suggested a limitation in length.

Response. The angle of incidence between a wheelchair descending a public sidewalk curb ramp and the counter slope of the gutter must be limited to avoid catching the wheelchair footrest. The 1:20 maximum required in the interim final rule is consistent with ADAAG 4.7.2 (Slope). The interim final rule adds a requirement that the area of 1:20 slope extend for a 24 inch distance (the length of the wheelbase of most wheelchairs) from the edge of the public sidewalk curb ramp.

Comment. Several commenters expressed concern about the difficulties of travelling over gratings in public sidewalks.

Response. Consistent with prohibitions within the continuous passage and on public sidewalk curb ramp landings, gratings may not be installed in street crossings where public sidewalk curb ramps or landings meet adjacent surfaces. Additional discussion can be found in ADAAG 14.2.3 (Public Sidewalks).

Comment. Several jurisdictions recommended that raised edges be permitted at the bases of public sidewalk curb ramps to facilitate street cleaning and surface drainage.

Response. The interim final rule is consistent with ADAAG 4.7.2 (Slope), which requires that transitions be flush and free of abrupt changes. Even a small level change at the base of a public sidewalk curb ramp can stop a wheelchair, particularly on ascent where it may be necessary to take a run at the ramp slope. No change has been made to the requirement that transitions be smoothly blended.

14.2.4(9) Obstructions

Paragraph (9) requires that public sidewalk curb ramps be protected from obstructions by parked vehicles. No comments were received on this provision and no changes were made.

14.2.5 Pedestrian Street Crossings [14.2.5(13), 14.2.6, 14.2.7, and 14.2.8 in the NPRM]

This section requires that street crossings connect to the continuous passage by means of a public sidewalk curb ramp and that related crossing controls, marked crossings, islands, and overpasses be accessible where provided.

14.2.5(1) Crossing Controls

Paragraph (1) adapts ADAAG requirements for control button size, operating force, mounting height, and location. It requires a control button to be raised or flush and a minimum of two inches in its smallest dimension and limits the force required to operate controls to 5 lbf (22.2 N). This paragraph also requires that controls be located as

close as practicable to the public sidewalk curb ramp or landing serving the crossing at a maximum height of 42 inches above the finished surface of the public sidewalk. It further requires a 30 inch by 48 inch level area within 10 inches horizontally of the control and centered on the control for a parallel approach and centered on and abutting the control for a forward approach.

Comment. The NPRM sought comment on the size, usability and maintenance of crossing control buttons. Commenters stated that recessed or hooded buttons and very small membrane-enclosed buttons were difficult for many persons to operate. A few commenters supported the proposed 3/4 inch provision, derived from ADAAG 4.10 (Elevators), for reasons of consistency. Other commenters stated that they had had no problems or complaints from the ¾ inch diameter buttons installed in their jurisdictions. A number of municipalities indicated that larger buttons were more prone to freezing and vandalism. However, the State of Oregon, and the Douglas County (OR) Public Works Department both indicated that two inch buttons with integral guards posed minimal problems in cold wet climates. EPVA recommended a two inch diameter button as being easier to operate on public sidewalks where site conditions may be less than adequate and the relationship of the button, the public sidewalk curb ramp and landing, and the street crossing may not be optimal. Most individuals with disabilities and organizations representing them strongly supported a button two inches or larger in diameter. The Hawaii Commission on Persons with Disabilities noted that controls should be operable with a closed fist.

Several State and local government transportation and public works agencies submitted manufacturers' specifications on crossing controls. An Australian traffic engineer submitted data on a three inch by five inch oval button with raised arrows that indicate crossing direction. Large buttons and plates, tactile signage, and raised crossing direction indicators were also recommended by a number of individuals who are blind. A few commenters, including the Lighthouse for the Blind and the American Council of the Blind, suggested that a color contrast at the button would also be useful for pedestrians with vision impairments. Other recommendations included convex and raised buttons rather than flush installations and lever and vertical bar operators for maximum usability by persons with upper body mobility impairments.

Response. The interim final rule requires that crossing control buttons be larger than elevator call buttons given their outdoor locations and the likelihood that surface conditions and location may not allow as controlled an approach as is possible to a wall-mounted elevator button in the lobby of a building. Small buttons require greater fine motor control to operate. A larger button that can be actuated by a slight motion or closed fist will be usable by more persons. This is particularly important where a crossing cycle can only be actuated by operating the control. Additional issues, such as contrast, tactile directions for use, and other button designs may be considered in future rulemaking.

Comment. Several commenters from organizations representing persons with disabilities noted that operating force is more significant to usability than button size, recommending as little as two pounds of force to actuate a crossing control.

Response. No data were submitted in support of a lesser operating force nor was information supplied on the availability of controls with lesser requirements. The larger button requirement and lower mounting height now required of crossing controls should facilitate operation by a larger number of persons. No change has been made in this requirement.

Comment. The NPRM proposed that the control button be located as close as possible to a public sidewalk curb ramp. Few comments were received on the location of the control button relative to the approach area and public sidewalk curb ramp or level landing serving the street crossing. However, a few commenters suggested that greater specificity was required to ensure usability within standard crossing times.

Response. The interim final rule requires that the horizontal distance between the approach space and the control be no more than 10 inches for a parallel approach. This requirement is derived from ADAAG 4.2 (Space Allowance and Reach Ranges). Both forward and parallel approaches are permitted. An appendix note recommends placing the controls out of the path of travel along the public sidewalk.

Comment. The NPRM sought comment on the proposed 48 inch maximum mounting height for crossing controls. Most commenters favored a lower height, in some cases as low as 32 inches. Heights of 36 inches and 42 inches were supported by organizations representing persons with mobility impairments. EPVA recommended a 42 inch mounting height, as required for an elevator button in ADAAG 4.10 (Elevators). MUTCD recommends a range between 42 and 48 inches. Commenters noted that controls are mounted on a slip ring and can be easily installed at a lower height.

Response. Where it is necessary to operate the control in order to initiate the crossing cycle, it is important that the button be installed within a reach range that serves the greatest number of people. Therefore, the mounting height in the interim final rule has been changed to a maximum of 42 inches.

Comment. The NPRM sought comment on specifications for audible crossing signals for persons with vision impairments and vibro-tactile controls for those with vision and hearing impairments. A large number of comments and technical data were received. Commenters with vision impairments cited locations and types of equipment that facilitated unassisted street crossing. Departments of public works and similar State and local government agencies and transportation engineers from private industry submitted reports, recommendations, warrants for installation, studies, and cost data for audible pedestrian signals. Organizations representing persons with vision impairments, mobility instructors, and individuals who are blind supported and opposed audible crossing signals. Some commenters noted that audible signals facilitated safe and independent travel, particularly by those with late-onset vision impairments. Other commenters were concerned that audible signals would mask environmental cues and stigmatize persons who are blind as needing special accommodations in order to travel about on public sidewalks.

Response. The interim final rule does not contain technical or scoping provisions for audible or vibro-tactile crossing signals because of a lack of consensus on the need for these devices and the specifications they should be required to meet. However, the material received may be of value to the Board in future rulemaking and technical assistance. Furthermore, emerging wayfinding and broadcast signage technologies may have applications to pedestrian street crossing. Technology that makes pedestrian information audible is being tested in several communities and facilities.

Comment. Several municipal governments were concerned about the need to change the button size or lower

the height of existing crossing controls and the potential costs of such changes.

Response. New, added, and altered installations must comply with ADAAG 14 requirements. Existing facilities are addressed by the Department of Justice regulations implementing title II of the ADA (28 CFR 35.150).

14.2.5(2) Marked Crossings

Paragraph (2) requires that markings at pedestrian crossings provide visual contrast.

Comment. The NPRM included an appendix note recommending locations for marked crossings such as at State and local government facilities, transportation facilities, places of public accommodation, irregular intersections and mid-block crossings. Commenters suggested deference to recommendations in the MUTCD for the location of marked crossings.

Response. The interim final rule does not contain recommendations on where marked crossings should be located. The appendix has been amended to include information on marked crossings derived from MUTCD and AASHTO recommendations.

Comment. The proposed rule required marked crossings to be delineated with contrasting markings or materials. Comments from organizations representing persons with vision impairments supported contrast requirements for marked crossings and recommended that the final rule contain more specific requirements. Many commenters suggested additional features for crosswalk design, including raised guidestrips, textured and resilient surfaces, and flashing lights to increase their identifiability. Other commenters noted that the examples provided did not include any of the standard methods of marking crosswalks.

Response. Methods of measuring color contrast in and between exterior paved surfaces are not sufficiently well-developed to establish a requirement at this time. No substantive changes have been made to this provision. However, the examples have been removed. A new appendix note on contrast has been added to clarify recommendations in the absence of a technical specification. Other crossing features recommended by commenters have been included in the appendix note.

14.2.5(3) Islands

Consistent with ADAAG 4.7.11 (Curb Ramps), paragraph (3) requires that islands in pedestrian crossings be cut through to allow an at-grade passage or be provided with public sidewalk curb ramps and a landing.

Comment. Few comments were received on this provision. Several commenters expressed concern that islands with cut-through passages at street grade did not provide cues to persons with vision impairments. One commenter noted that islands that are marked or cut through often do not provide enough space for a person using a wheelchair to wait safely through a traffic light cycle if his crossing is interrupted by a light change.

Response. An appendix note has been added recommending a visual contrast for the at-grade surface of an island in a street crossing and adequate space for a wheelchair to be out of traffic lanes.

14.2.5(4) Pedestrian Overpasses and Underpasses

Paragraph (4) requires ramps complying with ADAAG 4.8 (Ramps) or elevators complying with ADAAG 4.10 (Elevators) where a public sidewalk crosses over or under a street. It also requires that stairs serving overpasses and underpasses comply with ADAAG 4.9 (Stairs).

An appendix note clarifies that overpasses and underpasses in hilly terrain may be approached at or near grade by public sidewalks with a slope at or less than 1:20. Since the construction of an overcrossing or undercrossing facility offers the opportunity to provide slopes that could not be achieved adjacent to roadways, however, grade-separated segments must be connected to the continuous passage at each end by means of ramps or elevators.

Comment. The NPRM sought comment on whether there were constraints specific to overpasses and underpasses for which an exception should be allowed. Few commenters opposed accessible pedestrian overpasses and underpasses in new construction. Several commenters, including DREDF, recommended allowing a circular ramp if site constraints made that the only feasible option. The National Association of State Facilities Administrators (NASFA) favored an exception from accessibility requirements where the grade differential exceeds 14 feet. ITE members and several State transportation agencies noted that high spans may be too costly to construct to be accessible. One architect suggested that pedestrian actuated crossing signals and crosswalks be permitted in lieu of ramps and elevators where equivalent access could be achieved. The State of Illinois Department of Transportation recommended an exception for underpasses and overpasses serving remote transit parking if accessible spaces were provided at the station.

Response. The Architectural Barriers Act (42 U.S.C. 4151, *et seq.*) and the Department of Transportation regulation (49 CFR 27.75) implementing section 504 of the Rehabilitation Act require that Federally funded highway construction comply with UFAS standards. Therefore, ramps have been provided in most new grade-separated pedestrian crossings in recent years. By their nature, overcrossings and undercrossings are costly to plan and construct. Careful planning in new construction can provide full accessibility. Furthermore, providing accessible ramps does not have a major cost effect on overall project expenditures. An alternative at-grade crossing for extreme differentials in grade does not seem practicable, as most overpasses and underpasses are provided where roadways are wide, speed is high, and vehicle volume is heavy. Additionally, studies have shown that, if an alternate shorter route is available, pedestrians will choose it in favor of a longer grade-separated structure even if it is more dangerous. This would defeat the purpose of providing separated crossings. No exception is included for new construction. An appendix note has been added to include information on circular ramps, which do not meet the requirements of ADAAG 4.8 (Ramps). Transit stations are covered by ADAAG 10 (Transportation Facilities) and not as public rights-of-way under section 14.

Comment. The NPRM sought comment on whether stairs serving overpasses and underpasses that were also served by a ramp or elevator should comply with ADAAG 4.9 (Stairs). Commenters supported such a requirement, noting that its cost effect would be negligible because standards in most public works construction codes are similar to ADAAG 4.9 (Stairs). Commenters noted that the benefits of increased accessibility for persons who have difficulty traversing long ramped approaches justified the inclusion of such a provision in section 14.

Response. The interim final rule has been revised to include a requirement that stairs at overpasses and underpasses comply with ADAAG 4.9 (Stairs).

Comment. The NPRM proposed to include platform lifts where permitted under 4.1.3(5) as a means of access to an overpass or underpass. Several commenters noted that platform lifts were not a realistic option in such locations because of the limitations on run and operation imposed by ASME A17.1–1990 Safety Code for Elevators

and Escalators, referenced in ADAAG 4.11 (Platform Lifts (Wheelchair Lifts)). EPVA also opposed platform lifts, noting that installation would require a finding that an elevator was infeasible. EPVA further noted that elevators could be provided in any location that could accommodate a platform lift.

Response. Under ADAAG 4.1.3(5), a platform lift (wheelchair lift) may be provided only when installation of an elevator is infeasible because of site or other constraints. In new construction, access to overpasses and underpasses can be designed to incorporate an elevator. The reference to ADAAG 4.1.3(5) and 4.11 (Platform Lifts (Wheelchair Lifts)) has therefore been removed.

Comment. One commenter requested clarification of the application of ADAAG 14 to elevated pedestrian networks, such as the extensive pedestrian network developed by public and private interests in Minneapolis (MN) and below-grade networks, typically connecting subway stations and major building complexes, in New York City.

Response. To the extent that these networks are: (1) developed under the authority of a State or local government, (2) are intended for public pedestrian access, circulation, and use, and (3) occupy, along at least some of their length, air or ground rights in the public right-of-way, they must be accessible under this section. Because topography will not be a consideration, it should be possible in new construction to provide a level route along the continuous passage, which will typically connect to surface circulation networks by elevators, which may be provided in private facilities or at transit stations. ADAAG 4.3.1 requires skywalks and tunnels that are part of an accessible route on a site or within a facility to comply with 4.3 (Accessible Route). Where such construction lies in the public right-of-way and connects above or below grade to the accessible routes required of facilities on private sites, these pedestrian circulation networks must provide a continuous passage and comply with other provisions of this section. Direct connections from transit facilities are covered by ADAAG 10.3.1(3). Additionally, elements placed along above-grade or below-grade public pedestrian routes must comply with the requirements of ADAAG 14.

Comment. Comments from persons with vision impairments and several organizations representing them were concerned about traffic provisions such as "right-turn-on-red" and left/right turning phases, noting that such practices make it difficult to accurately perceive traffic cues at complex intersections. Other commenters recommended an extended crossing time interval at crossing controls for persons who cannot complete a crossing in the standard time allotted.

Response. These are operational issues more properly raised with local departments of streets and engineering, public works, or similar agencies. Many departments will install crossing devices upon individual request.

14.2.6 Vehicular Ways and Facilities [14.4 in the NPRM]

This section requires on-street parking, parking meters, passenger loading zones and motorist aid communications systems provided on or adjacent to a public right-of-way for pedestrian use by motorists to be accessible.

14.2.6(1) On-Street Parking

Paragraph (1) requires accessible parking spaces where on-street public convenience parking is provided in commercial areas or at civic buildings. Technical requirements are also provided for on-street parallel, perpendicular, and angled parking spaces in such areas. Appendix notes provide examples of new on-street parking and describe parallel, perpendicular, and angled on-street parking spaces. Requirements for on-street parking along existing public sidewalks are addressed in ADAAG 14.3 (Alterations).

Comment. The NPRM required that new on-street parking in commercial districts include accessible spaces and sought comment on how the chart at ADAAG 4.2.1(5)(a) should be applied to on-street parking spaces. Most commenters supported use of the table and suggested applying it in a variety of ways, including block areas, block lengths (both one-sided and two), parking districts, commercial and central business zones, or the total inventory of on-street parking in a jurisdiction. Several comments suggested a scoping based on demonstrated need. Some commenters were concerned that applying the table to a series of small projects with a limited number of spaces might result in an overall requirement for more spaces. Persons with disabilities recommended applying the table to small areas in order to provide broad dispersal, maximum convenience, and the shortest possible routes of travel. Several commenters suggested that scoping be expanded to include parking at municipal buildings.

Response. In new development, parking will typically be provided as part of a larger project, such as the widening of a street, the improvement of a downtown commercial area, or the creation of a new subdivision. Therefore, the interim final rule uses project as a basis for scoping. A new on-street parking project may be established within a discrete area defined by several blocks and include both sides of a street or streets. Major street and public sidewalk reconstructions will have similar characteristics. An urban block may provide as many as sixty spaces around its perimeter; a block-long street length may average thirty for both sides together. The interim final rule requires that where new on-street parking is provided as part of a project in commercial districts and at civic buildings, accessible spaces shall be provided in accordance with the table at ADAAG 4.1.2(5)(a). Such spaces shall be reasonably dispersed throughout the project area. A provision has been added that requires accessible spaces to be located where street and sidewalk slope is minimal, to the extent that this is consistent with reasonable dispersal. A needs-based provision is not feasible in new construction, where use levels will be initially low until full development is achieved, at which time it might not be practicable to add accessible spaces where needed. A requirement has been added to include parking at civic buildings.

Comment. Many comments recommended that the length and width of accessible parking spaces be specified.

Response. A requirement has been added that accessible parking space length and width be no less than those provided for standard spaces in a jurisdiction.

Comment. The NPRM proposed a 60 inch wide parallel access aisle and a 36 inch wide perpendicular access aisle connecting to a public sidewalk curb ramp. Two organizations representing the parking industry provided detailed recommendations on different designs of accessible parking spaces. Commenters were concerned about vehicle maneuverability in indented spaces, sufficient access space to use a public sidewalk curb ramp when spaces are occupied by vehicles, and provisions for rear-loading vans. Several commenters also recommended that angled and perpendicular on-street parking be addressed.

Response. The interim final rule provides technical provisions for parallel, perpendicular, and angled parking and requires a wider perpendicular access aisle. Where the public pedestrian right-of-way exceeds

12 feet in width, parallel on-street parking spaces require both perpendicular and parallel access aisles. A 60 inch wide perpendicular access aisle must be located at the head or foot of an accessible parking space and connect to a public sidewalk curb ramp. The perpendicular access aisle will allow unobstructed travel from accessible parking spaces to the public sidewalk and a more generous vehicle maneuvering space. Side-loading vans may use the public sidewalk area at a standard parking space, if unobstructed, or the public sidewalk at an accessible parking space to deploy a lift and thus are not specifically provided for here. Many rear-loading vans will be able to use the perpendicular access aisle to deploy a lift.

A parallel access aisle provides an area for entering and exiting the vehicle outside traffic lanes. The parallel access aisle is required to enable the driver or passenger to transfer from the vehicle. This access aisle can be located on either side of the vehicle, depending on how the car is parked. Parallel on-street parking spaces may be indented into the public sidewalk as are loading zones or utilize space occupied by parkways or street furnishing zones along a curb. An exception has been added for narrower rights-of-way, where only the perpendicular access aisle and public sidewalk curb ramp must be provided. Two parking spaces may be paired at one public sidewalk curb ramp, although the requirement for dispersion may preclude larger groupings. Perpendicular and angled spaces are specified similar to ADAAG 4.6 (Parking and Passenger Loading Zones). The provision for signage has been amended to include designation of van-accessible perpendicular and angled parking spaces. Two angled parking spaces are not permitted to share an access aisle because the parking approach may preclude backing into the space so that the access aisle is on the side necessary for transfer.

Comment. The NPRM asked whether additional parking spaces provided in lots or garages could substitute for required on-street parking spaces if greater convenience to commercial districts could be achieved. Commenters noted that when new on-street parking is added, regardless of its location and convenience, some accessible on-street parking spaces should be provided. If accessible on-street parking is not provided at the time of expansion, it will be difficult to add it later, when it will be needed. One commenter noted that Washington, DC and Los Angeles (CA) provide most of their municipal parking on streets rather than in parking garages or lots.

Response. No provision has been included in the interim final rule to allow additional accessible parking spaces in lots or garages to substitute for required on-street parking spaces. When either is provided, it must include the full number of accessible parking spaces required by applicable ADAAG provisions.

Comment. An appendix note in the NPRM suggested that accessible on-street parking spaces located adjacent to an intersection may be served by a public sidewalk curb ramp at that intersection. A few commenters were concerned about the safety of persons transferring from a vehicle to a wheelchair in narrow rights-of-way where parallel access aisles may not be provided.

Response. These are dangers faced by all motorists exiting on the driver's side under some conditions. As in other sections of these guidelines, access is nevertheless required to ensure choice. The proposed appendix note has been deleted. The interim final rule permits on-street parking spaces without access aisles in alterations where site infeasibility precludes compliance with ADAAG 14.2.6(1).

Comment. Several commenters from regions with heavy winter snowfall expressed concern about snow removal at indented curbs.

Response. Snow removal is a problem at every pedestrian feature, particularly at public sidewalk curb ramps and intersections. The construction of indented parking is similar to that of loading zones provided on urban public sidewalks in many jurisdictions and should not require different treatment.

14.2.6(2) Parking Meters

Paragraph (2) requires parking meters to meet ADAAG requirements for controls, mounting height, and location requirements.

Comment. The NPRM required that all parking meters be accessible. Most jurisdictions indicated that the parking meter they commonly specify could not meet guidelines for operation without tight grasping or twisting and reported having a program allowing free parking for persons displaying appropriate license plates or placards. Other commenters saw no need for accessible meters if exemptions were available.

However, many commenters supported the requirement that these parking meters be accessible and pointed out that some persons may have disabilities that make it difficult to operate controls but are not eligible for license plates allowing free parking. These commenters further noted that only a few State programs provide full reciprocity with other jurisdictions and that local policy on exemptions could change at any time. Commenters asserted that it would be less costly to have a standard specification for all meters than to have to install, maintain, and collect money from both accessible and inaccessible types.

Response. Meters with accessible controls are available from several manufacturers at only slightly increased cost over standard meters. Just as controls and operating mechanisms, such as door hardware, light switches, and dispenser controls, located on an accessible route must be accessible, the controls and operating mechanisms of fixed street furnishings along a continuous passage must also comply with ADAAG 4.27 (Controls and Operating Mechanisms). Since motorists generally cannot choose a particular parking space, and persons with disabilities that affect their ability to grasp and twist operating mechanisms will not always be able or need to use an accessible parking space, the requirement that all meters be accessible has not been changed in the interim final rule.

Comment. The NPRM sought comment on the requirement for a 48 inch mounting height for parking meters. Commenters recommended mounting heights between 32 and 48 inches. A number of commenters noted that some parking meters post hours of operation on a horizontal surface within the casing, and that this information should be accessible to persons in wheelchairs. Several jurisdictions noted that a lower mounting height was feasible.

Response. Persons with disabilities may choose to use any on-street parking space that is available, even though it may not meet the requirements for an accessible space. Therefore, the interim final rule requires a maximum mounting height of 42 inches to the operable parts of controls, consistent with requirements in ADAAG 14.2.5(1). Where accessible on-street parking spaces with access aisles are not provided, this provision ensures that accessible meters will be available.

Comment. Several commenters recommended a more specific requirement for the location of the parking meter relative to the approach area at accessible parking spaces. One commenter suggested that meters be located within 10 inches horizontally of the space required for a wheelchair to operate them, consistent with ADAAG side reach limits for a parallel approach.

Response. The interim final rule includes a requirement that meter controls be located within 10 inches horizontally of the clear ground space and be centered on that space at accessible parking spaces.

14.2.6(3) Passenger Loading Zones

Paragraph (3) adapts ADAAG requirements for passenger loading zones to the public right-of-way.

Comment. The NPRM referenced ADAAG 4.1 through 4.35, which included 4.6.6 (Passenger Loading Zones). One commenter sought a clarification of the number of public sidewalk curb ramps required in a passenger loading zone that serves several vehicles. The commenter noted that block-long curbside drop-off and pick-up areas at transportation facilities may have only a single public sidewalk curb ramp, which may be difficult to identify, be obstructed by a car, or require a lengthy route of travel to separate entrances.

Response. The interim final rule adds a provision that requires additional public sidewalk curb ramps at reasonable intervals where passenger loading zones serving multiple vehicle spaces are provided along public rights-of-way.

14.2.6(4) Motorist Aid Communications Systems

Paragraph (4) requires that callboxes installed along public roadways be accessible. It requires controls and operating mechanisms to be operable by one hand without tight grasping, pinching or twisting of the wrist. The force required to activate the controls cannot exceed five pounds. The highest operable part of the callbox shall be no more than 48 inches above the finished grade at the callbox. It also requires the callbox to provide both visible and audible indicators and precludes voice-only use. It further requires that a stable, firm, and slip-resistant surface a minimum of 30 inches by 48 inches be provided immediately adjacent to the callbox and that it be level and connect to the roadway shoulder, or to a public sidewalk or pedestrian path, if provided, by means of a continuous passage.

Comment. Several commenters suggested that the use of the word "emergency" in defining the coverage of this section might have legal implications or restrict coverage to systems that offer police communications only.

Response. This provision covers systems provided for motorist communication along highways, whether they access a central control station, a 911 service, or a law enforcement or other switchboard. Although the term "callbox" is used throughout the provision, the device in place may operate by cellular telephone, radio, or other technology using a handset or push buttons. The section has been retitled to clarify that it applies to all such systems.

Comment. The NPRM proposed that physical access be provided to callboxes. A large number of comments were received from State and local government agencies responsible for the design, installation, and operation of motorist aid systems in California. The California Highway Patrol submitted data on accidents involving patrol officers, disabled vehicles, and pedestrians along high-speed roadways indicating that persons travelling along a roadway shoulder or break-down lane are at risk and present a hazard to motorists. Commenters from transportation agencies were strongly opposed to accessible callboxes, citing safety concerns and the difficulty of providing a continuous passage to callboxes located along highways. Persons with disabilities and organizations representing them supported physical access to callboxes, noting that persons with disabilities should have the same choices as other motorists needing assistance on the highway. However, several persons with disabilities and two State organizations representing them submitted comments favoring alternative methods of access, specifically the provision of cellular telephones. A number of commenters favored physical accessibility to new installations in combination with alternative forms of access to existing systems.

Response. Callboxes that are physically accessible are available to every motorist if the need arises, allowing each motorist to make a judgment about the advisability of using it. In new installations, it is possible, by the careful selection of location and the application of standard engineering practices, to achieve an accessible approach without compromising drainage, guardrail, abutment, and other criteria of highway design. Although a continuous passage from the shoulder to the callbox is required, there is no requirement that a passage along the highway be provided. Access to existing facilities, including callboxes, is subject to the Department of Justice regulation implementing title II of the ADA (28 CFR 35.150(b)). No substantive changes have been made in this requirement.

Comment. The New York Metropolitan Transportation Authority (MTA) raised the issue of access to callboxes installed in tunnels and on bridges where structural and cost considerations encourage structural design that occupies the least possible right-of-way width. MTA suggested that an exception be given from the requirement for accessible callboxes for such facilities.

Response. Because of the likelihood and serious effect of breakdowns in tunnels or on bridges, AASHTO recommends full shoulders in longer tunnels and a 30 inch curb or public sidewalk. A four foot shoulder is the minimum recommended for bridges on arterials. Where motorist aid communications systems are provided in new construction, it should be possible to provide physical access from the roadway to the callbox (e.g., with an indentation in the raised curb at the callbox).

Comment. The NPRM asked whether callboxes were available that met the five pound requirement for controls and operation. One manufacturer of callboxes that utilize cellular telephone technology was confident that its equipment could meet the force requirement, although it acknowledged that some changes to their current specifications might be necessary. Another manufacturer, whose radio signal callboxes are powered by user actuation of a pull-down handle, asserted that the mechanics of this process made it impossible to meet the five pound force without increasing the range of motion required or impeding system reliability. The manufacturer reported that its product had been found usable by five persons with a range of mobility impairments during independent testing by the Delaware Architectural Accessibility Board in 1985. Several State highway agencies noted that callbox technology is now focussed on cellular telephone communications because of greater system reliability.

Response. Many industries have retooled to implement technological advances. While some manufacturers may have difficulty achieving the required operating force, accessible roadside callboxes are available from several manufacturers. Moreover, the operating force requirements in ADAAG are the same as those in UFAS, which has been in effect since 1984. Some units that do not currently comply with the operating force requirements can be made accessible by the addition of mechanical operating components. The increased range of motion which may be necessary can be accommodated by a lower mounting height or by reversing the direction of lever operation. No

substantive change has been made in operating force and control provisions.

Comment. The NPRM asked questions on the mounting height of callboxes, inquiring about the feasibility of a 48 inch maximum height rather than the standard 54 inch height. The Federal Highway Administration (FHWA) commented that callboxes as low as 42 inches above finished grade would meet standards imposed by the Federal-Aid Highway Act (23 U.S.C. 101, et seq.), "* * * if callboxes are mounted on the downstream side of their supports. A breakaway support with a callbox mounted opposite the direction of traffic will carry the callbox over the car on impact." While a few commenters anticipated increased difficulty in snow removal at a lesser height and some noted guardrail and other possible mounting impediments in existing locations, no commenter furnished information that would preclude a lower installation. Furthermore, several commenters noted that systems currently installed in California are mounted with the highest operable part at 54 inches, with the bottom of the receiver somewhat lower and its armored cord within 46 inches of grade. Persons with disabilities and groups representing them recommended a lower height, ranging from 36 to 48 inches.

Response. Callboxes are located outdoors where surface conditions may not allow as controlled an approach as is possible to elements installed in a building. Furthermore, persons using callboxes located as recommended by the FHWA should be facing traffic and may be using a front approach to the device. Therefore, the interim final rule requires that the highest operable part of a callbox be mounted no more than 48 inches above finished grade at the callbox. This height requirement should ensure that the bottom of the callbox is at or above the 42 inch minimum recommended by FHWA.

Comment. The NPRM requested comment on programs proposed in California that would provide access to motorist aid communications systems by means of cellular technology, and asked if these were an acceptable alternative to physical accessibility at the callbox site. Responses were received from many Service Authorities for Freeway Emergencies (SAFE), several State and local transportation departments, and many persons with disabilities and organizations representing them. Although several persons with disabilities welcomed the access offered by such a program, most commenters recommended that new callboxes be physically accessible and noted that providing cellular telephones only to persons with disabilities was discriminatory. Other commenters noted that the logistics of such a program would be unmanageably complex and could not guarantee cellular telephone availability to all who might need them.

Response. As discussed above, newly installed callboxes must be physically accessible. Access to existing facilities, including callboxes and callbox systems, is covered by the Department of Justice regulations implementing title II of the ADA (28 CFR 35.150(b)).

Comment. The NPRM proposed that callboxes not require voice-only communications. Comments from individuals who have hearing impairments and organizations representing them recommended that callboxes include TTYs or provide for the use of a portable TTY.

Response. While some cellular telephone callboxes are compatible with portable TTYs, no information on models that incorporate a TTY was submitted. Furthermore, some callboxes do not use telephone technology. The prohibition against voice-only communication has been maintained but TTY technology is not specified. The provision has not been changed.

14.3 Alterations [14.5 in the NPRM]

This section requires that altered pedestrian facilities comply with requirements for new construction to the maximum extent feasible under existing conditions of site development and provides exceptions for site infeasibility. This requirement is consistent with ADAAG 4.1.6 (Accessible Buildings: Alterations). Special technical provisions for alterations of elements covered by this section have also been provided. Appendix notes provide examples of alterations and describe conditions of site infeasibility.

Comment. The majority of commenters requested clarification of the differences between new construction and alterations.

Response. Most of the construction in public rights-of-way will be considered alterations and will therefore be covered by this section rather than by ADAAG 14.2 (New Construction). Alterations occur in existing developed areas of an improved public right-of-way where existing construction is removed or altered, whether by intention or as a consequence of other work. The new work must meet established grades and existing construction at the project perimeter as well as at points within its area, such as at intersecting public sidewalks, curbs and street crossings, and at entrances to existing buildings and facilities. Alterations may occur within the physical boundaries of a project area or be described as a project scope of work. For example, the reconstruction of a length of street and public sidewalk will occur within a project area bounded by the limits of the public right-of-way for a stipulated distance. Within this project area, all new work must meet guidelines for new construction to the maximum extent feasible. Other alterations projects may consist of the installation of a typical element, such as benches or drinking fountains, dispersed throughout a neighborhood or other general area. In such work, the scoping of accessible elements is based on individual location. Where a single item is placed at a location, it is a common use element and must therefore be accessible.

Comment. The NPRM proposed that alterations to existing elements constructed as a part of a public improvement project comply with ADAAG 4.1.6 (Accessible Buildings: Alterations) and section 14. Many commenters requested clarification of the application of ADAAG 4.1.6 to public rights-of-way.

Response. As discussed in ADAAG 14.1 (General), the entire section has been reorganized to address new construction and alterations separately. Provisions derived from ADAAG 4.1.6 (Accessible Buildings: Alterations) have been added to this section to clarify applications to public rights-of-way. These requirements (1) prohibit decreasing the accessibility of existing pedestrian facilities; (2) require full accessibility to public sidewalks, public sidewalk curb ramps, and pedestrian street crossings within a project area if a series of small alterations has the overall effect of a reconstruction; and (3) require alteration projects involving public sidewalks, public sidewalk curb ramps, and street crossings to include alterations necessary to connect to adjacent portions of the continuous passage, to the extent it is not disproportionate in cost and scope. The latter requirement is based upon ADAAG 4.1.6(2) (Alterations to an Area Containing a Primary Function), which requires that alterations that affect or could affect the usability of or access to an area of primary function be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area, and certain elements serving that area, be readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope.

Public sidewalks, including the continuous passage, public sidewalk curb ramps, and pedestrian street crossings are the areas of primary function in a pedestrian circulation network. Accordingly, when any of these elements is altered, the scope of work may need to be expanded to include accessible connections to existing work. For example, when a new public sidewalk curb ramp is constructed, existing contiguous areas of the public sidewalk must be altered to ensure that the newly-placed public sidewalk curb ramp complies to the maximum extent feasible with the provisions required of public sidewalk curb ramps in new construction, if it can be done by the expenditure of an additional 20 percent of the cost of this alteration. However, alterations in the public right-of-way that do not affect these elements or the continuous passage would not incur a path of travel obligation. For example, the addition of accessible benches at an intersection will not require the provision of a continuous passage or other accessible elements.

In order to ensure smooth transitions and structural integrity, public works specifications typically require that finished surfaces adjacent to altered work be removed and replaced beyond the minimum necessary to perform the work. Therefore, most jurisdictions already include improvements necessary to blend new work with existing surfaces.

