

Defense Contract Management Command's implementation of their Plant Clearance Automated Reutilization Screening System (PCARSS) eliminated hard-copy schedules for contractors under DOD cognizance and will eliminate, through procedures established under PCARSS, the need for which the former language was developed.

#### B. Regulatory Flexibility Act

The Department of Defense, the General Services Administration, and the National Aeronautics and Space Administration certify that this final rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act, 5 U.S.C. 601, *et seq.*, because the rule revises to make less burdensome a procedure normally associated with large businesses having Government property in their possession.

#### C. Paperwork Reduction Act

The Paperwork Reduction Act does not apply because the changes to the FAR do not impose recordkeeping or information collection requirements, or collections of information from offerors, contractors, or members of the public which require the approval of the Office of Management and Budget under 44 U.S.C. 3501, *et seq.*

#### List of Subjects in 48 CFR Part 45

Government procurement.

Dated: December 9, 1992.

Albert A. Vicchiolla,

Director, Office of Federal Acquisition Policy.

Therefore, 48 CFR part 45 is amended as set forth below:

#### PART 45—GOVERNMENT PROPERTY

1. The authority citation for 48 CFR part 45 continues to read as follows:

**Authority:** 40 U.S.C. 486(c); 10 U.S.C. chapter 137; and 42 U.S.C. 2473(c).

2. Section 45.606-1 is amended by revising paragraph (b) to read as follows:

##### 45.606-1 Submission.

\* \* \*

(b) The certificate on the inventory schedule must be executed when contractor inventory is reported. The prime contractor shall execute this certificate, except that for subcontractor termination inventory the subcontractor shall execute the certificate.

[FR Doc. 92-30581 Filed 12-18-92; 8:45 am]

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## DEPARTMENT OF DEFENSE

### GENERAL SERVICES ADMINISTRATION

### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

#### 48 CFR Part 51

[FAC 90-16; FAR Case 91-55; Item XXII]

#### Federal Acquisition Regulation; Threshold Change to 51.106(b)

**AGENCIES:** Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

**ACTION:** Final rule.

**SUMMARY:** The Civilian Agency Acquisition and Defense Acquisition Regulations Councils have agreed on a final rule amending paragraph (b) of FAR 51.106, Title, which raises the threshold listed therein from \$1,000 to \$5,000. The revision is consistent with the threshold listed in FAR 52.245-2, Alternate II, and 52.245-5, Alternate I, to which FAR 51.106(b) refers. The revised paragraph will state that if contracts are with educational institutions using the Government Property clause at FAR 52.245-2, Alternate II, or FAR 52.245-5, Alternate I, then title to property having an acquisition cost of less than \$5,000 shall vest in the contractor, as provided in the clause. Agencies may provide higher thresholds, if appropriate.

**EFFECTIVE DATE:** February 19, 1993.

**FOR FURTHER INFORMATION CONTACT:** Ms. Linda Klein at (202) 501-3775 in reference to this FAR case. For general information, contact the FAR Secretariat, room 4037, GS Building, Washington, DC 20405 (202) 501-4755. Please cite FAC 90-16, FAR Case 91-55.

#### SUPPLEMENTARY INFORMATION:

##### A. Background

The Department of Defense requested that the threshold referenced in FAR 51.106(b) be raised from \$1,000 to \$5,000 to be consistent with the threshold listed in FAR 52.245-2, Alternate II, and 52.245-5, Alternate I, to which it refers.

##### B. Regulatory Flexibility Act

The final rule does not constitute a significant FAR revision within the meaning of FAR 1.501 and Public Law 98-577 and publication for public comment is not required. The case revises paragraph (b) of 51.106, Title, by raising the dollar threshold from "\$1,000" to "\$5,000" to be consistent

with the threshold specified in FAR 52.245-2, Alternate II, and 52.245-5, Alternate I, which it references. Therefore, the Regulatory Flexibility Act does not apply. However, comments from small entities concerning the affected subpart will be considered in accordance with 5 U.S.C. 610. Such comments must be submitted separately and cite 5 U.S.C. 601, *et seq.* (FAC 90-16, FAR case 91-55), in correspondence.

#### C. Paperwork Reduction Act

The Paperwork Reduction Act does not apply because the change to the FAR does not impose recordkeeping or information collection requirements, or collections of information from offerors, contractors, or members of the public which require the approval of the Office of Management and Budget under 44 U.S.C. 3501, *et seq.*

#### List of Subjects in 48 CFR Part 51

Government procurement.

Dated: December 9, 1992.

Albert A. Vicchiolla,

Director, Office of Federal Acquisition Policy.

Therefore, 48 CFR part 51 is amended as set forth below:

#### PART 51—USE OF GOVERNMENT SOURCES BY CONTRACTORS

1. The authority citation for 48 CFR part 51 continues to read as follows:

**Authority:** 40 U.S.C. 486(c); 10 U.S.C. chapter 137; and 42 U.S.C. 2473(c).

##### 51.106 [Amended]

2. Section 51.106 is amended in paragraph (b) by removing the amount "\$1,000" and inserting "\$5,000" in its place.

[FR Doc. 92-30582 Filed 12-18-92; 8:45 am]

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## DEPARTMENT OF DEFENSE

### GENERAL SERVICES ADMINISTRATION

### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

#### 48 CFR Part 53

[FAC 90-16; FAR Case 91-69; Item XXIII]

#### Federal Acquisition Regulation; Standard Forms 254 and 255, Architect-Engineer Questionnaires

**AGENCIES:** Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

**ACTION:** Final rule.

**SUMMARY:** The Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council have agreed on a final rule to revise Standard Form 254, Architect-Engineer and Related Services Questionnaire, and Standard Form 255, Architect-Engineer and Related Services Questionnaire for Specific Project. The rule deletes the obsolete definition of "Architect-Engineer and related services" on the forms and refers to the definition in FAR part 36. Corresponding changes will be made to the prescriptive language for the forms at FAR 53.236-2(b) and (c).

**EFFECTIVE DATE:** February 19, 1993.

**FOR FURTHER INFORMATION CONTACT:** Mr. Jack O'Neill at (202) 501-3856 in reference to this FAR case. For general information, contact the FAR Secretariat, room 4037, GS Building, Washington, DC 20405 (202) 501-4755. Please cite FAC 90-16, FAR Case 91-69.

**SUPPLEMENTARY INFORMATION:**

**A. Background**

The changes were determined to be necessary by the two Councils because the definition of "Architect-Engineer and related services" at FAR 36.102 was recently revised and the forms and prescriptive language contain an obsolete definition.

**B. Regulatory Flexibility Act**

The final rule does not constitute a significant FAR revision within the

meaning of FAR 1.501 and Public Law 98-577, and publication for public comments is not required. Therefore, the Regulatory Flexibility Act does not apply. However, comments from small entities concerning the affected subpart will be considered in accordance with 5 U.S.C. 610. Such comments must be submitted separately and cite 5 U.S.C. 601, *et seq.* (FAC 90-16, FAR case 91-69), in correspondence.

**C. Paperwork Reduction Act**

The Paperwork Reduction Act does not apply because the changes to the FAR do not impose recordkeeping or information collection requirements, or collections of information from offerors, contractors, or members of the public which require the approval of the Office of Management and Budget under 44 U.S.C. 3501, *et seq.*

**List of Subjects in 48 CFR Part 53**

Government procurement.

Dated: December 9, 1992.

Albert A. Vicchiolla,

Director, Office of Federal Acquisition Policy.

Therefore, 48 CFR part 53 is amended as set forth below:

**PART 53—FORMS**

1. The authority citation for 48 CFR part 53 continues to read as follows:

**Authority:** 40 U.S.C. 486(c); 10 U.S.C. chapter 137; and 42 U.S.C. 2473(c).

2. Section 53.236-2 is amended by revising paragraphs (b) and (c) to read as follows:

**53.236-2 Architect-engineer services (SF's 252, 254, 255, and 1421).**

\* \* \* \* \*

(b) *SF 254 (REV. 11/92), Architect-Engineer and Related Services Questionnaire.* SF 254 is prescribed for use to obtain information for architect-engineer firms regarding their professional qualifications, as specified in 36.702(b)(1).

(c) *SF 255 (REV. 11/92), Architect-Engineer and Related Services Questionnaire for Specific Project.* SF 255 is prescribed for use within approved dollar thresholds and as otherwise specified in 36.702(b)(2), whenever an agency requires information to supplement the SF 254 regarding the prospective firm's qualifications for a particular architect-engineer project.

\* \* \* \* \*

BILLING CODE 6820-34-M

# STANDARD FORM (SF) 254 Architect-Engineer and Related Services Questionnaire

Form Approved  
OMB No. 9000-0004  
Expires 7-31-94

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition and Regulatory Policy, GSA, Washington, D.C. 20405; and to the Office of Management and Budget, Paperwork Reduction Project (9000-0004), Washington, D.C. 20503.

## Purpose:

The policy of the Federal Government in acquiring architectural, engineering, and related professional services is to encourage firms lawfully engaged in the practice of those professions to submit annually a statement of qualifications and performance data. Standard Form 254, "Architect-Engineer and Related Services Questionnaire," is provided for that purpose. Interested A-E firms (including new, small, and/or minority firms) should complete and file SF 254's with each Federal agency and with appropriate regional or district offices for which the A-E is qualified to perform services. The agency head for each proposed project shall evaluate these qualification resumes, together with any other performance data on file or requested by the agency, in relation to the proposed project. The SF 254 may be used as a basis for selecting firms for discussions, or for screening firms preliminary to inviting submission of additional information.

## Definitions:

"Architect-Engineer Services" are defined in Part 36 of the Federal Acquisition Regulation.

"Parent Company" is that firm, company, corporation, association or conglomerate which is the major stockholder or highest tier owner of the firm completing this questionnaire; i.e., Firm A is owned by Firm B which is, in turn, a subsidiary of Corporation C. The "parent company" of Firm A is Corporation C.

"Principals" are those individuals in a firm who possess legal responsibility for its management. They may be owners, partners, corporate officers, associates, administrators, etc.

"Discipline," as used in this questionnaire, refers to the primary technological capability of individuals in the responding firm. Possession of an academic degree, professional registration, certification, or extensive experience in a particular field of practice normally reflects an individual's primary technical discipline.

"Joint Venture" is a collaborative undertaking by two or more firms or individuals for which the participants are both jointly and individually responsible.

"Consultant," as used in this questionnaire, is a highly specialized individual or firm having significant input and responsibility for certain aspects of a project and possessing unusual or unique capabilities for assuring success of the finished work.

"Prime" refers to that firm which may be coordinating the concerted and complementary inputs of several firms, individuals or related services to produce a complexed study or facility. The "prime" would normally be regarded as having full responsibility and liability for quality of performance by itself as well as by subcontractors under its jurisdiction.

"Branch Office" is a satellite, or subsidiary extension, of a headquarters office of a company, regardless of any differences in name or legal structure of such a branch due to local or state laws. "Branch offices" are normally subject to the management decisions, bookkeeping, and policies of the main office.

**Instructions for Filing** (Numbers below correspond to numbers contained in form):  
1. Type accurate and complete name of submitting firm, its address, and zip code.

1a. Indicate whether form is being submitted in behalf of a parent firm or a branch office. (Branch office submissions should list only personnel in, and experience of, that office.)

2. Provide date the firm was established under the name shown in question 1.

3. Show date on which form is prepared. All information submitted shall be current and accurate as of this date.

4. Enter type of ownership, or legal structure, of firm (sole proprietor, partnership, corporation, joint venture, etc.).

Check appropriate boxes indicating if firm is (a) a small business concern; (b) a small business concern owned and operated by socially and economically disadvantaged individuals; and (c) Woman-owned (See 48 CFR 19.101 and 52.219-8).

5. Branches of subsidiaries of large or parent companies, or conglomerates, should insert name and address of highest-tier owner.

5a. If present firm is the successor to, or outgrowth of, one or more predecessor firms, show name(s) of former entity(ies) and the year(s) of their original establishment.

6. List not more than two principals from submitting firm who may be contacted by the agency receiving this form. (Different principals may be listed on forms going to another agency.) Listed principals must be empowered to speak for the firm on policy and contractual matters.

7. Beginning with the submitting office, list name, location, total number of personnel, and telephone numbers for all associated or branch offices, (including any headquarters or foreign offices) which provide A-E and related services.

7a. Show total personnel in all offices. (Should be sum of all personnel, all branches.)

8. Show total number of employees, by discipline, in submitting office. (\*If form is being submitted by main or headquarters office, firm should list total employees, by discipline, in all offices.) While some personnel may be qualified in several disciplines, each person should be counted only once in accord with his or her primary function. Include clerical personnel as "administrative." Write in any additional disciplines--sociologists, biologists, etc. -- and number of people in each, in blank spaces.

# STANDARD FORM (SF) 254 Architect-Engineer and Related Services Questionnaire

9. Using chart (below) insert appropriate index number to indicate range of professional services fees received by submitting firm each calendar year for last five years, most recent year first. Fee summaries should be broken down to reflect the fees received each year for (a) work performed directly for the Federal Government (not including grant and loan projects) or as a sub to other professionals performing work directly for the Federal Government; (b) all other domestic work, U.S. and possessions, including Federally-assisted projects; and (c) all other foreign work.

## Ranges of Professional Services Fees

### INDEX

- |                             |                                |
|-----------------------------|--------------------------------|
| 1. Less than \$100,000      | 5. \$1 million to \$2 million  |
| 2. \$100,000 to \$250,000   | 6. \$2 million to \$5 million  |
| 3. \$250,000 to \$500,000   | 7. \$5 million to \$10 million |
| 4. \$500,000 to \$1 million | 8. \$10 million or greater     |

10. Select and enter, in numerical sequence, not more than thirty (30) "Experience Profile Code" numbers from the listing (next page) which most accurately reflect submitting firm's demonstrated technical capabilities and project experience. Carefully review list. (It is recognized some profile codes may be part of other services or projects contained on list; firms are encouraged to select profile codes which best indicate type and scope of services provided on past projects.) For each code number, show total number of projects and gross fees (in thousands) received for profile projects performed by firm during past few years. If firm has one or more capabilities not included on list, insert same in blank spaces at end of list and show numbers in question 10 on the form. In such cases, the filled-in listing must accompany the complete SF 254 when submitted to the Federal agencies.

11. Using the "Experience Profile Code" numbers in the same sequence as entered in item 10, give details of at least one recent (within last five years) representative project for each code number, up to a maximum of thirty (30) separate projects, or portions of projects, for which firm was responsible. (Project examples may be used more than once to illustrate different services rendered on the same job. Example: a dining hall may be part of an auditorium or educational facility.) Firms which select less than thirty "profile codes" may list two or more project examples (to illustrate specialization) for each code number so long as total of all project examples does not exceed thirty (30). After each code number in question 11, show: (a) whether firm was "P," the prime professional, or "C," a consultant, or "JV," part of a joint venture on that particular project (new firms, in existence less than five (5) years may use the symbol "IE" to indicate "Individual Experience" as opposed to firm experience); (b) provide name and location of the specific project which typifies firm's (or individual's) performance under that code category; (c) give name and address of the

owner of that project (if government agency indicate responsible office); (d) show the estimated construction cost (or other applicable cost) for that portion of the project for which the firm was primarily responsible. (Where no construction was involved, show approximate cost of firm's work); and (e) state year work on that particular project was, or will be, completed.

12. The completed SF 254 should be signed by a principal of the firm, preferably the chief executive officer.

13. Additional data, brochures, photos, etc. should not accompany this form unless specifically requested.

**NEW FIRMS** (not reorganized or recently-amalgamated firms) are eligible and encouraged to seek work from the Federal Government in connection with performance of projects for which they are qualified. Such firms are encouraged to complete and submit Standard Form 254 to appropriate agencies. Questions on the form dealing with personnel or experience may be answered by citing experience and capabilities of individuals in the firm, based on performance and responsibility while in the employee of others. In so doing, notation of this fact should be made on the form. In question 9, write in "N/A" to indicate "not applicable" for those years prior to firm's organization.

# Experience Profile Code Numbers for use with questions 10 and 11

- |                                                                 |                                                                     |                                                        |
|-----------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------|
| 001 Acoustics, Noise Abatement                                  | 042 Harbors: Jetties; Piers, Ship Terminal Facilities               | 085 Radar; Sonar; Radio & Radar Telescopes             |
| 002 Aerial Photogrammetry                                       | 043 Heating: Ventilating; Air Conditioning                          | 087 Railroad; Rapid Transit                            |
| 003 Agricultural Development; Grain Storage; Farm Mechanization | 044 Health Systems Planning                                         | 088 Recreation Facilities (Parks, Marinas, Etc.)       |
| 004 Air Pollution Control                                       | 045 Highrise; Air-Rights-Type Buildings                             | 089 Rehabilitation (Buildings; Structures; Facilities) |
| 005 Airports; Navals; Airport Lighting; Aircraft Fueling        | 046 Highways: Streets; Airfield Paving Parking Lots                 | 090 Resource Recovery; Recycling                       |
| 006 Airports; Terminals & Hangars; Freight Handling             | 047 Historical Preservation                                         | 091 Radio Frequency Systems & Shieldings               |
| 007 Arctic Facilities                                           | 048 Hospital & Medical Facilities                                   | 092 Rivers; Canals; Waterways; Flood Control           |
| 008 Auditoriums & Theatres                                      | 049 Hotels; Models                                                  | 093 Safety Engineering; Accident Studies; OSHA Studies |
| 009 Automation; Controls; Instrumentation                       | 050 Housing (Residential, Multi-Family; Apartments; Condominiums)   | 094 Security Systems; Intruder & Smoke Detection       |
| 010 Barracks; Dormitories                                       | 051 Hydraulics & Pneumatics                                         | 095 Seismic Designs & Studies                          |
| 011 Bridges                                                     | 052 Industrial Buildings; Manufacturing Plants                      | 096 Sewage Collection, Treatment and Disposal          |
| 012 Cemeteries (Planning & Relocation)                          | 053 Industrial Processes; Quality Control                           | 097 Soils & Geologic Studies; Foundations              |
| 013 Chemical Processing & Storage                               | 054 Industrial Waste Treatment                                      | 098 Solar Energy Utilization                           |
| 014 Churches; Chapels                                           | 055 Interior Design; Space Planning                                 | 099 Solid Wastes; Incineration; Land Fill              |
| 015 Codes; Standards; Ordinances                                | 056 Irrigation; Drainage                                            | 100 Special Environments; Clean Rooms, Etc.            |
| 016 Cold Storage; Refrigeration; Fast Freeze                    | 057 Judicial and Courtroom Facilities                               | 101 Structural Design; Special Structures              |
| 017 Commercial Building (low rise); Shopping Centers            | 058 Laboratories; Medical Research Facilities                       | 102 Surveying; Platting; Mapping; Flood Plain Studies  |
| 018 Communications Systems; TV; Microwave                       | 059 Landscape Architecture                                          | 103 Swimming Pools                                     |
| 019 Computer Facilities; Computer Service                       | 060 Libraries; Museums; Galleries                                   | 104 Storm Water Handling & Facilities                  |
| 020 Conservation and Resource Management                        | 061 Lighting (Interiors; Display; Theatre, Etc.)                    | 105 Telephone Systems (Rural; Mobile; Intercom, Etc.)  |
| 021 Construction Management                                     | 062 Lighting (Exteriors; Streets; Memorials; Athletic Fields, Etc.) | 106 Testing & Inspection Services                      |
| 022 Corrosion Control; Cathodic Protection; Electrolysis        | 063 Materials Handling Systems; Conveyors; Sorters                  | 107 Traffic & Transportation Engineering               |
| 023 Cost Estimating                                             | 064 Metallurgy                                                      | 108 Towers (Self-Supporting & Guyed Systems)           |
| 024 Dams (Concrete; Arch)                                       | 065 Microclimatology; Tropical Engineering                          | 109 Tunnels & Subways                                  |
| 025 Dams (Earth; Rock); Dikes; Levees                           | 066 Military Design Standards                                       | 110 Urban Renewals; Community Development              |
| 026 Desalination (Process & Facilities)                         | 067 Mining & Mineralogy                                             | 111 Utilities (Gas & Steam)                            |
| 027 Dining Halls; Clubs; Restaurants                            | 068 Missile Facilities (Silos; Fuels; Transport)                    | 112 Value Analysis; Life-Cycle Costing                 |
| 028 Ecological & Archeological Investigations                   | 069 Modular Systems Design; Pre-Fabricated Structures or Components | 113 Warehouses & Depots                                |
| 029 Educational Facilities; Classrooms                          | 070 Naval Architecture; Off-Shore Platforms                         | 114 Water Resources; Hydrology; Ground Water           |
| 030 Electronics                                                 | 071 Nuclear Facilities; Nuclear Shielding                           | 115 Water Supply; Treatment and Distribution           |
| 031 Elevators; Escalators; People-Movers                        | 072 Office Buildings; Industrial Parks                              | 116 Wind Tunnels; Research/Testing Facilities Design   |
| 032 Energy Conservation; New Energy Sources                     | 073 Oceanographic Engineering                                       | 117 Zoning; Land Use Studies                           |
| 033 Environmental Impact Studies, Assessments or Statements     | 074 Ordnance; Munitions; Special Weapons                            | 201                                                    |
| 034 Fallout Shelters; Blast-Resistant Design                    | 075 Petroleum Exploration; Refining                                 | 202                                                    |
| 035 Field Houses; Gyms; Stadiums                                | 076 Petroleum and Fuel (Storage and Distribution)                   | 203                                                    |
| 036 Fire Protection                                             | 077 Pipelines (Cross-Country - Liquid & Gas)                        | 204                                                    |
| 037 Fisheries; Fish Ladders                                     | 078 Planning (Community, Regional, Area-wide and State)             | 205                                                    |
| 038 Forestry & Forest Products                                  | 079 Planning (Site, Installation, and Project)                      |                                                        |
| 039 Garages; Vehicle Maintenance Facilities; Parking Decks      | 080 Plumbing & Piping Design                                        |                                                        |
| 040 Gas Systems (Propane; Natural, Etc.)                        | 081 Pneumatic Structures, Air-Support Buildings                     |                                                        |
| 041 Graphic Design                                              | 082 Postal Facilities                                               |                                                        |
|                                                                 | 083 Power Generation, Transmission, Distribution                    |                                                        |
|                                                                 | 084 Prisons & Correctional Facilities                               |                                                        |
|                                                                 | 085 Product, Machine & Equipment Design                             |                                                        |