The replacement of one flag, square, or section of public sidewalk paving within a larger area to remedy damage to, or deterioration of, a limited area is considered maintenance and repair unless a substantial area or significant element is involved. Alterations are generally planned as improvement projects and will be placed or constructed according to plans and specifications. Maintenance and repair items, however, are typically governed by work orders that assume an in-kind replacement of materials and surfaces that does not require detailed planning. As required by ADAAG 14.4 (Temporary Work), temporary repairs to public sidewalks must meet the surface requirements of this section.

Special technical provisions for alterations derived from ADAAG 4.1.6(3) (Special Technical Provisions for Alterations to Existing Buildings and Facilities) have also been added to this section. These technical provisions include exceptions which were applied to new construction in the NPRM.

Comment. State and local government agencies responsible for public rights-of-way construction recommended a general exception to cover all instances of site infeasibility. A FHWA engineer noted:

> Sidewalk reconstruction on "continuous accessible routes" in central business districts is often difficult due to the need to adjust the cross-slopes and the longitudinal grades to meet the ADAAG requirements. Existing curb line grades and the need to meet existing entrances in buildings abutting the back edge of the sidewalks impose many physical restrictions. Also, there may be underground structures (drainage, utilities, freight elevator entrances, subway and subway access structures) or other obstacles which may preclude full compliance with the ADAAG cross-slope requirements.

Response. The NPRM proposed a series of exceptions for constrained site conditions that applied to both new construction and alterations. The interim final rule clarifies that site infeasibility applies only to alterations and refers to existing improvements in public rights-of-way and development on adjacent sites that prohibit compliance with specific requirements for new construction.

Where site infeasibility precludes full compliance with provisions for new construction, public entities must provide accessibility to the maximum extent feasible, regardless of the accessibility of adjacent areas or other features. For example, an existing narrow public sidewalk being altered may be relieved of the obligation for a 36 inch width, if site infeasibility precludes it, but must nevertheless comply with limitations on cross slope, surface, and separation, to the maximum extent feasible. The interim final rule contains technical provisions for specific features that affect the accessibility of public sidewalks, public sidewalk curb ramps, and on-street parking.

14.3.2 Special Technical Provisions for Alterations to Existing Pedestrian Areas, Elements, and Facilities in the Public Right-of-Way

This section contains special technical provisions for alterations to public sidewalks, public sidewalk curb ramps, and on-street parking where site infeasibility precludes full compliance with requirements for new construction.

14.3.2(1) Public Sidewalks

Paragraph (1) permits public sidewalks to be warped or blended where necessary to provide a continuous passage, permits the minimum feasible cross slope in a continuous passage, and permits existing gratings to remain when surfaces are altered.

Comment. EPVA and other commenters noted that it may be necessary to blend or warp the surfaces of public sidewalks to achieve access to existing entrances and facilities on sites adjacent to a sloping public sidewalk.

Response. ADAAG 4.1.2(1) (Accessible Sites and Exterior Facilities: New Construction) requires that at least one accessible route be provided from public streets and public sidewalks to an accessible building entrance. ADAAG 4.3 (Accessible Route) limits cross slope on accessible routes to 1:50. However, the public sidewalk or continuous passage may have a running slope that exceeds 1:50. In practice, the connection between sidewalks on sites and the public sidewalk is commonly warped over a short distance to provide a smoothly blended transition. In some cases, the warping can be accommodated on the adjacent site. In others, however, it may be necessary to warp the public sidewalk or continuous passage in order to provide level landings at entrances and at other elements requiring access. A special technical provision has been added to permit warping and blending of existing public sidewalks where site infeasibility precludes a continuous cross slope of 1:50. For example, the continuous passage within an existing public sidewalk wider than 36 inches may be ramped perpendicular to its run to serve existing entrances and other accessible elements.

14.3.2(2) Public Sidewalk Curb Ramps

Paragraph (2) modifies the requirements of ADAAG 14.2.2 (Public Sidewalk Curb Ramps) for type, width, landings, slope, and surfaces in alterations. It requires the maximum feasible accessibility of each public sidewalk curb ramp feature where site infeasibility precludes full compliance with new construction provisions.

Paragraph (a) specifies the type of public sidewalk curb ramp permitted in alterations depending on the width of existing right-of-way and other existing conditions. Unlike new construction, this section permits diagonal public sidewalk curb ramps and built-up public sidewalk curb ramps. Paragraph (b) permits public sidewalk curb ramps in narrow public sidewalks to be less than 36 inches wide where site infeasibility precludes compliance with new construction requirements. Paragraph (c) permits perpendicular public sidewalk curb ramps to have a minimum 36 inch long landing at the top (where the landing of a perpendicular public sidewalk curb ramp is less than 48 inches in width, side flares may not exceed 1:12) and parallel public sidewalk curb ramps to have a minimum 48 inch long landing

at the bottom. Cross slope may be measured perpendicular to the curb. Under conditions of site infeasibility, the minimum feasible cross slope may be provided. Paragraph (d) permits certain exceptions to slope limitations in public sidewalk curb ramps. Paragraph (e) permits existing gratings and appurtenances to be retained in public sidewalk curb ramps and landings if relocation is infeasible and permits crowning or projecting public sidewalk curb ramp surfaces at streets and gutters that exceed a 1:20 slope.

Comment. The NPRM proposed a sequential series of exceptions for public sidewalk curb ramps based upon right-of-way width. Many commenters recommended additional types of public sidewalk curb ramps, such as combinations of parallel and perpendicular public sidewalk curb ramps. Individuals with disabilities and groups representing them strongly favored a requirement for a perpendicular public sidewalk curb ramp in all cases where a landing could be provided. Where a perpendicular public sidewalk curb ramp could not be provided with a landing because of narrow public sidewalks, these commenters preferred a requirement for a parallel public sidewalk curb ramp. Several jurisdictions submitted standard curb ramp specifications that were also based upon differences in right-of-way width.

Response. The interim final rule permits a sequential series of public sidewalk curb ramps, including diagonal and built-up public sidewalk curb ramps, to facilitate accessibility in constrained public rights-of-way.

Comment. A few municipalities in Texas have noted that their existing public sidewalks are elevated 18 to 27 inches above the level of the surrounding streets. Street crossings are reached by steps that may have risers of nine inches or more. The municipalities were concerned about means of providing ramped access under such conditions.

Response. New construction and alterations provisions are based upon a curb height of six inches, the common public works standard. However, newly constructed curb heights may range between 2-1/2 inches for a combination rolled curb and gutter section to as much as nine inches on bridge and overpass construction, where future resurfacing may have to be taken into account when establishing finished grades. Alterations involving changes in level that exceed commonly-specified curb heights cannot be accommodated by typical public sidewalk curb ramp designs. In such cases it may be possible to provide access with ramps complying with ADAAG 4.8 (Ramps) within the width of the public sidewalk. Where public sidewalk levels diverge, a railing or other edge protection is advisable.

Comment. Several commenters, including persons with disabilities, supported a requirement for public sidewalk curb ramps even when existing site conditions would require a steeply sloped or very narrow parallel public sidewalk curb ramp. Most commenters supported a requirement for a 36 inch continuous passage by a public sidewalk curb ramp but did not support a 36 inch landing at the top of the public sidewalk curb ramp because it was too narrow to make a turn. These commenters also supported cross slope limitations at 1:50. Most State and local governments, however, recommended that exceptions be provided for narrow rights-of-way and existing public sidewalks with excessive cross slope.

Response. The interim final rule permits a parallel public sidewalk curb ramp in a public sidewalk that is less than 36 inches wide. It also permits a minimum 36 inch landing in alterations to maximize the usability of perpendicular public sidewalk curb ramps constructed in existing developed rights-of-way. A 36 inch landing will accommodate the wheelbase of most wheelchairs and additional maneuvering space for a footrest may be available adjacent to public sidewalks to facilitate a turn at the top landing. Consistent with ADAAG 4.7 (Curb Ramps), the slope of side flares at public sidewalk curb ramps with landings less than 48 inches in length has been limited to 1:12. Landing slopes may be measured perpendicular to the curb face when a level landing cannot be provided. When site constraints preclude a 1:50 slope, the minimum feasible slope must be provided in both directions across a landing.

Comment. The NPRM proposed an alternate means of measuring public sidewalk curb ramp slope in existing public sidewalks. Although commenters supported this exception, they requested clarification of how it was to be applied.

Response. The interim final rule permits public sidewalk curb ramps to be steeper than permitted by 14.3.2(2)(d)(i) and (ii) if a ramp complying with those provisions would extend more than 72 inches in length. To simplify field application, the alternative form of measurement has been eliminated and replaced by a straightforward limitation on the length that might be required as a result of the application of the maximum slope. Where the running slopes permitted in the special technical provisions could result in a public sidewalk curb ramp more than 72 inches long when measured from a level plane, the public sidewalk curb ramp need not extend more than 72 inches in length.

Comment. Many commenters requested clarification of whether special technical provisions in ADAAG 4.1.6(3)(a) (Ramps) apply to public rights-of-way.

Response. As discussed above, ADAAG 14.3 no longer explicitly references ADAAG 4.1.6 (Accessible Buildings: Alterations). Instead, the interim final rule includes special technical provisions derived from ADAAG 4.1.6(3)(a) (Ramps) that permit public sidewalk curb ramps to have be steeper than 1:12 under specified conditions in alterations.

Comment. Several commenters recommended that public sidewalk curb ramps be crowned or projected (built-up) beyond the curb face where existing gutter counter slope exceeds 1:20. This recommendation is also included in the APWA/AGC Standard Plans for Public Works Construction. This may avoid major alterations to adjacent gutters and curbs when a public sidewalk curb ramp is installed in an existing public sidewalk.

Response. The interim final rule permits the installation of public sidewalk curb ramps with crowned or projected surfaces where gutter slopes exceed 1:20 in developed rights-of-way.

14.3.2(3) On-Street Parking

Paragraph (3) permits accessible on-street parking to use public sidewalk curb ramps at intersections if motorists exiting their vehicles do not have to cross into perpendicular traffic lanes to gain access to a public sidewalk curb ramp.

Comment. The NPRM included an appendix note describing on-street parallel parking spaces without access aisles that utilize adjacent public sidewalk curb ramps. Several commenters from public works agencies discouraged on-street parallel parking adjacent to intersections, where sight distance may be limited, because of the danger from turning vehicles to persons transferring from parked cars into wheelchairs. However, persons with disabilities noted that even though such spaces did not have access aisles, they were preferable to none at all. Many municipalities indicated that they had provided such spaces with a positive response from persons with disabilities.

Response. In existing developed rights-of-way, on-street parallel parking spaces without access aisles may be the only spaces some jurisdictions can

provide. While such spaces do not provide a high degree of accessible features, they are usable by many persons with disabilities. The interim final rule includes the proposed appendix note as a special technical provision.

14.4 Temporary Work [14.6 in the NPRM]

This section requires that construction and repair work in the public right-of-way that affects pedestrian facilities comply with ADAAG 4.1.1(4) (Temporary Structures). It further requires that construction sites be protected with barriers against hazards along the pedestrian circulation network and that temporary alternate circulation paths, where provided, be accessible and clearly marked. Appendix notes clarify accessibility requirements along temporary circulation paths.

Comment. The NPRM proposed that temporary work comply with ADAAG 4.1.1(4) (Temporary Structures), which applies the scope and technical requirements of ADAAG, including those for an accessible route, to temporary facilities. The NPRM further proposed that the temporary circulation path from building entrances to accessible street crossings be clearly marked. Several commenters from departments of public works noted that it may not always be possible to provide an accessible temporary route. Others recommended that an alternate route be required, particularly to building entrances. One commenter stated that the cost of providing an accessible alternate route might be excessive in some situations.

Response. Consistent with ADAAG 14.2.1, which requires that public sidewalks, where provided, be accessible, this section has been changed to require that where a temporary alternate circulation path is provided around construction in the public pedestrian circulation network, the alternate path must be accessible. It also requires that the temporary alternate circulation path comply with alterations standards at ADAAG 14.3 (Alterations). The reference to ADAAG 4.1.1(4) (Temporary Structures) has been removed as unnecessary. The provision at ADAAG 14.1 (General) applies ADAAG 4.1 through 4.35, which includes 4.1.1(4), to ADAAG 14.

Comment. Several commenters noted that, where construction involves the entire width of a public sidewalk, some pedestrians may choose to bypass the work by using the adjacent roadway for a short distance. These commenters requested clarification as to whether permitting the use of a street or public sidewalk by pedestrians without disabilities constituted the provision of an alternate circulation path that would require the temporary installation of public sidewalk curb ramps to allow persons using wheelchairs to travel in the street to detour around an obstruction.

Response. Along developed rights-of-way, access to other existing routes may already be available at nearby intersections where pedestrians can choose to cross to another public sidewalk that will provide temporary passage by the construction. This would not require the provision of a temporary alternate circulation path. However, where other existing routes are not available and where the sidewalk under construction remains open to pedestrian travel but does not provide a continuous passage, an accessible temporary path must be provided. The temporary path must comply with provisions for alterations in ADAAG 14.3 and must therefore contain a continuous passage connecting to public sidewalk curb ramps and street crossings, where necessary for access. Furthermore, the temporary alternate path must be clearly noted and, where there are hazardous conditions along the route, such as excavations, construction materials, or equipment, they must be protected by barriers.

Comment. The NPRM proposed that construction sites in the public right-of-way be protected with barriers. Commenters from FHWA noted that MUTCD contained requirements for street and highway construction, including traffic and pedestrian barriers. (DOT/FHWA, "Manual on Uniform Traffic Control Devices," 1988 edition.) These commenters recommended that the requirements of this section be coordinated with chapter 6C–9, Barricade Application, which recommends that, where it is not possible to divert pedestrians to other public sidewalks when a segment of a pedestrian route is impassable due to construction, barricades be used to define an alternate path.

Response. Conformance with MUTCD standards, which include technical guidelines for barricade design and designation, is required as a condition for receiving funding under the Federal-Aid Highway Act (23 U.S.C. 101, et seq). Therefore, most jurisdictions will comply with MUTCD guidelines. The interim final rule is consistent with MUTCD recommendations and no changes have been made in this requirement.

Comment. The NPRM proposed that construction sites be protected with barriers to warn pedestrians of hazards on the pedestrian circulation network. Many persons with vision impairments and organizations representing them submitted comments supporting this requirement and recommending that barriers be required to be discernible to persons with vision impairments. One commenter provided information on guidelines developed for the installation of scaffolding along public sidewalks in San Francisco.

Response. The appendix note has been expanded to emphasize the need for barriers that provide both protection and travel cues for bypassing construction hazards along a public sidewalk. A note has been added recommending particular attention to scaffolding design.

Technical Assistance

Under both the Architectural Barriers Act and the Americans with Disabilities Act, the Access Board provides technical assistance and training for entities covered under the acts. The Access Board's toll-free number allows callers to receive technical assistance and to order publications. The Access Board conducts in-depth training programs to advise and educate the general public, as well as architects and other professionals on the accessibility guidelines and requirements. In addition, the Board is developing two manuals for use by both technical and general audiences. The first is a general manual on ADAAG requirements that will be a useful tool in understanding ADAAG whether for purposes of compliance or as a reference for accessible design. The second is a technical assistance manual on the application of accessibility requirements for public sidewalks, curb ramps, street crossings and related pedestrian facilities in the public right-of-way. This manual will assist public works, streets and engineering, and similar State and local government agencies responsible for street and sidewalk improvements. The manual will also be of use to architects, civil engineers, landscape architects and other professionals who provide design services for pedestrian improvements under contract to public agencies and to construction firms who make the physical improvements. The manual on the application of accessibility requirements for public rights-of-ways will be coordinated with the publication of final rules by the Access Board and the Departments of Justice and Transportation. The more general manual on ADAAG will be available as soon as possible after the publication of the final rules.

Regulatory Process Matters

Regulatory Assessment

These guidelines are issued to provide guidance to the Department of Justice and the Department of Transportation in establishing accessibility standards for new construction and alterations of State and local government facilities covered by title II of the ADA. The standards established by the Department of Justice and the Department of Transportation must be consistent with these guidelines. These guidelines meet the criteria for a significant regulatory action under Executive Order 12866 and this interim final rule has been reviewed by the Office of Management and Budget pursuant to that order.

The Board has prepared a Regulatory Assessment (RA) which has been placed in the docket and is available for public inspection at the Board's office. The RA includes a cost impact analysis for certain accessibility elements and a discussion of the regulatory alternatives considered.

Accessibility does not generally add features to a building or a facility but rather simply requires that features commonly provided have certain characteristics. Some of the characteristics may add marginally to the cost of an element; however, the cost for installation is not usually increased. In addition, accessibility generally adds little or no space to buildings and facilities. Several studies discussed in the Regulatory Impact Analysis prepared for ADAAG on January 9, 1992 have shown that designing buildings and facilities to be accessible, from the conceptual phase onward, adds less than one percent to the total construction costs.

For purposes of the RA, the Board analyzed those provisions that pertain only to buildings and facilities which are covered by title II of ADA. Included in the analysis were: adaptable fixed judges' benches and clerk's stations, accessible jury boxes and witness stands, speakers' rostrums and raised daises, security systems, wiring and conduit for communication systems, restricted and secured entrances, visiting areas, cells, cubicles, platform lifts and elevators, passing space on sidewalks, crossing controls, motorist aid communication systems, on-street parking, principal and primary entrances, and swimming pools. The RA also discusses the indirect costs of the accessibility elements such as maintenance, operation and opportunity costs.

The Board is particularly interested in estimating the aggregate (nationwide) annual cost of this rule. In order to do so, the Board would need to calculate, for each category of facility, the product of (1) the cost of each individual requirement and (2) the number of times each requirement applies within the "average" facility and (3) the number of facilities affected each year. The Board has included reasonable estimates for the cost of individual requirements in the RA, and is requesting, for each class of facility (i.e., courthouses, correctional facilities, residential facilities, public rights-of-way), data on the extent to which each specific requirement will apply within the "average" facility. Additionally, the Board is requesting data on the number of affected facilities.

Regulatory Flexibility Act Analysis

Under the Regulatory Flexibility Act, the publication of a rule requires the preparation of a regulatory flexibility analysis if such rule could have a significant economic impact on a substantial number of small entities. These guidelines will have such an impact. Section 605(A) of the Regulatory Flexibility Act permits an agency to satisfy the flexibility analysis requirement by addressing the impacts of the rule on small entities in the agency's RA. The Board has chosen to exercise that option and has addressed the impact of the guidelines on small entities as part of the RA. The economic impacts imposed upon the small entities subject to the guidelines are the necessary result of the ADA statute itself. Every effort has been made by the Board to lessen the economic impact of this rule on small entities, but little discretion was reserved to the Board in this area.

Federalism Statement

These guidelines will have some Federalism impacts. The impacts imposed upon State and local government entities are the necessary result of the ADA statute itself. Every effort has been made by the Board to lessen the impact of these guidelines on State and local government entities, but little discretion was reserved to the Board in this area. The RA discusses the impact of these guidelines on public entities. This discussion serves the purposes of a Federalism Statement under Executive Order 12612 for purposes of this rule.

Enhancing the Intergovernmental Partnership

As discussed in the supplementary information above, on December 21, 1992, the Board published an NPRM in the **Federal Register** which proposed to amend the Americans with Disabilities Act Accessibility Guidelines (36 CFR part 1191) by adding four special application sections and miscellaneous provisions specifically applicable to buildings and facilities covered by title II of the ADA. Executive Order 12875, Enhancing the Intergovernmental Partnership, encourages Federal agencies to consult with State and local governments affected by the implementation of legislation. It has been determined that these guidelines will have an economic impact on such entities. Accordingly, following the issuance of the NPRM, the Board held five public hearings in major cities across the country. Notices of the hearings and invitations to attend were sent to major state and local government entities in those areas. In addition, copies of the NPRM were mailed directly to major associations of state and local governmental entities across the country and various responsible agencies in individual states. In response to the NPRM and the public hearings, a total of 148 people presented testimony on the proposed guidelines, 447 written comments were submitted to the Board by the end of the comment period, and an additional 127 comments were received after the close of the comment period. Although the latter comments were not timely, the Board considered them to the extent practicable. Two hundred and five of the comments and testimony received were from affected State and local governments. Those comments were carefully analyzed and the major issues are discussed in the Section by Section Analysis, which also indicates the Board's position on each issue. Additionally, cost concerns raised by those entities are further addressed in the Regulatory Assessment. A copy of the NPRMs published by the Departments of Justice and Transportation, as well as the Access Board's Interim Final Rule and the Regulatory Assessment prepared in connection with the rule will be forwarded to major State and local government associations and agencies for their review and comment. Additional copies of the Regulatory Assessment are available on request.

List of Subjects in 36 CFR Part 1191

Buildings and facilities, Civil rights, Individuals with disabilities.

Authorized by vote of the Board on November 10, 1993.

Judith E. Heumann,

Chairperson, Architectural and Transportation Barriers Compliance Board.

Editorial note: This document was received at the Office of the Federal Register on June 8, 1994.

For the reasons set forth in the preamble, Part 1191 of title 36 of the Code of Federal Regulations is amended as follows:

PART 1191—AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES

1. The authority citation for 36 CFR Part 1191 is revised to read as follows:

Authority: 42 U.S.C. 12204.

2. Appendix A to part 1191 is amended by revising the title page, pages i, ii, 1 through 15, 61, and 71; and by adding pages 14A, 61A and 72 through 92, as set forth below.

3. In Part 1191, the appendix to appendix A is amended by revising pages A1, A2, A16 and A17; and by adding pages A1A, and A18 through A30, as set forth below.

The additions and revisions read as follows:

BILLING CODE 8150-01-P

Americans with Disabilities Act (ADA)

Accessibility Guidelines for Buildings and Facilities

U.S. Architectural & Transportation Barriers Compliance Board
1331 F Street, N.W., Suite 1000
Washington, D.C. 20004-1111
(202) 272-5434 v/TTY
(202) 272-5449 TTY
(202) 272-5447 FAX

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APPENDIX A1

1. PURPOSE.

This document sets guidelines for accessibility to buildings and facilities by individuals with disabilities under the Americans with Disabilities Act (ADA) of 1990. These guidelines are to be applied during the design, construction, and alteration of buildings and facilities covered by titles II and III of the ADA to the extent required by regulations issued by Federal agencies, including the Department of Justice and the Department of Transportation, under the ADA.

The technical specifications 4.2 through 4.35, of these guidelines are the same as those of the American National Standard Institute's document A117.1-1980, except as noted in this text by italics. However, sections 4.1.1 through 4.1.7 and the special application sections are different from ANSI A117.1-1980 in their entirety and are printed in standard type.

The illustrations and text of ANSI A117.1-1980 are reproduced with permission from the American National Standards Institute. Copies of the standard may be purchased from the American National Standards Institute at 1430 Broadway, New York, New York 10018.

Paragraphs marked with an asterisk have related, nonmandatory material in the Appendix. In the Appendix, the corresponding paragraph numbers are preceded by an A.

2. GENERAL.

2.1 Provisions for Adults. *The specifications in these guidelines are based upon adult dimensions and anthropometrics.*

2.2* Equivalent Facilitation. *Departures from particular technical and scoping requirements of this guideline by the use of other designs and technologies are permitted where the alternative designs and technologies used will provide substantially equivalent or greater access to and usability of the facility.*

3. MISCELLANEOUS INSTRUCTIONS AND DEFINITIONS.

3.1 Graphic Conventions. Graphic conventions are shown in Table 1. Dimensions that are not marked minimum or maximum are absolute, unless otherwise indicated in the text or captions.

TABLE 1
Graphic Conventions

Convention	Description
36 / 915	Typical dimension line showing U.S. customary units (in inches) above the line and SI units (in millimeters) below
9 / 230	Dimensions for short distances indicated on extended line
9 / 230 — 36 / 915	Dimension line showing alternate dimensions required
	Direction of approach
max	Maximum
min	Minimum
	Boundary of clear floor area
℄	Centerline

3.2 Dimensional Tolerances. All dimensions are subject to conventional building industry tolerances for field conditions.

3.3 Notes. The text of these guidelines does not contain notes or footnotes. Additional information, explanations, and advisory materials are located in the Appendix.

3.4 General Terminology.

comply with. Meet one or more specifications of *these guidelines*.

if, if ... then. Denotes a specification that applies only when the conditions described are present.

may. Denotes an option or alternative.

shall. Denotes a mandatory specification or requirement.

should. Denotes an advisory specification or recommendation.

3.5 Definitions.

Access Aisle. An accessible pedestrian space between elements, such as parking spaces, seating, and desks, that provides clearances appropriate for use of the elements.

Accessible. Describes a site, building, facility, or portion thereof that complies with *these guidelines*.

Accessible Element. An *element* specified by *these guidelines* (for example, telephone, controls, and the like).

Accessible Route. A continuous unobstructed path connecting all accessible elements and spaces of a building or facility. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, *crosswalks at vehicular ways*, walks, ramps, and lifts.

Accessible Space. *Space that complies with these guidelines.*

Adaptability. The ability of certain building spaces and elements, such as kitchen counters, sinks, and grab bars, to be added or altered so as to accommodate the needs of *individuals with or without disabilities* or to accommodate the needs of persons with different types or degrees of disability.

Addition. *An expansion, extension, or increase in the gross floor area of a building or facility.*

Administrative Authority. A governmental agency that adopts or enforces regulations and *guidelines* for the design, construction, or *alteration* of buildings and facilities.

Alteration. *An alteration is a change to a building or facility, including pedestrian facilities in the public right-of-way, that affects or could affect the usability of the building or facility or part thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions or pedestrian elements or surfaces in a developed right-of-way. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.*

Area of Rescue Assistance. *An area, which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.*

Assembly Area. A room or space accommodating a *group* of individuals for recreational, educational, political, social, or amusement purposes, or for the consumption of food and drink.

Automatic Door. A door equipped with a power-operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat, or manual switch (see power-assisted door).

Building. Any structure used and intended for supporting or sheltering any use or occupancy.

Circulation Path. An exterior or interior way of passage from one place to another for pedestrians, including, but not limited to, walks, hallways, courtyards, stairways, and stair landings.

Clear. Unobstructed.

Clear Floor Space. *The minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.*

Closed Circuit Telephone. *A telephone with dedicated line(s) such as a house phone, courtesy phone or phone that must be used to gain entrance to a facility.*

Common Use. Refers to those interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (for example, *occupants of a homeless* shelter, the occupants of an office building, or the guests of such occupants).

Continuous Passage. See 14.1.1 (Definitions).

Cross Slope. The slope that is perpendicular to the direction of travel (see running slope).

Curb Ramp. A short ramp cutting through a curb or built up to it. See also 14.1.1 (Public Sidewalk Curb Ramps).

Detectable Warning. *A standardized surface feature built in or applied to walking surfaces or other elements to warn visually impaired people of hazards on a circulation path.*

Dwelling Unit. See 13.1 (General).

Egress, Means of. *A continuous and unobstructed way of exit travel from any point in a building or facility to a public way. A means of egress comprises vertical and horizontal travel and may include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, horizontal exits, courts and yards. An accessible means of egress is one that complies with these guidelines and does not include stairs, steps, or escalators. Areas of rescue assistance or evacuation elevators may be included as part of accessible means of egress.*

Element. *An architectural or mechanical component of a building, facility, space, or site, e.g., telephone, curb ramp, door, drinking fountain, seating, or water closet.*

Entrance. *Any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibules if provided, the entry door(s) or gate(s), and the hardware of the entry door(s) or gate(s).*

Facility. *All or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on a site.*

Ground Floor. *Any occupiable floor less than one story above or below grade with direct access to grade. A building or facility always has at least one ground floor and may have more than one ground floor as where a split level entrance has been provided or where a building is built into a hillside.*

Mezzanine or Mezzanine Floor. *That portion of a story which is an intermediate floor level placed within the story and having occupiable space above and below its floor.*

Marked Crossing. A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

Multifamily Dwelling. Any building containing more than two dwelling units.

Occupiable. *A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes, or in which occupants are engaged at labor, and which is equipped with means of egress, light, and ventilation.*

Operable Part. A part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate, or adjust the equipment or appliance (for example, coin slot, pushbutton, handle).

Path of Travel. *(Reserved).*

3.5 Definitions

Power-assisted Door. A door used *for human passage* with a mechanism that helps to open the door, or relieves the opening resistance of a door, upon the activation of a switch or a continued force applied to the door itself.

Principal Public Entrance(s). One or more public entrance(s) to a building or facility which are designed and constructed to accommodate a substantial flow of pedestrian traffic to a major function in a facility. Principal public entrances do not include: service entrances, employee only entrances, or exits that do not serve as entrances. In determining principal public entrance(s), the following factors should be considered:

(a) Travel distance from the entrance to:

(i) Exterior facilities such as parking, public transportation, public sidewalks and plazas; and

(ii) Interior amenities and services such as the main lobby, elevators and information desk.

(b) The embellishment of the entryway or any other design strategy which would make one entrance stand out prominently from other entrances.

Public Right-of-Way. See 14.1.1 (Definitions).

Public Sidewalk. See 14.1.1 (Definitions).

Public Sidewalk Curb Ramp. See 14.1.1 (Definitions).

Public Use. Describes interior or exterior rooms or spaces that are made available to the general public. Public use may be provided at a building or facility that is privately or publicly owned.

Ramp. A walking surface which has a running slope greater than 1:20.

Running Slope. The slope that is parallel to the direction of travel (see cross slope).

Service Entrance. An entrance intended primarily for delivery of goods or services.

Signage. *Displayed* verbal, symbolic, *tactile,* and pictorial information.

Site. A parcel of land bounded by a property line or a designated portion of a public right-of-way.

Site Improvement. Landscaping, paving for pedestrian and vehicular ways, outdoor lighting, recreational facilities, and the like, added to a site.

Site Infeasibility. See 14.1.1 (Definitions).

Sleeping Accommodations. Rooms in which people sleep; for example, dormitory and hotel or motel guest rooms or suites.

Space. *A definable area, e.g., room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.*

Story. *That portion of a building included between the upper surface of a floor and upper surface of the floor or roof next above. If such portion of a building does not include occupiable space, it is not considered a story for purposes of these guidelines. There may be more than one floor level within a story as in the case of a mezzanine or mezzanines.*

Structural Frame. The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and all other members which are essential to the stability of the building as a whole.

TTY. *Machinery or equipment that employs interactive graphic (i.e., typed) communications through the transmission of coded signals across the standard telephone network. TTYs can include, for example, devices known as TTYs (telecommunication display devices or telecommunication devices for deaf persons) or computers.*

Tactile. Describes an object that can be perceived using the sense of touch.

Technically Infeasible. See 4.1.6(1)(j) EXCEPTION.

Transient Lodging.* *A building, facility, or portion thereof, excluding inpatient medical care facilities and residential facilities, that contains sleeping accommodations. Transient lodging may include, but is not limited to, resorts, group homes, hotels, motels, and dormitories.*

Vehicular Way. A route intended for vehicular traffic, such as a street, driveway, or parking lot.

Walk. An exterior pathway with a prepared surface intended for pedestrian use, including general pedestrian areas such as plazas and courts.

NOTE: Sections 4.1.1 through 4.1.7 are different from ANSI A117.1 in their entirety and are printed in standard type (ANSI A117.1 does not include scoping provisions).

4. ACCESSIBLE ELEMENTS AND SPACES: SCOPE AND TECHNICAL REQUIREMENTS.

4.1 Minimum Requirements.

4.1.1* Application.

(1) General. All areas of newly designed or newly constructed buildings and facilities and altered portions of existing buildings and facilities shall comply with 4.1 through 4.35, unless otherwise provided in this section or as modified in a special application section.

(2) Application Based on Building Use. Special application sections provide additional requirements based on building use. When a building or facility contains more than one use covered by a special application section, each portion shall comply with the requirements for that use.

(3)* Areas Used Only by Employees as Work Areas. Areas that are used only as work areas shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. These guidelines do not require that any areas used only as work areas be constructed to permit maneuvering within the work area or be constructed or equipped (i.e., with racks or shelves) to be accessible.

(4) Temporary Structures. These guidelines cover temporary buildings or facilities as well as permanent facilities. Temporary buildings and facilities are not of permanent construction but are extensively used or are essential for public use for a period of time. Examples of temporary buildings or facilities covered by these guidelines include, but are not limited to: reviewing stands, temporary classrooms, bleacher areas, exhibit areas, temporary banking facilities, temporary health screening services, or temporary safe pedestrian passageways around a construction site. Structures, sites and equipment directly associated with the actual processes of construction, such as scaffolding, bridging, materials hoists, or construction trailers are not included.

(5) General Exceptions.

(a) In new construction, a person or entity is not required to meet fully the requirements of these guidelines where that person or entity can demonstrate that it is structurally impracticable to do so. Full compliance will be considered structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features. If full compliance with the requirements of these guidelines is structurally impracticable, a person or entity shall comply with the requirements to the extent it is not structurally impracticable. Any portion of the building or facility which can be made accessible shall comply to the extent that it is not structurally impracticable.

(b) Accessibility is not required to or in:

(i) raised areas used primarily for purposes of security or life or fire safety, including, but not limited to, observation galleries, prison guard towers, fire towers, or fixed life guard stands;

(ii) non-occupiable spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways, tunnels, or freight (non-passenger) elevators, and frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment; such spaces may include, but are not limited to, elevator pits, elevator penthouses, piping or equipment catwalks, water or sewage treatment pump rooms and stations, electric substations and transformer vaults, and highway and tunnel utility facilities; or

(iii) single occupant structures accessed only by passageways below grade or elevated above grade, including, but not limited to, toll booths that are required to be accessed from underground tunnels.

4.1.2 Accessible Sites and Exterior Facilities: New Construction

4.1.2 Accessible Sites and Exterior Facilities: New Construction. An accessible site shall meet the following minimum requirements:

(1) At least one accessible route complying with 4.3 shall be provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones if provided, and public streets or sidewalks, to an accessible building entrance.

(2) At least one accessible route complying with 4.3 shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.

(3) All objects that protrude from surfaces or posts into circulation paths shall comply with 4.4.

(4) Ground surfaces along accessible routes and in accessible spaces shall comply with 4.5.

(5) (a) If parking spaces are provided for self-parking by employees or visitors, or both, then accessible spaces complying with 4.6 shall be provided in each such parking area in conformance with the table below. Spaces required by the table need not be provided in the particular lot. They may be provided in a different location if equivalent or greater accessibility, in terms of distance from an accessible entrance, cost and convenience is ensured.

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

Except as provided in (b), access aisles adjacent to accessible spaces shall be 60 in (1525 mm) wide minimum.

(b) One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 in (2440 mm) wide minimum and shall be designated "van accessible" as required by 4.6.4. The vertical clearance at such spaces shall comply with 4.6.5. All such spaces may be grouped on one level of a parking structure.

EXCEPTION: Provision of all required parking spaces in conformance with "Universal Parking Design" (see Appendix A4.6.3) is permitted.