|                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |
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| <b>STANDARD FORM (SF) 254</b><br>Architect-Engineer and Related Services Questionnaire                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                             | 1. Firm Name/Business Address: _____<br><br>2. Year Present Firm Established _____<br><br>3. Date Prepared: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |
| 4. Specify type of ownership and check below, if applicable.<br><input type="checkbox"/> A. Small Business<br><input type="checkbox"/> B. Small Disadvantaged Business<br><input type="checkbox"/> C. Woman-owned Business |                                                                                                                                                                                                                                                                                                                                                                             | 5a. Former Parent Company Name(s), if any, and Year(s) Established: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |
| 5. Name of Parent Company, if any: _____<br>1a. Submittal is for <input type="checkbox"/> Parent Company <input type="checkbox"/> Branch or Subsidiary Office                                                              |                                                                                                                                                                                                                                                                                                                                                                             | 6. Names of not more than Two Principals to Contact: Title/Telephone<br>1) _____<br>2) _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |
| 7. Present Offices: City / State / Telephone / No. Personnel Each Office<br>_____<br>7a. Total Personnel _____                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                             | 8. Personnel by Discipline: (List each person only once, by primary function.)<br><table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;">           — Administrative<br/>           — Architects<br/>           — Chemical Engineers<br/>           — Civil Engineers<br/>           — Construction Inspectors<br/>           — Draftsmen<br/>           — Ecologists<br/>           — Economists         </td> <td style="width: 50%; vertical-align: top;">           — Electrical Engineers<br/>           — Estimators<br/>           — Geologists<br/>           — Hydrologists<br/>           — Interior Designers<br/>           — Landscape Architects<br/>           — Mechanical Engineers<br/>           — Mining Engineers<br/>           — Oceanographers<br/>           — Planners: Urban/Regional<br/>           — Sanitary Engineers<br/>           — Soils Engineers<br/>           — Specification Writers<br/>           — Structural Engineers<br/>           — Surveyors<br/>           — Transportation Engineers         </td> </tr> </table> |          | — Administrative<br>— Architects<br>— Chemical Engineers<br>— Civil Engineers<br>— Construction Inspectors<br>— Draftsmen<br>— Ecologists<br>— Economists | — Electrical Engineers<br>— Estimators<br>— Geologists<br>— Hydrologists<br>— Interior Designers<br>— Landscape Architects<br>— Mechanical Engineers<br>— Mining Engineers<br>— Oceanographers<br>— Planners: Urban/Regional<br>— Sanitary Engineers<br>— Soils Engineers<br>— Specification Writers<br>— Structural Engineers<br>— Surveyors<br>— Transportation Engineers |          |          |
| — Administrative<br>— Architects<br>— Chemical Engineers<br>— Civil Engineers<br>— Construction Inspectors<br>— Draftsmen<br>— Ecologists<br>— Economists                                                                  | — Electrical Engineers<br>— Estimators<br>— Geologists<br>— Hydrologists<br>— Interior Designers<br>— Landscape Architects<br>— Mechanical Engineers<br>— Mining Engineers<br>— Oceanographers<br>— Planners: Urban/Regional<br>— Sanitary Engineers<br>— Soils Engineers<br>— Specification Writers<br>— Structural Engineers<br>— Surveyors<br>— Transportation Engineers |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |
| 9. Summary of Professional Services Fees Received: (Insert index number)<br>Direct Federal contract work, including overseas _____<br>All other domestic work _____<br>All other foreign work* _____                       |                                                                                                                                                                                                                                                                                                                                                                             | Last 5 Years (most recent year first)<br><table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">19 _____</td> <td style="width: 25%;">19 _____</td> <td style="width: 25%;">19 _____</td> <td style="width: 25%;">19 _____</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | 19 _____                                                                                                                                                  | 19 _____                                                                                                                                                                                                                                                                                                                                                                    | 19 _____ | 19 _____ |
| 19 _____                                                                                                                                                                                                                   | 19 _____                                                                                                                                                                                                                                                                                                                                                                    | 19 _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 19 _____ |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |
| *Firms interested in foreign work, but without such experience, check here: <input type="checkbox"/>                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                             | Ranges of Professional Services Fees INDEX<br>1. Less than \$100,000<br>2. \$100,000 to \$250,000<br>3. \$250,000 to \$500,000<br>4. \$500,000 to \$1 million<br>5. \$1 million to \$2 million<br>6. \$2 million to \$5 million<br>7. \$5 million to \$10 million<br>8. \$10 million or greater                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |          |          |







# STANDARD FORM (SF) 255 Architect-Engineer and Related Services Questionnaire for Specific Project

Form Approved  
OMB No. 9000-0005  
Expires 7-31-94

Public reporting burden for this collection of information is estimated to average 1.2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition and Regulatory Policy, GSA, Washington, D.C. 20405; and to the Office of Management and Budget, Paperwork Reduction Project (9000-0005), Washington, D.C. 20503.

## Purpose:

This form is a supplement to the "Architect-Engineer and Related Services Questionnaire" (SF 254). Its purpose is to provide additional information regarding the qualifications of interested firms to undertake a specific Federal A-E project. Firms, or branch offices of firms, submitting this form should enclose (or already have on file with the appropriate office of the agency) a current (within the past year) and accurate copy of the SF 254 for that office.

The procurement official responsible for each proposed project may request submission of the SF 255 "Architect-Engineer and Related Services Questionnaire for Specific Project" in accord with applicable civilian and military procurement regulations and shall evaluate such submissions, as well as related information contained on the Standard Form 254, and any other performance data on file with the agency, and shall select firms for subsequent discussions leading to contract award in conformance with Public Law 92-582. This form should only be filed by an architect-engineer or related services firm when requested to do so by the agency or by a public announcement. Responses should be as complete and accurate as possible, contain data relative to the specific project for which you wish to be considered, and should be provided, by the required due date, to the office specified in the request or public announcement.

This form will be used only for the specified project. Do not refer to this submittal in response to other requests or public announcements.

## Definitions:

"Architect-Engineer Services" are defined in Part 36 of the Federal Acquisition Regulation.

"Principals" are those individuals in a firm who possess legal responsibility for its management. They may be owners, partners, corporate officers, associates, administrators, etc.

"Discipline," as used in this questionnaire, refers to the primary technological capability of individuals in the responding firm. Possession of an academic degree, professional registration, certification, or extensive experience in a particular field of practice normally reflects an individual's primary technical discipline.

"Joint Venture" is a collaborative undertaking by two or more firms or individuals for which the participants are both jointly and individually responsible.

"Key Persons, Specialists, and Individual Consultants," as used in this questionnaire, refer to individuals who will have major project responsibility or will provide unusual or unique capabilities for the project under consideration.

## Instructions for Filing (Numbers below correspond to numbers contained in form):

1. Give name and location of the project for which this form is being submitted.

2. Provide appropriate data from the *Commerce Business Daily* (CBD) identifying the particular project for which this form is being filed.

2a. Give the date of the *Commerce Business Daily* in which the project announcement appeared, or indicate "not applicable" (N/A) if the source of the announcement is other than the CBD.

2b. Indicate Agency identification or contract number as provided in the CBD announcement.

3. Show name and address of the individual or firm (or joint venture) which is submitting this form for the project.

3a. List the name, title, and telephone number of that principal who will serve as the point of contact. Such an individual must be empowered to speak for the firm on policy and contractual matters and should be familiar with the programs and procedures of the agency to which this form is directed.

3b. Give the address of the specific office which will have responsibility for performing the announced work.

4. Insert the number of consultant personnel by discipline proposed for subject project on line (A). Insert the number of in-house personnel by discipline proposed for subject project on line (B). While some personnel may be qualified in several disciplines, each person should be counted only once in accord with his or her primary function. Include clerical personnel as "administrative." Write in any additional disciplines -- sociologists, biologists, etc. -- and number of people in each, in blank spaces.

5. Answer only if this form is being submitted by a joint venture of two or more collaborating firms. Show the names and addresses of all individuals or organizations expected to be included as part of the joint venture and describe their particular areas of anticipated responsibility (i.e., technical disciplines, administration, financial, sociological, environmental, etc.).

5a. Indicate, by checking the appropriate box, whether this particular joint venture has worked together on other projects.

Each firm participating in the joint venture should have a Standard Form 254 on file with the contracting office receiving this form. Firms which do not have such forms on file should provide same immediately along with a notation at the top of page 1 of the form regarding their association with this joint venture submittal.

**STANDARD  
FORM (SF)  
255**

**Architect-Engineer  
and Related Services  
Questionnaire for  
Specific Project**

Standard Form 255  
General Services Administration  
Washington, D.C. 20405

6. If respondent is not a joint venture, but intends to use outside (as opposed to in-house or permanently and formally affiliated) consultants or associates, he should provide names and addresses of all such individuals or firms, as well as their particular areas of technical/professional expertise, as it relates to this project. Existence of previous working relationships should be noted. If more than eight outside consultants or associates are anticipated, attach an additional sheet containing requested information.

7. Regardless of whether respondent is a joint venture or an independent firm, provide brief resumes of key personnel expected to participate on this project. Care should be taken to limit resumes to only those personnel and specialists who will have major project responsibilities. Each resume must include: (a) name of each key person and specialist and his or her title, (b) the project assignment or role which that person will be expected to fulfill in connection with this project, (c) the name of the firm or organization, if any, with whom that individual is presently associated, (d) years of relevant experience with present firm and other firms, (e) the highest academic degree achieved and the discipline covered (if more than one highest degree, such as two Ph.D.'s, list both), the year received and the particular technical/professional discipline which that individual will bring to the project, (f) if registered as an architect, engineer, surveyor, etc., show only the field of registration and the year that such registration was first acquired. If registered in several states, do not list states, and (g) a synopsis of experience, training, or other qualities which reflect individual's potential contribution to this project. Include such data as: familiarity with Government or agency procedures, similar type of work performed in the past, management abilities, familiarity with the geographic area, relevant foreign language capabilities, etc. Please limit synopsis of experience to directly relevant information.

8. List up to ten projects which demonstrate the firm's or joint venture's competence to perform work similar to that likely to be required on this project. The more recent such projects, the better. Prime consideration will be given to projects which illustrate respondent's capability for performing work similar to that being sought. Required information must include: (a) name and location of project, (b) brief description of type and extent of services provided for each project (submissions by joint ventures should indicate which member of the joint venture was the prime on that particular project and what role it played), (c) name and address of the owner of that project (if Government agency, indicate responsible office), and name and phone number of individual to contact for reference (preferably the project manager), (d) completion date (actual when available, otherwise estimated), (e) total construction cost of completed project (or where no construction was involved, the approximate cost of your work) and that portion of the cost of the project for which the named firm was/is responsible.

9. List only those projects which the A-E firm or joint venture, or members of the joint venture, are currently performing under direct contract with an agency or department of the Federal Government. Exclude any grant or loan projects being financed by the Federal Government but being performed under contract to other non-Federal Governmental entities. Information provided under each heading is similar to that requested in the preceding item 8, except for (d) "Percent Complete." Indicate in this item the percentage of A-E work completed upon filing this form.

10. Through narrative discussion, show reason why the firm or joint venture submitting this questionnaire believes it is especially qualified to undertake the project. Information provided should include, but not be limited to, such data as: specialized equipment available for this work, any awards or recognition received by a firm or individuals for similar work, required security clearances, special approaches or concepts developed by the firm relevant to this project, etc. Respondents may say anything they wish in support of their qualifications. When appropriate, respondents may supplement this proposal with graphic material and photographs which best demonstrate design capabilities of the team proposed for this project.

11. Completed forms should be signed by the chief executive officer of the joint venture (thereby attesting to the concurrence and commitment of all members of the joint venture), or by the architect-engineer principal responsible for the conduct of the work in the event it is awarded to the organization submitting this form. Joint ventures selected for subsequent discussions regarding this project must make available a statement of participation signed by a principal of each member of the joint venture. **ALL INFORMATION CONTAINED IN THE FORM SHOULD BE CURRENT AND FACTUAL.**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    |                                                                 |                                              |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------|------------------------|---------|--------------------|--------------------|----------------------------------|---------|----------------------------|--------------------|----------------------------|---------|-------------------------|----------------------|-------------------------|---------|---------------------------------|----------------------------|-------------------------------|---------|-------------------|------------------------------|------------------------------|---------|--------------------|------------------------------|-------------------|---------|--------------------|--------------------------|----------------------------------|---------|--|--|--|-----------------|--------------------------------------------------------------------------------|--|
| <b>STANDARD<br/>FORM (SF)<br/>255</b><br><br>Architect-Engineer<br>and Related Services<br>Questionnaire for<br>Specific Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1. Project Name/Location for which Firm is Filing: | 2a. Commerce Business<br>Daily Announcement<br>Date, if any:    | 2b. Agency Identification<br>Number, if any: |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| 3. Firm (or Joint-Venture) Name & Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                    | 3a. Name, Title & Telephone Number of Principal to Contact      |                                              |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| 4. Personnel by Discipline: (List each person only once, by primary function.)<br>and In-house personnel on line (B).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                    | 3b. Address of office to perform work, if different from item 3 |                                              |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| <table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">(A) (B) Administrative</td> <td style="width: 25%;">(A) (B) Electrical Engineers</td> <td style="width: 25%;">(A) (B) Oceanographers</td> <td style="width: 25%;">(A) (B)</td> </tr> <tr> <td>(A) (B) Architects</td> <td>(A) (B) Estimators</td> <td>(A) (B) Planners: Urban/Regional</td> <td>(A) (B)</td> </tr> <tr> <td>(A) (B) Chemical Engineers</td> <td>(A) (B) Geologists</td> <td>(A) (B) Sanitary Engineers</td> <td>(A) (B)</td> </tr> <tr> <td>(A) (B) Civil Engineers</td> <td>(A) (B) Hydrologists</td> <td>(A) (B) Soils Engineers</td> <td>(A) (B)</td> </tr> <tr> <td>(A) (B) Construction Inspectors</td> <td>(A) (B) Interior Designers</td> <td>(A) (B) Specification Writers</td> <td>(A) (B)</td> </tr> <tr> <td>(A) (B) Draftsmen</td> <td>(A) (B) Landscape Architects</td> <td>(A) (B) Structural Engineers</td> <td>(A) (B)</td> </tr> <tr> <td>(A) (B) Ecologists</td> <td>(A) (B) Mechanical Engineers</td> <td>(A) (B) Surveyors</td> <td>(A) (B)</td> </tr> <tr> <td>(A) (B) Economists</td> <td>(A) (B) Mining Engineers</td> <td>(A) (B) Transportation Engineers</td> <td>(A) (B)</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">Total Personnel</td> </tr> </table> |                                                    | (A) (B) Administrative                                          | (A) (B) Electrical Engineers                 | (A) (B) Oceanographers | (A) (B) | (A) (B) Architects | (A) (B) Estimators | (A) (B) Planners: Urban/Regional | (A) (B) | (A) (B) Chemical Engineers | (A) (B) Geologists | (A) (B) Sanitary Engineers | (A) (B) | (A) (B) Civil Engineers | (A) (B) Hydrologists | (A) (B) Soils Engineers | (A) (B) | (A) (B) Construction Inspectors | (A) (B) Interior Designers | (A) (B) Specification Writers | (A) (B) | (A) (B) Draftsmen | (A) (B) Landscape Architects | (A) (B) Structural Engineers | (A) (B) | (A) (B) Ecologists | (A) (B) Mechanical Engineers | (A) (B) Surveyors | (A) (B) | (A) (B) Economists | (A) (B) Mining Engineers | (A) (B) Transportation Engineers | (A) (B) |  |  |  | Total Personnel | Enter proposed consultant personnel to be utilized on this project on line (A) |  |
| (A) (B) Administrative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | (A) (B) Electrical Engineers                       | (A) (B) Oceanographers                                          | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Architects                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (A) (B) Estimators                                 | (A) (B) Planners: Urban/Regional                                | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Chemical Engineers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (A) (B) Geologists                                 | (A) (B) Sanitary Engineers                                      | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Civil Engineers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (A) (B) Hydrologists                               | (A) (B) Soils Engineers                                         | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Construction Inspectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (A) (B) Interior Designers                         | (A) (B) Specification Writers                                   | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Draftsmen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (A) (B) Landscape Architects                       | (A) (B) Structural Engineers                                    | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Ecologists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (A) (B) Mechanical Engineers                       | (A) (B) Surveyors                                               | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| (A) (B) Economists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (A) (B) Mining Engineers                           | (A) (B) Transportation Engineers                                | (A) (B)                                      |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    |                                                                 | Total Personnel                              |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| 5. If submittal is by JOINT-VENTURE list participating firms and outline specific areas of responsibility (including administrative, technical and financial) for each firm: (Attach SF 254 for each if not on file with Procuring Office.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                    |                                                                 |                                              |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |
| 5a. Has this Joint-Venture previously worked together? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    |                                                                 |                                              |                        |         |                    |                    |                                  |         |                            |                    |                            |         |                         |                      |                         |         |                                 |                            |                               |         |                   |                              |                              |         |                    |                              |                   |         |                    |                          |                                  |         |  |  |  |                 |                                                                                |  |

6. If respondent is not a joint-venture, list outside key Consultants/Associates anticipated for this project (Attach SF 254 for Consultants/Associates listed, if not already on file with the Contracting Office).

| Name & Address | Specialty | Worked with<br>Prime before<br>(Yes or No) |
|----------------|-----------|--------------------------------------------|
| 1)             |           |                                            |
| 2)             |           |                                            |
| 3)             |           |                                            |
| 4)             |           |                                            |
| 5)             |           |                                            |
| 6)             |           |                                            |
| 7)             |           |                                            |
| 8)             |           |                                            |

|                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------|--|
| 7. Brief resume of key persons, specialists, and individual consultants anticipated for this project. |  |
| a. Name & Title:                                                                                      |  |
| b. Project Assignment:                                                                                |  |
| c. Name of Firm with which associated:                                                                |  |
| d. Years experience: With This Firm..... With Other Firms.....                                        |  |
| e. Education: Degree(s)/Year/Specialization                                                           |  |
| f. Active Registration: Year First Registered/Discipline                                              |  |
| g. Other Experience and Qualifications relevant to the proposed project:                              |  |

|                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------|--|
| 7. Brief resume of key persons, specialists, and individual consultants anticipated for this project. |  |
| a. Name & Title:                                                                                      |  |
| b. Project Assignment:                                                                                |  |
| c. Name of Firm with which associated:                                                                |  |
| d. Years experience: With This Firm..... With Other Firms.....                                        |  |
| e. Education: Degree(s)/Year/Specialization                                                           |  |
| f. Active Registration: Year First Registered/Discipline                                              |  |
| g. Other Experience and Qualifications relevant to the proposed project:                              |  |

|                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------|--|
| 7. Brief resume of key persons, specialists, and individual consultants anticipated for this project. |  |
| a. Name & Title:                                                                                      |  |
| b. Project Assignment:                                                                                |  |
| c. Name of Firm with which associated:                                                                |  |
| d. Years experience: With This Firm..... With Other Firms.....                                        |  |
| e. Education: Degree(s)/Year/Specialization                                                           |  |
| f. Active Registration: Year First Registered/Discipline                                              |  |
| g. Other Experience and Qualifications relevant to the proposed project:                              |  |

|                                                                                                       |                                                                          |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 7. Brief resume of key persons, specialists, and individual consultants anticipated for this project. |                                                                          |
| a. Name & Title:                                                                                      | a. Name & Title:                                                         |
| b. Project Assignment:                                                                                | b. Project Assignment:                                                   |
| c. Name of Firm with which associated:                                                                | c. Name of Firm with which associated:                                   |
| d. Years experience: With This Firm..... With Other Firms.....                                        | d. Years experience: With This Firm..... With Other Firms.....           |
| e. Education: Degree(s)/Year/Specialization                                                           | e. Education: Degree(s)/Year/Specialization                              |
| f. Active Registration: Year First Registered/Discipline                                              | f. Active Registration: Year First Registered/Discipline                 |
| g. Other Experience and Qualifications relevant to the proposed project:                              | g. Other Experience and Qualifications relevant to the proposed project: |

| 8. Work by firms or joint-venture members which best illustrates current qualifications relevant to this project (list not more than 10 projects). |                                    |                                                                             |                                          |                                  |                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------|------------------------------------------|----------------------------------|----------------------------------------|
| a. Project Name & Location                                                                                                                         | b. Nature of Firm's Responsibility | c. Project Owner's Name & Address and Project Manager's Name & Phone Number | d. Completion Date (actual or estimated) | e. Estimated Cost (In Thousands) |                                        |
|                                                                                                                                                    |                                    |                                                                             |                                          | Entire Project                   | Work For Which Firm Was/Is Responsible |
| (1)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (2)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (3)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (4)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (5)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (6)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (7)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (8)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (9)                                                                                                                                                |                                    |                                                                             |                                          |                                  |                                        |
| (10)                                                                                                                                               |                                    |                                                                             |                                          |                                  |                                        |

| 9. All work by firms or joint-venture members currently being performed directly for Federal agencies. |                                    |                                                                                           |                     |                                                      |
|--------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------|
| a. Project Name & Location                                                                             | b. Nature of Firm's Responsibility | c. Agency (Responsible Office) Name and Address and Project Manager's Name & Phone Number | d. Percent Complete | e. Estimated Cost (in Thousands)                     |
|                                                                                                        |                                    |                                                                                           |                     | Entire Project<br>Work For Which Firm Is Responsible |
|                                                                                                        |                                    |                                                                                           |                     |                                                      |

10. Use this space to provide any additional information or description of resources (including any computer design capabilities) supporting your firm's qualifications for the proposed project.

11. The foregoing is a statement of facts.

Date:

Signature: \_\_\_\_\_ Typed Name and Title: \_\_\_\_\_

STANDARD FORM 255 PAGE 11 (REV. 11-92)

**DEPARTMENT OF DEFENSE****GENERAL SERVICES  
ADMINISTRATION****NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION****48 CFR Parts 15, 19, 31, 33 and 52**

[Federal Acquisition Circular 90-16; Item XXIV]

**Federal Acquisition Regulation;  
Technical Corrections**

**AGENCIES:** Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

**ACTION:** Technical corrections.

**SUMMARY:** The following technical corrections have been made to FAR parts 15, 19, 31, 33, and 52 to correct references and terms.

**DATES:** *Effective Date:* December 21, 1992.

**FOR FURTHER INFORMATION CONTACT:** The FAR Secretariat, room 4041, GS Building, Washington, DC 20405, (202) 501-4755. Please cite FAC 90-16; Technical Corrections.

Dated: December 9, 1992.

**Albert A. Vicchiolla,**  
*Director, Office of Federal Acquisition Policy.*

Therefore, 48 CFR parts 15, 19, 31, 33, and 52 is amended as set forth in the technical corrections appearing below:

1. The authority citation for 48 CFR parts 15, 19, 31, 33, and 52 continues to read as follows:

**Authority:** 40 U.S.C. 486(c); 10 U.S.C. chapter 137; and 42 U.S.C. 2473(c).

**PART 15—CONTRACTING BY  
NEGOTIATION****15.804-4 [Amended]**

2. Section 15.804-4 is amended in the "Certificate of Current Cost or Pricing Data" following paragraph (a) by adding below the word "Firm", "Signature

**PART 19—SMALL BUSINESS AND  
SMALL DISADVANTAGED BUSINESS  
CONCERNS****19.102 [Technical amendment]**

3a. Section 19.102 is amended in the table consisting of the industry size standards in Major Group 37 by removing the size standard "500" for "Motor Vehicle Parts and Accessories" and inserting "750" in its place; and in Major Group 55 by removing the size standard "\$11.5" for "Motor Vehicle Dealers (New and Used)" and inserting "\$17.0".

3b. In addition to the amendments set forth above, section 19.102 is also amended in footnote number 5 in the "Footnotes" section following the Industry Size Standard Tables by removing the amount "50,000" and inserting "75,000" every time it appears.

**PART 31—CONTRACT COST  
PRINCIPLES AND PROCEDURES****31.205-33 [Technical amendment]**

4. Section 31.205-33 is amended in paragraph (f) by removing the reference "31.205-38(g)" and inserting "31.205-38(f)" in its place.