(c) If passenger loading zones are provided, then at least one passenger loading zone shall comply with 4.6.

(d) At facilities providing medical care or other services for persons with mobility impairments, parking spaces complying with 4.6 shall be provided in accordance with 4.1.2(5)(a) and (b) except as follows:

(i) Outpatient units and facilities: 10 percent of the total number of parking spaces provided serving each such outpatient unit or facility;

(ii) Units and facilities that specialize in treatment or services for persons with mobility impairments: 20 percent of the total number of parking spaces provided serving each such unit or facility.

(e)* Valet Parking. Valet parking facilities shall provide a passenger loading zone complying with 4.6 located on an accessible route to the entrance of the facility. Paragraphs 5(a), 5(b), and 5(d) of this section do not apply to valet parking facilities.

(6) If toilet facilities are provided on a site, then each such public or common use toilet facility shall comply with 4.22. If bathing facilities are provided on a site, then each such public or common use bathing facility shall comply with 4.23.

For single user portable toilet or bathing units clustered at a single location, at least five percent but no less than one toilet unit or bathing unit complying with 4.22 or 4.23 shall be installed at each cluster whenever typical inaccessible units are provided. Accessible units shall be identified by the International Symbol of Accessibility.

EXCEPTION: Portable toilet units at construction sites used exclusively by construction personnel are not required to comply with 4.1.2(6).

(7) Building Signage. Signs which designate permanent rooms and spaces shall comply with 4.30.1, 4.30.4, 4.30.5 and 4.30.6. Other signs which provide direction to, or information about, functional spaces of the building shall comply with 4.30.1, 4.30.2, 4.30.3, and 4.30.5. Elements and spaces of accessible facilities which shall be identified by the International Symbol of Accessibility and which shall comply with 4.30.7 are:

(a) Parking spaces designated as reserved for individuals with disabilities;

(b) Accessible passenger loading zones;

(c) Accessible entrances when not all are accessible (inaccessible entrances shall have directional signage to indicate the route to the nearest accessible entrance);

(d) Accessible toilet and bathing facilities when not all are accessible.

4.1.3 Accessible Buildings: New Construction. Accessible buildings and facilities shall meet the following minimum requirements:

(1) At least one accessible route complying with 4.3 shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility.

(2) All objects that overhang or protrude into circulation paths shall comply with 4.4.

(3) Ground and floor surfaces along accessible routes and in accessible rooms and spaces shall comply with 4.5.

(4) Interior and exterior stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access shall comply with 4.9.

(5)* One passenger elevator complying with 4.10 shall serve each level, including mezzanines, in all multi-story buildings and facilities unless exempted below. If more than one elevator is provided, each passenger elevator shall comply with 4.10.

EXCEPTION 1: Elevators are not required:

(a) in places of public accommodation and commercial facilities that are less than three stories or that have less than 3000 square feet per story unless the building is a shopping center, a shopping mall, or the professional office of a health care provider, or another type of facility as determined by the Attorney General; or

(b) to the upper level of drawbridge towers and boat traffic towers, lock and dam control stations, train dispatching towers, and similar structures that are less than three stories and that are not open to the general public if the floor above the accessible ground floor houses no more than five persons and is less than 500 square feet.

The elevator exemptions set forth in paragraphs (a) and (b) do not obviate or limit in any way the obligation to comply with the other accessibility requirements established in section 4.1.3. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor. In new construction if a building or facility is eligible for exemption but a passenger elevator is nonetheless planned, that elevator shall meet the requirements of 4.10 and shall serve each level in the building. A passenger elevator that provides service from a garage to only one level of a building or facility is not required to serve other levels.

EXCEPTION 2: Elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks are exempted from this requirement.

EXCEPTION 3: Accessible ramps complying with 4.8 may be used in lieu of an elevator.

EXCEPTION 4: Platform lifts (wheelchair lifts) complying with 4.11 of this guideline and applicable State or local codes may be used in lieu of an elevator only under the following conditions:

(a) To provide an accessible route to a performing area in an assembly occupancy.

4.1.3 Accessible Buildings: New Construction

(b) To comply with the wheelchair viewing position line-of-sight and dispersion requirements of 4.33.3.

(c) To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than five persons, including but not limited to equipment control rooms and projection booths.

(d) To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible.

(e) To provide access to raised judges' benches, clerks' stations, speakers' rostrums, and raised daises, jury boxes and witness stands.

(f) To connect levels within an individual dwelling unit.

EXCEPTION 5: Elevators located in air traffic control towers are not required to serve the cab and the floor immediately below the cab.

(6) Windows. (Reserved).

(7) Doors.

(a) At each accessible entrance to a building or facility, at least one door shall comply with 4.13.

(b) Within a building or facility, at least one door at each accessible space shall comply with 4.13.

(c) Each door that is an element of an accessible route shall comply with 4.13.

(d) Each door required by 4.3.10, Egress, shall comply with 4.13.

(8)* In new construction, at a minimum, the requirements in (a) and (b) below shall be satisfied independently:

(a)(i) At least 50 percent of all public entrances (excluding those in (b) below) must be accessible. At least one must be a ground floor entrance. Public entrances are any entrances that are not loading or service entrances. In facilities subject to title II of the ADA, all planned principal public entrances shall be included within the 50 percent of public entrances required to be accessible. This provision does not require the number of principal public entrances to exceed 50 percent of all public entrances planned for a facility.

(ii) Accessible entrances must be provided in a number at least equivalent to the number of exits required by the applicable building/fire codes. (This paragraph does not require an increase in the total number of entrances or principal public entrances planned for a facility.)

(iii) An accessible entrance must be provided to each tenancy in a facility (for example, individual stores in a strip shopping center).

One entrance may be considered as meeting more than one of the requirements in (a). Where feasible, accessible entrances shall be the entrances used by the majority of people visiting or working in the building.

(b)(i) In addition, if direct access is provided for pedestrians from an enclosed parking garage to the building, at least one direct entrance from the garage to the building must be accessible.

(ii) If access is provided for pedestrians from a pedestrian tunnel or elevated walkway, one entrance to the building from each tunnel or walkway must be accessible.

One entrance may be considered as meeting more than one of the requirements in (b).

Because entrances also serve as emergency exits whose proximity to all parts of buildings and facilities is essential, it is preferable that all entrances be accessible.

(c) If the only entrance to a building, or tenancy in a facility, is a service entrance, that entrance shall be accessible.

(d) Entrances which are not accessible shall have directional signage complying with 4.30.1, 4.30.2, 4.30.3, and 4.30.5, which indicates the location of the nearest accessible entrance.

(9)* In buildings or facilities, or portions of buildings or facilities, required to be accessible, accessible means of egress shall be provided in the same number as required for exits by local building/life safety regulations. Where a required exit from an occupiable level above or below a level of accessible exit discharge is not accessible, an area of rescue assistance shall be provided on each such level (in a number equal to that of inaccessible required exits). Areas of rescue assistance shall comply with 4.3.11. A horizontal exit, meeting the requirements of local building/life safety regulations, shall satisfy the requirement for an area of rescue assistance.

EXCEPTION: Areas of rescue assistance are not required in buildings or facilities having a supervised automatic sprinkler system.

(10)* Drinking Fountains.

(a) Where only one drinking fountain is provided on a floor there shall be a drinking fountain which is accessible to individuals who use wheelchairs in accordance with 4.15 and one accessible to those who have difficulty bending or stooping. (This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler; or by such other means as would achieve the required accessibility for each group on each floor.)

(b) Where more than one drinking fountain or water cooler is provided on a floor, 50 percent of those provided shall comply with 4.15 and shall be on an accessible route.

(11) Toilet Facilities. If toilet rooms are provided, then each public and common use toilet room shall comply with 4.22. Other toilet rooms provided for the use of occupants of specific spaces (i.e., a private toilet room for the occupant of a private office) shall be adaptable. If bathing rooms are provided, then each public and common use bathroom shall comply with 4.23. Accessible toilet rooms and bathing facilities shall be on an accessible route.

(12) Storage, Shelving and Display Units.

(a) If fixed or built-in storage facilities such as cabinets, shelves, closets, and drawers are provided in accessible spaces, at least one of each type provided shall contain storage space complying with 4.25. Additional storage may be provided outside of the dimensions required by 4.25.

(b) Shelves or display units allowing self-service by customers in mercantile occupancies shall be located on an accessible route complying with 4.3. Requirements for accessible reach range do not apply.

(13) Controls and operating mechanisms in accessible spaces, along accessible routes, or as parts of accessible elements (for example, light switches and dispenser controls) shall comply with 4.27.

(14) If emergency warning systems are provided, then they shall include both audible alarms and visible alarms complying with 4.28. Sleeping accommodations required to comply with 9.3 shall have an alarm system complying with 4.28. Emergency warning systems in medical care facilities may be modified to suit standard health care alarm design practice.

(15) Detectable warnings shall be provided at locations as specified in 4.29.

(16) Building Signage.

(a) Signs which designate permanent rooms and spaces shall comply with 4.30.1, 4.30.4, 4.30.5 and 4.30.6.

(b) Other signs which provide direction to or information about functional spaces of the building shall comply with 4.30.1, 4.30.2, 4.30.3, and 4.30.5.

EXCEPTION: Building directories, menus, and all other signs which are temporary are not required to comply.

4.1.3 Accessible Buildings: New Construction

(17) Public telephones.

(a) If public pay telephones, public closed circuit telephones, or other public telephones are provided, then they shall comply with 4.31.2 through 4.31.8 to the extent required by the following table:

Number of each type of telephone provided on each floor	Number of telephones required to comply with 4.31.2 through 4.31.8[1]
1 or more single unit	1 per floor
1 bank[2]	1 per floor
2 or more banks[2]	1 per bank. Accessible unit may be installed as a single unit in proximity (either visible or with signage) to the bank. At least one public telephone per floor shall meet the requirements for a forward reach telephone.[3]

[1] Additional public telephones may be installed at any height. Unless otherwise specified, accessible telephones may be either forward or side reach telephones.

[2] A bank consists of two or more adjacent public telephones, often installed as a unit.

[3] EXCEPTION: For exterior installations only, if dial tone first service is available, then a side reach telephone may be installed instead of the required forward reach telephone.

(b)* All telephones required to be accessible and complying with 4.31.2 through 4.31.8 shall be equipped with a volume control. In addition, 25 percent, but never less than one, of all other public telephones provided shall be equipped with a volume control and shall be dispersed among all types of public telephones, including closed circuit telephones, throughout the building or facility. Signage complying with applicable provisions of 4.30.7 shall be provided.

(c) The following shall be provided in accordance with 4.31.9:

(i) If a total number of four or more public pay telephones (including both interior and exterior phones) is provided at a site, and at least one is in an interior location, then at least one interior public TTY shall be provided.

(ii) If an interior public pay telephone is provided in a stadium or arena, a convention center, a hotel with a convention center, or a covered mall subject to title III of the ADA, at least one interior public TTY shall be provided in the facility. In stadiums, arenas and convention centers which are subject to title II of the ADA, at least one public TTY shall be provided on each floor level having a public pay telephone.

(iii) If a public pay telephone is located in or adjacent to a hospital emergency room, hospital recovery room, or hospital waiting room, one public TTY shall be provided at each such location.

(iv) If an interior public pay telephone is provided in a public use area of a facility covered by title II of the ADA, at least one interior public TTY shall be provided in at least one public use area.

(v) If an interior public pay telephone is provided in the secured area of a detention or correctional facility subject to section 12, then at least one public TTY shall also be provided in at least one secured area. Secured areas are those areas used only by detainees or inmates and security personnel.

(d) Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone in each such bank shall be equipped with a shelf and outlet in compliance with 4.31.9(2).

EXCEPTION: This requirement does not apply to the secured areas of detention or correctional facilities where shelves and outlets are prohibited for purposes of security or safety.

(18) If fixed or built-in seating or tables (including, but not limited to, study carrels and student laboratory stations), are provided in accessible public or common use areas, at least five percent, but not less than one, of the fixed or built-in seating areas or tables shall comply with 4.32. An accessible route shall lead to and through such fixed or built-in seating areas, or tables.

(19)* Assembly Areas.

(a) In places of assembly with fixed seating, accessible wheelchair locations shall comply with 4.33.2, 4.33.3, and 4.33.4 and shall be provided consistent with the following table:

Capacity of Seating in Assembly Areas	Number of Required Wheelchair Locations
4 to 25	1
26 to 50	2
51 to 300	4
301 to 500	6
over 500	6, plus 1 additional space for each total seating capacity increase of 100

In addition, one percent, but not less than one, of all fixed seats shall be aisle seats with no armrests on the aisle side, or removable or folding armrests on the aisle side. Each such seat shall be identified by a sign or marker. Signage notifying patrons of the availability of such seats shall be posted at the ticket office. Aisle seats are not required to comply with 4.33.4.

(b) This paragraph applies to assembly areas where audible communications are integral to the use of the space (e.g., concert and lecture halls, playhouses and movie theaters, meeting rooms, etc.). Such assembly areas, if (1) they accommodate at least 50 persons, or if they have audio-amplification systems, and (2) they have fixed seating, shall have a permanently installed assistive listening system complying with 4.33. For other assembly areas, a permanently installed assistive listening system, or an adequate number of electrical outlets or other supplementary wiring necessary to support a portable assistive listening system shall be provided. The minimum number of receivers to be provided shall be equal to four percent of the total number of seats, but in no case less than two. Signage complying with applicable provisions of 4.30 shall be installed to notify patrons of the availability of a listening system.

(20) Where automated teller machines are provided, each machine shall comply with the requirements of 4.34 except where two or more machines are provided at a location, then only one must comply.

EXCEPTION: Drive-up-only automated teller machines are not required to comply with 4.34.2 and 4.34.3.

(21) Where dressing and fitting rooms are provided for use by the general public, patients, customers or employees, five percent of dressing rooms, but never less than one, for each type of use in each cluster of dressing rooms shall be accessible and shall comply with 4.35.

Examples of types of dressing rooms are those serving different genders or distinct and different functions as in different treatment or examination facilities.

(22) Permanently-installed (indoor or outdoor) swimming pools subject to title II of the ADA shall be designed so as to provide at least one means of access into the water, if such swimming pools are intended for recreational purposes and not intended solely for diving or wading.

4.1.4 (Reserved).

4.1.5 Accessible Buildings: Additions. Each addition to an existing building or facility shall be regarded as an alteration. Each space or element added to the existing building or facility shall comply with the applicable provisions of 4.1.1 to 4.1.3, Minimum Requirements (for New Construction) and the applicable technical specifications of 4.2 through 4.35 and the special application sections. Each addition that affects or could affect the usability of an area containing a primary function shall comply with 4.1.6(2).

4.1.6 Accessible Buildings: Alterations.

(1) General. Alterations to existing buildings and facilities shall comply with the following:

(a) No alteration shall be undertaken which decreases or has the effect of decreasing accessibility or usability of a building or facility below the requirements for new construction at the time of alteration.

(b) If existing elements, spaces, or common areas are altered, then each such altered element, space, feature, or area shall comply with the applicable provisions of 4.1.1 to 4.1.3 Minimum Requirements (for New Construc-

4.1.6 Accessible Buildings: Alterations

tion). If the applicable provision for new construction requires that an element, space, or common area be on an accessible route, the altered element, space, or common area is not required to be on an accessible route except as provided in 4.1.6(2) (Alterations to an Area Containing a Primary Function).

(c) If alterations of single elements, when considered together, amount to an alteration of a room or space in a building or facility, the entire space shall be made accessible.

(d) No alteration of an existing element, space, or area of a building or facility shall impose a requirement for greater accessibility than that which would be required for new construction. For example, if the elevators and stairs in a building are being altered and the elevators are, in turn, being made accessible, then no accessibility modifications are required to the stairs connecting levels connected by the elevator. If stair modifications to correct unsafe conditions are required by other codes, the modifications shall be done in compliance with these guidelines unless technically infeasible.

(e) At least one interior public TTY complying with 4.31.9 shall be provided if:

(i) alterations to existing buildings or facilities with less than four exterior or interior public pay telephones would increase the total number to four or more telephones with at least one in an interior location; or

(ii) alterations to one or more exterior or interior public pay telephones occur in an existing building or facility with four or more public telephones with at least one in an interior location.

(f) If an escalator or stair is planned or installed where none existed previously and major structural modifications are necessary for such installation, then a means of accessible vertical access shall be provided that complies with the applicable provisions of 4.7, 4.8, 4.10, or 4.11.

(g) In alterations, the requirements of 4.1.3(9), 4.3.10 and 4.3.11 do not apply.

(h)* Entrances. If a planned alteration entails alterations to an entrance, and the building has an accessible entrance, the entrance being altered is not required to comply with 4.1.3(8), except to the extent required by 4.1.6(2). If a particular entrance is not made accessible, appropriate accessible signage indicating the location of the nearest accessible entrance(s) shall be installed at or near the inaccessible entrance, such that a person with disabilities will not be required to retrace the approach route from the inaccessible entrance.

(i) If the alteration work is limited solely to the electrical, mechanical, or plumbing system, or to hazardous material abatement, or automatic sprinkler retrofitting, and does not involve the alteration of any elements or spaces required to be accessible under these guidelines, then 4.1.6(2) does not apply.

(j) EXCEPTION: In alteration work, if compliance with 4.1.6 is technically infeasible, the alteration shall provide accessibility to the maximum extent feasible. Any elements or features of the building or facility that are being altered and can be made accessible shall be made accessible within the scope of the alteration.

Technically Infeasible. Means, with respect to an alteration of a building or a facility, that it has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

(k) EXCEPTION:

(i) These guidelines do not require the installation of an elevator in an altered facility that is exempt from the requirement for an elevator under 4.1.3(5).

(ii) The exemption provided in paragraph (i) does not obviate or limit in any way the obligation to comply with the other accessibility requirements established in these guidelines. For example, alterations to floors above or below the ground floor must be accessible regardless of whether the altered facility has an elevator. If a facility subject to the elevator exemption set forth in paragraph (i) nonetheless has a passenger elevator, that elevator

shall meet, to the maximum extent feasible, the accessibility requirements of these guidelines.

(2) Alterations to an Area Containing a Primary Function. In addition to the requirements of 4.1.6(1), an alteration that affects or could affect the usability of or access to an area containing a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope (as determined under criteria established by the Attorney General).

(3) Special Technical Provisions for Alterations to Existing Buildings and Facilities.

(a) Ramps. Curb ramps and interior or exterior ramps to be constructed on sites or in existing buildings or facilities where space limitations prohibit the use of a 1:12 slope or less may have slopes and rises as follows:

(i) A slope between 1:10 and 1:12 is allowed for a maximum rise of 6 in (152 mm).

(ii) A slope between 1:8 and 1:10 is allowed for a maximum rise of 3 in (76 mm). A slope steeper than 1:8 is not allowed.

(b) Stairs. Full extension of handrails at stairs shall not be required in alterations where such extensions would be hazardous or impossible due to plan configuration.

(c) Elevators.

(i) If safety door edges are provided in existing automatic elevators, automatic door reopening devices may be omitted (see 4.10.6).

(ii) Where existing shaft configuration or technical infeasibility prohibits strict compliance with 4.10.9, the minimum car plan dimensions may be reduced by the minimum amount necessary, but in no case shall the inside car area be smaller than 48 in by 48 in (1220 mm by 1220 mm).

(iii) Equivalent facilitation may be provided with an elevator car of different dimensions when usability can be demonstrated and when all other elements required to be accessible comply with the applicable provisions of 4.10. For example, an elevator of 47 in by 69 in (1195 mm by 1755 mm) with a door opening on the narrow dimension, could accommodate the standard wheelchair clearances shown in Fig. 4.

(d) Doors.

(i) Where it is technically infeasible to comply with clear opening width requirements of 4.13.5, a projection of 5/8 in (16 mm) maximum will be permitted for the latch side stop.

(ii) If existing thresholds are 3/4 in (20 mm) high or less, and have (or are modified to have) a beveled edge on each side, they may remain.

(e) Toilet Rooms.

(i) Where it is technically infeasible to comply with 4.22 or 4.23, the installation of at least one unisex toilet/bathroom per floor, located in the same area as existing toilet facilities, will be permitted in lieu of modifying existing toilet facilities to be accessible. Each unisex toilet room shall contain one water closet complying with 4.16 and one lavatory complying with 4.19, and the door shall have a privacy latch.

(ii) Where it is technically infeasible to install a required standard stall (Fig. 30(a)), or where other codes prohibit reduction of the fixture count (i.e., removal of a water closet in order to create a double-wide stall), either alternate stall (Fig. 30(b)) may be provided in lieu of the standard stall.

(iii) When existing toilet or bathing facilities are being altered and are not made accessible, signage complying with 4.30.1, 4.30.2, 4.30.3, 4.30.5, and 4.30.7 shall be provided indicating the location of the nearest accessible toilet or bathing facility within the facility.

(f) Assembly Areas.

(i) Where it is technically infeasible to disperse accessible seating throughout an altered assembly area, accessible seating areas may be clustered. Each accessible seating area shall have provisions for companion seating and shall be located on an accessible route that also serves as a means of emergency egress.

(ii) Where it is technically infeasible to alter all performing areas to be on an accessible route, at least one of each type of performing area shall be made accessible.

(g) Platform Lifts (Wheelchair Lifts). In alterations, platform lifts (wheelchair lifts) complying with 4.11 and applicable state or local codes may be used as part of an accessible route. The use of lifts is not limited to the four conditions in Exception 4 of 4.1.3(5).

(h) Dressing Rooms. In alterations where technical infeasibility can be demonstrated, one dressing room for each sex on each level shall be made accessible. Where only unisex dressing rooms are provided, accessible unisex dressing rooms may be used to fulfill this requirement.

4.1.7 Accessible Buildings: Historic Preservation.

(1) Applicability.

(a) General Rule. Alterations to a qualified historic building or facility shall comply with 4.1.6 (Accessible Buildings: Alterations), the applicable technical specifications of 4.2 through 4.35 and the applicable special application sections unless it is determined in accordance with the procedures in 4.1.7(2) that compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility in which case the alternative requirements in 4.1.7(3) may be used for the feature.

EXCEPTION: If it is determined in accordance with the procedures in 4.1.7(2) that it is not feasible to provide physical access to a qualified historic building or facility in a manner that will not threaten or destroy the historic significance of the building or facility, alternative methods of access shall be provided as required by 28 CFR 35.151(d)(2) for entities covered by title II of the ADA and 28 CFR 36.405(b) for entities covered by title III of the ADA.

(b) Definition. A qualified historic building or facility is a building or facility that is:

(i) Listed in or eligible for listing in the National Register of Historic Places; or

(ii) Designated as historic under an appropriate State or local law.

(2) Procedures.

(a) Alterations to Qualified Historic Buildings and Facilities Subject to Section 106 of the National Historic Preservation Act.

(i) Section 106 Process. Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) requires that a Federal agency with jurisdiction over a Federal, federally assisted, or federally licensed undertaking consider the effects of the agency's undertaking on buildings and facilities listed in or eligible for listing in the National Register of Historic Places and give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking prior to approval of the undertaking.

(ii) ADA Application. Where alterations are undertaken to a qualified historic building or facility that is subject to section 106 of the National Historic Preservation Act, the Federal agency with jurisdiction over the undertaking shall follow the section 106 process. If the State Historic Preservation Officer or Advisory Council on Historic Preservation agrees that compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility, the alternative requirements in 4.1.7(3) may be used for the feature.

(b) Alterations to Qualified Historic Buildings and Facilities Not Subject to Section 106 of the National Historic Preservation Act. Where alterations are undertaken to a qualified historic building or facility that is not subject to section 106 of the National Historic Preservation Act, if the entity undertaking the alterations believes that compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility and that the alternative requirements in 4.1.7(3) should be used for the feature, the entity should consult with the State Historic Preservation Officer. If the State Historic Preservation Officer agrees that compliance with the accessibility requirements for accessible routes (exterior and interior), ramps, entrances or toilets would

threaten or destroy the historical significance of the building or facility, the alternative requirements in 4.1.7(3) may be used.

(c) Consultation With Interested Persons. Interested persons should be invited to participate in the consultation process, including State or local accessibility officials, individuals with disabilities, and organizations representing individuals with disabilities.

(d) Certified Local Government Historic Preservation Programs. Where the State Historic Preservation Officer has delegated the consultation responsibility for purposes of this section to a local government historic preservation program that has been certified in accordance with section 101(c) of the National Historic Preservation Act of 1966 (16 U.S.C. 470a (c)) and implementing regulations (36 CFR 61.5), the responsibility may be carried out by the appropriate local government body or official.

(3) Historic Preservation: Minimum Requirements.

(a) At least one accessible route complying with 4.3 from a site access point to an accessible entrance shall be provided.

EXCEPTION: A ramp with a slope no greater than 1:6 for a run not to exceed 2 ft (610 mm) may be used as part of an accessible route to an entrance.

(b) At least one accessible entrance complying with 4.14 which is used by the public shall be provided.

EXCEPTION: If it is determined that no entrance used by the public can comply with 4.14, then access at any entrance not used by the general public but open (unlocked) with directional signage at the primary entrance may be used. The accessible entrance shall also have a notification system. Where security is a problem, remote monitoring may be used.

(c) If toilets are provided, then at least one toilet facility complying with 4.22 and 4.1.6 shall be provided along an accessible route that complies with 4.3. Such toilet facility may be unisex in design.

(d) Accessible routes from an accessible entrance to all publicly used spaces on at least the level of the accessible entrance shall be provided. Access shall be provided to all levels of a building or facility in compliance with 4.1 whenever practical.

(e) Displays and written information, documents, etc., should be located where they can be seen by a seated person. Exhibits and signage displayed horizontally (e.g., open books), should be no higher than 44 in (1120 mm) above the floor surface.

NOTE: The technical provisions of sections 4.2 through 4.35 are the same as those of the American National Standard Institute's document A117.1-1980, except as noted in the text.

4.2 Space Allowance and Reach Ranges.

4.2.1* Wheelchair Passage Width. The minimum clear width for single wheelchair passage shall be 32 in (815 mm) at a point and 36 in (915 mm) continuously (see Fig. 1 and 24(e)).

4.2.2 Width for Wheelchair Passing. The minimum width for two wheelchairs to pass is 60 in (1525 mm) (see Fig. 2).

4.2.3* Wheelchair Turning Space. The space required for a wheelchair to make a 180-degree turn is a clear space of 60 in (1525 mm) diameter (see Fig. 3(a)) or a T-shaped space (see Fig. 3(b)).

4.2.4* Clear Floor or Ground Space for Wheelchairs

4.2.4* Clear Floor or Ground Space for Wheelchairs.

4.2.4.1 Size and Approach. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 in by 48 in (760 mm by 1220 mm) (see Fig. 4(a)). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object (see Fig. 4(b) and (c)). Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.

4.2.4.2 Relationship of Maneuvering Clearance to Wheelchair Spaces. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in Fig. 4(d) and (e).

4.2.4.3 Surfaces for Wheelchair Spaces. Clear floor or ground spaces for wheelchairs shall comply with 4.5.

4.2.5* Forward Reach. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 in (1220 mm) (see Fig. 5(a)). *The minimum low forward reach is 15 in (380 mm).* If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).

4.2.6* Side Reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 in (1370 mm) and the low side reach shall be no less than 9 in (230 mm) above the floor (Fig. 6(a) and (b)). If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig. 6(c).

4.3 Accessible Route.

4.3.1* General. All walks, halls, corridors, aisles, *skywalks, tunnels,* and other spaces

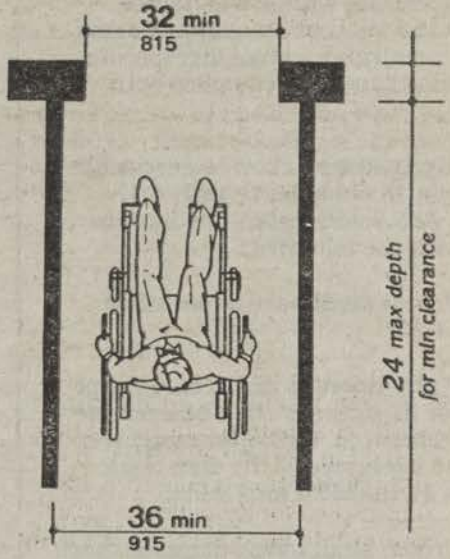


Fig. 1
Minimum Clear Width for Single Wheelchair

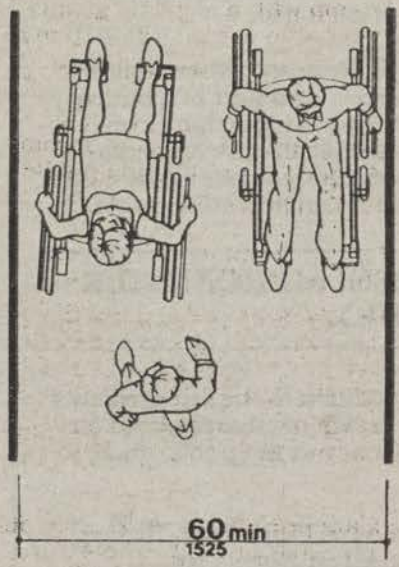


Fig. 2
Minimum Clear Width for Two Wheelchairs

6.2 Entrances. At least one accessible entrance that complies with 4.14 shall be protected from the weather by canopy or roof overhang. Such entrances shall incorporate a passenger loading zone that complies with 4.6.6.

6.3 Patient Bedrooms. Provide accessible patient bedrooms in compliance with 4.1 through 4.35. Accessible patient bedrooms shall comply with the following:

(1) Each bedroom shall have a door that complies with 4.13.

EXCEPTION: Entry doors to acute care hospital bedrooms for in-patients shall be exempted from the requirement in 4.13.6 for maneuvering space at the latch side of the door if the door is at least 44 in (1120 mm) wide.

(2) Each bedroom shall have adequate space to provide a maneuvering space that complies with 4.2.3. In rooms with two beds, it is preferable that this space be located between beds.

(3) Each bedroom shall have adequate space to provide a minimum clear floor space of 36 in (915 mm) along each side of the bed and to provide an accessible route complying with 4.3.3 to each side of each bed.

6.4 Patient Toilet Rooms. Where toilet/bathrooms are provided as a part of a patient bedroom, each patient bedroom that is required to be accessible shall have an accessible toilet/bathroom that complies with 4.22 or 4.23 and shall be on an accessible route.

7. BUSINESS, MERCANTILE AND CIVIC.

7.1 General. In addition to the requirements of 4.1 to 4.35, the design of all areas used for business transactions with the public shall comply with 7.

7.2 Sales and Service Counters, Teller Windows, Information Counters.

(1) In department stores and miscellaneous retail stores where counters have cash registers and are provided for sales or distribution of goods or services to the public, at least one of each type shall have a portion of the counter which is at least 36 in (915 mm) in length with a maximum height of 36 in (915 mm) above the finish floor. It shall be on an accessible route complying with 4.3. The accessible counters must be dispersed throughout the building or facility. In alterations where it is technically infeasible to provide an accessible counter, an auxiliary counter meeting these requirements may be provided.

(2) At ticketing counters, teller stations in a bank, registration counters in hotels and motels, box office ticket counters, and other counters that may not have a cash register but at which goods or services are sold or distributed, either:

(i) a portion of the main counter which is a minimum of 36 in (915 mm) in length shall be provided with a maximum height of 36 in (915 mm); or

(ii) an auxiliary counter with a maximum height of 36 in (915 mm) in close proximity to the main counter shall be provided; or

(iii) equivalent facilitation shall be provided (e.g., at a hotel registration counter, equivalent facilitation might consist of: (1) provision of a folding shelf attached to the main counter on which an individual with disabilities can write, and (2) use of the space on the side of the counter or at the concierge desk, for handing materials back and forth).

All accessible sales and service counters shall be on an accessible route complying with 4.3.

(3) In buildings or facilities subject to title II of the ADA:

(i) Where counters have cash registers and are provided for the sales or distribution of goods or services to the public, at least one of each type shall comply with 7.2(1).

(ii) At teller windows, service counters, or other counters that may not have a cash register but at which goods or services are sold or distributed, a portion of the main counter which is a minimum of 36 in (915 mm) in length shall be provided with a maximum height of 36 in (915 mm) or, an auxiliary counter with a maximum height of 36 in (915 mm) in close proximity to the main counter shall be provided.

7.2 Sales and Service Counters, Teller Windows, Information Counters

(iii)* In addition, at counters or teller windows with solid partitions or security glazing separating personnel from the public, at least one of each type shall provide a method to facilitate voice communication. Such methods may include, but are not limited to, grilles, talk-through baffles, intercoms, or telephone handset devices. The method of communication shall be accessible to both individuals who use wheelchairs and individuals who have difficulty bending or stooping. If provided, at least one telephone communication device shall be equipped with volume controls complying with 4.31.5. Hand-operable communications devices, if provided, shall comply with 4.27.	
(4)* Assistive Listening Devices. (Reserved).	

(5) New direct connections to commercial, retail, or residential facilities shall, to the maximum extent feasible, have an accessible route complying with 4.3 from the point of connection to boarding platforms and all transportation system elements used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements used by the public.

10.3.3 Existing Facilities: Alterations.

(1) For the purpose of complying with 4.1.6(2) (Alterations to an Area Containing a Primary Function), an area of primary function shall be as defined by applicable provisions of 49 CFR 37.43(c) (Department of Transportation's ADA Rule) or 28 CFR 36.403 (Department of Justice's ADA Rule).

10.4 Airports.

10.4.1 New Construction.

(1) Elements such as ramps, elevators or other vertical circulation devices, ticketing areas, security checkpoints, or passenger waiting areas shall be placed to minimize the distance which wheelchair users and other persons who cannot negotiate steps may have to travel compared to the general public.

(2) The circulation path, including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where the circulation path is different, directional signage complying with 4.30.1, 4.30.2, 4.30.3 and 4.30.5 shall be provided which indicates the location of the nearest accessible entrance and its accessible route.

(3) Ticketing areas shall permit persons with disabilities to obtain a ticket and check baggage and shall comply with 7.2.

(4) Where public pay telephones are provided, and at least one is at an interior location, a public TTY shall be provided in compliance with 4.31.9. Additionally, if four or more public pay telephones are located in any of the following locations, at least one public TTY shall also be provided in that location:

(a) a main terminal outside the security areas;

(b) a concourse within the security areas; or

(c) a baggage claim area in a terminal.

Compliance with this section constitutes compliance with section 4.1.3(17)(c).

(5) Baggage check-in and retrieval systems shall be on an accessible route complying with 4.3, and shall have space immediately adjacent complying with 4.2.4. If unattended security barriers are provided, at least one gate shall comply with 4.13. Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 in (50 mm) above the floor to 27 in (685 mm) above the floor.