**PART 33—PROTESTS, DISPUTES,  
AND APPEALS****33.215 [Technical amendment]**

5. Section 33.215 is amended by adding "(b)" at the end of the reference "33.203".

**PART 52—SOLICITATION PROVISIONS  
AND CONTRACT CLAUSES****52.301 [Amendment]**

6. Sections 52.301 is amended in the Matrix table at sections 52.214-34 and 52.214-35 by removing from the IBR column the words "No" and inserting "Yes" in their place.

[FR Doc. 92-30584 Filed 12-18-92; 8:45 am]

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**Monday  
December 21, 1992**

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**Part III**

**Architectural and  
Transportation  
Barriers Compliance  
Board**

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**36 CFR Part 1191**

**Americans With Disabilities Act  
Accessibility Guidelines; State and Local  
Government Facilities; Proposed  
Rulemaking**

# 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: Notice of proposed rulemaking.

**SUMMARY:** The Architectural and Transportation Barriers Compliance Board is issuing proposed guidelines to provide additional guidance to the Department of Justice 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 and design, and communication. The standards established by the Department of Justice must be consistent with and may incorporate the guidelines.

**DATES:** Comments should be received by March 22, 1993. Comments received after this date will be considered to the extent practicable. Where possible, the comments should reference specific sections in the proposed guidelines. The Board will hold public hearings on the proposed guidelines on the dates and times listed under **SUPPLEMENTARY INFORMATION** below.

**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. 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. The Board will hold public hearings on the proposed guidelines at the locations listed under **SUPPLEMENTARY INFORMATION** below.

**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 (Voice) or (202) 272-5449 (TDD). 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:

##### Public Hearings

To ensure broad public input into the rulemaking, the Board has scheduled five hearings around the country to hear from all those affected by the proposed guidelines. The hearings will be held on the following dates and times at the locations listed below:

February 22, 1993—Charlotte, North Carolina, 1 p.m. to 5 p.m., Marriott City Center, 100 West Trade Street.

February 22, 1993—Denver, Colorado, 1 p.m. to 5 p.m., Westin Hotel, Taber Center, 1672 Lawrence Street.

March 2, 1993—St. Louis, Missouri, 1 p.m. to 5 p.m., Marriott Pavilion Hotel, One Broadway.

March 9, 1993—Washington, DC, 1 p.m. to 5 p.m., Sheraton City Center, 1143 New Hampshire Avenue.

March 15, 1993—San Francisco, California, 1 p.m. to 5 p.m., San Francisco Hilton on Hilton Square, One Hilton Square.

Persons who wish to present oral comments on the proposed guidelines may register at the hearing location beginning one hour before the start of the hearings. Persons will be heard in the order in which they register. Oral comments should be concise and limited to five (5) minutes. A written copy of the comments should be submitted for the official record. If more people register to present comments than can be heard in the time scheduled for the hearing, the Board reserves the right to select among those persons who register to ensure that the various interested parties are given an opportunity to speak. The Board is particularly interested in receiving comments on the specific questions identified in the preamble to the proposed guidelines.

All hearing sites are accessible to individuals with disabilities. Sign language interpreters and assistive listening systems will be available for individuals with hearing impairments.

##### 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 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 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).<sup>1</sup>

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 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)<sup>2</sup> (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.<sup>3</sup> See 28 CFR 35.151.

When the Board published its notice of proposed rulemaking (NPRM) for ADAAG, State and local governments were informed that the guidelines would, at a later date, apply to State and

local government facilities and were encouraged to comment on how the proposed ADAAG would affect those facilities. See 56 FR 2299 (January 26, 1991). Additionally, a number of the questions in the NPRM were directed at issues particularly affecting State and local government facilities. In all, the Board received over 12,000 pages of comments and testimony on the proposed ADAAG from a broad range of interested individuals and groups, as well as from representatives of State and local governments. Comments received pertaining to State and local government facilities are discussed under General Issues below and in Section by Section Analysis.

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 NPRM. 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 that when this rulemaking is completed, it will initiate action to adopt ADAAG as supplemented for State and local government facilities 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. Federal agencies, and other interested persons, are encouraged to comment on this NPRM 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.

Since the Board issued ADAAG in July 1991, additional comments have been received on allowing the use of incised letters on certain signs. This NPRM asks several questions on this issue in order to assist the Board in developing appropriate requirements for State and local government facilities. The Board will also use the information that it receives during this rulemaking to guide it in determining whether to amend other provisions of ADAAG. Therefore the Board strongly encourages individuals and entities concerned about allowing the use of incised letters on certain signs to submit detailed comments to the questions in this NPRM relating to this issue.

## General Issues

### Alterations

Where substantial alterations occur to a building or facility, UFAS 4.1.6(3) establishes additional requirements for an accessible route, an accessible entrance, and accessible toilet facilities when the total cost of all alterations within any twelve month period amounts to 50 percent or more of the full and fair cash value of the building. ADAAG 4.1.6(2) provides that where alterations affect or could affect usability of or access to an area of a facility 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. The Department of Justice's title III regulations provide that alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alterations when the cost exceeds 20 percent of the cost of the alterations to the primary function area. See 28 CFR 36.403(f). The Department of Transportation regulations contain a similar requirement for publicly operated transit facilities. See 49 CFR 37.43.

<sup>1</sup> 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.

<sup>2</sup> 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).

<sup>3</sup> 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 3,000 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 situation used for specified public transportation or an airport terminal. See 28 CFR 36.401(d) and 36.404.

In the NPRM for ADAAG, the Board sought comment on whether the UFAS substantial alterations provision or the ADAAG primary function area provision should be applied to alterations in State and local government facilities. (See 56 FR 2319, January 22, 1991.) The overwhelming majority of comments received in response to this question supported the application of ADAAG 4.1.6(2) to buildings and facilities owned or operated by State and local governments. A few commenters stated that 100 percent accessibility should be the standard without regard to cost. In light of the response received to the question concerning alterations requirements and to make the standards consistent, the Board believes that the primary function area provision of ADAAG 4.1.6(2) should apply to facilities owned or operated by State and local governments and not the substantial alterations provision of UFAS 4.1.3(3).

#### *Exempt Spaces and Structures*

ADAAG 4.1.1(5) contains certain exceptions from the requirements for accessibility.

ADAAG 4.1.1(5)(a) provides an exception in new construction based on structural impracticability. Structural impracticability pertains to those rare circumstances when unique characteristics of terrain prevent the incorporation of accessibility features.

ADAAG 4.1.1(5)(b) excepts certain spaces that by their nature and use are not required to be accessible. This exception was provided in response to a question in the initial rulemaking which asked whether there were specific types of spaces which should be exempted from the guidelines. The exception includes: (1) Observation galleries used primarily for security purposes and (2) non-occupiable spaces that are accessed only by ladders, catwalks, crawl spaces, very narrow passageways, or freight (non-passenger) elevators; and frequented only by service personnel for repair purposes.

Exceptions under ADAAG 4.1.1(5) prevail over the other requirements of ADAAG, including those in ADAAG 4.1.1(3) pertaining to work areas. Thus, the requirement that work areas be designed and constructed so that individuals with disabilities can approach, enter and exit the areas, does not apply to an area that is exempt under ADAAG 4.1.1(5).

In addition to the spaces listed in ADAAG 4.1.1(5), some commenters recommended that structures such as air traffic control towers, fire towers, boat traffic and draw bridge towers, fixed life

guard stands, lock and dam control stations and toll booths be exempt from the guidelines. Those structures were not addressed in the initial rulemaking because they are generally owned and operated by State and local government entities and are not places of public accommodation or commercial facilities under title III of the ADA. However, as part of this rulemaking for State and local government facilities, the Board is considering adding an exception in ADAAG 4.1.1(5) for those structures where providing access might significantly alter the nature or design of the facility or greatly increase construction cost of the facility. For example, providing vertical access to fire towers might only be accomplished by substantially altering their design. Other structures such as fixed life guard stands, draw bridge towers, and toll booths may have similar constraints. Another example is air traffic control towers which require a 360 degree clear view that cannot be obstructed by an elevator shaft. All of the structures have certain features in common: (1) The nature of the work performed in the structures requires that they be elevated or accessed by tunnels and (2) they are used for fire or rescue assistance, traffic control, or toll collection.

**Question 1:** Despite these constraints, are there design solutions which would achieve accessibility in any of the following structures: Air traffic control towers, fire towers, boat traffic and draw bridge towers, lock and dam control stations, toll booths, and fixed life guard stands? Where possible, responses should include cost information for such design solutions and, where appropriate, address any health or safety concerns.

**Question 2:** Should any of the structures listed in Question 1 be exempt from the requirements for accessibility? Are there any other spaces or structures which should be exempt? Responses should include a rationale for exempting the space or structure. What is the cost impact of not providing an exception for the space or structure?

During the initial rulemaking, the Board asked whether certain areas of State and local government facilities should be exempt from the requirement for passenger elevators such as the second floor of a firehouse which contains sleeping accommodations but not office space. Some of the responses to this question recommended that the guidelines include an exemption from accessibility requirements based on the presumed physical abilities of the occupants. Specifically, commenters suggested that areas used only by "able-bodied" personnel should be exempt.

Many of these commenters recommended that such an exception be narrowly drawn and include examples, but they did not provide any specific guidance.

**Question 3:** Are there areas of State or local government facilities where an exemption from the requirement for a passenger elevator is justified based solely on the presumed physical abilities of the occupants? What would be the specific prerequisites for allowing such areas to be exempt? Commenters should give consideration to whether supervisory, maintenance or clerical personnel, visitors, or other persons doing business (e.g., sales representatives), who might have a disability, would need to have access to any of the areas recommended for the exemption. Commenters should also take into consideration if such areas would have a dual purpose which would require them to be accessible to persons with disabilities, (e.g., a conference room or classroom which is also used for public meetings) or whether the occupancy of such areas is likely to change over time.

UFAS allows a military exception from accessibility for "those portions of National Guard facilities which are designed and constructed primarily for use by able-bodied military personnel only." UFAS 4.1.4(2)(b). Commenters should note that the UFAS exception "does not apply to those portions of a building or facility which may be open to the public or which may be used by the public during the conduct of normal business or which may be used by physically handicapped persons employed or seeking employment at such building or facility." UFAS 4.1.4(2)(b). These portions of the building or facility must be accessible.

**Question 4:** Are there National Guard facilities which were built by or on behalf of a State government, or which are operated by State governments? Should ADAAG include a military exception, similar to the one in UFAS 4.1.4(2)(b), for National Guard facilities? Are there other facilities that are owned or operated by State or local governments where such a military exception should apply? If so, what are these areas and what would be the cost impact of not providing such an exception?

#### *Entrances*

##### *Principal or Primary 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 or primary entrance). State or local governments that receive Federal funds are required by section 504 of the Rehabilitation Act of 1973 to construct all new facilities in accordance with UFAS. UFAS 4.1.2(8) requires at least one principal entrance at each grade floor level to be accessible. UFAS defines a principal entrance as the main door through which most of the people enter.

Thirty State codes and the District of Columbia code require at least one principal or primary entrance to State buildings to be accessible. Many of these States have a specific definition of a principal or primary entrance. For example, the Texas Administrative Code states that: "Principal or Primary entrances—Are building and facility entrances that are recognized by the occupants and visitors as the main points of entry and exit and are used as such." (Texas Administrative Code title 16, section 68.112 (1992)). Therefore, as a result of the operation of both State law and section 504 of the Rehabilitation Act of 1973 as applied to recipients of Federal financial assistance, the majority of State buildings are already subject to the requirement that a principal or primary entrance be constructed in an accessible manner.

Architects and designers have historically recognized the principal entrance of a building as a focal point of its design. Thomas This-Evensen states in his book "Archetypes in Architecture" that:

The symbolic value of entering and of the entrance is revealed in both the rituals and behavior of most cultures. . . . By comparing the most diverse buildings throughout architectural history we find certain specific motifs which through constant recurrence accentuate the very action of entering. They appear with varying degrees of strength, alone or together, and are found in both monumental and folk architecture. (T. This-Evensen, "Archetypes in Architecture" at 283 (1987)).

Entrances have been visually reinforced by varying their size, shape or ornamentation. American architects have given particular attention to the principal entrances of public government buildings because these buildings represent important principles and values of the democratic system of government. The power behind this system resides in the people and not the leaders. One of the rights that comes

with this power is the right to have access to the government and the governmental process. This right of access is reflected in the way architects have designed public government buildings, specifically with respect to the principal entrances of those buildings.

Generally, entrances to public government buildings, particularly those with ceremonial uses, have been made larger and more ornate to draw attention to their importance, their significance and their difference from other buildings in the community. "A large door opening is both generous and public; generous because it lays bare the interior and extends toward the person entering and public because the opening seems calculated for the passage of large crowds or socially important people." (*Id.* at 291). In the case of American architecture, those "socially important people" are the American public. The ability to enter a public government building through the principal entrance carries the symbolic implication of access to the governmental process and may justify the application of a higher standard of accessibility to such buildings with respect to a principal or primary entrance.

In designing entrances to public government buildings, American architects have used various styles and motifs to enhance their importance. The use of monumental stairs to further enhance entrances in order to imply a greater level of importance has been common. Stairs, by their nature, exclude most persons with mobility impairments. However, accessibility and public architecture are not mutually exclusive. There are many good examples of civic architecture with grand entrances which are also accessible (e.g., the Harold Washington Library Center in Chicago, Illinois; the Pleasant Hill City Hall in Pleasant Hill, California). Requiring one principal entrance to be accessible will ensure that accessibility and good design of public buildings will coexist. Another factor to be taken into consideration is building security. Since the principal entrance is the one most used by the public, most of the security and information services of the building are focused there. If this entrance is also accessible, the job of maintaining security and providing information is easier.

**Question 5:** The Board is considering several options for requiring accessible entrances in legislative, judicial, and regulatory facilities which are owned or operated by State and local governments. These options include:

**Option 1:** Retaining the requirements in ADAAG 4.1.3(8) as written without additional requirements for principal or primary entrances;

**Option 2:** Specifying that at least one principal or primary entrance must be among those entrances required to be accessible by ADAAG 4.1.3(8);

**Option 3:** Requiring at least one principal or primary entrance to be accessible in addition to the number of entrances required to be accessible by ADAAG 4.1.3(8) (assuming that the entrances which are being made accessible under ADAAG 4.1.3(8) are not principal or primary entrances);

**Option 4:** Requiring 50 percent of the principal or primary entrances to be accessible and allowing those principal or primary entrances to be counted towards satisfying the requirements of ADAAG 4.1.3(8);

**Option 5:** Requiring 50 percent of principal or primary entrances to be accessible in addition to the number of entrances required to be accessible by ADAAG 4.1.3(8) (assuming that the entrances which are being made accessible under ADAAG 4.1.3(8) are not principal or primary entrances);

**Option 6:** Requiring all principal or primary entrances to be accessible and allowing those principal or primary entrances to be counted towards satisfying the requirements of ADAAG 4.1.3(8);

**Option 7:** Requiring all principal or primary entrances to be accessible in addition to the number of entrances required to be accessible under ADAAG 4.1.3(8), (assuming that the entrances which are being made accessible under ADAAG 4.1.3(8) are not principal or primary entrances); and

**Option 8:** Requiring that all entrances be accessible.

The Board seeks comments on each of these options. Commenters should state the preference and justification for a particular option and, where possible, should include information concerning the costs associated with such a requirement. Are there State and local government buildings, other than legislative, judicial, and regulatory, which should be included in this requirement? The Board also seeks information about how local codes (e.g., county and municipal) address the accessibility of entrances to local government buildings and facilities.

#### *Restricted and Secured Entrances*

In proposed ADAAG 11.5 (Judicial, Legislative and Regulatory Facilities) at least one restricted entrance and at least one secured entrance in judicial, legislative and regulatory facilities must be accessible. Proposed ADAAG 11.5

defines a restricted entrance as one used by judges, court personnel and other parties on a controlled basis. Secured entrances are used by detainees and detention officers. Additionally, under proposed ADAAG 11.5, 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 must be accessible.

In proposed ADAAG 12.2 (Detention and Correctional Facilities), at least one secured entrance in detention and correctional facilities must be accessible. A secured entrance is one which is used only by detainees, inmates and security personnel.

**Question 6:** These proposed requirements for restricted and secured entrances are in addition to ADAAG 4.1.3(8). The Board seeks comments on whether there may be other types of State and local government facilities which may also have restricted and secured entrances. If so, should the guidelines require that one or more of the restricted or secured entrances in those facilities be accessible? The Board also seeks information on the cost impact of the requirements for accessible restricted and secured entrances in proposed ADAAG 11.5 and 12.2 and of requirements for accessible restricted and secured entrances in other types of State and local government facilities.

#### *Distribution or Location of Accessible Entrances*

Some government buildings such as legislative and judicial facilities are very large and may occupy an entire city block. Although ADAAG 4.1.3(8)(i) requires at least 50 percent of entrances to be accessible and an accessible route to connect them with parking, transportation stops, and the public way or sidewalk on the site, accessible entrances may not always be the closest entrance to these elements.

**Question 7:** Should the guidelines include a distribution requirement for accessible entrances? If so, should such a provision require that an accessible entrance be located on each side of a building where entrances are provided? Such a requirement would help facilitate incorporating accessibility in any future development on the site. For example, a new government office building may be constructed adjacent to unimproved property. If the adjacent property is improved at a later date to include a new parking structure, or bus stop, a convenient accessible entrance would already be provided. Another option would be to require accessible entrances to be in close proximity to

certain areas such as elevators, information centers (e.g., building directories), accessible parking and passenger loading zones, transportation stops, public streets or sidewalks. Should a distribution requirement apply only to buildings above a certain size, and, if so, what criteria should be followed to identify the minimum size of a facility? Finally, should the distribution requirement apply only to certain types of buildings or facilities, such as judicial, legislative, regulatory, and detention and correctional facilities, or should it apply to all types of facilities owned or operated by State and local governments? What additional cost, if any, would be associated with such a requirement?

#### *Automatic Door Openers*

ADAAG does not specify a maximum opening force for exterior hinged doors. ANSI A117.1—1986 limits the opening force of such doors to 8.5 pounds-force (lbf). See ANSI A117.1 1986, section 4.13.11(2)(a). This maximum opening force was not included in ADAAG because of the many factors which affect the opening and closing force required at exterior doors (e.g., wind pressure, weight of door, heating and ventilation systems, and positive or negative pressure within a building). These factors can make it difficult for an individual with a disability to operate exterior doors. The Board, however, believes that a provision for an automatic or power operated door may resolve the difficulties created by these factors. An automatic or power operated door will also provide accessibility to persons who have difficulty in opening, or who cannot open, a door manually. There are currently many types of automatic and power operated doors available in a range of costs. The Board is currently sponsoring research aimed at obtaining data about automatic doors and accessibility issues. This research is intended to identify, among other things, (1) the need and appropriateness for automated doors in various building and facility types in new construction, alterations to existing facilities, and alterations to historic buildings; (2) the technical issues of opening force and maneuvering space related to automated doors; (3) the types of automated doors and operating controls; and (4) the advantages, disadvantages and costs associated with each automated door system. Although research is being conducted, the Board believes that the current body of information, including industry standards, is sufficient to establish a performance standard that enables independent operation by persons with disabilities. This would be

similar to the performance standard used in ADAAG 4.34.4 (Automated Teller Machines) which provides that instructions and information for use of automated teller machines shall be made accessible to and be independently usable by persons with vision impairments.

The Board may consider adding a provision to ADAAG which requires that an automatic or power operated door be located in at least one accessible entrance in all State and local government facilities.

**Question 8:** Should automatic or power operated doors be required at entrances to State and local government facilities? If so, should this provision be limited to specific types of State and local government facilities? What would be the justification for limiting the requirements to certain types of State and local government facilities? Information is also sought about alternative methods of providing accessibility at exterior doors (e.g., balanced doors, accessible revolving doors, etc.), including cost information about exterior door accessibility and cost data on heating and cooling loss related to automatic and power operated door timing requirements. The Board also requests comments on appropriate power operated door activating mechanisms (i.e., pressure and motion sensors versus manual activating mechanisms, such as push plates). If manual activating mechanisms are used with a power operated door, should that mechanism (button, push plate, or other method) be required to be a certain size? Should the mechanism be located at 42 inches (1065 mm) above the finished floor similar to the requirement for elevator call buttons in ADAAG 4.10.3? Since automatic and power operated doors must be operated manually during a power failure or malfunction, should they be required to meet ADAAG 4.13.6 (Maneuvering Clearances at Doors) or should they only be required to have a specific maximum opening force when they must be opened manually? What should this maximum opening force be?

#### *Building Signage*

The Department of Justice title II regulations require State and local governments to ensure that persons with visual impairments can obtain information about the existence and location of accessible services, activities and facilities. See 28 CFR 35.163(a). Such information is normally obtained through the use of building directories and other temporary signs. ADAAG 4.1.3.16 (Building Signage), however, exempts these types of signs from accessibility requirements. Building

directories usually cannot comply with ADAAG 4.30.4 (Raised and Brailled Characters and Pictorial Symbol Signs) because the minimum character height requirement would make the directories too large to be practical. Furthermore, ADAAG 4.30.6 (Mounting Height and Location) would require the information to be compressed into a small, specified area. One solution to this problem may be to provide alternative means of communication, such as a building directory with a telephone handset that connects to an information desk.

**Question 9:** Should the guidelines include provisions for tactile or audible directories, audible signs or other wayfinding devices for State and local government buildings in order to provide for the needs of persons with visual impairments? Should these requirements be restricted to specific State and local government building types? The Board seeks information about technologies that are currently available which would provide persons with visual impairments information about services, activities and facilities of State and local government buildings. Information is also sought about the cost, availability and reliability of such technologies.

#### *Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)*

ADAAG 4.30.4 (Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)) requires that letters and numerals shall be raised  $\frac{1}{32}$  inch, upper case, sans serif or simple serif type, and accompanied with Grade 2 Braille. This provision is based on ANSI A117.1-1986, section 4.28.4. ANSI A117.1-1980, section 4.28.4 originally provided that tactile letters on signs were permitted to be either raised or incised. In 1986, the ANSI provision was revised so that tactile letters were required to be raised and, in 1989, this revision was incorporated in the Board's Minimum Guidelines and Requirements for Accessible Design (MGRAD). See 36 CFR 1190.40.\*

Additionally, a Board sponsored research project report, "A Multidisciplinary Assessment of the State of the Art of Signage for Blind and

Low Vision Persons" (September 1985), concluded:

All tactile signage should use raised rather than incised (indented) characters. For example, for upper case Helvetica Medium type, incised characters produced average success rates from 10-18% lower than those of raised characters. In addition almost every subject had every strong negative comments regarding the use of incised signage. (at 47).

Copies of this research report are available from the National Technical Information System, Springfield, Virginia.

Section 504 of the ADA provides that the Board supplement the existing MGRAD for purposes of titles II and III of the ADA. The legislative history further explains: "In no event shall the minimum guidelines issued under this legislation reduce, weaken, narrow, or set less accessibility standards than those included in the existing MGRAD." H. Rept. 101-485, pt. 2, at 139. Consequently, the Board did not deviate from MGRAD by including a technical provision for incised letters in ADAAG 4.30.4 (Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)).

Following the adoption of ADAAG, the Board heard from representatives of the engraving industry regarding the requirement for raised letters in ADAAG 4.30.4 (Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)). The engraving industry representatives question the advisability of restricting tactile signs to raised letters and believe that incised letters can be designed so as to be readable by persons with vision impairments. Secondly, engraving industry representatives claim that not allowing incised letters has had a disproportionate impact on those companies that cannot convert to technologies which produce raised lettering.

**Question 10:** The Board is interested in consumers' experiences with both raised and incised letters on tactile signs. Specifically, is one type generally more readable than the other? Comments regarding individual preferences are welcome. If available, supporting data including research on success rates (readability) and factors influencing success is also requested.

Section 4.30.4 (Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)) of ANSI A117.1-1980 required that incised letters must be sans serif, a minimum of  $\frac{1}{32}$  inch incised, and have a stroke width of at least  $\frac{1}{4}$  inch. A minimum height of  $\frac{5}{16}$  inches is required only for raised letters.

**Question 11:** If incised tactile signs are permitted, is the ANSI A117.1-1980

specification sufficient to ensure readability? If not, what minimum specifications for depth of lettering, stroke width, height of characters and typeface is recommended for such signs? Commenters are asked to provide supporting data or research, where possible. The terms incised and indented have been used to describe this type of signage lettering. The Board seeks information on industry standards for these terms. Are they interchangeable or are they distinct from one another?

As discussed earlier, ADAAG 4.30.4 (Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)) does not permit incised letters on signs that are required to be tactile. ADAAG 4.1.2(7) and 4.1.3(16) require only those building signs that identify permanent rooms and spaces to be tactile. Informational and directional signs as well as temporary signs, including personal name plaques, building directories, menus, and company logos are not required to be tactile and these could use incised letters. Considering that not all signs must be tactile, the Board seeks information regarding the financial impact of the requirement for certain signs to have raised tactile lettering.

**Question 12:** What percentage of engraving businesses primarily manufacture building signage? Of these, how many have already acquired or have been unable to acquire technologies that enable them to produce raised tactile signs? What is the cost and availability of such technologies? What sort of training is required for businesses to convert to these technologies? The Board seeks information on the cost of producing and maintaining raised letter tactile signs as compared to producing and maintaining incised tactile signs.

The Department of Justice has issued a technical assistance letter stating that the only signs subject to the tactile sign requirements of ADAAG 4.1.3(16)(a) are men's and women's rooms (including locker rooms and dressing rooms if they contain men's or women's restrooms), room numbers, and exit signs. In light of this interpretation, the Board is considering including an additional requirement for tactile signs in State and local government facilities. Under consideration are signs which provide information about the function, or use of a room or space, such as "Courtroom", "Council Chambers", "Classroom", "Auditorium", "Accounting Department" and other identifying signs provided at the entrance to a room or space. If such a provision is added, such signs would be required to comply with

\* Also in 1989, the General Services Administration amended UFAS by deleting the words "indented" and "incised" where they appear in UFAS 4.30.4 which resulted in requiring tactile letters to be raised. See 41 CFR 101-19.8. This change was consistent with the ANSI A117.1-1986 provision. It should be noted that the other three standard setting agencies (the Department of Defense, the Department of Housing and Urban Development, and the U.S. Postal Service) did not make similar amendments with respect to section 4.30.4 of UFAS.

ADAAG 4.30.4 (Raised and Brailled Characters and Symbol Signs (Pictograms)), 4.30.5 (Finish and Contrast), and 4.30.6 (Mounting Location and Height).

**Question 13:** Should State and local government facilities be required to provide tactile signs when such signs provide information about the function or use of a room or space? If so, which informational signs should be included in 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. The Board is considering a requirement similar to this for State and local government facilities which also provide audible announcements to the public. For example, some courthouses use public address systems in calling cases to come before the court. Correctional facilities use public address systems to control prisoners and detainees.

**Question 14:** The Board seeks information on what other State and local government building types or facilities typically provide audible announcements to the public and what alternative means (such as visual paging systems, using video monitors, and computer technology) are available for providing this information to persons who are deaf or hearing-impaired. The Board is interested in cost data about such systems if available.

#### **Assistive Listening Systems**

ADAAG 4.1.3(19)(b) (Assembly Areas) 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 (1) accommodates at least 50 persons or has an audio-amplification system and (2) has fixed seating. Proposed ADAAG 11.9 would require that permanently installed assistive listening systems be provided in judicial, legislative and regulatory facilities based on the type of room in lieu of criteria in ADAAG 4.1.3(19)(b).

**Question 15:** Are there additional types of State and local government facilities where the scoping requirements for permanently installed assistive listening systems should be based on the facility or occupancy type in lieu of criteria in ADAAG 4.1.3(19)(b)?

Certain areas or spaces in State or local government facilities may need to be secure from electronic eavesdropping. Conference rooms, hearing rooms, and courtrooms are examples. Some assistive listening systems may be incompatible with electronic security.

**Question 16:** Are there areas or spaces in State or local government facilities which may require protection from electronic eavesdropping? What are the technical options for solving these security-related problems with respect to certain assistive listening systems? Is one type of system more secure than another? What are the costs involved in providing a secure assistive listening system? Is it appropriate to exempt such areas from the requirement of an assistive listening system?

#### **Assembly Areas**

During the initial rulemaking, the Board requested information on lines of sight at seating locations for persons who use wheelchairs. See 56 FR 2296 (January 22, 1991). The Board received a number of comments which recommended that ADAAG 4.33 (Assembly Areas) be expanded to address other issues such as companion seating, integration and dispersal, and transfer seating. An overwhelming majority of responses favored including a provision requiring lines of sight over standing spectators in sports arenas and other similar assembly areas. A few commenters opposed such a provision because it would be either unenforceable, add significant cost or reduce seating capacity. Some commenters felt that an entry level or front row seating location was acceptable if companion seating was available for more than one person.

After careful review of comments and of State accessibility codes and standards, the Board modified the scoping provisions in the final ADAAG for wheelchair seating, added requirements for transfer seats and companion seating, and clarified the dispersal requirement. See 56 FR 35408 (July 26, 1991). Additionally, the Board felt it was essential to conduct further research on assembly areas with respect to other recommendations received in response to the rulemaking. The Board is currently sponsoring a research project on accessibility in assembly areas which will provide additional information for future revisions of ADAAG. The Board intends to address the issue of lines of sight over standing spectators in the guidelines for recreational facilities which will be proposed at a future date.

**Question 17:** The Board is seeking comments on the design issues associated with providing integrated and dispersed accessible seating locations with a clear line of sight over standing spectators in arenas, stadiums or other sports facilities. Clearly, not all seats in sports facilities afford clear lines of sight over standing spectators. Tall persons, guard railings or other fixed elements in the facility may block one's view of the playing field. However, since persons with disabilities have fewer choices of seating locations, should all the accessible seating locations be required to have lines of sight over standing spectators? Would such a requirement compromise the requirement for dispersed wheelchair seating by providing seating in fewer locations? If maximum dispersal of accessible seating locations is provided, what percentage of such locations can be provided with a clear line of sight over standing spectators? The Board encourages commenters to provide cost information and examples (including drawings, pictures or slides) of sports facilities where the accessible seating locations are dispersed, integrated and provide clear lines of sight over standing spectators. Additionally, the Board is seeking comments on how the dispersal requirement is achieved in arenas or stadiums where fixed seating is on different levels within a tier having steps. How should dispersal be defined in such facilities? If the same definition of dispersal cannot be applied to all types of facilities, is there a way to categorize different facilities and apply a specific dispersal requirement to each category? What are the design issues associated with providing accessible seating locations within one tier on different levels?

#### **Other Issues**

##### **Swimming Pools**

During the initial rulemaking, the Board sought information on whether swimming pools should provide more than one means of water access, since not all means of providing access are equally useful. While there were few responses to this question, the majority of the comments received stated that more than one means of water access should be provided. A few commenters stated that if more than one pool was located on a site, differing means of access would be appropriate.

The Board is considering developing a guideline that would require access to the water for persons with disabilities in swimming pools owned or operated by State or local governments. There are various means of providing access to the

water for persons with disabilities. These may include raised pool edge copings with grab bars, wheelchair ramps, slides, stairs with raised transfer platforms, wide treads and low risers, pool lifts (hydraulic, pneumatic or electric), zero grade entry and movable pool floors.

**Question 18:** Should the Board develop guidelines that require access to the water in swimming pools owned or operated by State and local governments? Given the wide range of types of disabilities which need to be accommodated, is there one means of access what would be usable by all or a majority of persons with disabilities? If not, should more than one means of access be provided? What are ways, other than those listed above, which could provide access to pools to persons with disabilities? Where possible, commenters should include information regarding independent operation versus operation by a pool attendant, as well as cost and maintenance information.

#### *Polling Places, Voting Booths, and Equipment*

The Board recognizes that, in most cases, voting booths and equipment are portable in nature and therefore may not come under the jurisdiction of these guidelines. However, to the extent that a State or local government building which houses a polling booth or equipment is considered new construction or an alteration, that facility is covered by the accessibility requirements of ADAAG. Furthermore, polling places which are located in buildings or facilities which are owned or operated by State or local governments are covered by the Department of Justice's regulations implementing title II of the ADA which provide that individuals with disabilities shall not be excluded from participation in, or be denied the benefits of services, programs, or activities of a public entity. See 28 CFR 35.149.

The Board is proposing to issue advisory guidelines for voting booths and equipment in the form of a Technical Assistance Bulletin.

**Question 19:** The Board is seeking information regarding new and existing technologies which would facilitate the independent use of voting equipment and booths by persons with disabilities. The Board is particularly interested in technologies that would meet the needs of persons with visual impairments, reach range limitations, and limitations in manipulating or operating controls in voting booths. What are the costs that would be associated with technologies? Commenters should bear in mind that

those technologies recommended must maintain the confidentiality of the voting process.

**Question 20:** Are there polling places controlled by State or local governments which utilize fixed voting booths and devices? How do these fixed voting booths and devices currently meet the access needs of persons with visual impairments, reach range limitations, and limitations in manipulating or operating controls?

#### **Section-by-Section Analysis**

This section of the preamble contains a concise summary of the changes and additions which the Board is proposing to ADAAG.

##### **1. Purpose**

The Board is proposing additional special application sections to ADAAG and anticipates that more sections will be added in the future. Accordingly, the Board proposes to amend the purpose section 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**

A reference to the location of the definitions for "Continuous Passage", "Public Improvement Project", "Sidewalk", and "Site Infeasibility" was added to this section. These definitions pertain to proposed ADAAG 14 (Public Rights of Way) and are located in that section.

The definition of "alteration" has been revised to include a specific reference to State and local government entities.

The existing ADAAG definition of "dwelling unit" includes references to facilities used on a transient basis, such as group homes, shelters, and hotel guestrooms providing both sleeping accommodations and food preparation areas. ADAAG 9 (Accessible Transient Lodging) addresses these types of facilities but does not contain the term "dwelling unit." Since this term appears only in proposed ADAAG 13 (Accessible Residential Housing), the definition of "dwelling unit" has been removed from ADAAG 3.5 (Definitions) and placed in proposed ADAAG 13 and was revised to reflect a more limited application to that section. To assist readers, a reference to the location of the term "Dwelling Unit" is inserted in ADAAG 3.5 (Dwelling Unit).

The definition of "transient lodging" has been modified by removing the term "dwelling unit," which is used in

ADAAG only in reference to residential facilities covered by proposed ADAAG 13 (Accessible Residential Housing). Further, the change clarifies that "transient lodging" applies to facilities used on a transient basis and not to residential facilities.

#### **4. Accessible Elements and Spaces: Scope and Technical Requirements**

##### **4.1 Minimum Requirements**

##### **4.1.1 Application**

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. This modification does not change the substance of this provision but merely removes unnecessary references for clarity.

The Board is proposing additional special application sections to ADAAG and anticipates that more sections will be added in the future. Accordingly, ADAAG 4.1.1(2) is amended to delete the reference to specific special application sections currently in ADAAG.

##### **4.1.3 Accessible Buildings: New Construction**

##### **4.1.3(5) Exception 1 Elevators**

Section 303(b) of the ADA provides that an elevator shall not be required in facilities that are less than three stories or have less than 3,000 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. ADAAG 4.1.3(5) Exception 1 applies only to places of public accommodation and commercial facilities subject to title III of the ADA and not to State or local government facilities covered by title II of the ADA. The Board has clarified this distinction by adding a specific reference to places of public accommodation and commercial facilities in the exception.

##### **4.1.3(17)(c) Public Telephones—Text telephones**

ADAAG 4.1.3(17)(c) provides scoping requirements for text telephones in new construction. When ADAAG was published on July 26, 1991, the Board noted in the preamble that scoping provisions for State and local government buildings would be incorporated into this section at a later date (56 FR 35424). ADAAG 4.1.3(17)(c)(1) currently requires that buildings or facilities with four or more public pay telephones (at least one of which is located in an interior location) must have at least one interior public

text telephone. ADAAG 4.1.3(17)(c) (2) and (3) and also contain additional requirements for certain types of facilities, including stadiums, arenas, convention centers, and hospitals. These facilities are required to have an interior public text telephone if an interior public pay telephone is provided. The Board is proposing a similar requirement for State and local government buildings subject to proposed ADAAG 11 (Judicial, Legislative, and Regulatory Facilities) and 12 (Detention and Correctional Facilities). Based on responses to questions (21) through (24) below, the Board may: (1) Increase the existing scoping requirements for public text telephones as they apply to public entities or (2) include other types of State and local government facilities in this scoping section as part of the final rulemaking.

Under proposed ADAAG 4.1.3(17)(c)(iv), at least one interior public text telephone must be provided in judicial, legislative, and regulatory facilities if an interior public pay telephone is provided. Proposed ADAAG 4.1.3(17)(c)(v) addresses detention and correctional facilities and requires at least one interior public text telephone in the public areas of these facilities if an interior public pay telephone is provided. Further, if a public pay telephone is provided in the secured areas of these facilities, then at least one public text telephone is required in a secured area of the facility. A text telephone is not required in every secured area with a public pay telephone, but in just one secured area of the facility. Since detainees or inmates are limited to the secured areas of these facilities, this requirement ensures equal access to telecommunication for those inmates or detainees with hearing impairments.

**Question 21:** Are proposed ADAAG 4.1.3(17)(c) (iv) and (v) adequate to address the need for public text telephones in judicial, legislative, and regulatory facilities and detention and correctional facilities? For example, in prisons where inmates are separated and housed in areas with different levels of security, would the provision of one public text telephone ensure accessible telecommunication to the inmates from different housing areas? The Board also requests information on the cost impact of these requirements on the design and construction of these types of facilities.

In view of concerns about vandalism to permanently installed public text telephones, the Board notes that ADAAG 4.31.9 (Text Telephones Required by 4.1), which contains the

technical requirements for text telephones, includes a provision for equivalent facilitation. This provision allows use of portable devices in lieu of permanently installed public text telephones if the portable device is readily available to users. For example, a portable text telephone could be used in the secured area of a prison instead of a permanently installed public text telephone as long as it was conveniently available during the times at which inmates are allowed use of public telephones.

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 electrical outlet for use of a portable text telephone. However, since outlets may be a security hazard in the secured areas of detention and correctional facilities, the Board has exempted these areas from this requirement.

ADAAG 4.1.3(17)(c) (ii) and (iii) (Public Telephones) currently requires the provision of one text telephone when an interior public pay telephone is provided in the following locations: A stadium or arena, a convention center, a hotel with a convention center, a covered mall, or the area serving a hospital emergency room, a hospital recovery room or a hospital waiting room.

**Question 22:** Are the existing requirements in ADAAG 4.1.3(17)(c) (ii) and (iii) sufficient with respect to these building occupancies owned or operated by State or local government entities? Comments suggesting an alternative scoping requirement should include a justification and, if possible, estimates of any additional associated cost.

**Question 23:** Are there other specific State and local government building types which should be required to have a public text telephone if an interior public pay telephone is provided? Should all State and local government facilities be required to provide a public text telephone if an interior public pay telephone is provided?

**Question 24:** ADAAG 4.1.3(17)(c) (ii) and (iii) currently require only one public text telephone regardless of building size. Should the scoping for public text telephones take into account the size of buildings or facilities? If so, how should the requirement be delineated?

#### 4.1.6 Accessible Buildings: Alterations

##### 4.1.6(1)(k) Elevator Exception

As discussed under ADAAG 4.1.3(5) Exception 1 above, this section has been revised to reflect the limited application

of the elevator exception to places of public accommodation or commercial facilities.

#### 4.1.7 Accessible Buildings: Historic Preservation

##### 4.1.7(1)(a) Exception

During the initial rulemaking, the Board received comments recommending that an exception be established under ADAAG 4.1.7(1)(a) for a small group of historic properties such as a historic house museum that has only one entrance and where modifying the doorway or cutting out a window to create an accessible entrance would destroy the characteristics that qualify the building as an historic property. 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 phase of rulemaking. 56 FR 35430 (July 26, 1991). An exception was reserved under ADAAG 4.1.7(1)(a) for this purpose.

When the Department of Justice issued its final regulations for titles II and III of the ADA, it included sections in each of those regulations on alterations to historic properties which permitted alternative methods of access to be provided (e.g., using audio-visual materials and devices to depict portions of an historic property that cannot otherwise be made accessible) where providing physical access 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 an exception. The Board proposes to incorporate this exception in ADAAG 4.1.7(1)(a). The Department of Justice regulations for title III of the ADA provide that the exception may only be used if the procedures in ADAAG 4.1.7(2) are followed which require the State Historic Preservation Officer and, in certain cases the Advisory Council on Historic Preservation, to be consulted. The State Historic Preservation Officer and, where applicable the Advisory Council on Historic Preservation, are responsible for determining whether complying with ADAAG will threaten or destroy the characteristics that qualify a building as an historic property and whether physical access can be achieved using the alternative minimum requirements for historic preservation in ADAAG 4.1.7(3). Historic properties covered by title II of the ADA should be treated in the same manner as historic properties under title III of the ADA and the exception made

subject to following the consultation procedures in ADAAG 4.1.7(3).

## 7.2 Sales and Service Counters, Teller Windows, Information Counters

ADAAG 7 (Business and Mercantile) contains requirements for sales and service counters, teller windows, and information counters (7.2); check-out aisles (7.3); and security bollards (7.4). These requirements are applied to "the design of all areas used for business transactions with the public" and apply to business and mercantile facilities. State and local government buildings and facilities may also be equipped with service and information counters and teller windows. However, as currently written, ADAAG 7.2 makes reference to places of public accommodation such as department stores and hotels. Consequently, the Board has proposed an additional provision which specifically applies to State and local government buildings and facilities as well. This new section found at ADAAG 7.2(3) and replaces an existing reserved requirement for assistive listening devices which is renumbered ADAAG 7.2(4).

The Board considers access to service counters and windows in State and local government facilities to be particularly critical for several reasons. First, State and local government entities provide a variety of services that may only be received by individuals appearing in person. For example, application for a driver's license or for certain benefits, such as unemployment, usually must be completed in person with proper forms of identification. Second, State or local laws and regulations may actually obligate a person to receive certain services or complete various transactions in person, such as registration of a firearm. Third, these services are often provided at designated locations, such as courthouses, police stations, or social service agencies. Members of the public usually have less choice in where they may go to receive government services than they do in receiving services from public accommodations. In some cases, there may be only one location or building in a geographic area where government services are provided. For example, a county courthouse may be the only location for receiving certain county permits. These factors underscore the need for both mobility access and communication access at these types of service counters and windows.

Proposed ADAAG 7.2(3)(i) clarifies that the existing requirements in ADAAG 7.2(1) for counters with cash registers apply to the same type of

counters provided in State or local government facilities. ADAAG 7.2(1) requires at least one of each type of counters with cash registers to have a portion at least 36 inches in length with a maximum height of 36 inches.

Proposed ADAAG 7.2(3)(ii) states that the requirements of ADAAG 7.2(2) apply to State and local government buildings as well. ADAAG 7.2(2) covers counters and teller windows that do not have a cash register but at which goods or services are sold or distributed. These types of counters are also required to have a portion that is at least 36 inches in length with a maximum height of 36 inches. Under ADAAG 7.2(2), an auxiliary counter in close proximity to the main counter with a maximum height of 36 inches may be provided instead of making a portion of the main counter accessible. ADAAG 7.2(2) also contains an example of equivalent facilitation that may be provided in lieu of an accessible main counter or auxiliary counter. This example notes that at a hotel registration counter, equivalent facilitation might consist of (1) providing a folding shelf attached to the main counter upon which a person with a disability can write, and (2) use of the space aside the counter or at the concierge desk for handing materials back and forth. Proposed ADAAG 7.2(3)(ii) would apply this example of equivalent facilitation to counter or teller windows in State or local government facilities.

**Question 25:** In view of the importance of access to services provided by public entities, should the example of equivalent facilitation in ADAAG 7.2(2) for the provision of a folding shelf, apply to State and local government facilities? If not, what other examples of equivalent facilitation, if any, should be provided for counters and windows in State and local government facilities?

Counters and windows in State and local government buildings often are equipped with physical barriers or partitions that separate service personnel from the public. These barriers or partitions can impair voice communication and make it more difficult for persons to conduct a conversation, particularly those persons with hearing impairments. According to the Bureau of Census, it is estimated that 7,213,000 individuals have difficulty hearing what is said in a normal conversation with another person (not including those without any hearing at all). "Bureau of Census, Disability Functional Limitation and Insurance Coverage: 1984-85." Other surveys indicate that this figure represents a conservative estimate.

Since State and local governments provide many important services at counters or windows with partitions that separate service personnel from the public, the Board is proposing that a means of facilitating voice communication be provided at counters or windows equipped with solid partitions or safety glass. Proposed ADAAG 7.2(3)(iii) applies this requirement to those windows or portions of counters required to be accessible by ADAAG 7.2(3)(i) or (ii). This provision is a performance requirement which lists some acceptable alternatives for meeting the requirement. These alternatives include elements as simple as grills, or openings in the partition to more sophisticated devices such as intercom devices or two-way telephone handsets. The method of facilitating voice communication must be accessible to both persons who use wheelchairs and persons who have difficulty bending or stooping. This language is consistent with an existing requirement in ADAAG 4.1.3(10) which pertains to accessible drinking fountains. An appendix note states that consideration should be given to the placement of communication devices in the partition, such as grills or talk-thru baffles. When such elements are used, they should be designed or mounted to accommodate persons who use wheelchairs and persons who have difficulty bending or stooping. One possible solution would be mounting a grill at both the standard height and one at a lower height appropriate for a person in a seated position. See A7.2(3)(iii).

Consistent with ADAAG 4.1.3(17) (Telephones), proposed ADAAG 7.2(3)(iii) also requires telephone handset devices, if provided, to be equipped with a volume control. In order to accommodate persons who use wheelchairs, those devices operated by hand, such as the speak button on an intercom, must comply with the requirements of ADAAG 4.27 (Control and Operating Mechanisms).

**Question 26:** Are there other design solutions that can facilitate voice communication at solid partitions or safety glass? The Board also seeks cost information on those solutions noted in proposed ADAAG 7.2(3)(iii) or any other recommended alternatives.