(6) Terminal information systems which broadcast information to the general public through a public address system shall provide a means to provide the same or equivalent information to persons with a hearing loss or who are deaf. Such methods may include, but are not limited to, visual paging systems using video monitors and computer technology. For persons with certain types of hearing loss such methods may include, but are not limited to, an assistive listening system complying with 4.33.7.

(7) Where clocks are provided for use by the general public the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with their background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with 4.30.3. Clocks shall be placed in uniform locations throughout the facility to the maximum extent practicable.

(8)* Security Systems. In airports covered by title II of the ADA, at least one accessible route complying with 4.3 shall be provided through fixed security barriers at each single barrier or group of security barriers. A group is two or more security barriers immediately adjacent to each other at a single location. Where security barriers incorporate equipment such as metal detectors, fluoroscopes, or other similar devices which cannot be made acces-

sible, an accessible route shall be provided adjacent to such security screening devices to facilitate an equivalent path of travel. The path of travel shall permit persons with disabilities passing through security barriers to maintain visual contact with their personal items to the same extent provided other members of the general public.

EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall be exempt from 4.13.6, 4.13.9, 4.13.11, and 4.13.12.

10.5 Boat and Ferry Docks. (Reserved).

11. JUDICIAL, LEGISLATIVE AND REGULATORY FACILITIES.

11.1* General. In addition to the requirements in 4.1 through 4.35, judicial, legislative and regulatory facilities shall comply with 11. All public and common use areas are required to be designed and constructed to comply with section 4.

11.2 Courtrooms, Hearing Rooms, and Chambers.

11.2.1 Where the following elements are provided, each shall be on an accessible route that complies with 4.3 and coincides with the circulation path provided for all persons using the element and shall comply with the following provisions. Those elements covered in 11.2.1(4) (which are designed to be adaptable) must be located on an accessible route at the time they are adapted.

(1) Doors or Gates. Doors or gates designed to allow passage into the well of the courtroom, the witness stand, the jury box, the speaker's rostrum, or other areas shall comply with 4.13.

(2)* Jury Boxes and Witness Stands. Each jury box and witness stand shall have at least one accessible wheelchair space complying with 4.33.2. Readily removable seats may be installed in wheelchair spaces when the spaces are not required to accommodate wheelchair users. Accessible spaces shall be provided in the defined area of the jury box and witness stand. Fixed counters in the witness stand shall comply with 4.32. A 30 in by 48 in (760 mm by 1220 mm) clear floor space for a forward position shall be provided at each jury box and witness stand. An unobstructed turning space complying with 4.2.3 shall be provided serving each area. Where provided for use by the witness or juror, controls and operating mechanisms shall comply with 4.27.3 and 4.27.4 except that the maximum height of controls and operating mechanisms shall be 48 in (1220 mm).

EXCEPTION: In alterations to existing facilities where it is technically infeasible to provide a fixed means of vertical access to the witness stand and jury box, clear floor space shall be provided to accommodate a portable ramp complying with 4.8 or a portable lift complying with 4.11 as long as jurors or witnesses with disabilities are inside the defined area of the jury box and witness stand. In alterations, ramps may comply with 4.1.6(3)(a).

(3) Spectator, Press, and Other Areas with Fixed Seats. Where spectator, press or other areas with fixed seats are provided, each area shall comply with 4.1.3(19)(a). In addition, where the spectator seating capacity exceeds 50 and is located on one level that is not tiered or sloped, wheelchair spaces shall be provided in more than one seating row.

(4)* Fixed Judges' Benches, and Clerks' Stations. Fixed judges' benches, and clerks' stations shall be accessible or adaptable and comply with 4.32. A 30 in by 48 in (760 mm by 1220 mm) clear floor space for a forward position shall be provided at each accessible bench or station. An unobstructed turning space complying with 4.2.3 shall be provided serving each area. Controls and operating mechanisms shall comply with 4.27.3 and 4.27.4 except that the maximum height of controls and operating mechanisms shall be 48 in (1220 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).

Adaptable means that maneuvering clearances and other features (e.g., fixed controls) shall be designed into the space so that accessibility can easily be provided. For example, the judge's bench may be designed so that a ramp complying with 4.8 or a lift complying with 4.11 can easily be installed at a later date provided that the required maneuvering clearances are provided to approach, enter, and exit the ramp or lift. Maneuvering clearances must

also allow an individual to open gates, maneuver at the bench (e.g., knee clearance), and reach any fixed controls (e.g., alarm buttons) and electrical outlets that are integral components of the design.

(5)* Fixed Bailiffs' Stations, Court Reporters' Stations, Litigants' and Counsel Stations. Fixed or built-in stations, including tables for bailiffs, court reporters, litigants and counsel shall comply with 4.32. A 30 in by 48 in (760 mm by 1220 mm) clear floor space for a forward position shall be provided at each accessible station. Controls and operating mechanisms shall comply with 4.27.3 and 4.27.4 except that the maximum height of controls and operating mechanisms shall be 48 in (1220 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).

(6) Fixed Lecterns. Fixed lecterns shall provide adjustable heights. At least one height shall be from 28 in to 34 in (710 mm to 865 mm) above the finish floor and provide knee space at least 27 in (685 mm) high, 30 in (760 mm) wide, and 19 in (485 mm) deep. A 30 in by 48 in (760 mm by 1220 mm) clear floor space for a forward position shall be provided. Controls and operating mechanisms shall comply with 4.27.3 and 4.27.4 except that the maximum height of controls and operating mechanisms shall be 48 in (1220 mm).

(7) Fixed Speakers' Rostrums and Daises. Fixed speakers' rostrums and at least one dais shall be accessible and comply with 4.32. A 30 in by 48 in (760 mm by 1220 mm) clear floor space for a forward position shall be provided at each accessible rostrum and dais. An unobstructed turning space complying with 4.2.3 shall be provided serving each area.

11.3 Jury Assembly Areas and Jury Deliberation Areas.

11.3.1 Where provided in areas used for jury assembly or deliberation, the following elements or spaces shall be on an accessible route complying with 4.3 and shall comply with the following provisions:

(1) Refreshment Areas. Refreshment areas, kitchenettes and fixed or built-in refreshment dispensers and vending machines shall comply with the technical provisions of 9.2.2(7).

(2)* Fixed or Built-in Seating and Tables. At least five percent, but not less than one, of fixed or built-in seating and tables shall comply with 4.32. Readily removable seats may be installed in wheelchair spaces when the spaces are not required to accommodate wheelchair users.

(3) Drinking Fountains. Where provided in rooms covered under 11.3, there shall be a drinking fountain accessible to individuals who use wheelchairs in accordance with 4.15 and one accessible to those who have difficulty bending or stooping. This can be accomplished by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler; or by other such means as would achieve the required accessibility for each group.

11.4 Courthouse Holding Facilities.

11.4.1 Holding Cells - Minimum Number. Where provided, facilities for detainees, including central holding cells and court-floor holding cells, shall comply with the following:

(1) Central Holding Cells. Where separate central holding cells are provided for adult male, juvenile male, adult female, and juvenile female, one of each type shall comply with 11.4. Where central-holding cells are provided, which are not separated by age or sex, at least one cell complying with 11.4 shall be provided.

(2) Court-Floor Holding Cells. Where separate court-floor holding cells are provided for adult male, juvenile male, adult female, and juvenile female, one of each type shall comply with 11.4. Where court-floor holding cells are provided, and are not separated by age or sex, courtrooms shall be served by at least one cell complying with 11.4.

11.4.2 Requirements for Accessible Cells. Accessible cells shall be on an accessible route complying with 4.3. Where provided, the following elements or spaces serving accessible cells shall be accessible and on an accessible route:

(1) Doors and Doorways. All doors and doorways to accessible spaces and on an accessible route shall comply with 4.13.

11.4.3* Visiting Areas

EXCEPTION: Doors and doorways designed to be operated only by security personnel shall be exempt from 4.13.6, 4.13.9, 4.13.10, 4.13.11 and 4.13.12.

(2)* Restrooms. Toilet facilities shall comply with 4.22 and bathing facilities shall comply with 4.23. Privacy screens shall not intrude on the clear floor space required for fixtures or the accessible route.

(3)* Beds. Beds shall have maneuvering space at least 36 in (915 mm) wide along one side. Where more than one bed is provided in a cell, the maneuvering space provided at adjacent beds may overlap.

(4) Drinking Fountains and Water Coolers. Drinking fountains shall be accessible to individuals who use wheelchairs in accordance with 4.15 and shall be accessible to those who have difficulty bending or stooping. This can be accomplished by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler; or by other such means as would achieve the required accessibility for each group.

(5) Fixed or Built-in Seating and Tables. Fixed or built-in seating, tables or counters shall comply with 4.32.

(6) Fixed Benches. Fixed benches shall be mounted at 17 in to 19 in (430 mm to 485 mm) above the finish floor. The structural strength of the bench attachments shall comply with 4.26.3.

11.4.3* Visiting Areas. The following elements, where provided, shall be located on an accessible route complying with 4.3 and shall comply with the following provisions:

(1) Cubicles and Counters. At least five percent, but not less than one, of fixed cubicles shall be accessible according to 4.32 on both the visitor and detainee sides. Where counters are provided, a portion at least 36 in (915 mm) in length shall comply with 4.32 on both the visitor and detainee sides.

(2) Partitions. Solid partitions or security glazing that separate visitors from detainees shall comply with 7.2(3).

11.5 Restricted and Secured Entrances. Where provided, at least one restricted entrance and one secured entrance to the facility shall be accessible in addition to the entrances required by 4.1.3(8). Such entrances shall be connected by an accessible route complying with 4.3 to all accessible spaces or elements within the building or facility and comply with the following:

(1) Restricted Entrances. Restricted entrances are used by judges, court personnel and other authorized parties on a controlled basis. The accessible restricted entrance shall be connected by an accessible route to public transportation stops, to accessible parking and passenger loading zones and to public streets or sidewalks if available (see 4.3.2(1)). In addition, if direct access is provided for pedestrians from an enclosed parking garage to a restricted entrance, at least one direct entrance from the garage to the restricted entrance shall be accessible.

(2) Secured Entrances. Secured entrances are used by detainees and detention officers. Where provided, passenger loading zones for detainees shall comply with 4.6.6.

EXCEPTION: At secured entrances, doors and doorways designed to be operated only by security personnel shall be exempt from 4.13.6, 4.13.9, 4.13.10, 4.13.11 and 4.13.12.

11.6 Security Systems. An accessible route complying with 4.3 shall be provided through fixed security barriers at required accessible entrances. Where security barriers incorporate equipment such as metal detectors, fluoroscopes, or other similar devices which cannot be made accessible, an accessible route shall be provided adjacent to such security screening devices to facilitate an equivalent path of travel.

11.7* Two-Way Communication Systems. Where a two-way communication system is provided to gain admittance to a facility or to restricted areas within the facility, the system shall provide both visible and audible signals and shall comply with 4.27.

11.8* Electrical Outlets, Wiring, and Conduit for Communication Systems.

(1) In judicial, legislative, or regulatory facilities, all courtrooms, hearing rooms, jury deliberation and jury orientation rooms, and meeting rooms designated for public use shall be provided with the following to support communication equipment for persons with disabilities:

(a) Electrical outlets; and

(b) Wiring, conduit, or raceways.

(2) Within the courtroom, electrical outlets and wiring, conduit, or raceways shall be provided to serve each litigant and counsel station, clerk station, court reporter station, jury box, witness stand, judge's bench and spectator area.

(3) These electrical outlets shall be provided in addition to those convenience outlets required by applicable State or local codes.

11.9* Permanently Installed Assistive Listening Systems. Permanently installed assistive listening systems complying with 4.33.6 and 4.33.7 shall be provided in judicial, legislative and regulatory facilities as follows:

(1)* Judicial Facilities. In judicial facilities, 50 percent, but not less than one, of each type of courtroom (at least one of which shall have a jury box, where one is provided) shall have a permanently installed assistive listening system. In addition, 50 percent, but not less than one, of each of the following types of rooms shall have a permanently installed assistive listening system: hearing rooms, jury deliberation rooms, and jury orientation rooms.

(2)* Legislative and Regulatory Facilities. In legislative and regulatory facilities, 50 percent, but not less than one, of each of the following types of rooms shall have a permanently installed assistive listening system: chambers, and hearing or meeting rooms which are designated for public use and where legislative or regulatory business is conducted. In addition, where separate chambers are provided for a bicameral legislature (i.e., house and senate), each chamber shall have a permanently installed assistive listening system.

(3) Receivers. The minimum number of receivers shall be four percent, but not less than two, of the room occupant load, as determined by applicable State or local codes.

(4) Signage. An informational sign complying with 4.30.1, 4.30.2, 4.30.3, 4.30.5 and 4.30.7(4) shall be posted in a prominent place indicating the availability of assistive listening systems, computer-aided transcription system, or other communication equipment for persons with vision or hearing impairments.

12. DETENTION AND CORRECTIONAL FACILITIES.

12.1* General. This section applies to jails, holding cells in police stations, prisons, juvenile detention centers, reformatories, and other institutional occupancies where occupants are under some degree of restraint or restriction for security reasons. Except as specified in this section, detention and correctional facilities shall comply with the applicable requirements of 4.1 through 4.35. All common use areas serving accessible cells or rooms and all public use areas are required to be designed and constructed to comply with section 4.

EXCEPTION: In detention and correctional facilities the requirements for areas of rescue assistance in 4.1.3(9), 4.3.10, and 4.3.11 do not apply. In addition, the requirements of 4.1.3(16) apply only to public use areas.

12.2 Entrances.

12.2.1 Public Entrances. Entrances used by the public, including those that are secured, shall be accessible as required by 4.1.3(8). Public entrances are those entrances used by the general public, including those used by both visitors and inmates or detainees.

EXCEPTION: Entrances, doors and doorways designed to be operated only by security personnel shall be exempt from 4.13.6, 4.13.9, 4.13.10, 4.13.11 and 4.13.12. Doors and doorways not operated solely by security personnel which are subject to security requirements that prohibit full compliance with these provisions shall comply to the maximum extent feasible.

12.2.2 Other Entrances

12.2.2 Other Entrances. Where entrances used by inmates or detainees and not the general public are provided, at least one such entrance shall comply with 4.14. This requirement is in addition to the entrances that are required to be accessible by 4.1.3(8). Where provided, passenger loading zones serving entrances subject to this provision shall comply with 4.6.6.

EXCEPTION: Entrances, doors and doorways designed to be operated only by security personnel shall be exempt from 4.13.6, 4.13.9, 4.13.10, 4.13.11 and 4.13.12. Doors and doorways not operated solely by security personnel that are subject to security requirements that prohibit full compliance with these provisions shall comply to the maximum . extent feasible. Entrances subject to 4.14 are not required to be connected by an accessible route to public transportation stops, accessible parking, or public streets or sidewalks.

12.2.3 Security Systems. Where security systems are provided at public or other entrances required to be accessible by 12.2.1 or 12.2.2, an accessible route complying with 4.3 shall be provided through fixed security barriers. Where security barriers incorporate equipment such as metal detectors, fluoroscopes, or other similar devices which cannot be made accessible, an accessible route shall be provided adjacent to such security screening devices to facilitate an equivalent path of travel.

12.3* Visiting Areas. In non-contact visiting areas where inmates or detainees are separated from visitors, the following elements, where provided, shall be accessible and located on an accessible route complying with 4.3:

(1) Cubicles and Counters. Five percent, but not less than one, of fixed cubicles shall be accessible according to 4.32 on both the visitor and detainee or inmate sides. Where counters are provided, a portion at least 36 in (915 mm) in length shall comply with 4.32 on both the visitor and detainee or inmate sides.

EXCEPTION: At non-contact visiting areas not serving accessible cells or rooms, the requirements of 12.3(1) do not apply to cubicles or counters serving detainees or inmates.

(2) Partitions. Solid partitions or security glazing separating visitors from inmates or detainees shall comply with 7.2(3).

12.4 Holding and Housing Cells or Rooms: Minimum Number and Dispersion.

12.4.1* Holding Cells and General Housing Cells or Rooms.

(1) Minimum Number. At least three percent, but not less than one, of the total number of housing or holding cells or rooms provided in a facility shall comply with 12.5.

(2) Dispersion. Accessible cells or rooms complying with 12.5 shall be dispersed among all categories and types of general housing and holding areas. This does not require an increase in the minimum number specified by 12.4.1(1), nor does it require proportionate distribution of accessible cells among different categories or types of cells.

12.4.2 Special Holding and Housing Cells or Rooms. In addition to the requirements of 12.4.1, where special holding or housing cells or rooms are provided, at least one serving each purpose shall comply with 12.5. An accessible special holding or housing cell or room may serve more than one purpose. Cells or rooms subject to this requirement include, but are not limited to, those used for purposes of protective custody, disciplinary detention, detoxification, and medical isolation.

12.4.3* Accessible Cells or Rooms for Persons with Hearing Impairments. In addition to the requirements of 12.4.1, at least three percent, but not less than one, of general housing or holding cells or rooms equipped with audible emergency warning systems or permanently installed telephones within the cell or room shall comply with the applicable requirements of 12.6.

12.4.4* Medical Care Facilities. Medical care facilities providing physical or medical treatment or care shall comply with the applicable requirements of 6.1, 6.3 and 6.4, if persons may need assistance in emergencies and the period of stay may exceed 24 hours. Patient bedrooms or cells required to be accessible under 6.1 and 6.3 shall be provided in addition to any medical isolation cells required to be accessible under 12.4.2.

12.4.5 Alterations to Cells or Rooms. When holding or general housing cells or rooms are being altered in an existing facility, or portion thereof, at least three percent of the number being altered shall be made accessible according to 12.4.1 until the number of accessible cells or rooms equals the total number of accessible cells or rooms required for the facility under 12.4.1.

12.5 Requirements for Accessible Cells or Rooms.

12.5.1 General. Cells or rooms required to be accessible by 12.4 shall comply with 12.5.

12.5.2 Minimum Requirements. Accessible cells or rooms shall be on an accessible route complying with 4.3. Where provided within housing or holding cells or rooms, the following elements or spaces shall be accessible and connected by an accessible route.

(1) Doors and Doorways. All doors and doorways on an accessible route shall comply with 4.13.

EXCEPTION: Doors and doorways designed to be operated only by security personnel shall be exempt from 4.13.6, 4.13.9, 4.13.10, 4.13.11 and 4.13.12. Other doors and doorways not operated solely by security personnel which are subject to security requirements that prohibit full compliance with these provisions shall comply to the maximum extent feasible.

(2)* Restrooms. At least one toilet facility shall comply with 4.22 and one bathing facility shall comply with 4.23. Privacy screens shall not intrude on the clear floor space required for fixtures and the accessible route.

(3)* Beds. Beds shall have maneuvering space at least 36 in (915 mm) wide along one side. Where more than one bed is provided in a room or cell, the maneuvering space provided at adjacent beds may overlap.

(4) Drinking Fountains and Water Coolers. Drinking fountains shall be accessible to individuals who use wheelchairs in accordance with 4.15 and shall be accessible to those who have difficulty bending or stooping. This can be accomplished by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler; or by providing other such means as would achieve the required accessibility for each group.

(5) Fixed or Built-in Seating or Tables. Fixed or built-in seating, tables and counters shall comply with 4.32.

(6) Fixed Benches. Fixed benches shall be mounted at 17 in to 19 in (430 mm to 485 mm) above the finish floor. The structural strength of the bench attachments shall comply with 4.26.3.

(7) Storage. Fixed or built-in storage facilities such as cabinets, shelves, closets, and drawers, shall contain storage space complying with 4.25.

(8) Controls. All controls intended for operation by inmates shall comply with 4.27.

(9) Accommodations for persons with hearing impairments required by 12.4.3 and complying with 12.6 shall be provided in accessible cells or rooms.

12.6 Visible Alarms and Telephones.

12.6.1 General. Where audible emergency warning systems are provided to serve the occupants of holding or housing cells or rooms, visible alarms complying with 4.28.4 shall be provided. Where permanently installed telephones are provided within holding or housing cells or rooms, they shall have volume controls complying with 4.31.5.

EXCEPTION: Visible alarms are not required where inmates or detainees are not allowed independent means of egress.

12.6.2* Equivalent Facilitation. For purposes of this section, equivalent facilitation shall include the installation of electrical outlets (including outlets connected to a facility's central alarm system) and telephone wiring in the cell or room to enable inmates or detainees with hearing impairments to utilize portable visible alarms and communication devices made available by the operator of the facility.

13. ACCESSIBLE RESIDENTIAL HOUSING.

13.1 General.

(1) This section applies to newly constructed or altered residential housing facilities containing single-family and/or multifamily dwelling units subject to title II of the ADA. For purposes of this section, the term "dwelling unit" means a single unit containing rooms and spaces for living, bathing and sleeping and which may provide a kitchen or food preparation area. This section does not apply to transient lodging facilities covered by section 9.

(2) Except as specified in this section, accessible residential housing shall comply with the applicable requirements of 4.1 through 4.35. All public and common use areas shall be designed and constructed to comply with section 4.1 through 4.35. "Public use areas" pertains to interior or exterior spaces of a building or facility that are made available to the general public. As used in this section, "common use areas" means rooms, spaces or elements inside or outside of a building or facility that are made available solely for the use of residents of a building or facility or their guests. Common use areas may include, but are not limited to, halls, lounges, lobbies, laundry rooms, kitchens outside dwelling units for tenant use, refuse rooms, mail rooms, recreational areas, storage areas, areas used for official functions and walks among and between buildings. The term "common use" excludes spaces wholly within a dwelling unit.

EXCEPTION 1: Elevators are not required in residential facilities that are less than four stories provided that the requirements of 13.1(2), 13.2 and 13.3 are satisfied.

EXCEPTION 2*: Where multiple recreational facilities, such as tennis courts, are provided for common use only, at least one of each type shall be designed and constructed to comply with section 4.

13.2 Minimum Number and Dispersion.

13.2.1* New Construction: Minimum Number. Accessible dwelling units shall be provided as follows:

(1) Five percent of the total number of dwelling units in a facility, but not less than one, shall comply with 13.3 and 13.4. In a facility with more than two dwelling units, 25 percent, but not less than one, of the dwelling units required to be accessible and complying with 13.3 and 13.4, shall have a roll-in shower complying with 4.21.

(2) In addition to those dwelling units required to be accessible by 13.2.1(1), two percent of the total number of dwelling units in a facility, but not less than one, shall comply with 13.4. This paragraph does not require an increase in the total number of dwelling units planned for a facility. If the total number of dwelling units is one, that dwelling unit shall meet the requirements of 13.2.1(1).

(3) Where special purpose residences are provided for specific employee positions and are not interchangeable (e.g., Governors' mansions and university Presidents' residences) each shall comply with 13.2.1(1). Where such residences are interchangeable, five percent, or at least one shall be accessible.

13.2.2* New Construction: Dispersion.

(1) Accessible dwelling units shall be dispersed throughout the facility so as to provide people with disabilities a choice of housing types comparable to and integrated with those available to other members of the public. In dispersing accessible units, the following factors are to be considered: vertical dispersion in buildings where elevators are provided; unit size; rental or sale price; amenities provided within dwelling units; and the availability and proximity of amenities serving dwelling units.

(2) When units of different size in terms of number of bedrooms are provided, at least one of each unit shall comply with 13.2.1(1). In dispersing units according to the number of bedrooms provided, compliance with this provision is required regardless of whether it is necessary to exceed the number required to be accessible by 13.2.1(1) unless doing so will require the installation of an elevator where one was not planned. If the number required in 13.2.1(1) has not been met, units shall be dispersed throughout the facility according to the number of bedrooms provided to the maximum extent feasible.

13.2.3* Alterations: Minimum Number and Dispersion.

(1) Minimum Number: When dwelling units are altered in an existing facility, five percent, but not less than one, of the dwelling units altered shall comply with the requirements of 13.3 and 13.4 for each alteration until the number of accessible dwelling units in each facility equals the number required to be accessible by 13.2.1(1). In addition, two percent but not less than one of the altered dwelling units shall comply with the requirements of 13.4 until the number of accessible dwelling units equals the number required to be accessible by 13.2.1(2).

(2) Dispersion: When existing dwelling units are altered and are required to be accessible they shall be dispersed according to 13.2.2(1), to the maximum extent feasible.

13.3 Requirements for Accessible Dwelling Units.

13.3.1 General. The requirements of 13.3 apply to dwelling units required to be accessible by 13.2.1(1) and 13.2.3(1).

13.3.2* Minimum Requirements. An accessible dwelling unit shall be on an accessible route complying with 4.3 and shall have the following accessible elements and spaces:

(1) Ancillary Areas. Spaces and facilities serving individual accessible dwelling units, including but not limited to, entry walks, trash disposal facilities, storage areas, and mail boxes, where provided, shall comply with 4.1 through 4.35.

(2) Maneuvering Space. Accessible spaces shall have maneuvering space complying with 4.2.3 and surfaces complying with 4.5.

(3) Accessible Route. At least one accessible route complying with 4.3 shall connect the accessible entrances with all accessible spaces and elements within the accessible dwelling unit. This is not intended to require an elevator within an accessible dwelling unit as long as the spaces identified in 13.3.2(11), (12), and (13) are connected by an interior accessible route.

(4) Parking. Parking spaces shall comply with 4.6 and shall be provided in accordance with the following:

(a) Where parking is provided for residents, one accessible parking space shall be provided for each dwelling unit required to be accessible by 13.2.1(1). Van spaces shall be provided in compliance with 4.1.2(5)(b). If dwelling units are provided with more than one type of parking space (e.g., stalls, garages, or carports) then required parking spaces shall be distributed among the types.

(b) Where the total parking provided on a site exceeds one parking space per dwelling unit, not less than two percent, but no less than one space, of this additional parking shall be accessible. Van parking shall be provided in compliance with 4.1.2(5)(b).

EXCEPTION: Where parking spaces are assigned to specific dwelling units, the requirements for signage under 4.6.4 apply only during the tenancy of a person with a disability.

(5) Elevators. Elevators shall comply with 4.10.

EXCEPTION 1: An accessible private residence elevator complying with the following may be used in lieu of an elevator complying with 4.10 to connect levels within an individual dwelling unit:

(a) Independent Use and Operation. The elevator shall facilitate unassisted entry, operation, and exit from the elevator; and,

(b) Inside Dimension of Elevator Cars. Elevator cars shall provide a clear floor space in compliance with 4.2.4. Car gates and doors shall be positioned at the narrow end(s) of the clear floor space. The clearance between the car platform sill and any hoistway edge shall be 1-1/4 in (32 mm) maximum.

EXCEPTION 2: A platform lift complying with 4.11 may be used in lieu of an elevator complying with 4.10 to connect levels within an individual dwelling unit.

(6)* Doors. Doors intended for passage into and within accessible spaces shall comply with 4.13. Entry doors shall include peepholes for use by seated individuals, if peepholes are provided for other dwelling units in the facility.

13.3.3 Bathrooms

(7) Entrances. At least one accessible entrance to the dwelling unit shall comply with 4.14. Additional entrances, where provided, should comply with 4.14.

(8) Storage. At least one of each type of fixed or built-in storage facility in accessible spaces in dwelling units, including cabinets, shelves, closets, and drawers shall comply with 4.25. Storage cabinets in kitchens shall comply with 13.3.4(10).

(9) Controls. All controls in accessible spaces shall comply with 4.27. Electric circuit breaker panels and those portions of heating, ventilating, and air conditioning equipment requiring regular or periodic maintenance and adjustment by the resident of a dwelling unit shall comply with 4.27. Inaccessible controls are permitted where redundant controls complying with 4.27 are provided in close proximity.

EXCEPTION: This requirement shall not apply to controls on air distribution registers that are placed on or close to ceilings or floors.

(10) Alarms. If emergency warning systems are provided, they shall include audible alarms complying with 4.28.2 and visible alarms complying with 4.28.3.

(11) Bathrooms. At least one full bathroom shall comply with 13.3.3. A full bathroom shall include, at a minimum, a water closet and a lavatory, as well as a bathtub, or shower, or a combination tub and shower.

(12) Kitchens. If provided, the kitchen shall comply with 13.3.4.

(13) Living Spaces. The following spaces shall be accessible and shall be on an accessible route complying with 4.3:

(a) Living areas.

(b) Dining areas, if provided.

(c) Sleeping areas or bedrooms as follows:

(i) In dwelling units with one bedroom, one bedroom.

(ii) In dwelling units with more than one bedroom, at least two bedrooms.

(d) Carports and garages, serving the accessible dwelling unit and their routes or connections to the dwelling unit.

(e) Patios, decks, terraces, and balconies, serving accessible levels of the dwelling unit.

EXCEPTION: The requirements of 4.13.8 and 4.3.8 do not apply to patios, decks, terraces, or balconies where it is necessary to utilize a higher door threshold or a change in level to protect the integrity of the unit from wind or water damage. Where this exception results in level changes at patios, decks, terraces or balconies, equivalent facilitation shall be provided. Equivalent facilitation in residential housing may consist of providing raised decking or a ramp to provide accessibility.

(14) Laundry Facilities. Laundry facilities shall comply with 13.3.5 and shall be located on an accessible route complying with 4.3.

13.3.3 Bathrooms. Accessible bathrooms shall be on an accessible route and shall comply with the following:

(1) Doors. Doors to accessible bathrooms shall comply with 4.13. Doors shall not swing into the clear floor space required for any fixture unless the maneuvering space required by 13.3.3(8) is provided beyond the arc of the door swing within the room.

(2) Water Closets. Water closets shall comply with 4.16, except that the height of the water closet shall be between 15 in (380 mm) and 19 in (485 mm) measured to the top of the toilet seat.

(3) Lavatories and Mirrors. Lavatories and mirrors shall comply with 4.19. If medicine cabinets are provided, at least one shall be located with a usable shelf no higher than 44 in (1120 mm) above the floor. Clear floor space complying with 4.2.4 shall be provided at the medicine cabinet.

(4) Bathtubs. If a bathtub is provided, it shall comply with 4.20.

(5) Showers. If a shower is provided, it shall comply with 4.21.

(6) Bathtub and Shower Enclosures. Enclosures for bathtubs or shower stalls shall not obstruct controls or transfer from wheelchairs

onto shower or bathtub seats. Enclosures on bathtubs shall not have tracks mounted on the tub's rims.

(7) Fixtures and Controls. The accessible fixtures and controls required in an accessible bathroom shall be on an accessible route. The clear floor space at fixtures and controls and the accessible route may overlap.

(8) Maneuvering Space. Maneuvering space complying with 4.2.3 shall be provided.

13.3.4 Kitchens. If kitchens are provided within accessible dwelling units, or if separate kitchen facilities serve one or more accessible dwelling units, they shall comply with this section. Accessible kitchens and their components shall be designed to allow for the operation of cabinet and/or appliance doors so that all cabinets and appliances are accessible and usable. Accessible kitchens shall be on an accessible route complying with 4.3 and shall comply with the following:

(1) Maneuvering Clearance. Clearances between all opposing base cabinets, counter tops, appliances, or walls shall be 40 in (1015 mm) minimum, except in U-shaped kitchens, where such clearance shall be 60 in (1525 mm) minimum. A U-shaped kitchen is a closed end space having fixtures, storage or other usable elements on three sides.

(2) Clear Floor Space. A clear floor space complying with 4.2.4 that allows either a forward or a parallel approach shall be provided at fixtures and appliances. Such fixtures and appliances shall include, but are not limited to, the range or cooktop, oven, refrigerator/freezer, dishwasher, and trash compactor. Sinks shall have a forward approach. Laundry equipment located in the kitchen shall comply with 13.3.5.

(3) Controls. All controls in kitchens shall comply with 13.3.2(9).

(4) Counters. At least one 36 in (915 mm) length of counter shall provide a work surface that complies with the following requirements:

(a) The counter shall be mounted at a maximum height between 28 in to 34 in (710 mm to 865 mm) above the floor, measured from the floor to the top of the counter surface, or shall be adjustable to provide alternative heights of 28 in, 32 in, 34 in and 36 in (710 mm, 815 mm, 865 mm and 915 mm) measured from the floor to the top of the counter surface.

(b) Counter thickness and supporting structure shall be 2 in (50 mm) maximum over the required clear floor space.

(c) A clear floor space of 30 in by 48 in (760 mm by 1220 mm) shall allow a forward approach to the counter. Nineteen inches (485 mm) maximum of the clear floor space may extend underneath the counter. The knee space shall have a minimum clear width of 30 in (760 mm) and a minimum clear depth of 19 in (485 mm).

(d) There shall be no sharp or abrasive surfaces under such counters.

(5)* Sinks. The sink and its surrounding counter shall comply with 4.24. The sink may be adjustable to provide alternative heights of 28 in, 30 in, 32 in, 34 in, and 36 in (710 mm, 760 mm, 815 mm, 865 mm and 915 mm), measured from the floor to the top of the counter surface or sink rim. The total length of the sink and counter area shall be 30 in (760 mm) minimum. If the sink is adjustable, rough-in plumbing shall be located to accept connections of supply and drain pipes for alternative mounting heights.

(6)* Cooktops. If cooktops have knee spaces underneath, they shall be insulated or otherwise protected on the exposed contact surfaces to prevent burns, abrasions, or electric shock. The clear floor space may overlap the knee space, if provided, by 19 in (485 mm) maximum. The location of controls for cooktops shall not require reaching across burners.

(7)* Ovens. Ovens shall be of the self-cleaning type or be located adjacent to an accessible or adjustable height counter with knee space below. For side opening ovens, the door latch side shall be next to the open counter space, and there shall be a pull-out shelf under the oven extending the full width of the oven and not less than 10 in (255 mm) when fully extended. Wall ovens shall not have knee spaces underneath the oven. Ovens shall have controls on front panels and may be located on either side of the door.

13.3.5 Laundry Facilities

(8)* Refrigerators and Freezers. Provision shall be made for refrigerators which are:

(a) Of the vertical side-by-side refrigerator and freezer type; or

(b) Of the over-and-under type and have at least 50 percent of the freezer space no higher than 54 in (1370 mm) above the floor.

(c) Freezers with less than 100 percent of the storage volume within the limits specified in 4.2.5 and 4.2.6 shall be the self-defrosting type.

(d) Controls for refrigerator and freezer compartments shall comply with 4.2.5 and 4.2.6.

(9) Dishwashers. Dishwashers shall be front loading machines.

(10)* Kitchen Storage. Kitchen storage cabinets, drawers, and shelf areas shall have the following features:

(a) Maximum height shall be 48 in (1220 mm) for at least one shelf of all cabinets and storage shelves mounted above work counters.

(b) Door pulls or handles for wall cabinets shall be mounted as close to the bottom of cabinet doors as practicable. Door pulls or handles for base cabinets shall be mounted as close to the top of cabinet doors as possible.

13.3.5 Laundry Facilities. If laundry equipment is provided within individual accessible dwelling units, or if separate laundry facilities serve one or more accessible dwelling units, then they shall meet the following requirements:

(1) Location. Laundry facilities and laundry equipment shall be on an accessible route.