Counters and windows sometimes contain equipment that presents information such as display screens provided at point of sales terminals and information kiosks, and equipment for testing eyesight. If such equipment is permanently installed, it should be accessible to persons who use wheelchairs. Figure A3 in the appendix

of ADAAG recommends an eye level range of 43 to 51 inches for wheelchair user.

**Question 27:** Should the Board include specific requirements for mounting equipment that displays information? If so, is the 43 to 51 inch eye level range sufficient to provide access to persons using wheelchairs or mobility aids?

#### 10.4 Airports

ADAAG 10.4.1(8) was previously reserved to address security barriers at airports. Where the security barrier is a fixed element within a facility, the Board proposes to require that, in airports owned or operated by State or local governments, at least one accessible route complying with ADAAG 4.3 shall be provided at each single barrier or group of security barriers (i.e., two or more security barriers, adjacent to each other, at a single location). The requirements for an accessible route in ADAAG 4.3.9 provide that doors on such a route be accessible according to ADAAG 4.13. Consequently, an exception has been included for doors or gates on the accessible route which, for security reasons, are not intended to be opened or closed by other than security personnel. These doors are exempt from the requirements pertaining to maneuvering clearances (4.13.6), door hardware (4.13.9), opening force (4.13.11), and automatic or power-assisted operation (4.13.12).

The accessible route for passengers with disabilities should coincide with that of other passengers. Persons with disabilities should not have to pass through one security barrier and then be required to travel through a restricted, service, or employee area to reach their destination. This provision would provide passengers with disabilities the ability to travel with the same ease and convenience as other members of the public. This provision further provides that passengers with disabilities will not be separated from their carry-on items. Where passengers are separated from their personal items, they are subject to increased potential for loss or theft of their personal items while they are screened separately in a location which is not within the view of the passenger.

Although an accessible route may be provided, security and screening equipment may still be inaccessible because certain aids and mobility devices, including canes, leg braces, and wheelchairs sometimes interfere with metal detection devices. As a result, individuals with disabilities must be screened and searched individually. Some persons may consider such

methods to be inconvenient or embarrassing. Since the Board's guidelines do not cover the operational aspects of accessibility, proposed ADAAG 10.4.1(8) does not address the security or screening procedures implemented at airports. Such procedures are addressed by regulations issued by the Department of Transportation under the Air Carrier Access Act which prohibits discrimination by air carriers on the basis of disability. See 14 CFR part 382. The Board is aware of the necessity for effective screening of air travelers, however, it believes that consideration should be given to installing equipment that by design and new technology can accommodate most persons with disabilities and reduce the frequency of personal screenings.

Appendix note A10.4.1(8) recommends that, where barriers consist of movable equipment, they should comply with the provisions of this section so that passengers with disabilities can travel with the same ease and convenience as other members of the public.

**Question 28:** The Board seeks information on types of fixed security and screening equipment that is accessible or that may accommodate a greater number of persons using mobility aids which would limit the need to individually search and screen such persons. This information is sought for advisory purposes and possible inclusion in the appendix note at A10.4.1(8).

#### 11. Judicial, Legislative, and Regulatory Facilities

This section addresses those facilities where judicial, legislative, and regulatory functions occur. Judicial facilities consist of courthouses which are further discussed below. Legislative facilities include a town hall, city council chambers, county commissioners' meeting room, 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.

The organization of State and local government legislative and regulatory functions differs widely from one State to another and from one city to another,

as does the location and juxtaposition of such spaces. State governments may separately house legislative and regulatory functions. Smaller localities may choose to cluster legislative and regulatory functions within a single building or facility. For example, a city hall or town hall may house regulatory functions such as building, fire, and zoning functions, and legislative functions such as the city council.

Because the structure of judicial, legislative and regulatory facilities varies so widely from State to State and locality to locality, these proposed guidelines address the activities that take place in these facilities such as debate, deliberation or the taking of testimony. Proposed ADAAG 11.2 addresses courtrooms, hearing rooms, chambers and meeting rooms designated for public use. Many of these rooms share common elements and similar accessibility issues and, therefore, the Board has combined judicial, legislative and regulatory areas under one section. For example, where a courtroom would contain a raised judge's bench, a legislative chamber would include a speaker's rostrum which is situated in a similar fashion to the bench. The judge, like the presiding officer of a legislative body, is an authority figure. As such, they are positioned on raised platforms located in prominent places at the front of the room.

In addition to architectural considerations, the Board believes that access to information and participation in the governmental process is vitally important to all citizens. In judicial, legislative and regulatory facilities, the taking of testimony, and public debate and deliberation on local issues, laws or ordinances is an integral part of that process. Therefore, as communication is essential, the Board has proposed guidelines which address permanently installed assistive listening systems and require that these facilities take advantage of current and emerging technologies for providing information to persons with vision or hearing impairments by installing duplex outlets and wiring, conduits or raceways to facilitate future communication cabling. The proposals for each of these areas are discussed below.

With respect to judicial facilities, laws affecting accessibility to courthouses vary throughout the country. See Wood, "Court-Related Needs of the Elderly and Persons with Disabilities, Toward a Barrier Free Courthouse: Equal Access to Justice for Persons with Disabilities" American Bar Association (1991). While UFAS, State laws, and courthouse facilities guidelines require accessibility to the public areas of the courthouse

(e.g., parking, entrance, restrooms), few specify access to elements in the courtroom itself such as the jury box, witness stand, or the judge's bench.

UFAS classifies the public areas of courtrooms as an assembly occupancy and requires accessibility in "all areas for which the intended use will require public access or which may result in employment of physically handicapped persons." See UFAS 4.1.4(4). The "U.S. Courts Design Guide" published by the U.S. Administrative Office of the Courts, recommends that "courtroom space and circulation paths in the vicinity of the judge's bench, deputy clerk, law clerk, court reporter/recorder stations, and the witness box should be designed to accommodate handicapped ramps, lifts, or other required apparatus as they are needed." ("U.S. Courts Design Guide" at 97 (1991)). The National Center for State Courts published "The Courthouse", a planning and design guide for court facilities which recommends accessibility to the judge's bench, the clerk's station, the court reporter's station, the witness stand, the attorney tables, and the juror box. ("The Courthouse" at 64-70 (1991)).

General requirements for accessibility to courthouses may be found in State and local building codes and in guidelines developed by judicial committees. For example, the California Accessibility Standards require courtrooms (including the jury box, witness stand, public seating and other areas) to be accessible. California Accessibility Standards, title 24 part 2 section 712 (1989). Similar requirements are contained in the New Jersey Administrative Code which provides for courtrooms in new construction to be accessible in accordance with the requirements for "large buildings" and "small buildings". N.J. Admin. Code title 5, section 23-7.2(a) (1)-(2) (1991). Similarly, the Virginia Courthouse Facility Guidelines state that "handicapped citizens and court staff should enjoy convenient entry to all court facilities and barrier-free internal access to all appropriate spaces." See Virginia Courthouse Facility Guidelines, section 1.5 Handicapped Access. The Board is proposing requirements consistent with these State codes and guidelines.

Courthouse facilities are rich in tradition and symbolism and pose unique challenges due to complex, interwoven requirements, and the symbolic relationship of elements peculiar to courtrooms. The acoustics and the spatial relationship and sightlines between the judge, jury, witness, litigants, and spectators must all be carefully balanced to ensure that

everyone will be able to adequately see, hear, and participate in the proceedings. (See Greenberg, "Symbolism in Architecture: Courtrooms" Architectural Record at 114-116 (May 1979)). As stated by Allen Greenberg,

The judge is an impartial arbitrator and is therefore positioned on a raised podium in the center of the front of the room. Defense and prosecution are equal adversaries and, as such, are each provided with seats at assigned tables in the well of the courtroom facing the judge \* \* \*. The jury box is placed at the side of the room, deliberately divorced from the axial relationship of judge, counsel and public. This placement reflects the impartiality of the jurors, who must decide guilt or innocence. The witness stand is located adjacent to the judge's bench facing the two parties. This provides the latter with their constitutional right to confront the opposing counsel's witnesses. Seen in this light, the traditional American courtroom layout is notable for its marked orientation toward the rights of the accused. (*Id.* at 115).

While the Board recognizes the significance of symbolism in the courtroom, it is very important that all citizens be able to participate equally in the legal process. In proposing these guidelines, the Board believes that accessibility can be incorporated into the design of the courtroom without adversely affecting the spatial or symbolic relationship between the participants.

During the initial rulemaking, the Board requested information on access to jury boxes, witness stands, and judges' benches. See 56 FR 2296 (January 26, 1991). An overwhelming majority of responses favored including provisions in ADAAG for jury boxes, witness stands and judges' benches. One commenter disagreed, stating that access to such areas is a workplace issue more properly addressed under title I of the ADA.<sup>5</sup> Several commenters distinguished between the different areas, taking the position that jury boxes and witness stands should be accessible, but judges' benches should be covered under title I. One commenter recommended that judges' benches should be adaptable and only 5 percent of the seating in jury boxes should be accessible. Comments received from the American Bar Association addressed both program and architectural issues. The American Bar Association supported more accessibility in

courtrooms and within the judicial process as a whole.

Some of the comments received suggested the use of scheduling procedures as an alternative to requiring all courtrooms to be accessible (e.g., 30 percent of the courtrooms should be accessible in combination with scheduling procedures). With respect to judges' benches, a concern was raised that the judge's bench should remain at a higher level to signify authority and to provide sightlines. The Board has taken these comments into consideration and has developed guidelines for judges' benches, jury boxes and witness stands, as well as other courthouse areas. The requirements for those areas are discussed below.

Additionally, many of the comments addressed communication accessibility for individuals with hearing impairments. A third of the commenters stated that courthouses should be equipped with assistive listening systems. A few of those commenters suggested use of "real time captioning" by the courts. Some commenters took the position that 50 percent of the courtrooms should be accessible to individuals with hearing impairments. One commenter suggested sound absorbent materials in walls would be appropriate, as well as assistive listening devices with receivers for 8 percent of the seating capacity, use of a visual announcement system, interpreter services, and the availability of transcripts. In response to the comments received and in accordance with section 504 of the ADA, the Board has also included provisions for persons with vision and hearing impairments in this section.<sup>6</sup>

### 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. All public and common use areas would be subject to the applicable requirements contained in ADAAG 4.1 through 4.35. Examples of public and common use areas are given in the appendix note. See A11.1.

<sup>5</sup> Modifications to an individual workstation would be covered by reasonable accommodation under title I of the ADA which prohibits discrimination in employment on the basis of disability. The Equal Employment Opportunity Commission (EEOC) is responsible for issuing regulations to implement title I of the ADA.

<sup>6</sup> Section 504 of the ADA requires that the guidelines issued by the Board "establish additional requirements, consistent with this Act, to ensure that buildings [and] facilities \* \* \* are accessible in terms of architecture and design \* \* \* and communication, to individuals with disabilities."

### 11.2 Courtrooms, Hearing Rooms, Chambers and Meeting Rooms

This section requires that where doors or gates, jury boxes, witness stands, fixed seating, judges' benches, clerks', 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 further requires that the accessible route to each element coincide with the circulation path provided for all persons using the element. For example, often there are different circulation paths provided for jurors, witnesses, and spectators. This section would require each circulation path to be accessible.

Paragraph (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). This provision is consistent with ADAAG 4.1.3(7) (Doors) and will ensure that minimum maneuvering clearances are provided to approach, operate, enter and exit through the door or gate.

Paragraph (2) requires all jury boxes and witness stands to be accessible and that each jury box have at least one accessible wheelchair space. Accessible spaces must be provided within the defined area of the jury box or witness stand. Jurors are selected at the outset of each trial and thus it is impossible to predict when an accessible courtroom will be needed. Accordingly, the Board is proposing at least one accessible seating space in each jury box. This provision allows readily removable seats to be installed in the jury box and witness stand so that the accessible spaces may also be used by persons not using wheelchairs. Paragraph (2) further requires minimum maneuvering clearances for the approach to the accessible spaces, referencing ADAAG 4.33.2 (Size of Wheelchair Locations). Although Figure 46 illustrates space requirements for two wheelchair seating spaces, this provision only requires a minimum of one accessible seating space. Where a fixed counter is provided in the witness stand (e.g., for a microphone), it must comply with ADAAG 4.32 (Fixed or Built-in Seating and Tables) to ensure sufficient knee clearance. Clear floor space for a forward approach must also be provided. The maximum height of controls and operating mechanisms must be 48 inches and comply with 4.27.3 (Height) and 4.27.4 (Operation). Although ADAAG 4.27.3 allows controls to be placed at either a forward or a side reach range, the Board has

specified the forward reach range as it is presumed that in jury boxes and witness stands, the seated individual must be facing forward and a forward reach to controls is necessary. The 48 inches specified for such a forward reach is a maximum height requirement. If a desk or other writing surface is provided, the individual must reach over an obstruction to operate controls. Therefore, ADAAG 4.2.5 provides that controls are to be mounted at a maximum height of 48 inches only when they are located less than 20 inches from the leading edge of the obstruction (i.e., shelf). When controls are located between 20 to 25 inches from the obstruction they must be mounted at a maximum height of 44 inches as required in ADAAG 4.2.5 which is referenced by ADAAG 4.27.3. When controls are placed over an obstruction, they may never be further than 25 inches from the leading edge of that obstruction for a forward reach.

Paragraph (2) 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. For example, if providing a fixed ramp to a jury box would result in reducing seating needed to meet the minimum legal requirements for jurors in a criminal courtroom, only clear floor space to accommodate a portable ramp would be required. Or, in an alteration to a witness stand, if physical constraints would require an alteration of the judge's bench, jury box or enlarging the courtroom, only clear floor space to accommodate a portable ramp would be required. This exemption only applies to the fixed means of vertical access. All other requirements in paragraph (2) (i.e., knee clearance) would still apply. As in new construction, accessible spaces must be provided within the defined area of the jury box or witness stand.

There are several options in designing an accessible jury box and witness stand. In Federal courthouses, the General Services Administration is experimenting with a multi-tiered jury box, where the accessible spaces are incorporated with other seating located on the floor level and additional seating is provided in raised tiers. Other acceptable tiered jury box designs may incorporate a ramp or lift in the courtroom or outside the courtroom from a restricted corridor.

Many persons using wheelchairs entering and exiting a platform lift in one direction can be accommodated on a minimum 30 inch by 48 inch (760 mm x 1220 mm) 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. For a direct approach, straight through the lift, Figure 26 shows that a lift platform with a minimum clear space of 48 inches (1220 mm) 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 (1370 mm) 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, and 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. Widening the gates to provide a 36 inch to 42 inch (915 mm x 1065 mm) clear width will provide additional maneuvering clearance.

The Board is considering requiring maneuvering clearances complying with ADAAG 4.2.3 (Wheelchair Turning Space) to ensure independent use in areas that are likely to be raised so that persons using wheelchairs do not have to exit the areas backwards. The areas the Board is considering adding this requirement include the jury box, witness stand, judge's bench, clerk's station, speaker's rostrum, raised dais, and the bailiff's and court reporter's stations.

**Question 29:** Should the guidelines require maneuvering spaces in the jury box, witness stand, judge's bench, clerk's station, speaker's rostrum, raised dais, and the bailiff's and court reporter's stations? What would be the costs associated with such a requirement? Additionally, the Board encourages commenters to submit drawings, slides, photographs and cost information of other design alternatives used in making the jury box, witness box or judge's bench accessible. How has the concern for maneuvering space been addressed?

Paragraph (3) specifies the number of wheelchair spaces required where spectator, press, or other areas with fixed seats are provided. This section references the scoping provisions in ADAAG 4.1.3(19)(a) (Assembly Areas). The Board is proposing that where the

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.

ADAAG requires seating dispersal only when the seating capacity exceeds 300 because most fixed seats in small movie theaters are situated to provide a clear line of sight to the screen. Furthermore, these theaters have tiered or sloped aisles, which make it more difficult to provide accessible seating in more than one location. Courtrooms, however, differ in this regard in that most spectator seating areas are on a single level that is not sloped or tiered, which facilitates locating accessible seating spaces in more than one location. Where the seating is not on one level, but is sloped or tiered, the provision does not require dispersal. The provision for dispersal applies only to the total seating capacity in the spectator seating area, not the combined total of fixed seats in a courtroom.

Paragraph (4) requires all fixed judges' benches, clerks' stations, speakers' rostrums and a minimum of one raised dais to be adaptable. This provision references ADAAG 4.32 (Fixed or Built-in Seating and Tables) and requires a front approach to the bench, station or rostrum. The maximum height of controls and operating mechanisms must be 48 inches and comply with 4.27.3 (Height) and 4.27.4 (Operation). If the high forward reach is over an obstruction, reach and clearances must be as shown in Figure 5(b). This requirement is further discussed in paragraph (2). An appendix note further recommends that equipment such as a portable ramp, be on hand so that accessibility can be accomplished to at least one judge's bench and clerk's station within a few hours to accommodate court proceedings. See A11.2.1(4).

Although the areas identified in paragraph (4) are work stations, due to the complexity of courtroom and legislative chamber design and the difficulty of accommodating subsequent physical change, the Board believes that requiring adaptable judges' benches, clerks' stations, speakers' rostrums and a minimum of one raised dais, where provided, will significantly facilitate a reasonable accommodation for an employee in the future. Consistent with the definition of "adaptability" in ADAAG 3.5 (Definitions), the guidelines clarify the term "adaptable" and describe how it is applied to these areas. Adaptability means that maneuvering clearances and other features (e.g., fixed controls) are designed into the space so that accessibility can be easily provided

at a later date. For example, an adaptable judge's bench which is designed for a future installation of a ramp would have the required maneuvering clearances to approach, enter, and exit the ramp, to maneuver at the bench (e.g., knee clearance), and to reach any fixed controls (e.g., alarm buttons) already designed into the space. The ramp would be installed at a later date when a reasonable accommodation is needed. An appendix note further recommends that equipment such as a ramp, be on hand so that accessibility can be accomplished to at least one judge's bench and clerk's station to accommodate court proceedings. This provision is particularly important in courtrooms where judges and clerks are assigned on a temporary or rotating basis. See A11.2.1(4).

Paragraph (5) specifies minimum clear floor space, table height, and knee clearance requirements for fixed or built-in stations, including tables for bailiffs', court reporters', and litigants' stations. This provision is consistent with UFAS 4.1.2(17) which requires fixed or built-in seating, tables or work surfaces in accessible spaces to have 5 percent, but not less than one seating space(s), tables or work surfaces complying with UFAS 4.32 (Seating, Tables and Work Surfaces). This provision references ADAAG 4.32 (Fixed or Built-in Seating and Tables) and requires a front approach to the station or table. The maximum height of controls and operating mechanisms must be 48 inches and comply with ADAAG 4.27.3 (Height) and ADAAG 4.27.4 (Operation). If the high forward reach is over an obstruction, reach and clearances must be as shown in Figure 5(b). However, as the bailiffs', court reporters' and litigants' stations are usually designed with movable furniture (which is not covered by ADAAG but rather the Department of Justice's regulations) this provision may apply in few situations. Where furniture is provided, an appendix note recommends appropriate maneuvering clearances such as clear floor space and knee clearance under tables when such furniture will be utilized by the public (e.g., the litigant's station). See A11.2.1(5).<sup>7</sup>

<sup>7</sup> In its NPRM for regulations implementing title III of the ADA, the Department of Justice included a proposed section 36.309 which would have required that newly purchased furniture or equipment made available for use at a place of public accommodation be accessible, to the extent such furniture or equipment is available, unless this requirement would fundamentally alter the goods, services, facilities, privileges, advantages, or accommodations offered, or would not be readily achievable. See 56 FR 7452 (February 22, 1991). In

Paragraph (6) requires fixed lecterns to be a maximum height and have knee clearance to accommodate litigants and speakers who use wheelchairs. This provision references ADAAG 4.32 (Fixed or Built-in Seating and Tables) and requires a front approach to the lectern. The maximum height of controls and operating mechanisms shall be 48 inches and comply with ADAAG 4.27.3 (Height) and 4.27.4 (Operation). Similar to paragraph (5), this provision may apply in relatively few situations as portable lecterns are more common. Where portable lecterns are specified, the Board encourages the selection of lecterns with adjustable heights and knee clearance underneath. Such lecterns will help facilitate use of the lectern and approaching the microphone.

### 11.3 Jury Assembly Areas and Jury Deliberation Areas

This section requires all jury assembly areas and jury deliberation rooms to be accessible. Since the jury deliberation room is a controlled area, where amenities such as refreshment areas, fixed tables and drinking fountains are provided, they must comply with the provisions in this section. Where restroom facilities are provided, they are covered by ADAAG 4.1.3(11) (Toilet Facilities) which requires each public and common use toilet room to comply with ADAAG 4.22 (Toilet Rooms).

Paragraph (1) references technical specifications for refreshment areas or kitchenettes in ADAAG 9.2.2 which specifies maximum counter height, clear floor area, reach ranges, and mounting height. The technical specifications would also apply to fixed refreshment dispensers where provided. For example, a wall mounted microwave would have to comply with 9.2.2(7) which references 4.2.4 (Clear Floor or Ground Space for Wheelchairs), 4.2.5 (Forward Reach), 4.2.6 (Side Reach) and 4.27 (Controls and Operating Mechanisms).

Paragraph (2) requires 5 percent but not less than one, fixed or built-in seating and tables to be accessible and comply with ADAAG 4.32. As discussed in proposed ADAAG 11.2.1(5) relative to litigants' stations, tables in jury deliberation rooms and assembly areas are usually movable furniture, and

its final rule, proposed section 36.309 was omitted because the Department of Justice determined that its requirements were more properly addressed under other sections including sections 36.201 and 36.202 which set out general prohibitions against discrimination based on disability. Title II of the ADA provides similar prohibitions for state and local government entities. See 42 U.S.C. 12132 and 28 CFR 35.130.

therefore this provision may apply in few situations. Where movable furniture is provided, an appendix note recommends providing appropriate maneuvering clearances in the room and choosing furniture that would allow appropriate knee clearance under tables. See A11.3.1(2).

Paragraph (3) requires drinking fountains to be accessible to persons using wheelchairs and those who have difficulty bending or stooping. This provision is consistent with ADAAG 4.1.3(10)(a).

#### 11.4 Courthouse Holding Facilities

##### 11.4.1 Holding Cells: Minimum Number

This section applies to courthouse holding facilities including central holding cells and court-floor holding cells (i.e., those serving courtrooms). Where provided, at least one adult male, juvenile male, adult female, and juvenile female central holding cell must comply with the requirements in this section. Central holdings facilities are typically designed with sight and sound separation between men, women and juveniles. Where such cell separation is provided, the guidelines require at least one of each type of cell to be accessible. While there may be additional "types" of cells (i.e., isolation, group or individual cells) the Board's definition of "type" is limited to adult male, juvenile male, adult female, and juvenile female holding facilities. Court-floor holding cells, however, are not necessarily designed with sight and sound separation between adult males, juvenile males, adult female, and juvenile females. Therefore, in such instances, this provision would permit only one accessible cell to serve a courtroom.

##### 11.4.2 Requirements for Accessible Cells

This section contains the minimum requirements for accessible cells. In proposing these requirements, the Board has taken into account various security considerations which are further discussed below. Accessible cells and the elements or spaces serving them must be on an accessible route.