(2) Washing Machines and Clothes Dryers. A minimum of one washing machine and one clothes dryer in each common use laundry room shall be front loading.

(3) Controls. Laundry equipment controls on front loading machines shall comply with 4.27.

13.4 Requirements for Dwelling Units Accessible to Persons with Hearing Impairments.

13.4.1 General. Dwelling units required to be accessible by 13.2 must comply with 13.4.

(1)* Alarms. Alarms shall comply with 13.3.2(10).

EQUIVALENT FACILITATION. Where single station audible alarms are provided, equivalent facilitation shall include the installation of electrical outlets to accommodate single station visible alarms. Where building-wide audible alarm systems are provided, equivalent facilitation shall include the installation of all necessary connections to a facility's central alarm system to facilitate integration of visible alarm appliances. For the purpose of equivalent facilitation, such visible alarm appliances shall be provided by the operator of the facility during the tenancy of a person with a hearing impairment.

(2) Notification Devices. Permanently installed visible notification devices shall serve all kitchens, bathrooms, and living, sleeping and dining rooms. Notification devices shall provide visible signals to alert occupants of incoming telephone calls and door knocks or bells. Notification devices shall not be connected to visible alarm signal appliances. Visible notification devices in sleeping rooms shall have controls to deactivate the signal.

EQUIVALENT FACILITATION. Equivalent facilitation shall include telephone and other wiring to facilitate use of notification devices. For the purpose of equivalent facilitation, such notification devices shall be provided by the operator of the facility during the tenancy of a person with a hearing impairment.

(3) Telephones. Permanently installed telephones shall include a TTY and shall comply with 4.31.5(1) and 4.31.5(2). An accessible electrical outlet shall be provided within 48 in (1220 mm) of each telephone connection to facilitate the use of a TTY.

(4) Entry Doors. Entry doors to dwelling units shall have peepholes for use by standing individuals for security purposes.

14. PUBLIC RIGHTS-OF-WAY.

14.1* General. All areas, elements, and facilities intended for pedestrian access, circulation, and use that are constructed, installed, or altered in the public right-of-way and which are subject to title II of the ADA shall comply with 14 and with provisions of 4.1 through 4.35 that are not otherwise specified in this section.

14.1.1 Definitions.

Continuous Passage.* A continuous unobstructed pedestrian circulation path within a public sidewalk connecting pedestrian areas, elements, and facilities in the public right-of-way to accessible routes on adjacent sites. A continuous passage is provided in lieu of an accessible route in a public right-of-way.

Public Right-of-Way. The strip of land within the boundaries of which a public road and its appurtenances (e.g., shoulders, parkways, borders, and public sidewalks) are built or a public pedestrian easement providing access to a public facility through adjacent sites or properties.

Public Sidewalk.* An improved exterior pathway intended for pedestrian use along a vehicular way in the public right-of-way or in a public pedestrian easement.

Public Sidewalk Curb Ramp. A combined ramp and landing within a public sidewalk to accomplish a change of level at a curbed or otherwise separated street crossing. A perpendicular public sidewalk curb ramp runs perpendicular to and cuts through the curb; it connects to a street crossing at the bottom of its ramp run and to a landing at the top. A diagonal public sidewalk curb ramp is a variant of a perpendicular public sidewalk curb ramp that is located at the midpoint of a curb radius and serves two intersecting crossing directions at a corner. A parallel public sidewalk curb ramp has a ramped surface that is coincident with the public sidewalk and runs parallel to the curb in the direction of travel; it connects to the public sidewalk at the top and to a landing at the bottom of its run. The landing of a parallel public sidewalk curb ramp connects to the street crossing.

Site Infeasibility. Existing site development conditions that prohibit the incorporation of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction in the public right-of-way and which are necessary for pedestrian access, circulation, and use.

14.2* New Construction: Minimum Requirements.

14.2.1* Public Sidewalks. Where provided, public sidewalks shall contain a continuous passage. The continuous passage shall connect to elements covered by section 14 and accessible routes provided on adjacent sites. Public sidewalks and the continuous passage within them shall comply with the following requirements:

(1) Width.

(a) The minimum clear width of a continuous passage shall be 36 in (915 mm). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the continuous passage shall be as shown in Fig. 7(a) and (b).

(b) Public sidewalks less than 60 in (1525 mm) in continuous width shall provide passing space at reasonable intervals not to exceed 200 ft (61 m). Passing space shall provide a 60 in by 60 in (1525 mm by 1525 mm) minimum clear space and may be provided at driveways, at building entrances, and at public sidewalk intersections.

(2) Slope.

(a)* The minimum feasible public sidewalk running slope consistent with slopes established for adjacent roadways shall be provided.

(b)* Public sidewalk cross slope shall not exceed 1:50 (2 percent). Where public sidewalk intersections in the public right-of-way serve two directions of travel, the slope in any direction shall not exceed 1:50.

(3) Surfaces.

(a) Surfaces of public sidewalks shall be stable, firm, and slip-resistant and shall lie generally in a continuous plane with a minimum of surface warping.

14.2.2* Protruding Objects

(b) Changes in level up to 1/4 in (6 mm) may be vertical and without edge treatment (see Fig. 7(c)). Changes in level between 1/4 in and 1/2 in (6 mm and 13 mm) shall be beveled with a slope no greater than 1:2 (see Fig. 7(d)). Changes in level greater than 1/2 in (13 mm) shall be accomplished by means of a public sidewalk curb ramp that complies with 14.2.4, a ramp that complies with 4.8 (Ramps), or an elevator that complies with 4.10 (Elevators).

(c) Gratings in public sidewalks shall have spaces no greater than 1/2 in (13 mm) wide in the direction(s) of traffic flow and shall not be located in the continuous passage.

(d) Where public sidewalks cross rail systems at grade, the surface of the continuous passage shall be level and flush with the rail top at the outer edge and between the rails. The horizontal gap on the inner edge of each rail shall be the minimum necessary to allow passage of wheel flanges and shall not exceed 2-1/2 in (64 mm) maximum.

(4) Separation. Public sidewalks shall be raised to curb height or separated from vehicular ways by curbs, planted parkways, or other barriers, which shall be continuous except where interrupted by driveways, alleys, or connections to accessible elements.

EXCEPTION: Unseparated public sidewalks may be constructed along undeveloped frontages of rural roadways.

14.2.2* Protruding Objects.

(1) Wall-Mounted Objects. Objects projecting from walls (e.g., signs, fixtures, telephones, canopies) with their leading edges between 27 in and 80 in (685 mm and 2030 mm) above the finished public sidewalk shall protrude no more than 4 in (100 mm) into any portion of a public sidewalk (see Fig. 8(a)). Objects mounted with their leading edges located less than 27 in (685 mm) or more than 80 in (2030 mm) above the finished public sidewalk may project any amount provided that they do not reduce the required continuous passage along the public sidewalk (see Figs. 8(a) and (b)).

(2) Pole-Mounted Objects. Free-standing objects mounted on posts or pylons may overhang their mountings a maximum of 12 in (305 mm) when located between 27 in and 80 in (685 mm and 2030 mm) above the finished public sidewalk provided that they do not reduce the required continuous passage along the public sidewalk (see Fig. 8(d)).

(3) Head Room. Where the vertical clearance of an area on or adjoining a public sidewalk or continuous passage is less than 80 in (2030 mm) (e.g., at the underside of projecting stairs or other elements that exceed a 4 in (100 mm) profile when mounted from a wall), guardrails or other barriers shall be provided. Leading edges of such barriers shall be located less than 27 in (685 mm) above the finished public sidewalk, as shown in Fig. 8(c-1). Barriers shall not reduce the required continuous passage.

14.2.3* Fixed Street Furnishings. Where provided for pedestrian use or operation, fixed street furnishings installed on or adjacent to a public sidewalk and accessed from the public pedestrian right-of-way shall be connected to the continuous passage and shall comply with the applicable following provisions:

(1) Drinking Fountains. Where drinking fountains are provided at a location, they shall be accessible to individuals who use wheelchairs in accordance with 4.15 and to those who have difficulty bending or stooping. This can be accomplished by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending, or by such other means as would achieve the required accessibility for each group.

(2) Public Telephones.

(a) Where a single unit public telephone is provided, it shall comply with 4.31.2 through 4.31.8.

(b) Where a bank of telephones (two or more adjacent public telephones, often installed as a unit) is provided, at least one telephone per bank shall comply with 4.31.2 through 4.31.8.

(c) All public telephones shall be equipped with volume controls complying with 4.31.5(2) and shall be hearing aid compatible.

(3) Single User Toilet Facilities. Where a single user toilet facility is provided, it shall comply with 4.22.2 through 4.22.7.

(4) Fixed Seating, Tables, and Benches.

(a) Where fixed seating and tables are provided at a single location, at least five percent, but not less than one, shall comply with 4.32.

(b) Where fixed benches are provided at a single location, at least 50 percent shall have a back and armrests. A 30 in by 48 in (760 mm by 1220 mm) clear ground space for a wheelchair shall be provided at one end of at least one bench at each location where fixed benches are provided.

(5) Bus Shelters and Stops. Where a bus stop pad is provided, it shall comply with 10.2.1(1). Where a bus shelter is provided, it shall comply with 10.2.1(2).

(6) Street Identification and Other Pedestrian Signage. Where provided for pedestrian use, informational and directional signage and street identification signs shall comply with 4.30.2, 4.30.3, and 4.30.5. Where bus route identification signs are provided on or adjacent to a public sidewalk, they shall comply with 10.2.1(3).

(7) Other Elements. Where provided, other fixed street furnishings intended for pedestrian operation or use, such as information kiosks, fire alarm boxes, fixed trash receptacles and similar elements, shall comply with 4.27.

14.2.4* Public Sidewalk Curb Ramps.

(1) General.

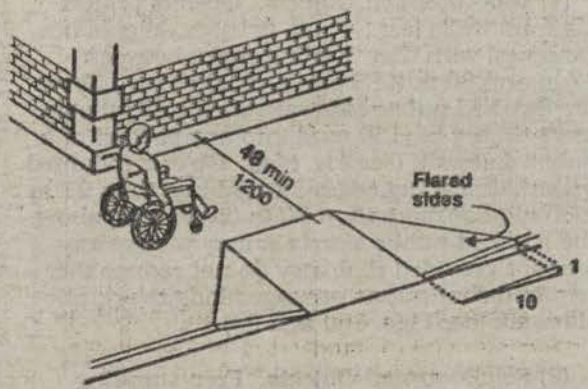
(a) A public sidewalk curb ramp and level landing complying with 14.2.4 shall be provided wherever a public sidewalk crosses a curb or other change in level at each street crossing and where otherwise required in this section and shall be connected to a continuous passage in each direction of travel.

(b) The provisions of 4.7 and 4.8 do not apply to public sidewalk curb ramps.

(2) Types of Public Sidewalk Curb Ramps. Public sidewalk curb ramps shall be perpendicular to the curb at street crossings and each shall have a level landing at the top (see Figs. 58 and 59(a)). At marked crossings, the bottom of the ramp run, exclusive of flared sides, shall be wholly contained within the markings (see Figs. 60 (a) and (b)). Single (i.e., diagonal or depressed corner) public sidewalk curb ramps serving two street crossing directions and built-up (i.e., projected) public sidewalk curb ramps are not permitted in new construction.

EXCEPTION: Where public pedestrian right-of-way width established by local or State regulation, guideline, or practice will not accommodate a perpendicular public sidewalk curb ramp and landing complying with 14.2.4(2), a parallel public sidewalk curb ramp with a level landing at its bottom shall be provided instead of a perpendicular public sidewalk curb ramp (see Fig. 59(b)). At marked crossings, the landing at the bottom of the ramp run shall be wholly contained within the markings (see Fig. 60(c)). A combination of parallel and perpendicular public sidewalk curb ramps and landings may also be provided (see Figs. 59(c) and 60(d)).

(3) Width. Public sidewalk curb ramps shall be 36 in (915 mm) wide minimum, exclusive of flared sides.



Level Landing at Top of Perpendicular Public Sidewalk Curb Ramp

Fig. 58

14.2.4* Public Sidewalk Curb Ramps

(4)* Landings.

(a) Where a perpendicular public sidewalk curb ramp is provided, a landing the width of the public sidewalk curb ramp shall be provided at the top of the ramp run (see Fig. 58). The slope of the landing shall not exceed 1:50 in any direction. The landing shall be 48 in (1220 mm) minimum in length and shall connect to the continuous passage in each direction of travel.

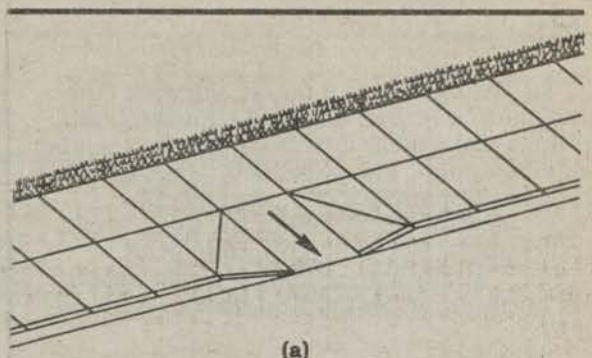
(b) Where a parallel public sidewalk curb ramp is provided, as permitted in 14.2.4(2) Exception, a landing the width of the parallel public sidewalk curb ramp and a minimum of 60 in (1525 mm) in length in the direction of the ramp run shall be provided at the bottom of the parallel public sidewalk curb ramp. The slope of the landing shall not exceed 1:50 in any direction. At marked crossings, the required landing at the bottom of the parallel public sidewalk curb ramp shall be wholly contained within the markings.

(c) Where parallel and perpendicular public sidewalk curb ramps are combined to serve a street crossing, as permitted in 14.2.4(2), the landing required for the perpendicular public sidewalk curb ramp may be coincident with that provided for the parallel public sidewalk curb ramp.

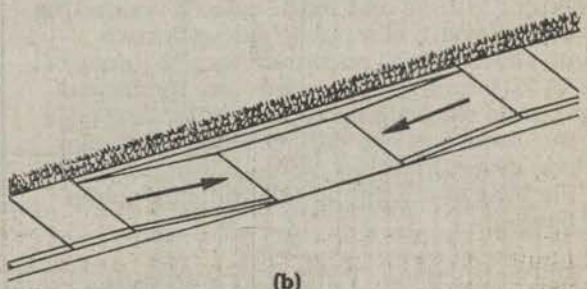
(5) Slope. The minimum feasible running slope shall be provided for any public sidewalk curb ramp and shall be measured from a level plane, as shown in Fig. 61. The maximum running slope of any public sidewalk curb ramp shall be 1:12. The maximum cross slope of any public sidewalk curb ramp shall be 1:50.

EXCEPTION: A parallel public sidewalk curb ramp allowed by 14.2.4(2) Exception shall have a maximum slope of 1:12 when measured from a level plane as shown in Fig. 61 but shall not be required to exceed 96 in (2440 mm) in length.

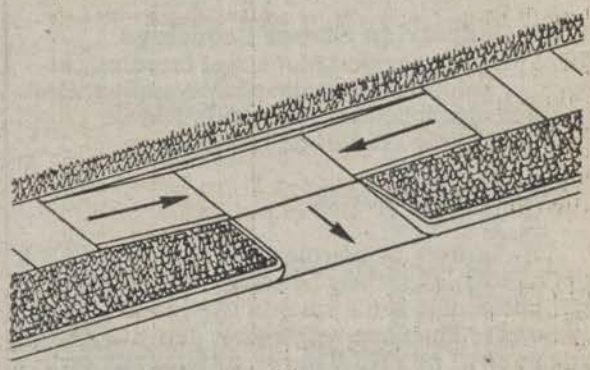
(6) Edges. Where a side of a perpendicular public sidewalk curb ramp is contiguous with a public sidewalk, it shall be flared, with a slope of 1:10 maximum. A perpendicular public sidewalk curb ramp may have a returned side or flare of any slope when not contiguous with a public sidewalk or where protected by a guardrail or other barrier.



(a)
Perpendicular Public Sidewalk Curb Ramp



(b)
Parallel Public Sidewalk Curb Ramp



(c)
Combined (Parallel/Perpendicular) Public Sidewalk Curb Ramp

Fig. 59
Public Sidewalk Curb Ramps

Note: See new construction and alteration provisions for minimum dimensions for public sidewalk curb ramps shown in Figure 59.

(7) Surfaces.

(a) The surface of a public sidewalk curb ramp shall be stable, firm and slip-resistant. Gratings and similar access covers shall not be located on public sidewalk curb ramps or landings. The surface of a perpendicular public sidewalk curb ramp or the landing of a parallel public sidewalk curb ramp shall contrast visually with adjoining public sidewalk surfaces, either light-on-dark or dark-on-light.

(b) Detectable Warnings. (Reserved).

(8) Transitions. Transitions shall be flush and free of abrupt changes. Counter slopes of adjoining gutters and road surfaces connecting to the full width of a public sidewalk curb ramp shall be 1:20 maximum for a distance of 24 in (610 mm) as measured from the base of the public sidewalk curb ramp or landing edge at the street (see Fig. 61). Gratings or similar access covers shall not be located in the area at the base of the public sidewalk curb ramp or landing.

(9) Obstructions. Public sidewalk curb ramps shall be located or protected to prevent their obstruction by parked vehicles.

14.2.5 Pedestrian Street Crossings. Where provided, pedestrian street crossings at, above, or below street grade shall comply with the applicable following provisions and be connected to the continuous passage:

(1)* Crossing Controls.

(a) Controls. Controls shall be raised from or flush with their housings and shall be a minimum of 2 in (51 mm) in the smallest dimension. The force required to activate controls shall be no greater than 5 lbf (22.2 N).

(b) Location. Controls shall be located as close as practicable to the public sidewalk curb ramp serving the controlled crossing and shall permit operation from a clear ground space.

(c) Mounting Height. Pedestrian-actuated crossing controls shall be a maximum of 42 in (1065 mm) above the finished public sidewalk.

(d) Clear Ground Space. A stable, firm, and slip-resistant area a minimum of 30 in by 48 in (915 mm by 1220 mm) and complying with 4.2.4(1) and (2) shall be provided to allow for a forward or parallel approach to the controls. Where a parallel approach is provided, controls shall be within 10 in (254 mm) horizontally of and centered on the clear ground space. Where a forward approach is provided, controls shall abut and be centered on the clear ground space.

(2)* Marked Crossings. Marked crossings shall be delineated in materials or markings that provide a visual contrast with the surface of the street.

(3)* Islands. Raised islands in crossings shall be cut through level with the street or have public sidewalk curb ramps at both sides and a level area 48 in (1220 mm) long minimum and a minimum of 36 in (915 mm) wide in the part of the island intersected by the crossings (see Figs. 60(a) and (b)).

(4)* Pedestrian Overpasses and Underpasses. Where a public sidewalk is provided on a grade-separated overpass or underpass, changes in level shall be accomplished by a ramp or elevator complying with 4.8 or 4.10. Stairs serving an underpass or overpass shall comply with 4.9.

14.2.6 Vehicular Ways and Facilities. Where the following elements are provided on or adjacent to a public right-of-way for pedestrian use by motorists, the elements shall be served by a continuous passage and shall comply with the following provisions:

(1)* On-Street Parking.

(a) Where on-street public convenience parking is provided in commercial districts and at civic buildings, accessible on-street parking spaces shall be included in the total provided in the project or project area in accordance with the table in 4.1.2(5)(a). Accessible spaces shall not be smaller in width or length than that specified by the local jurisdictions for other spaces. The accessible spaces shall be provided at locations with minimum street and public sidewalk slope to the extent this is consistent with reasonable dispersion within the overall project area in which they are provided.

14.2.6 Vehicular Ways and Facilities

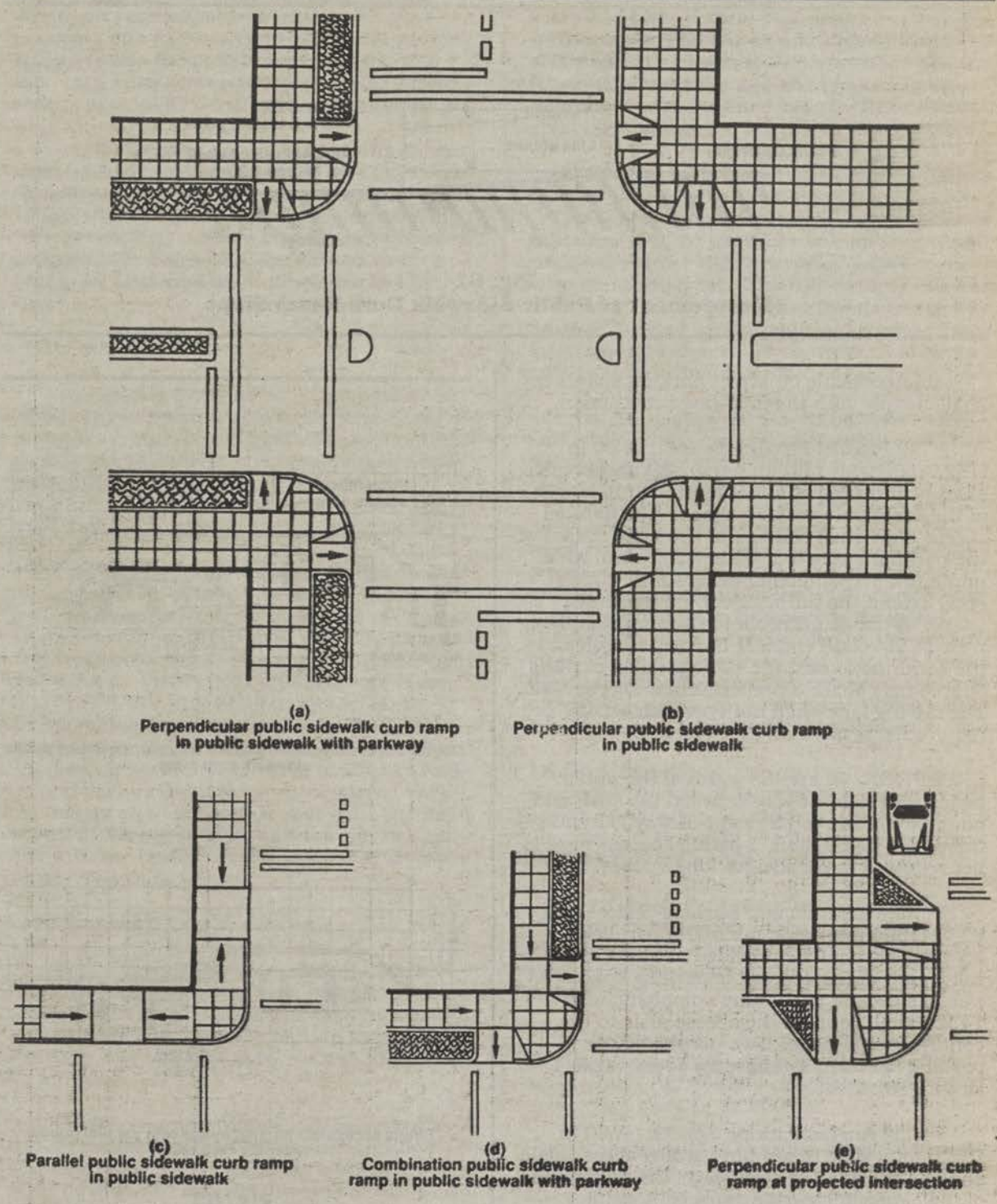


Fig. 60
Public Sidewalk Curb Ramps at Marked Crossings

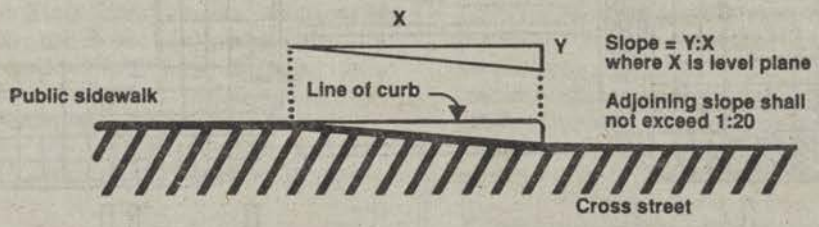


Fig. 61
Measurement of Public Sidewalk Curb Ramp Slope

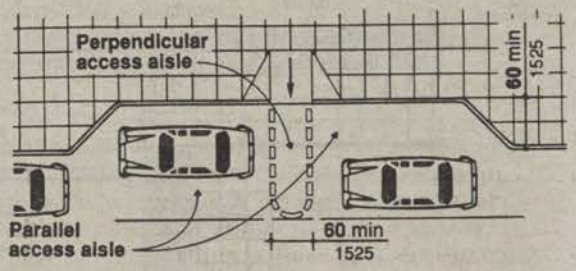
(b) Accessible on-street parking spaces shall comply with the following provisions:

(i) Parallel Parking Spaces. A 60 in (1525 mm) wide minimum parallel access aisle shall be provided at street level the full length of the accessible parking space. The parallel access aisle shall connect at the head or foot of the parking space to a 60 in (1525 mm) wide minimum perpendicular access aisle which shall extend the full width of the parking space. A public sidewalk curb ramp complying with 14.2.4 shall connect the access aisles to the continuous passage. Two parallel parking spaces may share a perpendicular access aisle. The driving lane shall not encroach on any required access aisle. (See Fig. 62).

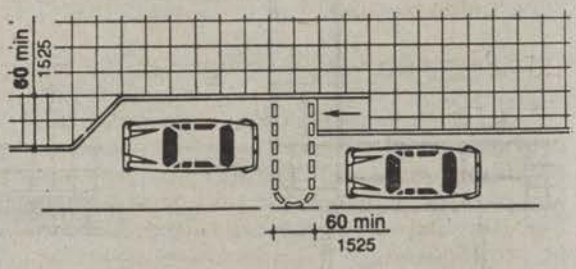
EXCEPTION: Where the width of the public pedestrian right-of-way between the curb and boundary of the public right-of-way is less than 12 ft (3660 mm), a parallel access aisle is not required in parallel parking spaces.

(ii) Perpendicular Parking Spaces. A 60 in (1525 mm) wide minimum parallel access aisle shall be provided at street level the full length of the accessible parking space. A public sidewalk curb ramp complying with 14.2.4 shall connect the access aisle to the continuous passage. Two perpendicular parking spaces may share an access aisle (see Fig. 9).

(iii) Angled Parking Spaces. A 60 in (1525 mm) wide minimum parallel access aisle shall be provided at street level the full length of the accessible parking space. A public sidewalk curb ramp complying with 14.2.4 shall connect the access aisle to the continuous passage.



(a)
Double accessible parking space with perpendicular public sidewalk curb ramp



(b)
Single accessible parking space with parallel public sidewalk curb ramp

Fig. 62
Examples of Accessible Parallel On-Street Parking Spaces

14.3* Alterations

(iv) Van-Accessible Parking Spaces. Where perpendicular or angled parking is provided, one in every eight accessible parking spaces within the project area, but not less than one, shall be served by a parallel access aisle that is 96 in (2440 mm) wide minimum.

(v) Signage. Accessible parking spaces shall be designated as reserved by a sign that complies with 4.30.7. Spaces complying with 14.2.6(1)(b)(iv) shall contain an additional sign "Van Accessible" mounted below the symbol of accessibility. Signs shall be located so they cannot be obscured by a vehicle parked in the space.

(2) Parking Meters.

(a) Parking meter controls shall be 42 in (1065 mm) maximum above the finished public sidewalk. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N).

(b) Where parking meters serve accessible parking spaces, a stable, firm, and slip-resistant clear ground space a minimum of 30 in by 48 in (760 mm by 1220 mm), shall be provided at the controls and shall comply with 4.2.4.1 and 4.2.4.2. Where only a parallel approach is provided, controls shall be within 10 in (255 mm) horizontally of and centered on the clear ground space. Where only a forward approach is provided, controls shall abut and be centered on the clear ground space. Parking meters shall be located at or near the head or foot of the parking space so as not to interfere with the operation of a side lift or a passenger side transfer.

(3) Passenger Loading Zones.

(a) Each passenger loading zone shall provide a parallel access aisle at least 60 in (1525 mm) wide and 20 ft (6.1 m) long adjacent and parallel to the vehicle pull-up space (see Fig. 10). Signage complying with 4.30.7 shall be provided.

(b) Where a continuous curb separates the access aisle and vehicle space, a public sidewalk curb ramp complying with 14.2.5 shall be provided outside the area of the access aisle and connecting to it.

(c) Where a single passenger loading zone serves multiple vehicle pull-up spaces (e.g., at transportation facilities), additional public sidewalk curb ramps shall be provided at reasonable intervals and shall be located to minimize travel distance and maximize availability during heavy use.

(4)* Motorist Aid Communications Systems.

(a) Controls and operating mechanisms at callboxes shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The highest operable part shall be 48 in (1370 mm) maximum above the finished surface at the callbox location. The force required to activate controls shall be no greater than 5 lbf (22.2 N).

(b) The system shall provide both visible and audible indicators of call receipt and shall not require voice communication only.

(c) A stable, firm, and slip-resistant clear ground space a minimum of 30 in by 48 in (760 mm by 1220 mm), with a slope no greater than 1:50 in any direction, shall be provided at the controls and shall comply with 4.2.4.1 and 4.2.4.2. Where only a parallel approach is provided, controls shall be within 10 in (255 mm) horizontally of and centered on the clear ground space. Where only a forward approach is provided, controls shall abut and be centered on the clear ground space.

14.3* Alterations. If existing areas, elements, or facilities intended for pedestrian access, circulation, and use in an existing developed public right-of-way are altered they shall comply with 14.3.

14.3.1 General. Alterations to individual elements shall comply to the maximum extent feasible with the applicable requirements of 14.2, consistent with the following requirements:

(1) No alterations shall be undertaken that decrease or have the effect of decreasing the accessibility or usability of existing pedestrian areas, elements, or facilities.

(2) If alterations to existing public sidewalks, public sidewalk curb ramps, or pedestrian street crossings, when considered together, amount to a reconstruction of a block, inter-

section, or other substantial segment of the pedestrian circulation network in the public right-of-way, the entire segment shall, to the maximum extent feasible, comply with provisions for new construction.

(3) No alterations of an existing pedestrian area, element, or facility shall impose a requirement for greater accessibility than that which would be required for new construction.

(4) Alterations to a public sidewalk, public sidewalk curb ramp, or pedestrian street crossing in the public right-of-way shall be made so that adjacent segments of the continuous passage are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope (as determined under criteria established by the Attorney General).

EXCEPTION: In alteration work, if site infeasibility precludes compliance with 14.2, the alteration work shall provide accessibility to the maximum extent feasible. Any elements or features of the public pedestrian right-of-way that are being altered and can be made accessible shall be made accessible within the scope of the alteration.

Site Infeasibility. Existing site development conditions that prohibit the incorporation of elements, spaces, and features which are in full and strict compliance with the minimum requirements for new construction in the public right-of-way and which are necessary for pedestrian access, circulation, and use.

14.3.2 Special Technical Provisions for Alterations to Existing Pedestrian Areas, Elements, and Facilities in the Public Right-of-Way.

(1)* Public Sidewalks. Where necessary to provide a continuous passage complying with 14.2.1, public sidewalk surfaces may be warped or blended. Where compliance with requirements for cross slope within the continuous passage cannot be fully met due to site infeasibility, the minimum cross slope feasible shall be provided. Existing gratings and similar appurtenances that comply with 14.2.1(2) and (3) may be located in the continuous passage if site infeasibility precludes their relocation during alterations.

(2)* Public Sidewalk Curb Ramps. Where site infeasibility precludes the installation of a public sidewalk curb ramp complying with all provisions of 14.2.2, the maximum accessibility feasible shall be provided, according to each of the following special technical provisions:

(a) Types of Public Sidewalk Curb Ramps. Public sidewalk curb ramp type shall be determined by existing public right-of-way width and the existence of other site constraints, in the following recommended priority: (i) perpendicular, (ii) parallel or combined, and (iii) diagonal. A projected (built-up) public sidewalk curb ramp is permitted in alterations to public rights-of-way where other designs cannot be accommodated.

(b) Width. Where public pedestrian right-of-way width is less than 36 in (915 mm), a parallel public sidewalk curb ramp and landing the width of the existing public pedestrian right-of-way shall be provided.

(c) Landings. Landings shall be provided and shall comply with the following special technical provisions:

(i) Where public pedestrian right-of-way width is insufficient to accommodate a perpendicular public sidewalk curb ramp with a top landing 48 in (1220 mm) in length, a top landing of the maximum feasible length and a minimum length of 36 in (915 mm) shall be provided. Side flares shall have a maximum slope of 1:12.

(ii) Where site infeasibility precludes a parallel public sidewalk curb ramp with a bottom landing 60 in (1525 mm) in length, a bottom landing of the maximum feasible length and a minimum length of 48 in (1220 mm) shall be provided.

(iii) Where site infeasibility precludes a landing slope of 1:50 in any direction, the slope perpendicular to the curb face shall not exceed 1:50.

(iv) Where site infeasibility precludes a landing slope of 1:50 when measured perpendicular to the curb face, the minimum feasible slope in each direction shall be provided.

14.4* Temporary Work

(d) Slope.

(i) Where public right-of-way width is insufficient to accommodate a landing and perpendicular public sidewalk curb ramp with a maximum running slope of 1:12, the minimum feasible running slope between 1:12 and 1:10 is permitted for a rise of 6 in (150 mm) maximum.

(ii) Where public right-of-way width is insufficient to accommodate a landing and perpendicular public sidewalk curb ramp with a maximum running slope of 1:10, the minimum feasible running slope between 1:8 and 1:10 shall be permitted for a rise of 3 in (75 mm) maximum.

(iii) A public sidewalk curb ramp shall have the maximum slope permitted in (i) or (ii) when measured from a level plane as shown in Fig. 61 but shall not be required to exceed 72 in (1830 mm) in length.

(iv) Where compliance with requirements for cross slope cannot be fully met due to site infeasibility, the minimum feasible cross slope shall be provided.

(e) Surfaces.

(i) Existing gratings and similar appurtenances that comply with 14.2.1(2) and (3) may be located in public sidewalk curb ramps or landings if site infeasibility precludes their relocation during alterations.

(ii) Where counter slopes of existing adjoining gutters and road surfaces exceed 1:20, newly installed public sidewalk curb ramp surfaces may be slightly crowned and projected beyond the curb face provided the leading edge at the street surface can be smoothly blended and sides are flared, without abrupt drop-offs.

(3) On-Street Parking. Parallel on-street parking spaces designated for use by persons with disabilities and located immediately adjacent to intersections may be served by public sidewalk curb ramps located at street crossings when site infeasibility precludes the installation of a public sidewalk curb ramp and access aisles complying with 14.2.6(1)(b)(i) at the space, provided that motorists exiting their vehicles do not have to cross into perpendicular travel lanes to gain access to a public sidewalk curb ramp.

14.4* Temporary Work. Construction and repair work within the public right-of-way that affects pedestrian circulation elements, spaces, or facilities shall comply with the following provisions:

(1) Construction sites in the public right-of-way shall be protected with barriers to warn of hazards on the pedestrian circulation network.

(2) Where a temporary alternate circulation path is provided it shall comply with 14.3 and shall be clearly marked.

APPENDIX

This Appendix contains *materials of an advisory nature* and provides additional information that should help the reader to understand the minimum requirements of *the guidelines* or to design buildings or facilities for greater accessibility. The paragraph numbers correspond to the sections or paragraphs of the *guideline* to which the material relates and are therefore not consecutive (for example, A4.2.1 contains additional information relevant to 4.2.1). Sections *of the guidelines* for which additional material appears in this Appendix have been indicated by an asterisk. *Nothing in this Appendix shall in any way obviate any obligation to comply with the requirements of the guidelines itself.*

A2.0 General.

A2.2 Equivalent Facilitation. *Specific examples of equivalent facilitation are found in the following sections:*

4.1.6(3)(c)	*Elevators in Alterations*
4.31.9	*TTYs*
7.2	*Sales and Service Counters, Teller Windows, Information Counters*
9.1.4	*Classes of Sleeping Accommodations*
9.2.2(6)(d)	*Requirements for Accessible Units, Sleeping Rooms, and Suites*

A3.0 Miscellaneous Instructions and Definitions.

A3.5 Definitions.

Transient Lodging. *The Department of Justice's policy and rules will further define what is covered as transient lodging.*

A4.0 Accessible Elements and Spaces: Scope and Technical Requirements.

A4.1.1 Application.

A4.1.1(3) *Areas Used Only by Employees as Work Areas. Where there are a series of individual work stations of the same type (e.g., laboratories, service counters, ticket booths), five percent, but not less than one, of each type of work station should be constructed so that an individual with disabilities can maneuver within the work stations. Rooms housing individual offices in a typical office building must meet the requirements of the guidelines concerning doors, accessible routes, etc. but do not need to allow for maneuvering space around individual desks. Modifications required to permit maneuvering within the work area may be accomplished as a reasonable accommodation to individual employees with disabilities under title I of the ADA. Consideration should also be given to placing shelves in employee work areas at a convenient height for accessibility or installing commercially available shelving that is adjustable so that reasonable accommodations can be made in the future.*

If work stations are made accessible they should comply with the applicable provisions of 4.2 through 4.35.

A4.1.2 Accessible Sites and Exterior Facilities: New Construction.

A4.1.2(5)(e) *Valet Parking. Valet parking is not always usable by individuals with disabilities. For instance, an individual may use a type of vehicle controls that render the regular controls inoperable or the driver's seat in a van may be removed. In these situations, another person cannot park the vehicle. It is recommended that some self-parking spaces be provided at valet parking facilities for individuals whose vehicles cannot be parked by another person and that such spaces be located on an accessible route to the entrance of the facility.*

A4.1.3 Accessible Buildings: New Construction.

A4.1.3(5) *Only passenger elevators are covered by the accessibility provisions of 4.10. Materials and equipment hoists, freight elevators not intended for passenger use, dumbwaiters, and construction elevators are not covered by these guidelines. If a building is exempt from the elevator requirement, it is not necessary to provide a platform lift or other means of vertical access in lieu of an elevator.*

Under Exception 4, platform lifts are allowed where existing conditions make it impractical to install a ramp or elevator. Such conditions generally occur where it is essential to provide access to small raised or lowered areas where space may not be available for a ramp. Ex-

A4.1.3 Accessible Buildings: New Construction

amples include, but are not limited to, raised pharmacy platforms, commercial offices raised above a sales floor, or radio and news booths.

A4.1.3(8)(a)(i) *This provision does not require an increase in the number of accessible entrances planned for facilities subject to title II of the ADA.*

Example 1: A new facility is planned with four principal public entrances. This section would require only two of the four principal public entrances to be accessible. It is preferable that all four entrances be accessible to provide greater convenience in accessing the facility.

Example 2: A new facility is planned with twelve entrances: ten entrances are public entrances, one is a service entrance, and one is a loading entrance. Of the ten public entrances, four are designed to be principal public entrances. This section would require that five of the ten public entrances be accessible. The five public entrances chosen to meet the 50 percent requirement of 4.1.3(8)(a)(i) would have to include the four principal public entrances planned for the facility.

A4.1.3(8)(b) *When a building or facility is designed and entrances are planned on more than one side of the facility, it is recommended that accessible entrances be included on each side of the facility where entrances are contemplated.*

When more than one type of entrance is planned for a facility, it is recommended that accessible entrances be distributed among the different types of entrances. Examples of different types of entrances are:

1) Entrances that are unrestricted. These entrances would be open to the general public during business hours.

2) Entrances that are restricted for a limited period of time. These entrances would be open to the general public during a portion of the day but restricted to a specific group of people for a limited period of time. For example, university facilities, such as libraries, might be restricted to students with proper identification after hours, and office buildings might be restricted to employees with card key access after regular business hours.

3) Entrances that are restricted at all times. These entrances would be used only by a controlled group of people. Such entrances might include skyboxes in sports facilities, university dormitories or other facilities which control entry for security purposes, stage door entrances used only by performers or stage personnel, sports facility entrances used only by team members, team staff, or officials, and employee only entrances.

A4.1.3(9) *Supervised automatic sprinkler systems have built in signals for monitoring features of the system such as the opening and closing of water control valves, the power supplies for needed pumps, water tank levels, and for indicating conditions that will impair the satisfactory operation of the sprinkler system. Because of these monitoring features, supervised automatic sprinkler systems have a high level of satisfactory performance and response to fire conditions.*

A4.1.3(10) *If an odd number of drinking fountains is provided on a floor, the requirement in 4.1.3(10)(b) may be met by rounding down the odd number to an even number and calculating 50 percent of the even number. When more than one drinking fountain on a floor is required to comply with 4.15, those fountains should be dispersed to allow wheelchair users convenient access. For example, in a large facility such as a convention center that has water fountains at several locations on a floor, the accessible water fountains should be located so that wheelchair users do not have to travel a greater distance than other people to use a drinking fountain.*

A4.1.3(17)(b) *In addition to the requirements of section 4.1.3(17)(b), the installation of additional volume controls is encouraged. Volume controls may be installed on any telephone.*

A4.1.3(19)(a) *Readily removable or folding seating units may be installed in lieu of providing an open space for wheelchair users. Folding seating units are usually two fixed seats that can be easily folded into a fixed center bar to allow for one or two open spaces for wheelchair users when necessary. These units are more easily adapted than removable seats which generally require the seat to be removed in advance by the facility management.*

Either a sign or a marker placed on seating with removable or folding arm rests is required by this section. Consideration should be given for ensuring identification of such seats in a darkened theater. For example, a marker which contrasts (light on dark or dark on light) and which also reflects light could be placed on the side of such seating so as to be visible in a lighted auditorium and also to reflect light from a flashlight.

A4.1.6 Accessible Buildings: Alterations.

A4.1.6(1)(h) *When an entrance is being altered, it is preferable that those entrances being altered be made accessible to the extent feasible.*

A4.2 Space Allowances and Reach Ranges.

A4.2.1 Wheelchair Passage Width.

(1) Space Requirements for Wheelchairs. Many persons who use wheelchairs need a 30 in (760 mm) clear opening width for doorways, gates, and the like, when the latter are entered head-on. If the *person* is unfamiliar with a building, if competing traffic is heavy, if sudden or frequent movements are needed, or if the wheelchair must be turned at an opening, then greater clear widths are needed. For most situations, the addition of an inch of leeway on either side is sufficient. Thus, a minimum clear width of 32 in (815 mm) will provide adequate clearance. However, when an opening or a restriction in a passageway is more than 24 in (610 mm) long, it is essentially a passageway and must be at least 36 in (915 mm) wide.

(2) Space Requirements for Use of Walking Aids. Although people who use walking aids can maneuver through clear width openings of 32 in (815 mm), they need 36 in (915 mm) wide passageways and walks for comfortable gaits. Crutch tips, often extending down at a wide angle, are a hazard in narrow passageways where they might not be seen by other pedestrians. Thus, the 36 in (915 mm) width provides a safety allowance both for the person *with a disability* and for others.

(3) Space Requirements for Passing. Able-bodied *persons* in winter clothing, walking

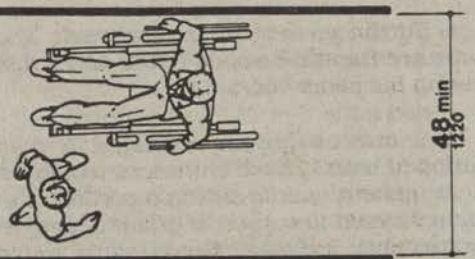


Fig. A1

Minimum Passage Width for One Wheelchair and One Ambulatory Person

A4.33.6 Placement of Listening Systems

within the seating area are provided. This will allow choice in viewing and price categories.

Building/life safety codes set minimum distances between rows of fixed seats with consideration of the number of seats in a row, the exit aisle width and arrangement, and the location of exit doors. "Continental" seating, with a greater number of seats per row and a commensurate increase in row spacing and exit doors, facilitates emergency egress for all people and increases ease of access to mid-row seats especially for people who walk with difficulty. Consideration of this positive attribute of "continental" seating should be included along with all other factors in the design of fixed seating areas.

A4.33.6 Placement of Listening Systems. A distance of 50 ft (15 m) allows a person to distinguish performers' facial expressions.

A4.33.7 Types of Listening Systems. *An assistive listening system appropriate for an assembly area for a group of persons or where the specific individuals are not known in advance, such as a playhouse, lecture hall or movie theater, may be different from the system appropriate for a particular individual provided as an auxiliary aid or as part of a reasonable accommodation. The appropriate device for an individual is the type that individual can use, whereas the appropriate system for an assembly area will necessarily be geared toward the "average" or aggregate needs of various individuals.* A listening system that can be used from any seat in a seating area is the most flexible way to meet this specification. Earphone jacks with variable volume controls can benefit only people who have slight hearing loss and do not help people who use hearing aids. At the present time, *magnetic induction* loops are the most feasible type of listening system for people who use hearing aids *equipped with "T-coils,"* but people without hearing aids or those with hearing aids not equipped with inductive pick-ups cannot use them *without special receivers.* Radio frequency systems can be extremely effective and inexpensive. People without hearing aids can use them, but people with hearing aids need a special receiver to use them as they are presently designed. If hearing aids had a jack to allow a by-pass of microphones, then radio frequency systems would be suitable for people with and without hearing aids. Some listening systems may be subject to interference from other equipment and feedback from hearing aids of people who are using the systems. Such interference can be controlled by careful engineering design that anticipates feedback sources in the surrounding area.

Table A2 shows some of the advantages and disadvantages of different types of assistive listening systems. In addition, the Access Board has published a pamphlet on Assistive Listening Systems which lists demonstration centers across the country where technical assistance can be obtained in selecting and installing appropriate systems. The State of New York has also adopted a detailed technical specification which may be useful.

A5.0 Restaurants and Cafeterias.

A5.1 General. *Dining counters (where there is no service) are typically found in small carry-out restaurants, bakeries, or coffee shops and may only be a narrow eating surface attached to a wall. This section requires that where such a dining counter is provided, a portion of the counter shall be at the required accessible height.*

A7.0 Business, Mercantile and Civic.

A7.2(3)(iii) *Counter or Teller Windows with Partitions. Methods of facilitating voice communication may include grilles, talk-through baffles, and other devices mounted directly into the partition which users can speak directly into for effective communication. These methods are required to be designed or placed so that they are accessible to a person who is standing or seated. However, if the counter is only used by persons in a seated position, then a method of facilitating communication which is accessible to standing persons would not be necessary.*

A7.2(4) *Assistive Listening Devices. At all sales and service counters, teller windows, box offices, and information kiosks where a physical barrier separates service personnel and customers, it is recommended that at least one permanently installed assistive listening device complying with 4.33 be provided at each location or series. Where assistive listening devices are installed, signage should be provided identifying those stations which are so equipped.*

Table A2. Summary of Assistive Listening Devices and Systems

Table A2.
Summary of Assistive Listening Devices and Systems

COMPARISON OF LARGE AREA ASSISTIVE LISTENING SYSTEMS

System Description	Advantages	Disadvantages	Typical Applications
FM BROADCAST (40 frequencies available on narrow band transmission systems. Ten frequencies available on wideband transmission systems.) ***Transmitters:*** FM base station or personal transmitter broadcasts signal to listening area. ***Receiver:*** Pocket size with: a) earphone(s), or b) headset, or c) induction neck-loop or silhouette coil coupling to personal hearing aid equipped with telecoil, or d) direct audio input (DAI) to personal hearing aid.	• Highly portable when used with body-worn, personal transmitter. • Easy to install. • May be used separately or integrated with existing PA-systems. • Multiple frequencies allow for use by different groups within same area (e.g., multi-language translation).	• Signal spill-over to adjacent rooms/ listening areas (can prevent interference by using different transmission frequencies for each room/listening area). Choose infrared if privacy is essential. • Receivers required for everyone. Requires administration and maintenance of receivers. • Susceptible to electrical interference when used with induction neck-loop/silhouette (Provision of DAI audio shoes and cords is impractical for public applications). • Some systems more susceptible to radio wave interference and signal drift than others.	Service counters Outdoor guided tours Tour busses Meeting rooms Conference rooms Auditoriums Classrooms Courtrooms Churches and Temples Theaters Museums Theme parks Arenas Sport stadiums Retirement/nursing homes Hospitals
INFRARED LIGHT ***Transmitter:*** Amplifier drives emitter panel(s) covering listening area. ***Receivers:*** Under-chin or Pendant type receiver with: a) headset, or b) earphone(s), or c) induction neck-loop or silhouette coil coupling to personal hearing aid equipped with telecoil, or d) direct audio input (DAI) to personal hearing aid.	• Unlike induction or FM transmission, IR transmission does not travel through walls or other solid surfaces. • Insures confidentiality. • Infrared receivers compatible with most infrared emitters. • May be used separately or integrated with existing PA-systems. • Can be used for multi-language translation (must use special multi-frequency receivers).	• Receivers required for everyone. Requires administration and maintenance of receivers. • Ineffective in direct sunlight. • Careful installation required to insure entire listening area will receive IR signal. • Susceptible to electrical interference when used with induction neckloop/silhouette (Provision of DAI audio shoes and cords is impractical for public applications). • Lifetime of emitters varies with company. • Historical buildings may pose installation problems.	Indoor service counters Meetings requiring confidentiality Meeting rooms Conference rooms Auditoriums Classrooms Courtrooms Churches and Temples Theaters Museums Arenas (indoors only) Sport stadiums (indoors only) Retirement/nursing homes Hospitals

Modified from a chart published by Centrum Sound, Cupertino, California
Cynthia L. Compton, Assistive Devices Center
Department of Audiology and Speech-Language Pathology
Gallaudet University, Washington, DC
Continued on next page

Table A2. Summary of Assistive Listening Devices and Systems

COMPARISON OF LARGE AREA ASSISTIVE LISTENING SYSTEMS			
System Description	**Advantages**	**Disadvantages**	**Typical Applications**
CONVENTIONAL INDUCTION LOOP ***Transmitter:*** Amplifier drives an induction loop that surrounds listening area. ***Receivers:*** a) Personal hearing aid with telecoil. b) Pocket size induction receiver with earphone or headset. c) Self-contained wand. d) Telecoil inside plastic chassis which looks like a BTE, ITE, or canal hearing aid.	• Requires little, or no administration of receivers, if most people have telecoil-equipped hearing aids. Induction receivers must be used where hearing aids in use are not equipped with telecoils. • Induction receivers are compatible with all loop systems. • Unobtrusive with telecoil hearing aid. • May be used separately or integrated with existing PA-systems. • Portable systems are available for use with small groups of listeners. These portable systems can be stored in a carrying case and set up temporarily, as needed.	• Signal spill-over to adjacent rooms. • Susceptible to electrical interference. • Limited portability unless areas are pre-looped or small, portable system is used (see advantages). • Requires installation of loop wire. Installation may be difficult in pre-existing buildings. Skilled installation essential in historical buildings (and may not be permitted at all). • If listener does not have telecoil-equipped hearing aid then requires administration and maintenance of receivers.	Service counters Ports of transportation Public transportation vehicles Tour busses Meeting rooms Conference rooms Auditoriums Classrooms Courtrooms Churches and Temples Theaters Museums Theme parks Arenas Sport stadiums Retirement/nursing homes Hospitals
3-D LOOP SYSTEM ***Transmitter:*** Amplifier drives a 3-D mat that is placed under the carpet of the listening area. ***Receivers:*** a) Personal hearing aid with telecoil. b) Pocket size induction receiver with earphone or headset. c) Self-contained wand. d) Telecoil inside plastic chassis which looks like a BTE, ITE, or canal hearing aid.	• Requires little, or no administration of receivers, provided most listeners have telecoil-equipped hearing aids. • Induction receivers are compatible with all loop systems. • May be used separately or integrated with existing PA-systems. • Three-dimensional reception of loop signal regardless of telecoil position. • Reduced signal spillover allows adjacent rooms to be looped without signal interference. • 3-D loop mats must be separated by 6 feet to avoid signal spillover.	• Limited portability (areas may be pre-3-D Loop matted to facilitate portability). • Requires installation of 3-D Loop mats. Installation may be difficult in pre-existing buildings. Skilled installation essential in historical buildings (and may not be permitted at all). • If listener does not have telecoil-equipped hearing aid then requires administration and maintenance of receivers. • Susceptible to electrical interference.	Service counters Ports of Transportation Meeting r ms Conference rooms Auditoriums Class rooms Court rooms Museums Theme Parks Retirement/nursing homes Meetings requiring confidentiality Hospitals

Modified from a chart published by Centrum Sound, Cupertino, California
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A7.3 Check-out Aisles. *Section 7.2 refers to counters without aisles; section 7.3 concerns check-out aisles. A counter without an aisle (7.2) can be approached from more than one direction such as in a convenience store. In order to use a check-out aisle (7.3), customers must enter a defined area (an aisle) at a particular point, pay for goods, and exit at a particular point.*

A10.0 Transportation Facilities.

A10.3 Fixed Facilities and Stations.

A10.3.1(7) *Route Signs. One means of making control buttons on fare vending machines usable by persons with vision impairments is to raise them above the surrounding surface. Those activated by a mechanical motion are likely to be more detectable. If farecard vending, collection, and adjustment devices are designed to accommodate farecards having one tactually distinctive corner, then a person who has a vision impairment will insert the card with greater ease. Token collection devices that are designed to accommodate tokens which are perforated can allow a person to distinguish more readily between tokens and common coins. Thoughtful placement of accessible gates and fare vending machines in relation to inaccessible devices will make their use and detection easier for all persons with disabilities.*

A10.4.1(8) *Security Systems. This provision requires that, at a minimum, an accessible route or path of travel be provided but does not require security equipment or screening devices to be accessible. However, where barriers consist of movable equipment, it is recommended that they comply with the provisions of this section to provide persons with disabilities the ability to travel with the same ease and convenience as other members of the general public.*

A11.0 Judicial, Legislative and Regulatory Facilities.

A11.1 *All public and common use areas are required to be accessible. In judicial, legislative and regulatory facilities, these include, but are not limited to, press rooms, conference rooms, and attorney lounges.*

A11.2.1(2) *Jury Boxes and Witness Stands. Figure 46 illustrates space requirements for two wheelchair seating spaces.*

A11.2.1(4) *Fixed Judges' Benches, Clerks' Stations. Where courtrooms are assigned on a temporary basis, equipment should be available so that accessibility can be provided to at least one judge's bench and clerk's station within a few hours to accommodate court proceedings.*

A11.2.1(5) *Fixed Bailiffs' Stations, Court Reporters' Stations, Litigants' and Counsel Stations. Providing appropriate maneuvering clearances such as knee clearance under tables should be considered when selecting furniture for accessible areas that will be utilized by the public such as the litigants' stations in a courtroom.*

A11.3.1(2) *Fixed or Built-in Seating and Tables. Providing appropriate maneuvering space in the room and knee clearance under tables should be considered when selecting furniture for accessible areas that will be used by jurors.*

A11.4.2(2) *Restrooms. The requirements of 4.22 for toilet rooms and 4.23 for bathrooms, bathing facilities, and shower rooms do not preclude the placement of toilet or bathing fixtures within housing or holding cells or rooms as long as the requirements for toilet rooms and bathrooms, including maneuvering space, are met. In such instances, the maneuvering space required within housing or holding cells or rooms may also serve as the maneuvering space required in toilet rooms by 4.22 or in bathrooms or shower rooms by 4.23.*

A11.4.2(3) *Beds. The height of beds should be 17 to 19 in (430 mm to 485 mm) measured from the finish floor to the bed surface, including mattresses or bed rolls, to ensure appropriate transfer from wheelchairs and other mobility aids. Where upper bunks are provided, sufficient clearance must be provided between bunks so that the transfer from wheelchairs to lower bunks is not restricted. Figure A3 provides average human dimensions that should be considered in determining this clearance.*

A11.4.3 Visiting Areas. *Accessible cubicles or portions of counters may have fixed seats if the required clear floor space is provided within the area defined by the cubicle. Consideration should be given to the placement of grilles, talk-thru baffles, intercoms, telephone handsets or other communication devices which should be usable from both the fixed seat and from the accessible seating area. If an assistive listening system is provided, the needs of the intended*

A11.7 Two-Way Communication Systems

user and characteristics of the setting should be considered as described in A4.33.7 and Table A2.

A11.7 Two-Way Communication Systems. *Two-way communication entry systems must provide both voice and visual display so that persons with hearing or speech impairments can utilize the system. This requirement may be met with a device that would allow security personnel to respond to a caller with a light indicating that assistance is on the way.*

A11.8 *Courtrooms, hearing rooms (including judges' chambers when used as hearing rooms), jury deliberation and jury orientation rooms, and all meeting rooms designated for public use should be designed to take advantage of current and emerging technologies for providing information to persons with disabilities. Since such persons may be litigants, jurors, witnesses, spectators, attorneys or courtroom personnel, it is important that the designated rooms be wired to support appropriate systems or that conduits or raceways be provided to facilitate future wiring as systems are added. For example, the use of so-called "smart" technology often includes bundled wiring harnesses which can be easily installed in new construction and can support a variety of current and future uses.*

A11.9 Permanently Installed Assistive Listening Systems. *In addition to the requirement for permanently installed assistive listening systems, 11.8 (Electrical Outlets, Wiring, Conduit for Communication Systems) requires that all courtrooms, hearing rooms, jury deliberation and jury orientation rooms, and meeting rooms designated for public use in judicial, legislative or regulatory facilities have electrical outlets and wiring, conduit or raceways to support communication equipment. This requirement is to facilitate the use of portable assistive listening systems.*

A11.9(1) *Judicial Facilities. Due to the large variation in the methods of assignment of courtrooms among jurisdictions, it is impossible to include an exhaustive list of each "type" of courtroom. "Type" is generally meant to include such distinct categories as civil courtroom(s), criminal courtroom(s), and family courtroom(s). For example, if a courthouse has seven courtrooms and three are assigned to criminal matters, two are assigned to civil matters and two are assigned to family law matters, then 11.9 would require that at least two criminal courtrooms, one civil courtroom and one family law courtroom have a permanently installed assistive listening system. In those facilities where courtrooms are not dedicated to a single type of proceeding, 11.9 would require that 50 percent of all courtrooms provided have a permanently installed assistive listening system.*

A11.9(2) *Legislative and Regulatory Facilities. Permanently installed assistive listening systems are not required in conference rooms restricted to use by employees, consultants, and other invited guests or areas which are only occasionally or sporadically used for legislative or regulatory business such as a school board meeting held in a high school cafeteria. However, the Department of Justice's regulations implementing title II of the ADA require public entities to take such steps as may be necessary to ensure effective communication with individuals with hearing impairments, unless it would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. See 28 CFR 35.160(a) and 28 CFR 35.164. Accordingly, a portable assistive listening system may be needed to provide communication access in the school board meeting held in the cafeteria.*

A12.0 Detention and Correctional Facilities.

A12.1 General. *All common use areas serving accessible cells or rooms are required to be accessible. In detention and correctional facilities, common use areas include those areas serving a group of inmates or detainees, including, but not limited to, exercise yards and recreation areas, workshops and areas of instruction or vocational training, counseling centers, cafeterias, commissaries, medical facilities, and any other rooms, spaces, or elements that are made available for the use of a group of inmates or detainees. Detention and correctional facilities also contain areas that may be regarded as common use areas which specifically serve a limited number of housing cells or rooms. Where this occurs, only those common use areas serving accessible cells or rooms would need to be accessible as required by 12.5. For example, several housing cells may be located at and served by a dayroom or recreation room. In this instance, only those dayrooms serving accessible housing cells or rooms would need to be accessible. However, common use areas that do not serve accessible cells but that are used by the public or by*

employees as work areas are still subject to the requirements for public use areas and employee work areas in sections 4.1 through 4.35.

A12.3 Visiting Areas. *Accessible cubicles or portions of counters may have fixed seats if the required clear floor space is provided within the area defined by the cubicle. Consideration should be given to the placement of grilles, talk-thru baffles, intercoms, telephone handsets or other communication devices which should be usable from both the fixed seat and from the accessible seating area. If an assistive listening system is provided, the needs of the intended user and characteristics of the setting should be considered as described in A4.33.7 and Table A2.*

A12.4.1(2) *Dispersion. The terms "categories" and "types" with respect to holding or general housing cells or rooms include security levels, and necessary classifications or distinctions such as male/female and adult/juvenile. The requirement for the dispersion of accessible cells or rooms among all categories and types is required only to the extent possible under the three percent minimum scoping; it does not require an increase in the minimum number of accessible cells or rooms required for the facility. Thus, the requirement for dispersion does not supersede the three percent minimum scoping. The amount or percentage of accessible cells or rooms to be provided in each available housing category or level of security is not specified since dispersion is not required to be proportionate to the total number of cells in each category or security level.*

Many detention and correctional facilities are designed so that certain areas (e.g., "shift" areas) can be adapted to serve as different types of housing according to need. For example, a shift area serving as a medium security housing unit might be redesignated for a period of time as a high security housing unit to meet capacity needs. Placement of accessible cells or rooms in shift areas may allow additional flexibility in meeting requirements for dispersion of accessible cells or rooms.

A12.4.3 Accessible Cells or Rooms for Persons with Hearing Impairments. *Many correctional facilities do not provide permanently installed telephones or alarms within individual housing cells. Such facilities are not subject to the requirements of 12.4.3. However, some categories of housing, such as minimum security prisons, may be equipped with such devices. The minimum three percent is based on the number of cells or rooms equipped with these devices and not on the total number of cells or rooms in the facility. In addition, this requirement applies only where permanently installed telephones or alarms are provided within individual cells. Permanently installed telephones and alarms located in common use areas, such as dayrooms, are required to be accessible according to ADAAG requirements for common use areas. See 12.1.*

A12.4.4 Medical Care Facilities. *Medical isolation cells required to be accessible by 12.4.2 shall not be counted as part of the minimum number of patient bedrooms or cells required to be accessible in 12.4.4. Thus, if a medical care facility has both types of cells, at least one medical isolation cell must be accessible under 12.4.2 in addition to the number of patient bedrooms or cells required to be accessible by 12.4.4. Consistent with the requirement for special purpose cells in 12.4.2, at least one medical isolation cell per facility is required to be accessible. However, it is recommended that consideration be given to ensuring the accessibility of all medical isolation cells.*

A12.5.2(2) *Restrooms. The requirements of 4.22 for toilet rooms and 4.23 for bathrooms, bathing facilities, and shower rooms do not preclude the placement of toilet or bathing fixtures within housing or holding cells or rooms as long as the requirements for toilet rooms and bathrooms, including maneuvering space, are met. In such instances, the maneuvering space required within housing or holding cells or rooms may also serve as the maneuvering space required in toilet rooms by 4.22 or in bathrooms or shower rooms by 4.23.*

A12.5.2(3) *Beds. The height of beds should be 17 to 19 in (430 mm to 485 mm) measured from the finish floor to the bed surface, including mattresses or bed rolls, to ensure appropriate transfer from wheelchairs and other mobility aids. Where upper bunks are provided, sufficient clearance must be provided between bunks so that the transfer from wheelchairs to lower bunks is not restricted. Figure A3 provides standard human dimensions that should be considered in determining this clearance.*

A12.6.2 Equivalent Facilitation. *Auxiliary aids, such as telephone handset amplifiers and portable visible alarms may be used instead of permanent devices. The Department*

of Justice's regulation implementing title II of the ADA requires public entities to make available appropriate auxiliary aids and services where necessary to ensure effective communication unless it would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. See 28 CFR 35.160(a), 35.164.

A13.0 Accessible Residential Housing.

A13.1(1) *Section 13 outlines the technical requirements for dwelling units subject to title II of the ADA. The facilities covered by this section, as well as other facilities not addressed or covered by this section, may still be subject to other Federal laws such as the Fair Housing Amendments Act of 1988 (42 U.S.C. 3604 et seq.) and section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794). For example, the Fair Housing Amendments Act requires that all units served by an elevator be adaptable according to guidelines established by the U.S. Department of Housing and Urban Development (HUD). Further information on these laws and the appropriate regulations may be obtained from HUD.*

In addition, the requirements for transient lodging in section 9 differ from residential housing in this section. Residential housing includes, but is not limited to, single-family homes, which may be a facility consisting of one dwelling unit, and multifamily dwelling facilities, which are those facilities consisting of more than one dwelling unit. A facility may consist of more than one building within a single site, such as garden apartments and townhouses. Examples of single-family dwelling units that must be accessible include official residences, such as those provided for governors and State university presidents and single-family housing provided as public housing. Multifamily dwelling units include public housing projects and apartments. Residential housing also includes dwelling units that are used to accommodate live-in employees such as faculty, visiting fellows, care-takers, rangers and curators. With respect to colleges and universities, student apartments containing dwelling units are considered residential housing.

A13.1(2) *Common use areas are subject to the applicable requirements of 4.1 through 4.35. Common use areas include hallways, corridors within and walks around or connecting buildings. For example, room numbers identifying dwelling units along a corridor are subject to the requirements for raised and brailled signage as required by section 4.1.3(16). Similarly, exterior walks must be accessible so that at least one accessible route connects accessible buildings, facilities, elements, and spaces on the same site as specified by section 4.1.2(2). A sufficient number of accessible multiple common use recreation facilities should be provided to ensure equitable opportunities for persons with disabilities. If recreation facilities are dispersed in a large facility, then tenants and guests with disabilities should not have to travel far greater distances than others to access recreation facilities. The term "common use" excludes spaces wholly within a dwelling unit. For example, official residences such as Governors' mansions contain facilities used for official functions. These areas are not within the private residence itself, and must be accessible both to residents and to the public.*

A13.2.1 *In determining the minimum number of accessible dwelling units, any fraction must be rounded upwards to the next whole number. It is not uncommon for facilities to offer one, two, and three bedroom units. Facility planners and designers need to consider that persons with disabilities and their families require access to all types of dwelling units offered in a facility. Neither section 13.3.1 or 13.2.2 requires proportionate distribution of accessible units among all unit sizes. However, at least one of each unit size according to the number of bedrooms provided must be accessible even if doing so would exceed the minimum number requirements of 13.2.1(1). Providing accessibility to each unit type according to the number of bedrooms provided will be more cost-effective than retrofitting inaccessible dwelling units to accommodate individuals with varying needs.*

A13.2.2 New Construction: Dispersion. *When dispersing accessible dwelling units throughout a facility, persons with disabilities must have the same choices regarding the type of unit as other members of the public. Types of dwelling units include single-family and multifamily; one, two, three or more bedrooms; official residences and certain employee and student apartments. Amenities may include dishwashers, laundry equipment, fireplaces, and walk-in closets. It is not acceptable to offer only one-bedroom accessible apartment units, when apartment units or single-family units*

with two and three bedrooms are also offered in the same facility. On a university campus official residences that are not interchangeable must be accessible. Therefore, a three bedroom graduate apartment cannot be made accessible in lieu of making the President's residence accessible. However, if several single-family residences are provided for visiting fellows and they are interchangeable, then only five percent of those dwelling units must be accessible. Additionally, if some dwelling units are provided with dishwashers while others are not, some accessible units must have dishwashers. In addition, the availability of other amenities such as view or the proximity to recreation facilities must also be comparable. For example, not all accessible units should be located on a side of a building overlooking an interior courtyard if other units have exterior views.

A13.2.3 Alterations: Minimum Number and Dispersion. *The following example illustrates the requirements of 13.2.3(1). An existing facility containing one hundred multifamily residential dwelling units is the subject of ten consecutive alterations over a period of ten years. Each year, ten units are altered. During the first five years, at least one unit of the ten altered units must comply with 13.3 and 13.4 (five percent but not less than one) until the total number, five percent, required for the facility overall is achieved. Similarly, as part of the alterations during the first two years, one unit complying with section 13.4 must be provided in addition to those which are accessible to people with mobility and hearing impairments until the two percent minimum is achieved. Section 3.5 defines the term "Alteration". Consistent with that definition, merely repairing or replacing an oven would not necessarily be an alteration. For example, replacing an oven in an apartment that is not required to be accessible is not an alteration. However, replacing an oven in an apartment that is required to be accessible is an alteration because it affects the usability of the dwelling unit.*

A13.3.2 Minimum Requirements. *An accessible second exit from dwelling units is recommended for emergency evacuation purposes.*

A13.3.4(5) *Sinks. Installing a sink with a drain at the rear so that plumbing is as close to the wall as possible can prevent garbage disposal units from obstructing the required clear knee space.*

A13.3.4(6) *Ranges and Cooktops. Although not required for minimum accessibility, countertop range units in a counter with adjustable heights can be an added convenience for wheelchair users.*

A13.3.4(7) *Ovens. Countertop or wall-mounted ovens with side-opening doors provide greater access. Clear space at least 30 in (760 mm) wide under counters at the side of conventional and self-cleaning ovens is an added convenience. The pull-out board or fixed shelf under side-opening oven doors provides a resting place for heavy items being moved from the oven to a counter.*

A13.3.4(8) *Refrigerators and Freezers. Side-by-side refrigerators and freezers provide the most usable freezer compartments. Locating refrigerators so that their doors can swing 180 degrees provides greater access by increasing maneuvering space so that knee and toe clearance is provided on the hinge side. Reaching items placed far back on the hinge side will be easier if the door arrangement permits the optimal maneuvering space.*

A13.3.4(10) *Kitchen Storage. Pantry type cabinets or tall cabinets can be provided rather than cabinets mounted over work counters. Additional storage space located conveniently adjacent to kitchens can be provided to make up for space lost when cabinets are not provided under sinks and work surfaces.*

A13.4.1(1) *Alarms. Some residents including those who are deaf-blind will not be capable of responding to a visible alarm. In those instances the facility operator may have a responsibility to provide an alternative method of alerting residents of emergencies. Alternative methods may include devices such as tactile bedframe alarms for sleeping individuals and other vibrotactile devices worn by occupants during the day.*

A14.0 Public Rights-of-Way.