Paragraph (1) requires that doors to accessible spaces and 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 maneuvering clearances (4.13.6), door hardware (4.13.9), opening force (4.13.11), and automatic or power-assisted operation (4.13.12) in

those areas where detainees are escorted by security personnel at all times.

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). Where privacy screens are provided, they may not intrude on the clear floor space required for fixtures. The Board recognizes that typical cell design often does not provide a separate room for water closets or shower stalls. Water closets and lavatories are usually provided within individual cells behind privacy screens. The references to ADAAG 4.22 (Toilet Rooms) and ADAAG 4.23 (Bathrooms, Bathing Facilities, and Shower Rooms) do not require that separate toilet rooms or shower rooms be provided. For example, a facility may choose to provide individual fixtures and a privacy screen instead of a separate toilet or shower room. In that instance, the applicable clear floor space and mounting height requirements should be followed in ADAAG 4.22 and ADAAG 4.23 as it applies to each fixture provided.

Typical cell design includes a combination stainless steel water closet and lavatory unit which may also include a drinking fountain. The Board understands that some courthouse design guidelines may recommend a combined unit to maximize the limited amount of space within cells. However, the Board is not aware of standard combination units which fully meet ADAAG requirements for water closets and lavatories. For example, some existing "accessible" designs, such as those where the water closet projects out from the unit, would actually prohibit the installation of a 36-inch grab bar behind the water closet and would not allow for appropriate positioning of the grab bar in relation to the centerline of the water closet. See Figure 29. Additionally, some units provide a drinking fountain spout behind the wash basin which would not be usable by a person with a disability because they do not meet ADAAG 4.15.3 (Spout Location). Separate stainless steel lavatories, water closets, and drinking fountains are readily available that do meet ADAAG requirements.

**Question 30:** Are there standard combination units available which meet the requirements of the proposed guidelines? If so, what are the specifications of these types of combination units? Are combination units required to the exclusion of separate fixtures by any State, local or other codes?

The ADAAG requirements for water closets, bathtubs and showers require grab bars, which are considered essential for use of such elements by persons with disabilities. However, grab bars may be prohibited in some holding or detention facilities in order to reduce the risk of suicide. While the Board is not aware of a specific case in which a person has committed suicide using grab bars, there are numerous cases where persons have asphyxiated themselves by hanging underneath beds and chairs. "The Training Curriculum on Suicide Detection and Prevention in Jails and Lockups" developed by Jail Suicide Prevention Information Task Force describes how typical steel beds with holes in the bottom have been used to attach suicide nooses. The task force was sponsored by the National Center on Institutions and Alternatives, in cooperation with Juvenile, Criminal, Justice International Inc., with assistance from the National Sheriffs' Association. The training curriculum further recommends:

\* \* \* cells and rooms to be protrusion-free. While it is more common for suicide nooses to be affixed to bars and grills, all fixtures should be given attention, since beds, shelves, sprinklers, door handles, towel racks and water faucet lips have been used for this purpose. (Chap. 16-3B).

A grab bar without any open surfaces that is recessed in the wall is one possible alternative that would meet the ADAAG requirements as shown in Figures 39 (c) and (d). Although these figures illustrate handrail designs, the Board feels similar designs can be used for grab bars in security areas. Also, the Minnesota Regional Treatment Center Design Consortium recommends an infill welded plate at the bottom of the grab bar which would not be prohibited by ADAAG requirements. (See "Mental Health-Master Specification for Safety and Suicide Resistant Design at Minnesota Psychiatric Hospitals" at 14 (1990)). In view of these design alternatives, the Board is not inclined to provide an exception for grab bars at water closets and bathing facilities serving accessible cells.

**Question 31:** What are the experiences with suicide in detention and correctional facilities relative to providing accessibility features? The Board seeks further information on whether certain grab bar design solutions, including those discussed above, can be used to provide access but which do not facilitate suicide attempts. Where possible, responses should include any available information on these and other design solutions and their costs.

Concern has also been raised as to whether or not grab bars create a security risk in that they may be torn from the wall and used as a weapon. The Board feels that such concerns can be addressed by the structural strength and securement of the grab bars. Grab bars are currently required to comply with the structural strength requirements in ADAAG 4.26.3 (Structural Strength). However, these are minimum guidelines which may be exceeded where necessary.

**Question 32:** The Board seeks comment on whether grab bars can be installed without creating a security risk.

Paragraph (3) requires that accessible clear floor space be provided on one side of beds. Upper bunks, which often may be installed due to crowding, may interfere with the transfer between the lower bed and a wheelchair due to the insufficient vertical distance between the upper and lower bunk. While not requiring a specific distance, the Board recommends that the necessary vertical distance between the upper and lower bunk be sufficient to allow a person to sit upright during a transfer.

Paragraph (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. This provision is consistent with ADAAG 4.1.3(10)(a).

Paragraph (5) requires fixed or built-in seating and tables to be accessible. This would pertain to fixed seating or table provided in the cell and is consistent with ADAAG 4.1.3(18) which requires fixed seating and tables where provided in a public or common use area to be accessible. Because the cell is a secured area, the guidelines require compliance with ADAAG 4.32 (Fixed or Built-in Seating or Tables) in each accessible cell.

Paragraph (6) requires that fixed benches be mounted at a specific height and be a minimum of 24 inches by 48 inches. It further requires compliance with the structural strength requirements in ADAAG 4.26.3 (Structural Strength). The height requirements are consistent with those for water closets (ADAAG 4.16.3 Height), shower seats (ADAAG 4.21.3 Seat), and benches in dressing rooms (ADAAG 4.35.4 Bench), and would allow for a transfer from a wheelchair.

#### 11.4.3 Visiting Areas

This section requires that where fixed cubicles are provided, at least 5 percent but not less than one, on each side must have the maximum counter height and knee clearance underneath as required

by ADAAG 4.32 (Fixed or Built-in Seating or Tables). It also requires a method to facilitate voice communication if solid partitions or safety glass separate visitors from detainees.

The scoping and technical specification in paragraph (1) is consistent with ADAAG 4.1.3(18) which requires in public and common use areas that 5 percent, but not less than one, of the built-in seating areas or tables and counters to have a maximum height of 34 inches and knee clearance underneath. Although this requirement applies to both sides of the fixed cubicles, it does not require that one particular cubicle be accessible on both sides.

**Question 33:** Should the guidelines require at least one cubicle to be accessible on both sides to accommodate those situations where both the detainee and visitor require accessible features?

Where counters are provided without a cubicle, a portion of the counter on both sides which is a minimum 36 inches in length must be accessible. The latter requirement is consistent with ADAAG 7.2 which also defines a portion of a counter as 36 inches in length.

Paragraph (2) requires a method to facilitate voice communication if solid partitions or safety glass separate visitors from detainees. This provision is further discussed under ADAAG 7.2(3).

Paragraph (3) requires accessible cubicles and counters to be identified by the International Symbol of Accessibility on both sides to be visible by both visitors and detainees. This provision is consistent with ADAAG 4.1.2(7) and 4.1.3(17)(b) which requires elements and spaces of accessible facilities to be identified by the International Symbol of Accessibility.

An appendix note clarifies that accessible cubicles may have fixed seats if the required clear floor space is provided within the area defined by the cubicle. See A11.4.3. This design would allow the "accessible" cubicle to be utilized by all persons. Where both the floor space and the fixed seat are provided in one cubicle, a method to facilitate voice communication would need to be usable from both areas. A wire mesh barrier typically provided in holding facilities to separate visitors from detainees would be one way to satisfy this requirement. If a glass partition is utilized, one centrally located telephone handset can be provided. The appendix note further recommends that when assistive listening systems are provided, the

needs of the intended user and characteristics of the setting should be considered as described in A4.33.7 and Table A2.

#### 11.5 Restricted and Secured Entrances

This section requires at least one restricted entrance and at least one secured entrance to be accessible where provided. Restricted entrances are defined as those used by judges, court personnel and other parties on a controlled basis; and secured entrances as those used by detainees and detention officers. 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.

ADAAG 4.1.3(8) requires at least 50 percent of all public entrances to be accessible and, in addition, accessible entrances to enclosed parking garage, pedestrian tunnels and elevated walkways. This section only addresses restricted and secured entrances. Therefore, the requirements of ADAAG 4.1.3(8) must be satisfied independently of this section. Typical courthouse design contains three distinct entrances and interior circulation routes which do not cross one another: public, restricted and secured. This section requires at least one restricted entrance and at least one secured entrance to be accessible. 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.

**Question 34:** What is the cost impact of requiring at least one restricted entrance and at least one secured entrance to be accessible?

In Question 6, the Board has requested comments on other types of State and local government facilities which may also have restricted and secured entrances and the appropriate number which should be accessible.

#### 11.6 Security Systems

This provision requires an accessible route complying with ADAAG 4.3 to be provided through fixed security barriers. Where the security barriers incorporate equipment which cannot be made accessible, an alternate accessible route must be provided adjacent to the fixed security screening devices. For example, metal detectors may be triggered automatically by wheelchairs or braces and therefore cannot be made accessible. In most cases, the security devices consist of movable equipment or furniture and may not be covered under the guidelines. However, where

the security barrier is a fixed element within a facility, an accessible fixed barrier or an accessible route adjacent to the fixed security device must be provided to facilitate an equivalent path of travel. The path of travel must permit persons with disabilities passing through security barriers to maintain visual contact with their personal items to the same extent as do other members of the public. An exception is provided so that doors and gates which are designed to be opened solely by security personnel need not comply with the requirements for maneuvering clearances at doors (4.13.6), door hardware (4.13.9), door opening force (4.13.11), and automatic doors and power assisted doors (4.13.12).

#### 11.7 Two-Way Communication Systems

This section requires two-way communication systems to provide both visible and audible signals so that person with hearing and speech impairments can utilize the systems. It further requires that such systems comply with the clear floor space, height and operating requirements for controls in ADAAG 4.27 (Controls and Operating Mechanisms). This provision is consistent with ADAAG 4.3.11.4 (Two-way Communication in Areas of Rescue Assistance) and ADAAG 4.10.14 (Emergency Communications in Elevators). An appendix note clarifies that this requirement can 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. This requirement would enable a person with hearing and speech impairments to communicate with security personnel to gain access to restricted areas.

#### 11.8 Electrical Outlets, Wiring and Conduit for Communication Systems

This section requires that duplex electrical outlets be provided to support communication equipment for persons with vision and hearing impairments in all courtrooms, hearing rooms (including judges' chambers when used as hearing rooms), jury deliberation and orientation rooms, and meeting rooms designated for public use. In addition to duplex electrical outlets, this section requires appropriate wiring, conduit, or raceways to support equipment and systems to accommodate participants with vision and hearing impairments in judicial, legislative and regulatory proceedings.

The Board feels that this provision will assist State and local governments to comply with Department of Justice's regulations implementing title II which

require public entities to take such steps as may be necessary to ensure effective communication with individuals. See 28 CFR 35.160.

"Meeting rooms designated for public use" refers to those areas of a facility in which public debate or discussion on local issues, laws or ordinances, or regulations takes place. "Hearing rooms", refers to those areas where hearings are held, other than courtrooms. Judge's chambers are included in this section when such chambers are used as hearing rooms.

In courtrooms, duplex electrical outlets are required in specified locations. State and local codes may contain provisions for the number and general placement of convenience duplex outlets. Therefore, the Board is proposing to require additional outlets to accommodate specific use requirements for communication access: 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 in this provision.

Some states have developed guidelines which recommend that courthouses be designed with the flexibility to accept audio-visual and data systems. (See Courthouse Facility Guidelines, State of New Jersey, 1989, Section 3.21 Technology; and Virginia Courthouse Facility Guidelines, 1987, Section 2.7 Sound and Video Recording). The "U.S. Courts Design Guide" published by the Administrative Office of the U.S. Courts in 1991, recommends that electrical duplex outlets be provided at the judge's bench; deputy clerks' stations; witness stand; jury box and law clerk's, bailiff's, court reporters', and litigants' stations. (Chapter 3: Courtrooms, at 147). See also, "The Courthouse" National Center for State Courts at 62 (1992). Additionally, the "U.S. Courts Design Guide" suggests that data transmission outlets should be located at the judge's bench, deputy clerk's station; court reporter's/recorder's station, attorneys' and litigants' stations, and law clerk's station. (Id. at 152). The "U.S. Courts Design Guide" further recommends that a provision should be made for both present and future needs for power and data cabling at each attorney's table and at the court reporter's station. (Id. at 135-136). Although the recommendations in these guides do not necessarily pertain to accessibility, the trend in courtroom design is to provide for maximum future utilization of all types of technology. The provisions in proposed ADAAG 11.8 extend the application of this trend to include

technology for persons with hearing and vision impairments.

The Board is aware that permanent wiring for all future technology cannot be anticipated; however, conduit or raceways can be provided to support a variety of current and future uses. For example, so-called "smart" technology often includes bundled wiring harnesses which can be easily installed in new construction. Examples of current technology which assists persons with hearing impairments may include assistive listening systems, or computer assisted real-time transcription. Examples of current technology which assists persons with vision impairments may include computerized reading devices with braille or magnification capability or closed circuit television reading or viewing devices.

**Question 35:** The Board believes that providing supplementary wiring, conduits or raceways at the construction phase can be done for minimal additional cost. The Board requests specific examples and cost information where supplementary wiring, conduits or raceways have been provided in newly built judicial, legislative and regulatory facilities.

This section does not mandate any specific system or technology, but only the physical capacity to accommodate future connections and systems that may be appropriate. Concern has been raised regarding the potential conflict between technology used in the jury deliberation room and the right to a jury trial which requires that jury deliberations are kept confidential. Jurors need to know that what they say in the jury room will not be revealed. There is a concern that the use of transcription systems, which may record the conversation in the jury deliberation room, will inhibit jurors and deny individuals the right to a jury trial. Similarly, the use of transcription systems in order to enable a client or attorney with a hearing impairment to communicate, raises similar questions regarding the confidentiality of attorney-client communications. Attorneys, clients and jurors need to be confident that their communications will not be heard by other persons at the time of the communication or later. The right to confidentiality of litigants who use computer aided transcription or other systems should be as secure as that of other litigants. The issue of whether a particular system or technology is appropriate for a specific application should be based on full consideration of the variables, including the need for privacy.

**Question 36:** The Board seeks comment on how issues of

confidentiality and privacy can be addressed while providing accessibility for persons with vision and hearing impairments.

#### 11.90 Permanently Installed Assistive Listening Systems

This section requires that certain areas in judicial, legislative and regulatory facilities have a permanently installed assistive listening system comply with ADAAG 4.33.6 and 4.33.7. This provision is similar to ADAAG 4.1.3(19)(b) (Assembly Areas) which requires permanently installed assistive listening systems where audible communications are integral to the use of assembly areas, if the assembly area (1) accommodates at least 50 persons or has an audio-amplification system and (2) has fixed seating. However, the facilities covered by this section would rarely meet the threshold requirements of ADAAG 4.1.3(19)(b) (Assembly Areas) as typically there are no fixed seats and, in many instances the occupant load is fewer than 50 people. Accordingly, the Board has proposed basing the threshold requirement for permanently installed assistive listening systems on the type of room.

An appendix note references proposed ADAAG 11.8 (Electrical Outlets, Wiring, Conduit for Communication Systems) which requires that courtrooms, hearing rooms, jury deliberation and jury orientation rooms, and all meeting rooms designated for public use in judicial, legislative or regulatory facilities have a duplex outlet and wiring, conduit or raceways to support communication equipment. This requirement is in addition to the requirement in this section for permanently installed assistive listening systems and is intended to facilitate the use of portable assistive listening systems.

Paragraph (1) applies to judicial facilities, and requires 50 percent, but not less than one, of each type of courtroom (at least one of which shall have a jury box, where available) to have a permanently installed assistive listening system. "Courtrooms" refers to those areas which are generally open to the public (such as a room where a criminal trial is conducted), as opposed to smaller "hearing rooms" where admittance is generally restricted (for example where a domestic case is heard). An appendix note acknowledges the large variation in the assignment of courtrooms among jurisdictions and the difficulty in listing each "type" of courtroom or courtroom use. However, where multiple courtrooms are available, they typically fall into three "types". The appendix note defines

these "types" as family (or domestic) courtroom, civil courtroom, and criminal courtroom. This definition is very broad; for example it does not distinguish between a criminal court used for adults and one used for juveniles. Proceedings such as juvenile or probate would generally fall under the three categories. For example, a courthouse has ten courtrooms: Six are assigned primarily to criminal matters (including one courtroom assigned to handle juvenile cases); one to family or domestic matters; and three to civil proceedings. Permanently installed assistive listening systems would be required in a total of six courtrooms, dispersed as follows: Three courtrooms assigned to criminal or juvenile matters, one courtroom assigned to family or domestic matters, and two courtrooms handling civil proceedings. The Board would suggest that one of the required permanently installed assistive listening systems be placed in the courtroom assigned to handle juvenile proceedings (as one of the criminal courtrooms) even though the Board does not regard courtrooms that handle juvenile cases as a different type of courtroom. See A11.9(1).

In some jurisdictions, courtrooms are assigned to accommodate more than one type of proceeding. For example, in a single courtroom, a civil trial may be in progress one day and a criminal matter the next day. In those facilities where courtrooms are not dedicated to a single type of proceeding, the guidelines would require that 50 percent of all courtrooms provided have a permanently installed assistive listening system.

In addition, paragraph (1) requires 50 percent, but not less than one, of each of the following types of rooms to have a permanently installed assistive listening system: judicial hearings rooms, jury deliberation rooms, and juror orientation rooms. "Hearing rooms", refers to those areas where hearings are held, other than courtrooms. Typically, these rooms consist of a conference table and chairs and admittance is generally restricted to the participants in the proceedings.

Paragraph (2) applies to legislative and regulatory facilities and requires 50 percent, but not less than one, of each of the following types of rooms to have a permanently installed assistive listening system: chambers and hearing or meeting rooms designated for public use where legislative or regulatory business is conducted.

"Chambers" refers to areas such as the council chambers in a city hall where public debate over proposed ordinances may occur. In addition to the

requirement for 50 percent of the total number of chambers, in State legislative facilities where separate chambers are provided for a bicameral legislature (i.e., House and Senate), the guidelines require each to have a permanently installed assistive listening system.

"Hearing rooms or meeting rooms designated for public use" refers to those areas of a facility in which public debate or discussion on local issues, laws, ordinances, or regulations takes place. In this section, the terms "hearing rooms" and "meeting rooms" are used interchangeably. Hearing rooms in legislative and regulatory facilities differ from hearing rooms in judicial facilities in that they are open to the public and are usually much larger. Examples of hearing rooms or meeting rooms would include areas in which hearings on zoning applications or waivers are held; or where town council meetings or school board meetings are conducted. It would also include adjudicatory administrative hearings (e.g., drivers license suspension hearings). On the State level, a hearing or meeting room might be the Joint Committee Room in a State legislative facility as well as smaller committee hearing rooms. As provided in the appendix note, it is not the intention of the Board to require permanently installed assistive listening systems in conference rooms restricted to use by employees, consultants and other invited guests. Nor is it the Board's intention to 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. However, the note references the Department of Justice's title II regulations which require effective communication to be provided. See A11.9(2). This may entail use of a portable assistive listening system.

**Question 37:** Is the proposed requirement for permanently installed assistive listening systems appropriate to meet the needs of persons with hearing impairments in judicial, legislative and regulatory facilities? What are the costs associated with providing permanently installed assistive listening systems in all courtrooms, chambers, and hearing or meeting rooms designated for public use?

During its initial rulemaking, the Board requested comment regarding which types of assistive listening systems (induction loop, FM, infra red) work best in particular environments. Each of the three types of systems received some support for all applications. Many commenters described their personal experiences

with particular types of systems. Those who provided extensive information on the advantages and disadvantages of the various systems recommended that a specific type should be selected only after consultation with experts in the field. The appendix contains additional information at A4.33.6 (Assembly Areas: Placement of Listening Systems) on the various types of assistive listening systems. As in ADAAG 4.1.3(19)(b) (Assembly Areas), the Board is not mandating a specific type of assistive listening system for judicial, legislative or regulatory facilities. However, the Board suggests that in choosing the most appropriate assistive listening system, due consideration be given to the confidentiality constraints discussed in proposed ADAAG 11.8.

Paragraph (3) requires that the minimum number of receivers shall be 4 percent of the occupant load of each covered room, as determined by applicable State or local codes, but not less than two, whichever is greater. As with ADAAG 4.1.3(19)(b) (Assistive Listening Systems), the 4 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). ADAAG 4.1.3(19)(b) (Assistive Listening Systems) requires that the minimum number of receivers to be provided shall be equal to 4 percent of the total number of fixed seats. As these facilities may not have fixed seats, the requirement for 4 percent receivers is based on the occupant load of the room rather than the number of fixed seats.

Paragraph (4) requires that an information sign be posted in a prominent place indicating the availability of assistive listening systems, computer-aided transcription systems, or other equipment to provide information and services to persons with vision or hearing impairments. This provision is consistent with ADAAG 4.1.3(16)(b) (Building Signage) and ADAAG 4.1.3(19)(b) (Assembly Areas) and specifies technical provisions relevant to informational signs. The Board recommends that the signage also indicate the location of such systems and equipment.

## 12. Detention and Correctional Facilities

During the initial rulemaking, the Board requested information on various State and local government facilities, including detention and correctional facilities. See 56 FR 2296 (January 26, 1991). Specifically, the Board sought

information regarding the number of cells that should be made accessible. Commenters took the position that correctional facilities should be accessible but were divided over the number or percentage of cells that should be accessible. These comments are further discussed in proposed ADAAG 12.4. Since the Board has received limited information concerning the need for accessible cells in detention and correctional facilities, those sections concerning the percentage of accessible cells are reserved in this NPRM. However, the Board intends to specify a minimum number or percentage in the final guidelines.

**Question 38:** The Board seeks additional information or survey results of the number of persons with disabilities housed in detention and correctional facilities.

During the initial rulemaking, commenters also addressed concerns about security considerations in relation to certain elements of accessibility, such as grab bars, which, if loosened and removed from walls, could be used as weapons. This issue is further discussed in proposed ADAAG 12.5.

### 12.1 General

This section applies to those detention facilities where persons apprehended or arrested for alleged violations of law are temporarily detained and to correctional facilities where persons convicted and sentenced for such violations are housed. This section covers facilities that contain holding facilities such as police stations and sheriff's offices, and facilities housing persons for security reasons, including jails, prisons, reformatories, and juvenile detention centers. This section contains specific requirements for accessible cells or rooms and access to non-contact visiting areas. Other areas, including all public and common use areas, are subject to applicable requirements contained in ADAAG 4.1 through 4.35. An appendix note addresses common use areas that serve only a limited number of housing cells or rooms, such as dayrooms, which are provided in proximity to a particular cluster or group of cells. In this situation, not all dayrooms would have to be accessible, but only those serving accessible cells or rooms.

**Question 39:** The Board seeks comments on the application of "common use areas" to detention and correctional facilities. Specifically, is additional clarification needed in regard to the areas considered to be common use areas and thus required to be accessible? Further, are there other areas

not specifically listed in the appendix that should be addressed?

ADAAG 5 through 9 also apply to detention and correctional facilities. For example cafeterias would have to comply with the applicable provisions of ADAAG 5 (Restaurants and Cafeterias).