A14.1 *Most public rights-of-way are coincident with and include roadways. However, some are established as easements to provide pedestrian access to a public facility through a private site or series of properties. A downtown pedestrian street that occupies public space between private building and property lines is also part of the public right-of-way.*

The public right-of-way does not include public sites, such as those that contain public buildings, parks, and plazas, nor does this section apply to pedestrian facilities on public or private sites adjacent to the public right-of-way, such as a campus or complex of buildings. These public and private sites must be designed, constructed, or altered to meet the requirements of 4.1 through 4.35, which require that an accessible route be provided to connect accessible elements and facilities on a site to public transportation stops, streets, or public sidewalks. Section 14 applies only to the public pedestrian circulation network within the public right-of-way that connects and provides public access to the public and private sites along its borders. However, where an accessible route required within a site uses the public sidewalk, the public sidewalk must comply with requirements for an accessible route for that segment.

Work in the public right-of-way may include the widening or realignment of a public roadway, the construction or installation of site improvements and pedestrian amenities on or along a public sidewalk, or the upgrading of a subsurface water system, sewer, or utility below a public sidewalk, curb-and-gutter, or street. Projects may be undertaken within the clearly defined boundaries of a street frontage along a block, at an intersection, or in the right-of-way of a commercial district or may consist of the installation of a typical item (e.g., drinking fountains, toilets, benches, public sidewalk curb ramps, landscaping, telephones, signage, bus shelters) dispersed along public sidewalks throughout an area or jurisdiction.

Work in the public right-of-way that is undertaken by private entities under standards imposed by a State or local government must comply with section 14. Jurisdictions that may later accept pedestrian facilities constructed in rights-of-way developed by private entities should ensure through the permitting process that such elements will also meet the requirements of this section.

Technical provisions in ADAAG 4.2 to 4.35 apply to public rights-of-way unless modified by ADAAG 14 to address site conditions particular to the public right-of-way. Therefore, a public sidewalk curb ramp in the public right-of-way is subject to the technical provisions of ADAAG 14.2.4 (Public Sidewalk Curb Ramps) and not to ADAAG 4.7 (Curb Ramps). A public sidewalk in the public right-of-way is subject to the technical provisions of ADAAG 14.2.1 (Public Sidewalks), which substitutes a continuous passage for the accessible route required in ADAAG 4.1. However, some technical provisions in ADAAG 4.2 to 4.35, such as those contained in 4.2.4 (Clear Floor or Ground Space for Wheelchairs), 4.9 (Stairs), and 4.27 (Controls and Operating Mechanisms), have not been modified for application to the public right-of-way and therefore apply to work covered by this section.

A14.1.1 Definitions.

Continuous Passage. *A continuous passage along a public pedestrian right-of-way is analogous to the accessible route within a site or building. Although public sidewalks are subject to technical provisions similar to those that apply to accessible routes, public sidewalks are not required to meet guidelines for accessible routes unless the public sidewalk is used to provide the required accessible route connecting accessible elements on a site.*

Public Sidewalk. *Public sidewalks include any exterior walkway in the public right-of-way intended for pedestrian use, whether raised to curb height, separated horizontally by a parkway, or surfaced for pedestrian use along the shoulder of a roadway. Although most public sidewalks border streets and roadways, pedestrian streets developed in urban areas and public pedestrian easements that do not parallel vehicular ways but are part of a pedestrian circulation network in the public right-of-way are also included. Where pedestrians and cyclists are intended to share a route in the public right-of-way, the route must meet requirements for public sidewalks.*

A14.2 New Construction: Minimum Requirements. *New construction includes work which is constrained primarily by topographic features, as for example, the design of a new subdivision, new town, or an expansion of jurisdictional limits to incorporate as yet undeveloped land. When new rights-of-way are established, sufficient width should be allotted*

to permit new public sidewalks, if provided, to comply with 14.2.1 and 14.2.4. New construction anticipates a high degree of accessibility and usability in features newly planned and provided within the public right-of-way.

A14.2.1 Public Sidewalks. *Public sidewalks in the public right-of-way include paved pedestrian walkways raised to curb level or separated horizontally from adjacent roadways by parkways and similar divisions, as well as unseparated roadside routes with prepared surfaces where these are intended for pedestrian circulation, as permitted in undeveloped rural areas. Public sidewalks that are vertically or horizontally separated from adjacent vehicular ways are safer for all pedestrians. Routes delineated only by pavement markings can be made more discernible if a distinct edge is provided.*

The continuous passage in a public sidewalk takes the place of the accessible route on a site. The continuous passage has a vertical as well as a horizontal component and should be considered a protected volume of space. However, headroom clearances apply across the entire width of a public sidewalk, not just to the continuous passage. Permanently-installed street appurtenances such as lighting standards, fire hydrants, utility poles, drainage inlets, access covers, and traffic signals and controls must be carefully located during the design stage of a project to avoid conflict with pedestrian routes. Designers who employ standard design templates for public sidewalk and public sidewalk intersection design provide a more predictable and usable environment for pedestrians. Most such templates include curbside strips in which street furnishings, landscaping, and other equipment and fittings are accommodated, leaving the public sidewalk itself open, straight, and free of obstructions.

A14.2.1(2)(a) *Several options are available even when public sidewalk running slopes are extreme. Terraced construction that provides accessible curbside parking and level areas across a new public sidewalk can provide connections to entrances along a steeply sloping pedestrian route. Intermediate landings with benches can serve as resting and passing spaces to ameliorate some effects of such grades. Additionally, operational methods may enhance accessibility. For example, full block developments can provide accessible entrances connecting to interior accessible routes that use elevators within facilities to serve different public sidewalk levels. However, operating hours that may restrict the availability of these interior routes limit their usefulness.*

The provisions of section 14 do not preclude public sidewalk segments at different levels or public sidewalks with stairs (which may be advantageous in providing access to building entrances along steeply sloping sites) provided that accessible elements, including entrances, can be reached from the public sidewalk or continuous passage. Where a public sidewalk contains steps or where public sidewalk levels diverge, a railing, planter or other barrier separating the levels is recommended. Because such stairs will typically occur in steeply sloping public sidewalks, it is important that the alternate route they offer be accessible for those persons with mobility impairments who can more easily use stairs.

Stairs abutting a public sidewalk and serving a building on a private site should have uniform riser heights and tread widths for maximum discernibility. Stairs or steps that disappear into the grade of the adjoining public sidewalk are hazardous for many pedestrians.

A14.2.1(2)(b) *Narrow public sidewalks immediately adjacent to the curb or roadway may be offset to avoid a non-conforming cross slope at driveway aprons by diverting the public sidewalk around the apron. Public sidewalks separated from the curb or roadway by a planted parkway can accommodate an apron within the width of the parkway (see Fig. A9).*

A14.2.1(3) *Public sidewalk surfaces should fall generally along a single plane from landing to landing. However, landings, public sidewalk curb ramps, and other elements must be blended within the public sidewalk. Although such changes in plane cannot be avoided, they should be minimized within a length of public sidewalk. Gratings in public sidewalks that are located where pedestrian travel directions intersect, such as at corners, must be designed with minimum opening sizes that comply in both directions of travel. The proportions of large areas of gratings, such as those necessary to ventilate transformer vaults or subway structures, may be varied to maintain the surface area required while still providing a 36 in (915 mm) continuous passage along the public sidewalk. For example, a long but narrow run of gratings can provide the same rate of ventilation as a square installation, but would avoid*

A14.2.3 Fixed Street Furnishings

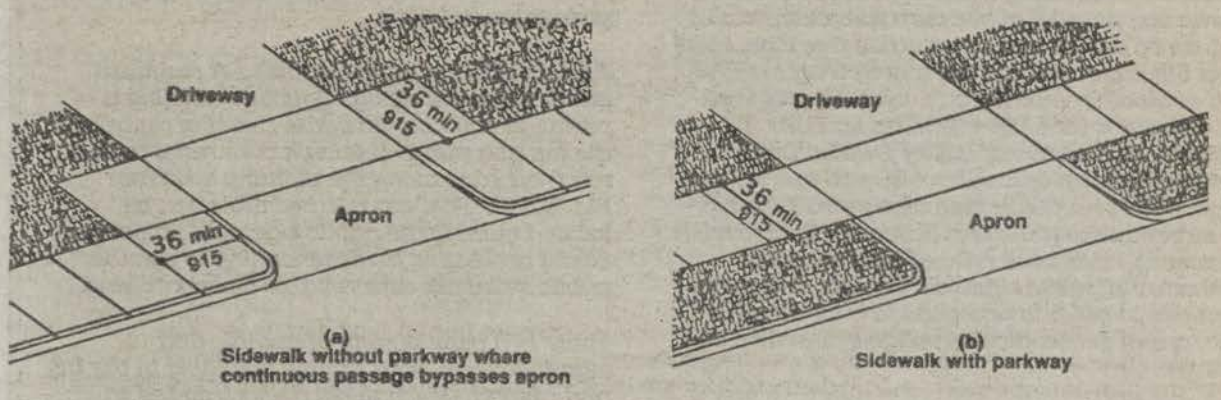

Fig. A9
Sidewalks at Driveway Aprons

the need to increase overall public sidewalk width in order to provide a grating-free continuous passage within the width of the public sidewalk. Alternatively, such gratings may be located within the street surface, as are some drainage inlets and similar fittings.

A14.2.2 *The requirement of a continuous passage within the public sidewalk is intended to provide accessibility for persons with mobility impairments. However, because pedestrians with vision impairments may use any portion of the public sidewalk, provisions for protruding objects apply to its entire width. Elements that overhang a public sidewalk are covered even though they may not arise from the public sidewalk. Tree branches are a particular hazard when they intrude into the required clear headroom of 80 in (2030 mm). Many other objects on or along a public sidewalk, such as newspaper vending machines, trash receptacles and construction barricades, are not fixed and thus are not subject to these guidelines but may nevertheless be covered under the Department of Justice regulation regarding maintenance of accessible features. (See 28 CFR 35.133).*

A14.2.3 Fixed Street Furnishings. *Street furnishings may be provided by a public entity, as in the case of benches, drinking fountains, and signage; be installed under public franchise or similar agreement, as public pay telephones or single user toilet facilities; or be put in place by another government authority, as are fire alarm boxes.*

A14.2.3(4) *Fixed Seating, Tables, and Benches. Where benches are grouped at a single location, such as those provided in a seating area constructed as part of a downtown improvement project, each location at which a seating area is provided should contain accessible benches. However, at bus stops or along a street frontage where seating is dispersed and only a single bench is provided at a location, the application of the 50 percent requirement will result in each bench being accessible.*

A14.2.4 Public Sidewalk Curb Ramps. *In section 14, ADAAG 4.7 (Curb Ramps) has been replaced by 14.2.4 (Public Sidewalk Curb Ramps) to reflect differing requirements in the public right-of-way. A landing permits pedestrians to bypass the flares and ramp run of a perpendicular public sidewalk curb ramp and allows persons using wheelchairs to turn and enter the ramp with all four wheels in contact with the surface. When a perpendicular public sidewalk curb ramp interrupts the path of travel and cannot be bypassed, its running slope and flares have the same effect on a person using a wheelchair as would a severe cross slope along that route. Persons with low-powered chairs or poor control have particular difficulty with the combined effect of these running and cross slopes.*

Where a curb is six in (151 mm) high, a new perpendicular public sidewalk curb ramp and landing would necessitate a minimum curb-face to back-of-sidewalk width of approximately 12 ft (3.6 m) (see Figs. 59(a) and 60(a) and (b)). In

narrower rights-of-way outside commercial districts, particularly those in residential neighborhoods, parallel public curb ramp (depressed sidewalk) design and construction (see Figs. 59(b) and 60(c)) can provide the required accessibility, although other alternatives, such as projected intersections (see Fig. 60(e)), lesser curb heights, and combinations of parallel and perpendicular public sidewalk curb ramps (see Figs. 59(c) and 60(d)) may also provide access to street crossings. Jurisdictions may also wish to commit additional right-of-way or utilize setbacks at public sidewalk corners and intersections in order to accommodate landings at the tops of perpendicular public sidewalk curb ramps.

State and local governments are encouraged to require a right-of-way width sufficient to ensure that perpendicular public sidewalk curb ramps can be provided. However, jurisdictions are not required to provide a greater right-of-way width than would otherwise be planned under regulations, guidelines, or practices normally applied to new development. Right-of-way width may be based on zoning, land use, pedestrian volume or population densities, transportation master plans, or similar factors. Since these guidelines prohibit decreasing the accessibility of the public pedestrian circulation network, jurisdictions should anticipate the need for future roadway widenings by establishing an initial right-of-way that can accommodate future growth and development.

Perpendicular public sidewalk curb ramps that are 36 in (915 mm) wide and installed adjacent to a parkway to serve a single crossing direction need only one side flare at a 1:10 slope, thus greatly lessening space requirements. This permits the corner radius of the public sidewalk to have a generous waiting area at full curb height, increasing the discernibility of the border between public sidewalk and street crossings. Where depressed corners, raised street crossings, or wide diagonal public sidewalk curb ramps are installed, the boundary between pedestrian and vehicular areas at corners is undefined. For these reasons, these designs are not permitted in new construction.

Standardization of public sidewalks, public sidewalk curb ramps, and street crossings is encouraged in new construction. Consistency in the design of public sidewalks, parkways and landscaping setbacks, street furnishing zones, signage, and crossing signals and markings will increase the predictability, and may improve the usability and safety, of the public pedestrian network.

A14.2.5(1) Crossing Controls. A standard public sidewalk design template utilizing a parkway can accommodate crossing controls at the top of a public sidewalk curb ramp with a returned edge along the planting strip (see Fig. 60(a)). Post-mounted controls can be located outside the public sidewalk proper but easily accessible to those waiting to use the public sidewalk curb ramp or street crossing.

There is a wide variety of audible and vibrotactile crossing signals available in the US and abroad. Mechanical devices added to walk/don't walk crossing signals buzz, tweet, chime, talk, and, in Japan, play refrains from popular tunes at intersections. Many are available with adjustable volume controls, demand controls, or time clocks to limit hours of operation. Broadcast systems employing fixed transmitters and handheld pedestrian receivers can make a range of street crossing data available to individuals. Vibrating devices, more common in Europe, can indicate the separate phases of a visible crossing signal or street light.

A14.2.5(2) Marked Crossings. Marked crossings are of particular use to pedestrians with low vision and are of greatest assistance at irregular intersections and mid-block crossings. The Manual on Uniform Traffic Control Devices (MUTCD) published by the FHWA recommends solid white lines for marked crossings. However, many urban street crossings are delineated in brick or other unit paving materials, particularly where design standards have been developed for an historic district or other significant area. When adjacent public sidewalks are similarly paved, it is difficult to distinguish between public sidewalk areas and street crossings, particularly if depressed public sidewalks have been installed in lieu of well-defined public sidewalk curb ramps. Furthermore, many colors in the brick range cannot be distinguished by persons with color blindness. The use of markings with a strong visual contrast, both between public sidewalk surfaces and crossings and between street surface and crossing markings, is encouraged.

A14.2.5(3) Islands. A visual contrast like that required on public sidewalk curb ramps and landings that connect to street crossings is

A14.2.5(4) Pedestrian Overpasses and Underpasses

recommended. Persons using wheelchairs need a minimum length of 48 in (1220 mm) within the island to be out of traffic lanes.

A14.2.5(4) *Pedestrian Overpasses and Underpasses. Circular ramps cannot meet requirements for slope, cross slope, and level landings and are difficult for persons using wheelchairs. Their non-uniform cross slopes do not provide a plane to allow all wheels to contact the ground at the same time. This makes it difficult to control a wheelchair, particularly on a downhill run, and presents a constant tipping hazard for some types of motorized chairs. Furthermore, much of the effort of propelling a hand-powered wheelchair on such ramps must go into overcoming cross slope rather than rise. Circular ramps do not have landings required by 4.8 (Ramps) and thus do not provide rest areas for persons with limited stamina or those using wheelchairs.*

Below-grade and elevated pedestrian networks in the public right-of-way (e.g., skywalks and pedestrian tunnels) are considered to be pedestrian overpasses and underpasses. To the extent that these networks are: (1) developed under the authority of a State or local government; (2) are intended for public pedestrian access, circulation, and use; and (3) occupy, along at least some of their length, air or ground rights in the public right-of-way, they must be accessible. Because topography will not be a consideration, it should be possible in new construction to provide a level route along the continuous passage, which will typically connect to surface circulation networks by means of elevators, which may be provided in private facilities or at transit stations. ADAAG 4.3.1 requires skywalks and tunnels that are part of an accessible route on a site or within a facility to comply with 4.3 (Accessible Route). Where such construction lies in the public right-of-way and connects above or below grade to the accessible routes required of facilities on private sites, these pedestrian circulation networks must provide a continuous passage and comply with other provisions of this section. Direct connections from transit facilities are covered by ADAAG 10.3.1(3). Additionally, elements placed along above-grade or below-grade public pedestrian routes must comply with the requirements of ADAAG 14.

Overpasses and underpasses in hilly terrain may be approached at or near grade by public sidewalks with a grade at or less than 1:20. However, the construction of an overcrossing or undercrossing facility offers the opportunity to provide ramp slopes that could not be achieved adjacent to roadways.

A14.2.6(1) *On-Street Parking. New on-street parking may result from the extension of a public right-of-way, the planning and development of a new town center, the reconstruction of a segment of a roadway and its public sidewalks, the implementation of a downtown revitalization program, or a similar program or project. The application of the scoping table at 4.1.2(5)(a) shall be based upon the overall numbers of new parking spaces planned within a project or project area. For example, in a downtown revitalization program that includes the construction of new site amenities and on-street parking along both sides of a street for several blocks, the project area is the scope of work described in the contract for the work. The chart at 4.1.2(5)(a) shall be applied to the total number of parking spaces provided in the project. If an additional project is undertaken nearby, it too shall provide accessible parking spaces based upon the application of the table to the total number of spaces provided within the boundary of the project. Planners must carefully consider dispersion requirements, balancing user convenience to high-volume destinations and locations where street and public sidewalk slope are minimal to provide maximum accessibility.*

On-street parking may be parallel, perpendicular, or angled. Perpendicular parking along public streets will be similar to parking in lots and garages. However, while slopes at access aisles in lots and garages on sites can be no greater than 1:50 in any direction, the slopes of access aisles on streets are limited only to the minimum feasible slope. Parallel and perpendicular accessible spaces allow a driver to locate the access aisle on either the passenger or driver side as necessary for transfer and therefore may share an access aisle. Because angled spaces are approached from only one direction, a driver cannot always select a space with an access aisle that will accommodate the desired transfer. Therefore, angled parking spaces may not share an access aisle.

On-street convenience parking requirements do not apply in residential or other neighborhoods where parking is permitted without delineation, metering, or time limits.

A14.2.6(4) *Motorist Aid Communications Systems. The approach area at the callbox must be connected to the roadway shoulder, public sidewalk or pedestrian path by means of a continuous passage. This does not require that paved shoulders or public sidewalks be provided, but it does require that a person using a wheelchair be able to reach the approach area from the roadway shoulder. This would prohibit the approach area from being separated from the roadway by a ditch, gutter, curb, or other barrier.*

A14.3 Alterations. *The Department of Justice preamble to the amended regulation implementing title II of the ADA provides guidance on alterations work that may give rise to a path of travel obligation.*

When additional right-of-way is acquired for road-widening, sufficient width should be provided to permit public sidewalks to comply with 14.2.1 and 14.2.4. Jurisdictions contemplating roadway improvements must ensure that the accessibility of their public sidewalks and public sidewalk curb ramps and street crossings are not adversely affected.

Site infeasibility is the basis for exceptions and special technical provisions in 14.3. A finding of site infeasibility may be warranted in the following situations: (1) the existence of an underground structure, such as a utility vault, manhole, or sewer inlet at a street crossing, which may preclude the installation of a new public sidewalk curb ramp in full compliance with provisions for new construction; (2) the geometric design of existing roadways, bridges, or tunnels constrained by structural elements that, even when altered, may not accommodate a 36 in (915 mm) wide public sidewalk; (3) differences in finished grade at curbside and elevations at existing building entrances at the back-of-sidewalk which may preclude compliance with cross slope provisions across the entire public sidewalk width; (4) existing fixed equipment, such as fire hydrants or street lighting standards, located on a public sidewalk and connected to below-grade water, power, signal, and similar distribution systems which may prevent full compliance with public sidewalk curb ramp provisions if the equipment cannot be relocated in the course of the work; (5) existing narrow public sidewalks or rights-of-way that might preclude the maintenance of a continuous passage free of gratings required for new subway construction; or (6) the existence of an established landscaping feature, such as a large tree or grouping of trees, that may preclude the provision of a parallel access aisle at a newly-established on-street parking space. Furthermore, a pre-existing commercial use of the public sidewalk, as for a sidewalk cafe, may also constitute site infeasibility if no other location for an accessible parking space is feasible within the scope of the alterations project.

A finding of site infeasibility must be made relative to each feature of accessible elements. For example, although a finding of site infeasibility may be made with respect to the length of a required curb ramp landing, the slope, cross slope, and other features of the curb ramp must comply with new construction provisions, if feasible. As in new construction, jurisdictions are not required to provide a greater right-of-way width than would otherwise be planned for an alteration. For instance, the acquisition of additional right-of-way from adjacent public or private sites or properties to accommodate accessible on-street parking spaces is not required if such expansion is not otherwise planned as part of the scope of an alterations project.

Newly installed elements required to be accessible should be reasonably dispersed within a project area or scope of work. However, where one area of a project already has more existing accessible elements than another area, the new accessible elements should be dispersed within a portion of the project area where there are fewer or none, or at project boundaries with areas not served by existing accessible elements. Where there are no existing accessible elements, distribution may be uniformly dispersed or dispersed in the same proportion as all units within the project scope or area.

New construction requirements for level approach and operating spaces for persons in wheelchairs may not always be feasible in alterations. Designers must carefully balance dispersion requirements against site characteristics to achieve maximum accessibility.

A14.3.2(1) *Public Sidewalks. Cross slopes on portions of public sidewalks adjacent to the continuous passage required by 14.2 may exceed 1:50 (two percent) provided that the adjacent portions are smoothly blended. This may facilitate connecting the continuous passage to building entrances, sites, or other pedestrian circulation elements.*

A14.4 Temporary Work

A14.3.2(2) *Public Sidewalk Curb Ramps. Controlled cross slope is a critical factor in the usability of public sidewalks, public sidewalk curb ramps and their landings, and street crossings. Of primary concern in the design of public sidewalk curb ramps planned for installation as alterations to existing rights-of-way should be the provision of a level landing with a slope of no more than 1:50 in any direction at the top or bottom of the public sidewalk curb ramp. A perpendicular public sidewalk curb ramp and landing complying with 14.2.4(2) and serving a single street crossing offers pedestrians the maximum usability and detectability. Where necessary to accommodate to the width of an existing pedestrian right-of-way, the running slope of a perpendicular public sidewalk curb ramp may be increased to a maximum of 1:10 for six in (150 mm) of rise, and landing length may be reduced to 36 in (915 mm). In narrower pedestrian rights-of-way or where existing site improvements preclude the installation of a perpendicular public sidewalk curb ramp, it may be necessary to provide a parallel public sidewalk curb ramp, where the change in level is accomplished by ramping the sidewalk itself down to a landing at street level. Such construction can provide a level landing for a 90 degree turn when pedestrian rights-of-way are less than six ft (1830 mm) wide. Alternatively, a combined (perpendicular and parallel) sidewalk curb ramp can be installed in which a segment of the public sidewalk is ramped or depressed to accomplish part of the level change and the balance is achieved by a short perpendicular sidewalk curb ramp at a slope as steep as 1:8 for a three in (75 mm) rise. The single landing serving the combined public sidewalk curb ramps must be a minimum of 60 in (1525 mm) in length along the public sidewalk if feasible; however, a landing 48 in (1220 mm) in length is permitted where site infeasibility precludes a 60 in (1525 mm) landing length. Only when these alternatives cannot provide usability should a diagonal curb ramp and landing (a single perpendicular public sidewalk curb ramp serving both street crossing directions) be installed. As a last option, in rare instances where pedestrian rights-of-way are severely constrained and other public sidewalk curb ramp types cannot be constructed, a built-up or projected ramp may be provided. Where the change in level between existing public sidewalks and adjacent streets exceeds commonly-specified curb heights, usability cannot be achieved by means of a public sidewalk curb ramp. In such cases, it may be possible to provide access to street crossings with ramps complying with ADAAG 4.8 (Ramps) within the width of the public sidewalk. Where public sidewalk levels diverge, a railing or other edge protection is advisable.*

A14.4 Temporary Work. *Construction occupying or disrupting the surface of a public sidewalk is a particular hazard to pedestrians with vision impairments if the work is not adequately protected by barriers. Persons who use long canes may not detect a tape or a series of widely spaced traffic cones placed around a construction site. Such marking does not provide sufficient cuing to enable a pedestrian to anticipate a hazard nor does it provide an edge along which to travel around an obstruction and should not be considered a barrier. Jurisdictions and their contractors should ensure that barriers establishing a temporary passage around public sidewalk and street construction meet the needs of all pedestrians. Scaffolding in the public right-of-way should be carefully designed in order to avoid creating protruding objects along the public sidewalk.*

The removal, even for only a short time, of a public sidewalk curb ramp or other accessible element may preclude access to buildings, facilities, or areas by a person using a wheelchair or require a lengthy and circuitous route to bypass such barriers in order to reach regular destinatio[illegible] The alternate route should be convenient and accessible for all public sidewalk users and should be clearly marked to avoid extra travel distance.

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federal register

Monday
June 20, 1994

Part III

Department of Justice

Office of the Attorney General

28 CFR Part 35, et al.

Nondiscrimination on the Basis of Disability in the State and Local Government Services; Public Accommodations and Commercial Facilities; Accessibility Standards; Proposed Rule

DEPARTMENT OF JUSTICE

Office of the Attorney General

28 CFR Parts 35, 36, and 37

[Order No. 1889–94]

Nondiscrimination on the Basis of Disability in State and Local Government Services; Public Accommodations and Commercial Facilities; Accessibility Standards

AGENCY: Department of Justice.

ACTION: Proposed rule.

SUMMARY: This proposed rule would amend the regulations of the Department of Justice (Department) implementing titles II and III of the Americans with Disabilities Act (ADA) to incorporate, as the ADA Standards for Accessible Design, the ADA Accessibility Guidelines for Buildings and Facilities as they are revised in the interim rule with request for comments being published by the Architectural and Transportation Barriers Compliance Board (Access Board) elsewhere in this issue of the **Federal Register**. In so doing, the proposed rule would establish new ADA standards for construction and alterations covered by the Department's title II regulations. (The guidelines set forth in the Access Board's interim rule are effective only as guidance for the Departments of Justice and Transportation; they have no effect on the public and should not be used by the public until such time as the Department of Justice and the Department of Transportation adopt them as standards.) The proposed rule would also add new enforcement procedures to subpart F of the title II regulation.

DATES: To be assured of consideration, comments must be in writing and must be received on or before August 19, 1994. Comments that are received after the closing date will be considered to the extent practicable.

ADDRESSES: Comments on this proposed rule should be sent to: Merrily A. Friedlander, Acting Chief, Coordination and Review Section, Civil Rights Division, U.S. Department of Justice, Rulemaking Docket 007, P.O. Box 66118, Washington, DC 20035–6118. However, comments on the proposed ADA Standards for Accessible Design, published as an interim rule by the Access Board elsewhere in this issue of the **Federal Register**, should be sent to: Office of the General Counsel, Architectural and Transportation Barriers Compliance Board, 1331 F Street NW., suite 1000, Washington, DC 20004–1111. For further information on comments, see the beginning of **SUPPLEMENTARY INFORMATION.**

Comments submitted to the Department of Justice will be available for public inspection in Room 4014, 1425 New York Avenue NW., Washington, DC, from 9 a.m. to 5 p.m., Monday through Friday, except legal holidays, from July 5, 1994 until the Department publishes this rule in final form. Persons who need assistance to review the comments will be provided with appropriate aids such as readers or print magnifiers.

FOR FURTHER INFORMATION CONTACT: Merrily A. Friedlander, Acting Chief, Coordination and Review Section, Civil Rights Division, U.S. Department of Justice, Washington, DC 20530, (202) 514–0301 (Voice), (202) 514–0383 (TDD) (the Division's ADA Information Line). These telephone numbers are not toll-free numbers.

Copies of this rule are available in the following alternative formats: large print, Braille, electronic file on computer disk, and audio-tape. Copies may be obtained from the Coordination and Review Section at (202) 514–0301 (Voice) or (202) 514–0383 (TDD). The rule is also available on electronic bulletin board at (202) 514–6193. These telephone numbers are not toll-free numbers.

SUPPLEMENTARY INFORMATION: All timely comments received by the Access Board on its guidelines published December 21, 1992 (57 FR 60612), and on its interim rule published today in the **Federal Register** will be deemed by the Department to have been submitted in response to this proposed rule and will be thoroughly analyzed and considered by the Department prior to the adoption of any final rule. Therefore, it is not necessary for any comments submitted to the Board on its proposed or interim rules to be resubmitted to the Department.

Background

On July 26, 1991, the Department published its final rules implementing titles II and III of the Americans with Disabilities Act, Pub. L. 101–336, 42 U.S.C. 12131–12134 and 12181–12189, which prohibits discrimination on the basis of disability by public entities and in places of public accommodation and commercial facilities. 56 FR 35694, 35544. The Department's implementing regulations were codified at 28 CFR, parts 35 and 36. Subtitle A of title II of the ADA protects qualified individuals with disabilities from discrimination on the basis of disability in the services, programs, or activities of all state and local governments. It extends the prohibition of discrimination in federally assisted programs established by section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, to all activities of state and local governments, including those that do not receive federal financial assistance, and incorporates specific prohibitions of discrimination on the basis of disability from titles I, III, and V of the ADA. Title III of the ADA protects qualified individuals with disabilities from discrimination on the basis of disability by public accommodations and in commercial facilities.

This proposed rule would amend 28 CFR 35.151 and 36.406 to adopt the ADA Accessibility Guidelines for Buildings and Facilities (ADAAG), as revised by the Access Board in their interim rule that is published elsewhere in this issue of the **Federal Register**, as the ADA Standards for Accessible Design (ADA Standards) for new construction and alterations covered by the Department's title II regulation. The ADA Standards would apply to facilities designed, constructed, or altered after the effective date of the amendment to § 35.151. The proposed rule would also remove the original ADA Standards for Accessible Design, 28 CFR part 36, Appendix A; add the ADA Standards, as amended by the Access Board's interim rule, as Appendix A to part 37; and amend parts 35 and 36 to correctly reference the redesignated ADA Standards. Finally, the proposed rule would amend the Compliance Procedures in subpart F of part 35 to incorporate procedures used under agency regulations implementing section 504 of the Rehabilitation Act for federally assisted programs and activities.

Accessibility Standard

Section 504 of the ADA requires the Access Board to issue supplemental Minimum Guidelines and Requirements for Accessible Design of buildings and facilities subject to the ADA, including titles II and III. Sections 204(c) and 306(c) of the ADA provide that the Attorney General shall promulgate regulations implementing titles II and III that are consistent with the Access Board's ADA guidelines. In issuing its final title II regulation, the Department explained that it intended to amend the regulation to adopt the new accessibility standards for title II after the Access Board had amended its ADA Accessibility Guidelines to include specific requirements applicable to buildings and facilities operated by entities subject to title II. The Access Board is now publishing its interim guidelines for title II elsewhere in this

issue of the **Federal Register**, and this proposed rule would adopt those guidelines. Rather than having the ADA Standards for Accessible Design published twice, as an appendix to both parts 35 and 36, this proposed rule would adopt the revised ADA Standards as Appendix A to part 37. Parts 35 and 36 are amended to reference those standards.

The Access Board received public comments on its proposed guidelines, published on December 21, 1992, and is soliciting comments on its interim rule, which is published elsewhere in this issue of the **Federal Register**. The Department, as a member of the Access Board, will be actively involved in the review and analysis of the comments that the Access Board receives on its interim guidelines and in making any revisions to the guidelines in response to those comments. Therefore, the Department has proposed to adopt the guidelines, as revised by the Access Board in its final rule, as the ADA Standards for Accessible Design. Comments submitted to the Access Board in response either to its Notice of Proposed Rulemaking or its Interim Rule, therefore, will also be considered by the Department as comments on this proposed rule, and need not be separately submitted to the Department. Comments previously received by the Access Board concerning provision of unisex restrooms will be considered by the Department of Justice through future rulemaking or other action.

28 CFR 35.151 would be replaced by §§ 35.151–35.155 of the proposed regulation. At present, § 35.151 provides that those buildings that are constructed or altered by, on behalf of, or for the use of a public entity shall be designed, constructed, or altered to be readily accessible to and usable by individuals with disabilities. Current § 35.151(c) establishes two standards for accessible new construction and alteration. Under paragraph (c), design, construction, or alteration of facilities in conformance with the Uniform Federal Accessibility Standards (UFAS) or with the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG) is deemed to comply with the requirements of this section with respect to those facilities (except that, if ADAAG is chosen, the elevator exemption does not apply). ADAAG was initially developed by the Access Board as a guideline for accessibility to buildings and facilities that are subject to title III. It was adopted by the Department as the standard for places of public accommodation and commercial facilities under title III of the ADA and was published as Appendix A to the Department's regulation implementing title III, 28 CFR part 36, and amended on January 18, 1994, 59 FR 2674. This rule removes that appendix and adds the Access Board's revised guidelines as Appendix A to 28 CFR part 37.

The proposed rule would revise 28 CFR 35.151 and add four new sections, 28 CFR 35.152–35.155, which follow the format of parallel provisions in the Department's title III regulation at 28 CFR part 36, subpart D.

Section 35.150 Existing Facilities

The proposed rule would amend § 35.150(a)(2), which provides that, in ensuring access to programs in existing facilities, a public entity is not required to take any action that would threaten or destroy the historic significance of an historic property. The proposed amendment to § 35.150(a)(2) would incorporate the procedures set out in section 4.1.7 of the ADA Standards for determining whether a physical alteration would threaten or destroy the historic significance of an historic property.

The proposed rule would also amend § 35.150(b)(1) to make clear that the path of travel requirements of § 35.153 do not apply to measures taken solely to comply with program accessibility requirements. This amendment is consistent with § 36.304(d)(1) of the title III regulation, which states that "[t]he path of travel requirements of § 36.403 shall not apply to measures taken solely to comply with the barrier removal requirements of this section."

Section 35.151 New Construction

Section 35.151, as revised, would require that newly constructed facilities be readily accessible to and usable by individuals with disabilities. Paragraph 35.151(b)(2) of the proposed rule incorporates the ADA's "structural impracticability" exception for new construction. Under that exception, in new construction, full compliance with the requirements of the ADA Standards is not required where a public entity can demonstrate that it is structurally impracticable to meet the requirements. However, full compliance will be considered structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features.

The statute dictates that regulations promulgated under title II of the ADA "shall be consistent with [the other titles of] this Act" as well as with section 504 of the Rehabilitation Act of 1973. Pub. L. No. 101–336, § 204(b). Furthermore, the legislative history of the ADA indicates that "the forms of discrimination prohibited by [title II are] identical to those set out in the applicable provisions of titles I and III." H.R. Rep. No. 485, 101st Cong., 2d Sess., pt. 2, at 84 (1990). Thus the structural impracticability exception for public accommodations and commercial facilities contained in the Department of Justice title III regulations at 28 CFR 36.401(c) has been incorporated in § 35.151 and is included in the ADA Standards at § 4.1.1(5)(a). Other revisions to this rule and to the ADA Standards that render this rule and the ADA Standards consistent with title III, which are discussed below, are based on this same statutory mandate and legislative history.

Consistent with the legislative history of the ADA, the Department's proposed rule states that the structural impracticability exception will apply only in rare and unusual circumstances where unique characteristics of terrain make accessibility unusually difficult. This exception is the same as the exception in the Department's title III regulation, 28 CFR 36.401(c), and is narrower than the exception in the Department of Housing and Urban Development's Fair Housing Accessibility Guidelines (56 FR 9472 (1991)), which generally would allow exceptions from accessibility requirements, or allow compliance with less stringent requirements, on sites with slopes exceeding 10%.

The limited structural impracticability exception adopted by the proposed rule would allow deviations from accessibility requirements only where unique characteristics of terrain prevent the incorporation of accessibility features or where providing accessibility would destroy the physical integrity of a facility. A situation in which a building must be built on stilts because of its location in marshlands or over water is an example of one of the few situations in which the exception for structural impracticability would apply.

In addition, if full compliance with the accessibility standards would be structurally impracticable, compliance is required to the extent that it is not structurally impracticable. Any portion of the facility that can be made accessible must be made accessible to the extent that it is not structurally impracticable. In addition, if providing accessibility to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility must nonetheless be ensured to persons with other types of disabilities (e.g., those who use crutches or who have sight,

hearing, or mental impairments) in accordance with this section.

Section 35.152 Alterations: General

New § 35.152 of the proposed rule establishes the requirements for alterations. It includes a definition of "alteration" based on the Department's title III regulation. The term "resurfacing" is added to this definition to be consistent with the Access Board's proposed change to the definition of alteration in ADAAG § 3.5. It also adds a definition of the phrase "to the maximum extent feasible," as used in § 35.152(a), which requires that alterations be done, to the maximum extent feasible, in such manner that the altered portion of the facility is accessible. That proposed definition is taken from the Department's title III regulation, 28 CFR 36.402(c), and provides that the phrase applies to the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration. In the occasional cases in which full compliance is impossible, alterations shall provide the maximum physical accessibility feasible. Like the structural impracticability exception for new construction, it requires that the facility be made accessible to persons with other types of disabilities even if providing accessibility for individuals who use wheelchairs would not be feasible.

Section 35.153 Alterations: Path of Travel

Proposed § 35.153, Alterations: Path of Travel, is also based on the title III regulation. UFAS and ADAAG both contain requirements for provision of an accessible "path of travel" to the altered area when an existing facility is altered, although the circumstances that trigger the requirements are somewhat different under each statute. Under § 4.1.6(3) of UFAS, an accessible route to the altered area, an accessible entrance, and (where applicable) accessible toilet facilities must be provided when a substantial alteration is made to an existing building. An alteration is considered "substantial" if the total cost of all alterations within any twelve-month period amounts to 50% or more of the full and fair cash value of the building. The proposed rule eliminates the UFAS "substantial alteration" basis for path of travel requirements because it eliminates UFAS as an option.

The path of travel requirements of proposed § 35.153 are based on section 303(a)(2) of the ADA, which provides that, when an entity undertakes an alteration to a place of public accommodation or commercial facility that affects or could affect the usability of or access to an area that contains a primary function, the entity shall ensure that, to the maximum extent feasible, the path of travel to the altered area, and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs.

Paragraph (b)(1) of proposed § 35.153 provides that areas such as mechanical rooms, boiler rooms, supply storage rooms, employee lounges and locker rooms, janitorial closets, entrances, and corridors are not areas containing a primary function. Nor are restrooms areas containing a primary function unless the provision of restrooms is the major reason that the facility is maintained by a public entity, such as at a highway rest stop. In that situation, a restroom would be considered to be an "area containing a primary function" of the facility.

The requirement for an accessible path of travel does not apply, however, to the extent that the cost and scope of alterations to the path of travel is disproportionate to the cost of the overall alteration, as determined under criteria established by the Attorney General. Sections 227 and 242 of the ADA adopt the same requirement for public transportation facilities under title II.

Section 4.1.6(2) of the ADA Standards, which is not modified by the Access Board's proposed amendments, adopts the statutory path of travel requirement, and § 36.403 of the Department's title III regulation establishes the criteria for determining when the cost of alterations to the path of travel are "disproportionate" to the cost of the overall alteration. The proposed rule would add a new § 35.153(d) to adopt the same disproportionality criteria for facilities altered by public entities as are applied to private entities under title III. Alterations made to provide an accessible path of travel to the altered area would be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area.

Section 35.154 Alterations: Historic Preservation

Proposed § 35.154 would incorporate the procedures set out in section 4.1.7 of the ADA Standards for determining whether a physical alteration would threaten or destroy the historic significance of an historic property and would replace § 35.151(d) of the Department's current title II regulation.

Section 35.155 Standards for New Construction and Alterations

Proposed § 35.155 provides that, as of the effective date of this amendment, new construction and alterations subject to the regulation shall comply with the ADA Standards for Accessible Design published as Appendix A to 28 CFR part 37 in this publication. Appendix A to 28 CFR part 37, which the proposed rule would adopt as the ADA Standards for Accessible Design, would incorporate the text of the revised ADAAG, which is published as an interim rule elsewhere in today's **Federal Register**.

As originally published, the ADA Standards consisted of nine main sections and a separate appendix. Sections 1 through 3 contain general provisions and definitions. Section 4 contains scoping provisions and technical specifications applicable to all covered buildings and facilities. Sections 5 through 9 are special application sections and contain additional requirements for restaurants and cafeterias, medical care facilities, business and mercantile facilities, libraries, and transient lodging. Section 10, which established requirements for transportation facilities, was added on January 18, 1994 (59 FR 2674). The appendix to the ADA Standards contains additional information to aid in understanding the technical specifications.

The Department is now proposing to supplement the original ADA Standards by adding specific requirements applicable to public entities. These requirements are set out in sections 11 through 14 of the Access Board's interim guidelines, which are special application sections for facilities covered by title II. Section 11 would apply to Judicial, Legislative, and Regulatory Facilities; section 12 to Detention and Correctional Facilities; section 13 to Accessible Residential Housing subject to title II; and section 14 to Public Rights-of-Way. The Department's proposed rule would also amend certain general requirements of the ADA Standards to clarify application to facilities covered by title II. (It would, for example, clarify that the elevator exemption applies to places of public accommodation and commercial facilities, but not to facilities covered by title II.)

Section 35.151 of the current regulation applies to design, construction, and alteration of facilities if the construction was commenced after the effective date of the regulation, January 26, 1992. Facilities under

design for new construction on that date were governed by that section if the date that bids were invited fell after the effective date. Alterations were deemed to have commenced after January 26, 1992, if the physical alteration of the property began after that date.

Paragraph (c) of § 35.151, which provides that public entities could use either UFAS or ADAAG as the accessibility standard, would be replaced by § 35.155, which adopts the ADA Standards (*i.e.*, the Access Board's ADAAG as revised in the interim rule) as the applicable standard, as of the effective date of the amendment. Consistent with federal practice under section 504, the new standard to be adopted by this proposed amendment would not be applied retroactively. Facilities that were designed, constructed, or altered in conformance with the requirements of § 35.151 prior to the effective date of this proposed amendment would not be required to be retrofitted to conform to the new standard.

Thus, newly constructed or altered facilities would continue to be covered by either UFAS or ADAAG if the construction or alteration commenced between January 26, 1992, and the effective date of the proposed amendments.

Proposed § 35.155 could create a potential conflict between the revised regulation and the existing agency regulations implementing section 504 of the Rehabilitation Act for federally assisted programs. These section 504 regulations require that newly constructed or altered facilities be readily accessible to and usable by individuals with disabilities and provide that facilities designed, constructed, or altered in conformance with UFAS shall be deemed to comply with that requirement. Public entities that receive federal financial assistance, therefore, would be required by this regulation to follow the ADA Standards, while, under section 504, they could also be required to follow UFAS. This overlap between the requirements of title II of the ADA and section 504 of the Rehabilitation Act was one of the reasons that the current regulation allows public entities the option of using either UFAS or ADAAG. Pursuant to its authority under Executive Order 12,250 for coordination of implementation and enforcement of section 504, therefore, the Department has advised the federal agencies that have regulations implementing section 504 for their federally assisted programs that facilities designed, constructed, or altered by a public entity in conformance with the proposed ADAAG should be deemed to comply with the requirements for new construction and alterations of any regulation implementing section 504 of the Rehabilitation Act that applies to that public entity. Private entities that receive federal financial assistance would continue to be governed by the standards in any applicable regulation implementing section 504. It is expected that, when ADA Standards proposed in this rule are finalized, the agencies with enforcement responsibilities under section 504 will amend their regulations to adopt the ADA Standards as the standard for new construction and alterations. In the interim, the agencies that enforce section 504 should not require public entities to conform to both UFAS and ADAAG.

Enforcement Procedures

Subpart F of the current regulation establishes administrative procedures for enforcement of title II of the ADA. Section 203 of the ADA adopts the "remedies, procedures, and rights" provided in section 505 of the Rehabilitation Act, 29 U.S.C. 794a, as the enforcement procedures for title II. Section 505, in turn, incorporates by reference the remedies, procedures, and rights set forth in title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d to 2000d–4a). Section 204 of the ADA, which requires the Department to issue regulations to implement subtitle A of title II, requires that the regulations be consistent with the section 504 coordination regulation for federally assisted programs and activities at 28 CFR Part 41. The House Committee on Education and Labor explained that it expected the Attorney General to use the section 504 enforcement procedures as the model for title II enforcement. H.R. Rep. No. 485, 101st Cong., 2d Sess., pt. 2, at 98 (1990). *See also* S. Rep. No. 116, 101st Cong., 1st Sess., at 57–58 (1989).

As required by sections 203 and 204(b) of the ADA, the proposed enforcement procedures are the procedures for enforcement of section 504, which, in turn, adopt the enforcement procedures for title VI. Title VI, which prohibits discrimination on the basis of race, color, or national origin in federally assisted programs and activities, is enforced by the federal agencies that provide the federal financial assistance to the covered programs and activities in question. If voluntary compliance cannot be achieved, federal agencies enforce title VI either by the termination of federal funds to a program or activity that is found to discriminate, following an administrative hearing, or by a referral to the Department of Justice for judicial enforcement.

Title II of the ADA extended the requirements of section 504 to all services, programs, and activities of state and local governments, not only those that receive federal financial assistance. Subpart F of the Department's original regulation establishes basic procedures to be followed by the agencies designated in subpart G for processing complaints against state and local government entities when the designated agency does not have jurisdiction under section 504. As required by section 204(b) of the ADA, these procedures are consistent with the Department's coordination regulation for section 504 of the Rehabilitation Act, 28 CFR 41.5(a)(1), which directs agencies to adopt the enforcement procedures of their title VI regulations for enforcement of section 504. Although section 203 of the ADA mandates that the title II procedures be the same as the section 504 procedures, the final rule did not detail procedures for investigations other than those based on individual complaints. Nor did it include requirements for cooperation by public entities in investigations, as required under title VI. This proposed rule would clarify §§ 35.172 and 35.174 of subpart F by specifically incorporating the language of the regulations implementing title VI and section 504 for federally assisted programs with respect to those provisions.

Section 35.172 of the Department's current regulation requires designated agencies to investigate all complete complaints for which they were responsible as determined under § 35.171. It requires the designated agency to issue a Letter of Findings at the conclusion of the investigation if the complaint was not resolved informally, and to attempt to negotiate a voluntary compliance agreement if a violation was found. It does not, however, include specific procedural requirements for investigations, and does not address compliance reviews that are not based on individual complaints.

Proposed § 35.172, captioned Investigations and Compliance reviews, makes clear that the same procedures that apply to complaint investigations also apply to compliance reviews that are not initiated by receipt of a complaint, but rather are based on other information indicating that discrimination exists in a service, program, or activity covered by this part. This provision is consistent with the Department's procedures for enforcing title VI at 28 CFR 42.107, as

required by the section 504 coordination regulation at 28 CFR 41.5(a)(1).

Paragraph (e) of proposed § 35.172 explicitly spells out the agency's authority to require a public entity to cooperate in the investigation by permitting access by the designated agency to its records and other sources of information and to its facilities. It also makes clear that access by the designated agency may not be barred on the basis of considerations of privacy or confidentiality and that confidential information obtained by the designated agency shall not be disclosed except where necessary in formal enforcement proceedings or where otherwise required by law. These provisions of the proposed rule are based on the enforcement procedures for title VI and section 504 in federally assisted programs, *e.g.*, 28 CFR 42.106 (Department of Justice title VI regulation, as incorporated in the Department of Justice section 504 regulation by 28 CFR 42.530); 45 CFR 80.6, 80.7 (Department of Health and Human Services).

Section 35.173 of the current regulation establishes requirements for voluntary compliance agreements and would not be changed by the proposed rule.

Section 35.174 of the current regulation and § 35.174(a) of the proposed regulation provide for referral of a matter to the Department of Justice when a public entity declines to enter into voluntary compliance negotiations or when negotiations are unsuccessful. The proposed rule adds a new § 35.174(b), which provides that the designated agency may refer the matter to the Department with a recommendation for appropriate action or use any other means authorized by law to achieve compliance when there appears to be a failure or threatened failure to comply with this part that cannot be corrected by informal means. This provision is taken from language in existing title VI and section 504 regulations for federally assisted programs. *See, e.g.*, 28 CFR 42.108; 45 CFR 80.8.

ADA Standards for Accessible Design

This proposed rule would amend the regulations of the Department of Justice implementing titles II and III of the ADA to incorporate, as the ADA Standards for Accessible Design, the ADA Accessibility Guidelines for Buildings and Facilities, currently Appendix A to 28 CFR Part 36, as they are revised in the Access Board's interim rule published elsewhere in this issue of the **Federal Register**. (The guidelines set forth in the Access Board's interim rule are effective only as guidance for the Departments of Justice and Transportation; they have no effect on the public and should not be used by the public until such time as the Department of Justice and the Department of Transportation adopt them as standards.) The ADA Standards will be set forth in full in the new part 37 of 28 CFR when this rule is printed in final.

The ADA Standards set out in the Access Board's interim rule supplement the original ADA Standards by adding specific requirements applicable to public entities. These requirements are set out in sections 11 through 14 of the Access Board's interim guidelines, which are special application sections for facilities covered by title II. Section 11 would apply to Judicial, Legislative, and Regulatory Facilities; section 12 to Detention and Correctional Facilities; section 13 to Accessible Residential Housing subject to title II; and section 14 to Public Rights-of-Way. For a section-by-section analysis of these requirements, see the Access Board's preamble to its interim rule published in today's **Federal Register**.

In addition to purely editorial changes, the Access Board's interim rule contains several substantive changes that needed to be made to §§ 3, 4, 7, and 10 of ADAAG, either as a result of the addition of new sections 11–14 or to make certain provisions of ADAAG specifically applicable to title II facilities. These changes are discussed below.

In § 3.5, the definition of "alteration" is revised to explicitly cover pedestrian facilities in the public right-of-way and to include resurfacing. This change is consistent with the decision in *Kinney v. Yerusalim*, 812 F. Supp. 547 (E.D.Pa. 1993), aff'd, 9 F.3d 1067 (3d Cir. 1993), *cert. denied*, 114 S. Ct. 1545 (1994), holding that resurfacing of a street constitutes an alteration under the ADA. Also in § 3.5, definitions are being added for the following terms: continuous passage, public right-of-way, public sidewalk, public sidewalk curb ramp, principal public entrance, site infeasibility, and technically infeasible; and the term text telephone is being replaced with the term TTY. Finally, the definition of "transient lodging" is revised to include residential facilities rather than facilities that contain one or more dwelling units.

The general exception in § 4.1.1(5)(b)(i) is expanded to include all raised areas used primarily for purposes of security or life or fire safety; several more examples are added to the non-occupiable spaces listed in § 4.1.1(5)(b)(ii); and § 4.1.1(5)(b)(iii) is added to exempt single-occupant structures accessed only by passageways below grade or elevated above grade, such as certain toll booths.

Exception 1 to § 4.1.3(5) is expanded to exempt the upper level of drawbridge towers, boat traffic towers, lock and dam control stations, train dispatching towers, and similar structures less than three stories and not open to the general public if the upper level houses no more than five persons and is less than 500 square feet.

Exception 4 to § 4.1.3(5) is expanded to allow platform lifts to provide access to raised judges' benches, clerks' stations, speakers' rostrums, raised daises, jury boxes, and witness stands, and to connect levels within an individual dwelling unit.

Exception 5 is added to § 4.1.3(5) to exempt the cab level and, in some instances, the penultimate floor of air traffic control towers.

Language is added to § 4.1.3(8)(a)(i) to require that, in facilities subject to title II, all planned principal public entrances shall be included within the 50% of public entrances required to be accessible.

Section 4.1.3(17)(c)(ii) is expanded to require that, in stadiums, arenas, and convention centers subject to title II, at least one public TTY shall be provided on each floor level having a public pay telephone.

Sections 4.1.3(17)(c) (iv) and (v) are added to require that if an interior public pay telephone is provided in a public use area of a facility covered by title II, at least one interior public TTY shall be provided in at least one public use area, and if an interior public pay telephone is provided in the secured area of a detention or correctional facility subject to section 12, then at least one public TTY shall also be provided in at least one secured area.

An exception is added to § 4.1.3(17)(d) to exempt the secured areas of detention or correctional facilities where shelves and outlets are prohibited for purposes of security or safety.

Section 4.1.3(22) is added to require that permanently-installed swimming pools subject to title II shall be designed so as to provide at least one means of access into the water, if such swimming pools are intended for recreational purposes and not intended solely for diving or wading.

The previously-reserved exception to § 4.1.7(1)(a) is added to allow alternative methods of access if it is determined that it is not feasible to provide physical access to a qualified historic building or facility in a manner that will not

threaten or destroy the historic significance of the building or facility.

Section 7.2(3) is added to cover title II facilities, and requires that, where counters have cash registers and are provided for the sale or distribution of goods or services to the public, at least one of each type shall comply with 7.2(1); at counters that may not have cash registers but at which goods or services are sold or distributed, a portion of the main counter shall be accessible or an accessible auxiliary counter shall be provided in close proximity; and at counter or teller windows with solid partitions or security glazing separating personnel from the public, at least one of each type shall provide a method to facilitate voice communication that is accessible to both individuals who use wheelchairs and individuals who have difficulty bending or stooping.

Section 10.4.1(8), which was previously reserved, is added to require that, in airports covered by title II, at least one accessible route shall be provided through fixed security barriers, and where security barriers incorporate equipment, such as metal detectors, which cannot be made accessible, an accessible route shall be provided adjacent to such security screening devices. An exception is also added to this section to exempt doors, doorways, and gates designed to be operated only by security personnel from the requirements of 4.13.6, 4.13.9, 4.13.11, and 4.13.12.

Finally, appendix notes are added for the following sections: 3.5 (definition of transient lodging); 4.1.3(8)(a)(i) (public entrances); 4.1.3(8)(b) (path of travel to building entrances); 7.2(3)(iii) (counter or teller windows with partitions); and 10.4.1(8) (security systems in transportation facilities).

Regulatory Process Matters

This notice of proposed rulemaking has been reviewed by the Office of Management and Budget under Executive Order 12866. The Access Board has analyzed the impact of applying its proposed amendments to ADAAG to entities covered by titles II and III of the ADA and has determined that they are a significant regulatory action for purposes of Executive Order 12866. The Access Board has prepared a Regulatory Assessment, which includes a cost impact analysis for certain accessibility elements and a discussion of the regulatory alternatives considered. Adoption of the revised ADA Standards as the standards for title II is, therefore, also a significant regulatory action to which the Access Board's Regulatory Assessment would apply. Comments submitted to the Access Board on its Regulatory Assessment will also be considered by the Department as comments on this proposed rule.

The Access Board has determined that this proposed rule will have a significant economic impact on a substantial number of small entities and, therefore, has included the flexibility analysis required by the Regulatory Flexibility Act in its Regulatory Assessment. The Access Board has made every effort to lessen the economic impacts of its proposed rule on small entities, but recognizes that such impacts are the necessary result of the mandate of the ADA itself. The Access Board's analysis also applies to the Department's proposed adoption of the revised ADAAG. The Department's proposed procedural amendments will not have a significant economic impact on small entities.

The Access Board has made every effort to lessen the impact of its proposed guidelines on state and local governments, but recognizes that the guidelines will have some federalism impacts. These impacts are discussed in the Access Board's Regulatory Assessment, which also applies to the Department's proposed rule.

Executive Order 12875 prohibits executive departments and agencies from promulgating any regulation that is not required by statute and that creates a mandate upon a state, local, or tribal government unless certain conditions are met. The Access Board is required by statute to issue minimum guidelines for the purposes of implementing titles II and III of the ADA (42 USC 12204). The Department of Justice is required by statute to promulgate regulations that implement title II of the ADA and that are consistent with the minimum guidelines and requirements issued by the Access Board (42 USC 12134). Because the Department of Justice is required by statute to promulgate regulations that do not go below the Access Board's minimum guidelines, and because this rule adopts guidelines issued by the Access Board as also required by statute, this rule is required by statute. Therefore, the special conditions in Executive Order 12875 need not be met. However, the Department will provide any comments submitted that suggest ways to make compliance less burdensome or that would improve the effectiveness of the title II regulation in achieving its objective.

List of Subjects

28 CFR Part 35

Administrative practice and procedure, Alcoholism, Blind, Buildings and facilities, Civil rights, Drug abuse, Historic preservation, HIV/AIDS, Individuals with disabilities, Intergovernmental relations, Reporting and recordkeeping requirements, State and local governments.

28 CFR Part 36

Administrative practice and procedure, Alcoholism, Blind, Buildings and facilities, Business and industry, Civil rights, Consumer protection, Drug abuse, Historic preservation, HIV/AIDS, Individuals with disabilities, Reporting and recordkeeping requirements, Transportation.

28 CFR Part 37

Buildings and facilities, Civil rights, Individuals with disabilities, Historic preservation, Transportation.

By the authority vested in me as Attorney General by 28 U.S.C. 509, 510, 5 U.S.C. 301, and sections 204 and 306 of the Americans with Disabilities Act, Pub. L. 101–336, 42 U.S.C. 12134 and 12186, and for the reasons set forth in the preamble, Chapter I of Title 28 of the Code of Federal Regulations is proposed to be amended as follows:

PART 35—NONDISCRIMINATION ON THE BASIS OF DISABILITY IN STATE AND LOCAL GOVERNMENT SERVICES

1. The authority citation for 28 CFR part 35 is revised to read as follows:

Authority: 5 U.S.C. 301; 28 U.S.C. 509, 510; 42 U.S.C. 12134.

2. In § 35.150, paragraph (a)(2) and the third sentence of paragraph (b)(1) are revised to read as follows:

§ 35.150 Existing facilities.

(a) * * *

* * * * *

(2) Require a public entity to take any action that would threaten or destroy the historic significance of an historic property, as determined under the procedures set out in section 4.1.7 of appendix A to part 37 of this chapter; or

* * * * *

(b) * * *

(1) * * * A public entity, in making alterations to existing buildings, shall meet the accessibility requirements of § 35.151. The path of travel requirements of § 35.153 shall not apply to measures taken solely to comply with the program accessibility requirements of this section. * * *

* * * * *

3. Section 35.151 is revised and §§ 35.152 through 35.155 are added to read as follows:

§ 35.151 New construction.

(a) *Design and construction.* Each facility or part of a facility constructed by, on behalf of, or for the use of a public entity shall be designed and constructed in such manner that the facility or part of the facility is readily accessible to and usable by individuals with disabilities, if the construction was commenced after January 26, 1992.

(b) *Exception for structural impracticability.* (1) Full compliance with the requirements of this section is not required where a public entity can demonstrate that it is structurally impracticable to meet the requirements. Full compliance will be considered structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features.

(2) If full compliance with this section would be structurally impracticable, compliance with this section is required to the extent that it is not structurally impracticable. In that case, any portion of the facility that can be made accessible shall be made accessible to the extent that it is not structurally impracticable.

(3) If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility shall nonetheless be ensured to persons with other types of disabilities (e.g., those who use crutches or who have sight, hearing, or mental impairments) in accordance with this section.

§ 35.152 Alterations: General.

(a) *General.* (1) Each facility or part of a facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or part of the facility shall, to the maximum extent feasible, be altered in such manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities, if the alteration was commenced after January 26, 1992.

(2) An alteration is deemed to have commenced after January 26, 1992, if the physical alteration of the property begins after that date.

(b) *Alteration.* For the purposes of this part, an alteration is a change to a facility that affects or could affect the usability of the building or facility or any part thereof.

(1) Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing, changes or rearrangement in structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, asbestos removal, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.

(2) If existing elements, spaces, or common areas are altered, then each such altered element, space, or area shall comply with the applicable provisions of appendix A to part 37 of this chapter.

(c) *To the maximum extent feasible.* The phrase "to the maximum extent feasible," as used in this section, applies to the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration. In these circumstances, the alteration shall provide the maximum physical accessibility feasible. Any altered features of the facility that can be made accessible shall be made accessible. If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would not be feasible, the facility shall be made accessible to persons with other types of disabilities (e.g., those who use crutches, those who have impaired vision or hearing, or those who have other impairments).

§ 35.153 Alterations: Path of travel.

(a) *General.* An alteration that affects or could affect the usability of or access to an area of a facility that contains a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, unless the cost and scope of such alterations is disproportionate to the cost of the overall alteration.

(b) *Primary function.* A "primary function" is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public entity using the facility are carried out.

(1) Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, and corridors are not areas containing a primary function. Restrooms are not areas containing a primary function, unless the provision of restrooms is the principal purpose of the area, *e.g.*, in highway rest stops.

(2) For the purposes of this section, alterations to windows, hardware, controls, electrical outlets, and signage shall not be deemed to be alterations that affect the usability of or access to an area containing a primary function.

(c) *Path of travel.* (1) A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which the altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility.

(2) An accessible path of travel may consist of walks and sidewalks, curb ramps and other interior or exterior pedestrian ramps; clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements.

(3) For the purposes of this part, the term "path of travel" also includes the restrooms, telephones, and drinking fountains serving the altered area.

(d) *Disproportionality.* (1) Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area.

(2) Costs that may be counted as expenditures required to provide an accessible path of travel may include:

(i) Costs associated with providing an accessible entrance and an accessible route to the altered area, for example, the cost of widening doorways or installing ramps;

(ii) Costs associated with making restrooms accessible, such as installing grab bars, enlarging toilet stalls, insulating pipes, or installing accessible faucet controls;

(iii) Costs associated with providing accessible telephones, such as relocating the telephone to an accessible height, installing amplification devices, or installing a telecommunications device for deaf persons (TDD);

(iv) Costs associated with relocating an inaccessible drinking fountain.

(e) *Duty to provide accessible features in the event of disproportionality.* (1) When the cost of alterations necessary to make the path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be made accessible to the extent that it can be made

accessible without incurring disproportionate costs.

(2) In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order:

(i) An accessible entrance;

(ii) An accessible route to the altered area;

(iii) At least one accessible restroom for each sex or a single unisex restroom;

(iv) Accessible telephones;

(v) Accessible drinking fountains; and

(vi) When possible, additional accessible elements such as parking, storage, and alarms.

(f) *Series of smaller alterations.* (1) The obligation to provide an accessible path of travel may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking.

(2) (i) If an area containing a primary function has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area, or a different area on the same path of travel, are undertaken within three years of the original alteration, the total cost of alterations to the primary function areas on that path of travel during the preceding three-year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate.

(ii) Only alterations undertaken after the effective date of this amendment shall be considered in determining if the cost of providing an accessible path of travel is disproportionate to the overall cost of the alterations.

§ 35.154 Alterations: Historic preservation.

(a) Alterations to buildings or facilities that are "historic properties" as defined in § 35.104 shall comply, to the maximum extent feasible, with section 4.1.7 of appendix A to part 37 of this chapter.

(b) If it is determined under the procedures set out in section 4.1.7 of appendix A to part 37 of this chapter that it is not feasible to provide physical access to an historic property in a manner that will not threaten or destroy the historic significance of the building or facility, alternative methods of access shall be provided pursuant to the requirements of § 35.150.

§ 35.155 Standards for new construction and alterations.

Effective on [the effective date of the final rules] new construction and alterations subject to this part shall comply with the standards for accessible design in 28 CFR part 37, appendix A.

4. Section 35.172 is revised to read as follows:

§ 35.172 Investigations and compliance reviews.

(a) The designated agency shall investigate each complete complaint for which it is responsible under § 35.171.

(b) The designated agency may conduct compliance reviews of public entities based on information indicating a possible failure to comply with the nondiscrimination requirements of this part.

(c) Where appropriate, the designated agency shall attempt informal resolution of any matter being investigated under this section, and, if resolution is not achieved, issue to the public entity and the complainant, if any, a Letter of Findings that shall include—

(1) Findings of fact and conclusions of law;

(2) A description of a remedy for each violation found; and

(3) Notice of the rights and procedures available under paragraph (d) of this section and §§ 35.173 and 35.174.

(d) At any time, the complainant may file a private suit pursuant to section 203 of the Act, whether or not the designated agency finds a violation.

(e) A public entity shall permit access by the designated agency during normal business hours to books, records, accounts, and other sources of information, and its facilities as may be pertinent to ascertain compliance with this part. Whenever any information required of a public entity is in the exclusive possession of any other agency, institution, or person and that agency, institution, or person fails or refuses to furnish that information, the public entity shall so certify in its report and shall set forth the efforts that it has made to obtain the information. Asserted considerations of privacy or confidentiality may not operate to bar the designated agency from evaluating or seeking to enforce compliance with this part. Information of a confidential nature obtained in connection with compliance evaluation or enforcement shall not be disclosed except where necessary in formal enforcement proceedings or where otherwise required by law.

5. Section 35.174 is revised to read as follows:

§ 35.174 Enforcement.

(a) If a public entity declines to enter into voluntary compliance negotiations or if negotiations are unsuccessful, the designated agency shall refer the matter to the Attorney General with a recommendation for appropriate action.

(b) If there appears to be a threatened failure to comply with this part and if the threatened noncompliance cannot be corrected by informal means, the designated agency may use any means authorized by law to achieve compliance, including, but not limited to, referral to the Department of Justice with a recommendation for appropriate action.

PART 36—NONDISCRIMINATION ON THE BASIS OF DISABILITY BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES

6. The authority citation for 28 CFR part 36 continues to read as follows:

Authority: 5 U.S.C. 301; 28 U.S.C. 509, 510; (42 U.S.C. 12186).

7. Section 36.402(b)(2) is revised to read as follows:

§ 36.402 Alterations.

* * * * *

(b) * * *

(2) If existing elements, spaces, or common areas are altered, then each such altered element, space, or area shall comply with the applicable provisions of appendix A to part 37 of this chapter.

* * * * *

8. Section 36.405 is revised to read as follows:

§ 36.405 Alterations: Historic preservation.

(a) Alterations to buildings or facilities that are eligible for listing in the National Register of Historic Places under the National Historic Preservation Act (16 U.S.C. 470 *et seq.*), or are designated as historic under State or local law, shall comply to the maximum extent feasible with section 4.1.7 of appendix A to part 37 of this chapter.

(b) If it is determined under the procedures set out in section 4.1.7 of appendix A to part 37 of this chapter that it is not feasible to provide physical access to an historic property that is a place of public accommodation in a manner that will not threaten or destroy the historic significance of the building or facility, alternative methods of access shall be provided pursuant to the requirements of subpart C of this part.

9. Paragraphs (a) and (b) of § 36.406 are revised to read as follows:

§ 36.406 Standards for new construction and alterations.

(a) New construction and alterations subject to this part shall comply with the standards for accessible designs published as appendix A to part 37 of this chapter.

(b) The chart in the appendix to this section provides guidance to the user in reading appendix A to part 37 of this chapter together with subparts A

through D of this part, when determining requirements for a particular facility.

* * * * *

10. In the Appendix to § 36.406, in the heading in the third column of the table, "ADAAG" is revised to read "ADA Standards".

Appendix A to Part 36 [Removed]

Appendix B to Part 36 [Redesignated as Appendix A to Part 36]

11. Appendix A to Part 36 is removed and Appendix B to Part 36 is redesignated as Appendix A to Part 36.

PART 37—NONDISCRIMINATION ON THE BASIS OF DISABILITY IN STATE AND LOCAL GOVERNMENT SERVICES AND BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES

12. Part 37 is added to read as follows:

Sec.
37.101 Accessibility Standards.
37.102–37.999 [Reserved]

Appendix A to Part 37—Standards for Accessible Design

Authority: 5 U.S.C. 301; 28 U.S.C. 509, 510; 42 U.S.C. 12134, 12186.

§ 37.101 Accessibility Standards.

The standards for accessible design for purposes of the Americans with Disabilities Act are set forth in Appendix A of this part.

§§ 37.102–37.999 [Reserved]

Appendix A to Part 37—Standards for Accessible Design

[**Note:** the text of the Appendix, including the changes set out in the Access Board's interim rule published elsewhere in this issue of the **Federal Register**, is available from John Wodatch, Public Access Section, Civil Rights Division, U.S. Department of Justice, P.O. Box 66738, Washington, D.C. 20035–9998. Telephone (202) 307–2227 (Voice) or (202) 514–0383 (TTY) (the Division's ADA Information Line). These are not toll free numbers.]

Dated: June 5, 1994.

Janet Reno,

Attorney General.

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