In some cases, individuals are sentenced to institutional facilities for persons with mental illness instead of prisons due to reasons of insanity or determined mental disorders. While this section covers "other institutional occupancies where the occupants are under some degree of restraint or restriction for security reasons," mental institutions have not been specifically referenced.

**Question 40:** Should mental institutions, such as those for the criminally insane, be specifically addressed by this section or are these types of occupancies more appropriately addressed by ADAAG 6 (Medical Care Facilities)? Where possible, responses should include information about the procedures used by a State or locality in committing individuals to these types of facilities.

### 12.2 Entrances

#### 12.2.1 Secured Entrances

#### 12.2.2 Security Systems

Detention and correctional facilities typically provide secured entrances used only by inmates and security personnel and not the public. ADAAG 4.1.3(8) does not address secured entrances but only public entrances. Consequently, proposed ADAAG 12.2.1 (Secured Entrances) would require at least one secured entrance to be accessible. Since inmates are required to use such entrances, it is essential that at least one be accessible in order to ensure an accessible secured route into the facility for inmates. This requirement would be in addition to those public entrances required to be accessible by ADAAG 4.1.3(8).

**Question 41:** The Board seeks information on the new construction cost of providing one accessible secured entrance in addition to those public entrances required to be accessible by ADAAG 4.1.3(8).

Proposed ADAAG 12.2.2 (Security Systems) addresses security systems, such as metal detectors, which the public is required to pass through when visiting the facility. According to this provision, which is similar to a requirement in proposed ADAAG 11 (Judicial, Legislative, and Regulatory Facilities), if security systems are provided at public entrances, an accessible route either through or

around the device shall be provided. The Board does not intend this requirement to conflict with any security or screening procedures employed by the operators of detention or correctional facilities.

**Question 42:** Are there any existing security or screening procedures which could not be effectively carried out under the requirement for an accessible route through or around security systems?

### 12.3 Visiting Areas

This section addresses visiting areas where inmates are separated from visitors. These requirements are identical to those proposed in ADAAG 11.4.3 (Visiting Areas) for similar areas in judicial facilities and are discussed in that section. This requirement would pertain to all non-contact visiting areas provided in a detention or correctional facility where the elements addressed are provided.

Non-contact visiting areas are commonly provided in detention and correctional facilities, especially at higher security levels. Family and legal visits, which are very important for both inmates, family members, and lawyers, frequently occur in non-contact booths. Non-contact visiting areas are intended to provide increased comfort and privacy to both categories of users. The "Small Jail Design Guide," prepared by the National Institute of Corrections in 1988 found that only six percent of the facilities surveyed did not provide any non-contact visiting space and recommended counter surfaces in booths for leaning or writing, with sufficient dimension to allow access by inmates or visitors with disabilities. ("Small Jail Design Guide" 4-132, 4-133).

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

#### 12.4.1 Holding Cells and General Housing Cells or Rooms [Reserved]

This section is reserved for specifying the minimum number or percentage of required accessible cells. UFAS 4.1.4(9)(c) requires that five percent of the available residential units, but not less than one, be accessible. During the initial rulemaking, the Board requested comment on the experience of detention and correctional facilities in meeting this requirement. The response to this question was mixed. A slight majority of the comments favored a requirement of five percent but other commenters considered it excessive. Some commenters suggested a ten percent requirement, and others recommended a two percent requirement or a one

percent requirement. Only one commenter, from the State of New Mexico property control division, provided information relating to the number of individuals with disabilities who are in detention facilities, estimating that two to three percent of the population in the prison system is permanently or temporarily disabled.

In addition to UFAS, several State codes, including Delaware, Illinois, and North Carolina's, currently require five percent or at least one, whichever is greater, of cells to be accessible. Other States, including California and New York, require a minimum of one detention cell or holding area. Some State codes, including Michigan and Florida, contain scoping requirements that pertain only to accessible toilet facilities serving cells, not housing or holding cells.

The Federal Bureau of Prisons (Bureau) conducted an informal survey of prisons under its jurisdiction, which are subject to the Architectural Barriers Act and section 504 of the Rehabilitation Act. According to this survey, less than one percent of the Federal prison population was identified as having a permanent disability or needing special housing accommodations. Given these initial results, the staff at the Bureau has informally stated that no more than one to two percent of the cells under the jurisdiction of the Bureau need to be accessible. The basis for identifying persons with disabilities that was used in this survey has not been determined.

The Board intends to specify a minimum number or percentage of accessible cells or rooms as part of this rulemaking. These cells or rooms would be subject to the requirements of proposed ADAAG 12.5.

**Question 43:** The Board requests comments on the number or percentage of housing cells or rooms that should be made accessible. In particular, the Board is interested in any information or survey results on the percentage of inmates with disabilities in State or local prisons and jails. Are there any instances where an inmate with a disability is housed in other areas of the prison or jail (e.g., infirmaries), instead of among the general population due to the fact that an accessible cell or room is not available? Are there any instances when a person with a disability is sentenced to locations other than a prison or jail (e.g., halfway house), due to the lack of an accessible cell or room? If so, what is the frequency of either of these practices? Responses should include, if possible, the working definition of "disability" used for purposes of the survey and a break-

down of the number of persons with mobility impairments and the number of persons with hearing impairments identified by the survey. Further, any available information on the cost impact in new construction of providing cells or rooms that are accessible as specified in proposed ADAAG 12.5 is also requested.

Various types or categories of housing are usually found in detention and correctional facilities. These different types include minimum, medium, and maximum security; work release; and trustee. Housing for male and female inmates, and juveniles is typically segregated. The Board is considering a requirement that accessible cells or rooms be dispersed among the various types or categories of housing provided at the facility. This would ensure that all available types of housing cells or rooms are accessible to persons with disabilities. Under such a requirement, a facility that provided minimum and maximum security housing for both men and women, would have to provide accessible cells in both the male minimum and maximum housing units and the female minimum housing units.

The Board understands that the safety of inmates or detainees with disabilities may be at greater risk in some prison environments. Consequently, some prison operators may house inmates or detainees with disabilities in safer areas of the facility. For example, an inmate with a disability may be housed in a medical facility or other area in the facility where violence may occur less frequently instead of a regular housing unit. Further, such a policy may also be based on a presumption that some individuals with disabilities may pose less of a security risk.

**Question 44:** Are inmates with disabilities generally at greater risk than other inmates? Do inmates with disabilities present less of a security risk? If so, should this section include an exception providing that accessible cells do not need to be dispersed among all categories of housing? Should this exception apply only to maximum security areas and facilities or are there other areas where inmates or detainees with disabilities are particularly at risk?

In addition to requiring cells to be dispersed among different categories of housing, the Board is considering whether accessible cells should be required to be dispersed within a category of housing. For example, if minimum security housing is provided in three housing units, and three accessible cells are required in that category of housing, an accessible cell would have to be provided in each of the three units. The Board recognizes,

however, that there may be certain security or safety factors that would justify grouping accessible cells or rooms in one area or building, such as in the case of emergency evacuation.

**Question 45:** Should accessible cells or rooms be required to be dispersed throughout housing units or buildings? If so, should an exception be added based on any security or safety considerations? Commenters should explain in detail specific safety or security considerations upon which such an exception might be based. In addition, the Board requests information on the design and cost impact of providing dispersed, as opposed to grouped or clustered, accessible cells or rooms in new construction.

Correctional facilities are sometimes designed with "shift areas" which are housing areas that can serve different security needs according to the current prison population. For example, a housing area intended for minimum security inmates might be designed and constructed so that it can easily be converted into a medium security housing area when needed. The Board believes that placement of accessible cells in these areas would provide greater flexibility in accommodating inmates with disabilities. An appendix note recommends that consideration be given to the placement of accessible cells in such areas. See A12.4.1.

#### 12.4.2 Special Holding and Housing Cells or Rooms [Reserved]

In addition to general housing, detention and correctional facilities often provide housing units that serve special purposes and house inmates or detainees for shorter periods of time. These special types include cells or rooms used for disciplinary detention, protective custody, medical isolation, detoxification, and suicidal inmates or detainees. Since inmates with disabilities might require or necessitate the services provided in these facilities, the Board believes it is essential that some of each type be accessible. The Board is considering such a requirement and a minimum number or percentage has been reserved in proposed ADAAG 12.4.2.

**Question 46:** Should special housing cells or rooms be held to the same scoping requirement as general categories of housing cells or rooms or should the scoping requirement be different? Further, should each type of special housing cell or room be accessible or could one or a limited number of cells or rooms be accessible and serve as different types of special housing? For example, could a single accessible cell be used for either

protective custody, medical isolation, or detoxification? What effect would this have on access to the services provided by special facilities? Where possible, commenters should include cost information.

#### 12.4.3 Accessible Cells or Rooms for Persons with Hearing Impairments [Reserved]

This section reserves a requirement for a minimum number of cells or rooms that are accessible to persons with hearing impairments. The Board intends to require in the final rule that a certain number or percentage of cells or rooms be accessible to persons with hearing impairments according to requirements in proposed ADAAG 12.6. Accessibility requirements for persons with hearing impairments apply only to cells where certain elements such as permanently installed phones are provided in cells or rooms. (See proposed ADAAG 12.6). 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.

ADAAG 9.1.3 (Transient Lodging: Sleeping Accommodations for Persons with Hearing Impairments) requires that one of every 25 sleeping rooms be accessible to persons with hearing impairments. This scoping requirement was based in part on demographic information from the Bureau of Census indicating that 7,213,000 individuals (slightly more than 4 percent of the total population aged 15 or older) have difficulty hearing what is said in a normal conversation with another person. This figure does not include those who cannot hear at all. Bureau of Census, Disability Functional Limitation and Insurance Coverage: 1984-85. Other studies indicate that this percentage may in fact be greater. The National Center for Health Statistics determined that 7.9 percent of the population has a hearing impairment. National Health Interview Survey 1979-80. Further, an analysis of demographic data indicates that there are at least as many persons with hearing impairments as there are persons with mobility impairments. Although the Board had originally proposed requiring additional sleeping rooms in transient lodging to be accessible to persons with hearing impairments equal to the number which

are totally accessible, this number was slightly reduced based on statistical data on travelers with hearing impairments provided by commenters during the initial rulemaking.

**Question 47:** The Board requests information on the percentage of persons with hearing impairments in detention or correctional facilities.

#### 12.4.4 Medical Care Facilities

This section provides that if medical facilities with cells or rooms for patients are provided, an accessible number [percentage specified for new construction] of those cells or rooms shall comply with ADAAG 6 (Medical Care Facilities). Facilities providing medical treatment or care are required to comply only if persons may need assistance in emergencies and the period of stay may exceed twenty-four hours. These cells or rooms would be required to be accessible in addition to the number of general and special housing cells or rooms required to be accessible. This provision is intended to address the same range of medical facilities in accordance with the scoping requirements in ADAAG 6.1 (Medical Care Facilities; General) that are part of a detention or correctional facility. For example, if a prison contained a detoxification facility, 10 percent of the patient bedrooms would have to be accessible according to ADAAG 6.1(1). Other medical areas that do not meet this definition (e.g., that do not provide overnight stay for patients) would be required to be accessible to the extent required for common use areas. Thus, a medical clinic that did not have patient bedrooms would have to be accessible according to the requirements of ADAAG 4, which address public and common use areas.

**Question 48:** Is further clarification needed on the types of medical facilities addressed by this provision? Are there other kinds of medical facilities provided in detention or correctional facilities that are not clearly addressed by those covered by ADAAG 6?

**Question 49:** Proposed ADAAG 12.4.2 will address special housing cells and rooms, which may include those provided for medical isolation. If a correctional facility contains a medical unit subject to proposed ADAAG 12.4.4 which provides medical isolation cells, should such cells be counted as part of the percentage of patient bedrooms required to be accessible or should accessible isolation cells be required in addition to accessible patient bedrooms?

#### 12.4.5 Alterations to Cells or Rooms

Since correctional and detention facilities are usually built to have long

life-spans, the Board has proposed a scoping provision for the alteration of cells. This provision requires that the number or percentage of cells which must be made accessible as part of the alteration, be based on the total number of rooms altered, not the total number of cells in the facility. This requirement would be in effect for each future alteration undertaken until the total number of accessible cells required for new construction was achieved. This provision is generally consistent with similar requirements in ADAAG 9 (Accessible Transient Lodging).

## 12.5 Requirements for Accessible Cells or Rooms

### 12.5.1 General

#### 12.5.2 Minimum Requirements

This section outlines the minimum requirements for accessible cells or rooms. These requirements are based in part on specifications in ADAAG 9 for rooms in transient lodging. In proposing these requirements, the Board has taken into account various security considerations which have been discussed in proposed ADAAG 11.4 (Courthouse Holding Facilities). These issues, which are also applicable to detention and correctional facilities, include the possible security and suicide risks of grab bars, as well as the accessibility of combined watercloset and lavatory units which are a standard feature of prison cell design. [See questions 30, 31 and 32]. As noted in the beginning of this section, the Board received several comments during the initial rulemaking expressing concern about grab bars which could be loosened from the walls and used as weapons. The Board seeks information on grab bars, but notes that removal of grab bars is dependent primarily on the securement and structural strength of grab bars. ADAAG 4.26 (Handrails, Grab bars, and Tub and Shower Seats) provides minimum criteria for grab bars and handrails but does not limit their structural strength or level of securement.

**Question 50:** The Board requests information on any conflicts (in addition to those raised in the questions noted above) between these proposed guidelines and any security requirements inherent in the design of detention or correctional facilities. Commenters should specify both the relevant section of the guidelines and the security design requirement of feature with which it conflicts.

This section requires that accessible cells or rooms and the elements or spaces serving them must be on an accessible route. It also requires that the

same common areas, amenities, spaces, and elements serving other cells or rooms in the same type of housing be accessible. For example, if dayrooms or recreation facilities are available to occupants of a medium security housing unit, then such areas must be accessible and connected by an accessible route to accessible cells or rooms within the unit. These requirements would apply either to elements provided within accessible cells or rooms or those elements that may be provided in other areas but that serve accessible cells or rooms.

Paragraphs (1) through (6) are similar to provisions previously discussed under proposed ADAAG 11.4 (Courthouse Holding Facilities). Paragraph (5) requires fixed or built-in seating and tables to be accessible according to the general scoping requirement in ADAAG 4.1.3(18), which requires five percent, but not less than one, of the fixed or built-in seating or tables to be accessible according to ADAAG 4.32 (Fixed or Built-in Seating and Tables). This requirement would apply to fixed or built-in seating or tables provided within the accessible cells and those areas where such seating or tables are provided in other areas directly serving accessible cells, such as a dayrooms. Other public or common use areas serving the facility in general, such as exercise yards, vocational or instructional areas, and visiting areas, are subject to the requirements of ADAAG 4.1 through 4.35.

Paragraphs (7) and (8), which are based on requirements in ADAAG 9 for transient lodging, contain requirements pertinent to elements found primarily in housing, as opposed to holding cells or rooms. Paragraph (7) requires accessible fixed or built-in storage facilities, and paragraph (8) specifies that controls and operating mechanisms operated by inmates must be accessible.

Under paragraph (9), cells required to be accessible must also provide accommodations for persons with hearing impairments. This provision is based on a similar requirement for transient lodging in ADAAG 9.2 (Requirements for Accessible Units, Sleeping Rooms and Suites) which requires rooms accessible to persons with mobility impairments to also be accessible to persons with hearing impairments. This provision was included under transient lodging facilities so that persons with both mobility and hearing impairments could be accommodated.

**Question 51:** Is the requirement in paragraph (9) for accommodations for persons with hearing impairments

appropriate or necessary with respect to detention or correctional facilities?

## 12.6 Visual Alarms and Telephones

### 12.6.1 General

#### 12.6.2 Equivalent Facilitation

This section addresses the accommodation of inmates with hearing impairments and is derived from requirements for transient lodging in ADAAG 9.3 (Visual Alarms, Notification Devices and Telephones). The requirement for a visual alarm pertains only to those calls or rooms served by audible emergency alarms and from which inmates may evacuate independently. The term "audible emergency alarm" is intended to apply only to systems used to alert occupants of the cell or room of emergencies such as fire and would pertain to systems used only to notify security personnel, such as in cases of inmate escape or riot. Where inmates are evacuated from housing cells or rooms by security personnel, this requirement would not apply even if an emergency warning system is provided. Permanently installed telephones are required to have volume controls.

The equivalent facilitation provision in proposed ADAAG 12.6.2 allows use of portable devices in lieu of permanent ones as long as the cell or room has appropriate electrical wiring for the use of such devices. This section is consistent with a similar provision in ADAAG 9 for accessible transient lodging.

## 13. Accessible Residential Housing

Title II of the ADA covers all State and local government programs, services, and newly constructed facilities, including residential housing. Examples of housing covered under title II include, but are not limited to, public housing projects and apartments and official residences, such as those provided for governors or State university presidents. Proposed ADAAG 13 (Accessible Residential Housing) outlines minimum requirements for these residential facilities.

In proposing these requirements, the Board took into consideration existing Federal laws and regulations pertaining to residential facilities in the public sector. Specifically, these include section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), the Fair Housing Amendments Act of 1988 (Fair Housing Act) (42 U.S.C. 3604 *et seq.*), and regulations issued pursuant to both of these laws. Many residential facilities owned or operated by State governments are subject to both section

504 of the Rehabilitation Act and the Fair Housing Act.

Section 504 of the Rehabilitation Act prohibits discrimination on the basis of disability in Federally funded programs and services. The Department of Housing and Urban Development (HUD) has issued regulations implementing section 504 as it applies to housing and other programs and services which receive HUD assistance. (See 24 CFR part 8). HUD's regulations implementing section 504 reference UFAS (24 CFR 8.32). In new construction and substantial alterations, UFAS 4.1.4(11) requires five percent of the dwelling units to be accessible according to the requirements in UFAS 4.34. HUD's section 504 regulations also require that two percent of the dwelling units be accessible to persons with hearing impairments and persons with vision impairments. (See 24 CFR 8.22).

The Fair Housing Act prohibits discrimination on the basis of disability in multifamily housing and requires that new multifamily housing units be adaptable to the access needs of persons with disabilities. Section 804(f)(3)(C) of the Act requires covered multifamily dwellings to be designed and constructed in accordance with certain accessibility requirements. (See 56 FR 9473). Pursuant to this Act, HUD issued the Fair Housing Accessibility Guidelines which contain minimum requirements for adaptability in multifamily dwelling units containing four or more units. (See 24 CFR 100.205). Title II of the ADA applies to State and local government facilities containing dwelling units without respect to the number of dwelling units. Thus, coverage of title II of the ADA and the Fair Housing Act overlap.

This section outlines requirements for accessible dwelling units which are based, with modification, on requirements in UFAS 4.34 for dwelling units. Additionally, the Board has sought to ensure that these requirements do not conflict with the minimum requirements of the Fair Housing Accessibility Guidelines for adaptable dwelling units. Except as otherwise provided in this section, all public and common use areas are subject to ADAAG 4.1 through 4.35. This provision is consistent with the Fair Housing Accessibility Guidelines which require all public and common use areas to be accessible in buildings covered by the Fair Housing Act. This would include those public and common use areas provided on upper or lower floors of facilities that do not contain elevators. In requiring this provision, the Board notes that the absence of an elevator is not a barrier to all

individuals with disabilities. The guidelines include requirements for access for persons with hearing impairments and persons with vision impairments. Further, some individuals with mobility impairments, such as those using crutches or braces, may be able to use stairs to access other floors. The Board also notes that an elevator may be installed at a future date, or an addition to a building or a second building which is later connected may include an elevator. Furthermore, the legislative history of the ADA states that the exception for elevators in certain private sector facilities "does not obviate or limit in any way the obligation to comply with the other accessibility requirements established by this legislation, including requirements applicable to floors which, pursuant to the exception, are not served by an elevator." H. Rept. 101-485, pt. 2 at 114.

An exception has been included for public or 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. This is 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. (24 CFR Ch. 1, App. II, sec. 5, req. 2).

This section defines "public use areas" and "common use areas." "Public use area" is defined according to the definition in 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. This definition of "common use areas" is derived from the Fair Housing Accessibility Guidelines and applies to rooms, spaces or elements used by residents or their guests, such as hallways, lounges, lobbies, laundry rooms, refuse rooms, mail rooms, recreational areas and passageways among and between buildings. (24 CFR Ch. 1, App. II, sec. 2).

### 13.1 General

Proposed ADAAG 13.1 outlines the types of residential facilities addressed by the section. These facilities include single family and multifamily dwelling units constructed or altered by, or on behalf of, a State or local government entity. The definition of "dwelling unit" in this section is derived from the definition previously included in ADAAG 3.5 (Definitions). The definition

has been incorporated here and revised to apply only to residential housing and not transient lodging since this term is used only in this section and not in ADAAG 9 (Accessible Transient Lodging).

The term "dwelling unit" as used in ADAAG 13 specifically applies only to those facilities used as a residence which provides a kitchen or food preparation area, in addition to rooms and spaces for living, bathing, and sleeping. Examples include public housing projects and apartments and official residences. Proposed appendix note A13.1 discusses certain characteristics that distinguish residential dwelling units addressed by this section from those considered transient lodging. Specifically, residential dwelling units contain full accommodations, including kitchens, bathrooms, living and sleeping areas. Often, all of these spaces are not provided within units which are used on a transient basis.

Question 52: UFAS 4.1.4(2)(a) provides for a military exclusion for residential housing for unaccompanied military personnel, when their job descriptions cannot be filled by persons with disabilities. The Board has not included such an exemption in the proposed guidelines but seeks comment on whether such an exemption is appropriate under title II of the ADA. For example, should this section exclude unaccompanied military housing located within a State National Guard facility? Are there other types of residential housing which should be exempted from this section? Responses should include discussion of the justification upon which any recommended exemption might be based.

### 13.2 Minimum Number and Dispersion

#### 13.2.1 New Construction: Minimum Number

Proposed ADAAG 13.2.1(2) requires two percent, but not less than one, of the total number of dwelling units to be accessible to persons with hearing impairments, as well as to persons with visual impairments. Thus, five percent of the dwelling units are required to be accessible to persons with mobility impairments as well as persons with hearing or visual impairments and an additional two percent of the dwelling units (seven percent total) are required to be accessible to persons with hearing or visual impairments. In developing the requirements of proposed ADAAG 13.2.1 (1) and (2), the Board considered HUD's section 504 regulation, its Fair

Housing Accessibility Guidelines, and existing provisions in ADAAG, as discussed below.

HUD's section 504 regulations reference UFAS. UFAS 4.1.4(11)(b) requires that five percent of the dwelling units be accessible for persons with mobility impairments. HUD's section 504 regulation also requires that an additional two percent of the dwelling units be "accessible for persons with hearing or vision impairments." See 24 CFR 8.22.

The Fair Housing Act requires that all dwelling units in elevator buildings and all ground floor dwelling units in non-elevator buildings be adaptable. It does not require that any dwelling unit be fully accessible by design or construction. In general, adaptable dwelling units, as defined by HUD, allow for certain elements, such as grab bars, to be provided by the tenant.

Consequently, housing facilities subject to both HUD's section 504 regulations and its Fair Housing Accessibility Guidelines must be constructed so that five percent of the dwelling units are accessible for persons with mobility impairments, two percent are accessible to persons with hearing or visual impairments, and 100 percent of the dwelling units in elevator or 100 percent of the ground floor dwelling units in non-elevator buildings are adaptable. The requirement in proposed ADAAG 13.2.1(1) that a percentage of the dwelling units be accessible for persons with mobility impairments and the requirement in 13.2.1(2) that a percentage of the dwelling units be accessible to persons with hearing and visual impairments are derived from HUD's section 504 regulations.

ADAAG 9 (Accessible Transient Lodging) contains scoping requirements for accessible transient lodging in the form of a chart. The first chart, at ADAAG 9.1.2, contains requirements for the minimum number of accessible rooms. These rooms must be accessible to persons with mobility impairments according to the requirements in ADAAG 9.2 and contain accommodations for persons with hearing impairments according to the requirements in ADAAG 9.3. In addition, it also specifies a number of accessible rooms with roll-in showers. These requirements are to be satisfied independently. For example, a facility containing between 76 and 100 rooms must have a total of five accessible rooms, one of which must be equipped with a roll-in shower.

The second chart, at ADAAG 9.1.3, specifies a minimum number of rooms that must provide accommodations for persons with hearing impairments only.

This number is in addition to those required to be accessible in the first chart. The requirement is based on the total number of rooms provided and ranges from two percent to four percent.

The requirement in ADAAG 13.2.1(1) that five percent of dwelling units required to be accessible also be accessible to persons with hearing or visual impairments is based in part on existing requirements for transient lodging in ADAAG 9.

While proposed ADAAG 13.2 does not require any percentage of dwelling units to be adaptable, it does not conflict with the Fair Housing Accessibility Guidelines and may facilitate compliance with the Fair Housing Accessibility Guidelines by ensuring a certain level of access in new construction and reducing the need for future adaptability.

Proposed ADAAG 13.2.1(1)(a) reserves the requirement that a certain number of accessible dwelling units provide roll-in showers. In the final guidelines, the Board intends to provide scoping for the number of dwelling units required to provide roll-in showers. Such a provision would be similar to the requirement in ADAAG 9 (Accessible Transient Lodging). In ADAAG 9, a roll-in shower stall is required in certain accessible sleeping rooms on a sliding scale according to the table in ADAAG 9.1.2. (Accessible Units, Sleeping Rooms, and Suites). According to this table, transient lodging facilities with more than fifty rooms must have roll-in showers in one to two percent of the rooms.

The roll-in showers required by these provisions are shown in Figure 57 (a) and (b) and differ from the accessible shower stalls in ADAAG 4.21 (Shower Stalls). ADAAG 4.21 allows use of a 36 inch by 36 inch transfer shower stall or a larger roll-in shower stall at least 30 inches by 60 inches. The requirement for roll-in showers was based on comments received in response to the initial rulemaking.

Question 53: What percentage of the accessible residential dwelling units should contain roll-in showers? Where possible, responses should include information on the benefits, as well as estimates on the cost and design impact, of providing roll-in shower stalls in residential dwelling units.

With respect to transient lodging, accessible rooms with roll-in showers are required only in facilities with over 50 rooms. Given the trend toward integrating a number of smaller public housing facilities within communities, as opposed to providing large isolated facilities comprised of a greater number of units, the Board is concerned that

State and local government entities may not construct residential facilities that trigger the requirement for roll-in showers.

Question 54: Should the requirement for roll-in showers parallel that for transient lodging in ADAAG 9.1.2 which applies only to facilities with over 50 units or should it apply to smaller residential facilities? If so, how many dwelling units should a facility contain to trigger the requirement for roll-in showers.

Proposed ADAAG 13.2.1(1)(b) reserves the requirement for a minimum number of dwelling units with bathtubs. Persons with certain disabilities, such as severe arthritis, may have greater need for bathtubs than showers for therapeutic reasons. Consequently, the Board is considering requiring that a portion of accessible dwelling units contain accessible bathtubs.

Question 55: Should a provision for bathtubs complying with ADAAG 4.20 be included in 13.2.1(1)? If so, what portion of a facility's accessible units should contain such bathtubs? How many dwelling units should a facility contain to trigger the requirements for bathtubs complying with ADAAG 4.20?

As stated in proposed ADAAG 13.2.1(3), these requirements are not intended to increase the total number of dwelling units planned for a facility. If a facility contains only one dwelling unit, both scoping requirements could be met by making that unit accessible for persons with mobility impairments, as well as for persons with hearing and visual impairments.

Question 56: The Board seeks comment on whether the percentages specified in proposed ADAAG 13.2.1 (1) and (2) provide for an appropriate level of accessibility in residential facilities. In particular, the Board is interested in any information or survey results on the need for accessible units in existing residential facilities which are owned or operated by public entities. Public entities that have followed the UFAS scoping requirements are encouraged to comment on their experiences in providing this level of access. Responses should include, where possible, any available cost estimates or data.

The scoping percentages in proposed ADAAG 13.2.1 (1) and (2) are based on the total number of dwelling units in a facility. The term "facility" in ADAAG, as noted above, would include all buildings on a single site. However, UFAS 4.1.1 (11) requires five percent, or at least one, whichever is greater, of the "total" of Federally owned multi-family and single family dwelling units to be accessible but does not specify whether this means the total number of dwelling

units in a facility or the total number of dwelling units in each building in a facility. With respect to Federally assisted multi-family housing, UFAS bases this percentage on the total "in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or States under applicable regulations." The term "project" is not defined in UFAS. Consequently, the Board sought guidance from HUD's section 504 regulation, which defines the term "project" as: "Project means the whole of one or more residential structures and appurtenant structures, equipment, roads, walks, and parking lots which are covered by a single contract for Federal financial assistance or application for assistance, or are treated as a whole for processing purposes, whether or not located on a common site." 24 CFR 8.3.

Basing the minimum number on projects instead of facilities may lead to a decrease in the number of accessible dwelling units required, since projects may include more than one facility or site. For example, in a project that involved construction of three different facilities at different sites each providing 15 dwelling units, a minimum number based on the project total (five percent of 45) would require at least two accessible dwelling units, whereas a minimum number based on each facility total (five percent, but not less than one, of 15) would require three accessible dwelling units.

**Question 57:** The Board seeks information on whether basing the minimum number on the number of dwelling units in each facility is the most appropriate means of determining an adequate level of accessibility. Should another basis, such as the total number of dwelling units in a project be used? If an alternative is recommended, commenters should state, where possible, the impact the recommendation would have on the minimum number of accessible dwelling units required.

### 13.2.2 New Construction: Dispersion

Proposed ADAAG 13.2.2 requires that accessible dwelling units be dispersed 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. This section provides that the factors to be considered in dispersing units include unit size and configuration, cost, the amenities provided within or serving dwelling units, and location with respect to amenities. This requirement is based on a similar provision for

transient lodging in ADAAG 9.1.4 (Classes of Sleeping Accommodations). The Department of Justice regulations implementing title II of the ADA provide that a public entity may not "afford a qualified individual with a disability an opportunity to participate in or benefit from the aid, benefit, or service that is not equal to that afforded others". See 28 CFR 35.130(b)(1)(ii).

In addition, accessible dwelling units cannot be grouped or clustered but must be dispersed so that they are integrated within the facility. The principle of integration underlies the ADA as evidenced in the legislative history:

As with Section 504 of the Rehabilitation Act, integrated services are essential to accomplishing the purposes of Title II. As stated by Judge Mansmann in *ADAPT v. Skinner*, "the goal [is to] eradicate the 'invisibility of the handicapped'." Separate-but-equal services do not accomplish this central goal and should be rejected.

The fact that it is more convenient, either administratively or fiscally, to provide services in a segregated manner, does not constitute a valid justification for separate or different services under Section 504 of the Rehabilitation Act, or under this title. Nor is the fact that the separate service is equal to or better than the services offered to others sufficient justification for involuntary different treatment for persons with disabilities \* \* \* (H. Rept. 101-485, Part 3, at 50).

Thus, it is essential that tenants with disabilities are not segregated from the overall facility population. An appendix note clarifies the level of dispersion required by this provision.

**Question 58:** The Board seeks comment on the factors that constitute an acceptable level of dispersion of accessible units. In particular, the Board seeks comment on whether there are overriding factors which are more significant than a dispersed location for certain types of facilities. For example, should accessible units be located as close as possible to entrances, amenities such as parking, or common use areas such as laundry facilities? Where possible, commenters are asked to provide cost data which takes into consideration that both these guidelines and the Fair Housing Act require all public and common use areas to be accessible.

These proposed guidelines are intended to be consistent with HUD's section 504 regulations, as previously discussed. 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. A similar allowance has not been included in these proposed

guidelines because of the requirement for dispersion and integration of accessible dwelling units. Thus, under these proposed guidelines, a low-rise garden style apartment building may need an elevator serving all floors so that accessible dwelling units can be dispersed and integrated.

**Question 59:** Should the guidelines include an allowance similar to that in UFAS with respect to low-rise structures? Responses should include a discussion of the justification upon which such an allowance would be based and information on the cost impact of providing elevators in low-rise buildings in new construction.

### 13.2.3 Alterations: Minimum Number and Dispersion

Proposed ADAAG 13.2.3 addresses the alteration of residential dwelling units. Proposed ADAAG 13.2.3(1) provides that the minimum number of dwelling units required to be accessible to persons with mobility, vision and hearing impairments (five percent but not less than one) and the minimum number of dwelling units required to be accessible for persons with hearing or visual impairments (two percent but not less than one) is based on the total number of units being altered. This requirement would remain in effect and apply to subsequent alterations of other units until such time as the total number of accessible dwelling units required for the facility overall was achieved. Appendix note A.13.2.2 provides an illustration of this requirement by illustrating how this might affect a facility undergoing ten alterations in ten consecutive years. This requirement is consistent with similar provisions in ADAAG 6 (Medical Care Facilities) and 9 (Accessible Transient Lodging). Both of these sections cover facilities similar to residential facilities, which are often altered or renovated in phases with only a portion of units or rooms renovated at a time.

Proposed ADAAG 13.2.3(2) takes into account that existing conditions or the scope of the alteration may limit the ability to fully disperse 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.

### 13.3 Requirements for Accessible Dwelling Units

#### 13.3.1 General

Proposed ADAAG 13.3 contains the technical requirements for accessible dwelling units. This section is

consistent with UFAS 4.34 (Dwelling Units) except where discussed below. Specifically, the proposed requirements do not include all the provisions allowing adaptability which are in UFAS 4.34. Under provisions of adaptability, dwelling units may be designed and constructed so that certain elements necessary for accessibility, such as grab bars, can be installed at a later date. The effectiveness of adaptability depends on operational factors which are not within the purview of these guidelines. The Board has sought to ensure a level of accessibility for dwelling units that is consistent with the statutory mandate of the ADA to ensure that buildings and facilities are accessible to persons with disabilities.

In addition to ensuring a minimum level of accessibility as part of the actual design, construction or alteration of publicly owned dwelling units covered under title II of the ADA, these requirements will facilitate compliance with section 504 of the Rehabilitation Act. Further, accessible dwelling units complying with this section will satisfy the requirements in HUD's Fair Housing Act regulations, which require all units to be adaptable.

This section includes requirements for the areas, spaces, and elements of accessible dwelling units (13.3.2), and specific sections on bathrooms (13.3.3), kitchens (13.3.4), and laundry facilities (13.3.5).

### 13.3.2 Minimum Requirements

Consistent with UFAS 4.34.2, proposed ADAAG 13.3.2 requires accessible dwelling units to be on an accessible route and to provide accessible elements, spaces, and areas complying with paragraphs (1) through (14).

Paragraph (1) applies the requirements of ADAAG 4.1 through 4.35 to those spaces and facilities serving accessible dwelling units. These include entry walks, trash disposal facilities, and mail boxes. The provision applies only where such spaces and facilities are provided.

Paragraph (2) requires wheelchair turning space complying with ADAAG 4.2.3 and ground and floor spaces complying with ADAAG 4.5 in accessible spaces. The UFAS requirement at 4.34.2(2) for wheelchair passing space was not included here since such a requirement could not be met within a dwelling unit. The requirement for wheelchair passing space is applicable to public and common use areas under the accessible route requirements at ADAAG 4.3.4.

Paragraph (3) requires an accessible route complying with ADAAG 4.3 to connect all accessible spaces and elements within accessible dwelling units. A provision has been added clarifying that an elevator is not required within multi-level dwelling units as long as the following accessible elements are provided on an accessible level: one full bathroom; a kitchen; a living room; a dining room; one bedroom in a dwelling unit with one bedroom, or two bedrooms in a dwelling unit with more than two bedrooms; and, where provided, patios, decks, terraces, balconies, carports, garages. This provision is derived from UFAS 4.34.2(15)(c) and there is a similar provision for transient lodging in ADAAG 9.2.2(2).

Paragraph (4)(a) requires an accessible parking space complying with ADAAG 4.6 for each accessible dwelling unit if resident parking is provided. An exception is provided regarding signage for the required accessible parking spaces. Where parking spaces are assigned to specific dwelling units, the parking sign identifying the space as accessible required at ADAAG 4.6.4 is not required to be provided until the dwelling unit is occupied by a resident with a disability. UFAS 4.1.1(5)(d) requires an accessible space for each accessible dwelling unit only where parking is provided for all residents. Where parking is provided for only a portion of residents, the same UFAS provision requires that an accessible space be provided upon the request of the occupants of accessible dwelling units. Since redesigning a parking lot to provide accessible spaces at a later date may be extremely costly, the Board has proposed applying the provision of accessible spaces for each accessible dwelling unit even when parking is provided for only a portion of residents. However, the exception for signage designating the space would allow for the space to be used by persons without disabilities until such time as a tenant with a disability requires the accommodation. Paragraph 4(b) is consistent with UFAS 4.1.1(5)(d) in requiring that where visitor spaces are provided, two percent, but not less than one, are to be accessible.

The Board is considering a requirement for accessible van parking. The Board recognizes that tenants will want to park as close as possible to their units, however, it is impossible to predict which accessible dwelling unit might be occupied by a person having a van. Therefore, the Board is considering requiring every accessible parking space in tenant lots to be van accessible. Universal design which also

can be used either by cars or vans is another alternative. A Universal space, as shown in ADAAG A4.6.3, Figure A5(b) is 132 inches wide with a 60 inch access aisle. Spaces designed specifically for vans must be 96 inches wide and have a 96 inch access aisle. When only one space is provided at a location, the van and universal spaces are the same overall size, 192 inches. When spaces are paired, two universal spaces with a shared access aisle measure 324 inches and two van spaces with a shared access aisle measure 288 inches. However, given that accessible dwelling units will be dispersed within a facility, it seems unlikely that spaces will be paired.

**Question 60:** Should accessible van parking spaces be provided for tenants? If so, should all accessible parking spaces be van accessible or are there other design or scoping solutions? Should the Board specify the universal design parking space or the van accessible type? Responses should include, where possible, cost information.

Paragraph (5) requires that elevators serving accessible dwelling units comply with the requirements for elevators in ADAAG 4.10. This provision is reserved in UFAS. The Board feels that elevators are essential for access in some residential facilities covered by ADAAG 13. This requirement would apply to accessible dwelling units provided on the upper floors of a high-rise apartment building. It may also apply to elevators located within a dwelling unit that connects levels required to be accessible. However, under paragraph (3), an elevator would not be required in an accessible dwelling unit if the required accessible spaces are on an accessible level. In providing for equivalent facilitation under paragraph (5)(ii), the Board has taken into consideration the cost and design impact of providing elevators complying with ADAAG 4.10 within accessible dwelling units and has proposed a provision allowing for the installation of a platform lift complying with ADAAG 4.11 to connect levels that are required to be accessible.

Paragraph (6) requires doors provided for passage in and to accessible spaces to comply with ADAAG 4.13. This provision is consistent with the requirements for accessible units in transient lodging in ADAAG 9.2.2(3).

Paragraph (7) requires at least one accessible entrance to the dwelling unit complying with ADAAG 4.14. This requirement is consistent with UFAS 4.34.2(7).

Paragraph (8) addresses storage facilities provided in accessible spaces,

including cabinets, shelves, closets, and drawers; and requires one of each type to be accessible in compliance with ADAAG 4.25. This provision applies to one of each type of storage facility, and is consistent with the general scoping for storage facilities in UFAS 4.1.2(11) and ADAAG 4.1.3(12), as well as a requirement specific to transient lodging in ADAAG 9.2.2(4).

Paragraph (9) requires all controls, including those used in the regular and periodic adjustment of heating, ventilating, and air conditioning, to be accessible in compliance with ADAAG 4.27. An exception provides that this requirement does not apply to controls such as air distribution registers, required to be placed in or close to ceilings for proper air circulation. This provision is consistent with UFAS 4.34.2(9).

Paragraph (10) requires audible alarms complying with ADAAG 4.28.2 and auxiliary alarms complying with ADAAG 4.28.4 if emergency warning systems are provided. This is consistent with UFAS 4.34.2(10). Otherwise, visual alarms complying with ADAAG 4.28.3 are not required within dwelling units because they are required to be connected to a building central alarm system and currently, many residential facilities are constructed without a central alarm system.

Paragraph (11) requires at least one full bathroom complying with proposed ADAAG 13.3.3, including a water closet, lavatory, and bathtub or shower. This is consistent with UFAS 4.34.2(12).

Paragraph (12) requires kitchens to be accessible in compliance with proposed ADAAG 13.3.4 and is consistent with UFAS 4.34.2(13).

Paragraph (13) 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, carports, and garages. This is consistent with UFAS 4.34.2(15). The Board has included an exemption based on ADAAG 9.2.2(6)(d) for transient lodging to allow for a higher threshold at doors on patios, decks, and balconies when it is necessary to protect the integrity of the unit from wind or water damage if equivalent facilitation is provided. Some local building codes require higher door thresholds or a change in the level of balconies to prevent structural damage from water.

Paragraph (14) requires laundry facilities to be accessible in compliance with proposed ADAAG 13.3.5 and is consistent with UFAS 4.34.2(15).

### 13.3.3 Bathrooms

This section contains requirements for bathrooms and is based on UFAS 4.34.5 with modification. The UFAS requirements for bathrooms are based in part on the concept of adaptability. Under this concept, certain elements necessary for access, such as grab bars, may be installed later instead of as part of new construction. These proposed requirements do not include adaptability in order to ensure full bathroom accessibility in the design and construction of dwelling units. The differences between the proposed requirements and those in UFAS 4.34.5 are further discussed below.

Paragraph (1) prohibits doors from swinging into the clear floor space required for any fixture. This is consistent with UFAS 4.34.5.1. The Board has also applied the requirements for doors in ADAAG 4.13 to doors leading to accessible bathrooms.

Paragraph (2) 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 aside the water closet. UFAS 4.34.5.2(3) requires only that bathrooms be designed so that grab bars can be installed as a feature of adaptability. ADAAG 4.16 also contains requirements for toilet paper dispensers similar to those in UFAS 4.34.5.2(4) and requirements for flush controls not included in UFAS 4.34.5.2.

Paragraph (3) 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. This provision is consistent with UFAS 4.34.5.3, except that UFAS addresses only those medicine cabinets located above lavatories. The Board expanded this requirement to medicine cabinets not located above the lavatory because such cabinets are often provided elsewhere within accessible bathrooms.

Paragraph (4) requires bathtubs, if provided, to comply with ADAAG 4.20. This provision is consistent with UFAS 4.34.5.4, except that UFAS allows grab bars to be installed under the concept of adaptability.

Paragraph (5) requires shower stalls, if provided, to comply with ADAAG 4.21 and is consistent with UFAS 4.34.5.5. However, ADAAG 4.21 includes requirements for seats in roll-in shower stalls where provided, specifications for

curbs, and requirements for grab bars which are not included in UFAS.

Paragraph (6) contains requirements for bathtub and shower enclosures that are derived from UFAS 4.34.5.6.

Paragraph (7) notes that the clear floor space at fixtures and controls may overlap and is based on UFAS 4.34.5.7. The Board has also clarified that those fixtures and controls required in accessible bathrooms shall be on an accessible route.

Paragraph (8) requires a turning space complying with ADAAG 4.2.3 and has been added as a restatement of a similar requirement in proposed ADAAG 13.3.2(2) which is consistent with UFAS 4.34.2(2).

### 13.3.4 Kitchens

This section contains requirements for accessible kitchens, which are required to be located on an accessible route. In general, this section is consistent with UFAS 4.34.6. However, where UFAS allows certain elements to be either accessible or adaptable, this proposed section requires full accessibility and does not address adaptability. Differences between these requirements and those of UFAS are further discussed below.

Paragraph (1) provides for minimum clearances between all opposing base cabinets, counter tops, appliances, or walls. This provision is identical to UFAS 4.34.6.1.

Paragraph (2) provides for clear floor space of at least 30 by 48 inches at all appliances in the kitchen, including the range or cooktop, oven, refrigerator/freezer, dishwasher, and trash compactor. Clear floor spaces must comply with ADAAG 4.2.4 and allow for either a forward or a parallel approach. Laundry equipment provided in the kitchen must comply with proposed ADAAG 13.3.5. All of the above requirements are the same as those in UFAS 4.34.6.2. A clarifying provision has been added requiring maneuvering space complying with ADAAG 4.2.3. UFAS 4.34.2(2) and proposed ADAAG 13.3.2(2) require that accessible spaces shall have maneuvering spaces complying with 4.2.3 in UFAS or ADAAG.

Paragraph (3) requires that all controls in the kitchen comply with ADAAG 4.27. This provision is identical to UFAS 4.34.5.3.

Paragraph (4), like UFAS 4.34.5.4, requires that at least one 30 inch section of counter provide an accessible work surface. Paragraph (4)(a) allows the accessible work surface to be either adjustable or mounted at a fixed height and is similar to UFAS 4.34.6.4(1). However, consistent with ADAAG

4.32.4, the proposed requirement provides a range of height for fixed counters from 28 to 34 inches whereas UFAS requires a counter height of 34 inches maximum. Paragraph (4)(b) requires that counter thickness and supporting structure be 2 inches maximum over the required knee clearance and is consistent with UFAS 4.34.6.4(3). Paragraph (4)(c) requires a clear floor space at the accessible work surface of 30 by 48 inches, and provides for a forward approach. 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. This section is consistent with UFAS 4.34.6.4(4).

Paragraph (4)(d) requires that there shall be no sharp or abrasive surfaces under work surfaces and is consistent with UFAS 4.34.6.4(5).

The provision in UFAS 4.34.6.4(2), which allows use of removable base cabinets, has not been included because those adaptable features that may obstruct accessible elements are not included in this section.

Paragraph (5) requires that the sink and surrounding counter comply with ADAAG 4.24. With respect to mounting height, this paragraph is consistent with UFAS 4.34.6.5(1) in that it allows for the sink to be capable of being adjusted to alternative heights. However, while UFAS requires that the sink be capable of being mounted at 28, 32, and 36 inches, this section requires that an adjustable sink be capable of being mounted at 28, 32, 34, and 36 inches. This action has been taken to provide consistency with the requirements for a fixed sink and it takes into consideration the clearances required for a sink with a 6½ inch deep bowl while maintaining the required knee clearances. ADAAG 4.24 contains provisions which are consistent with UFAS 4.34.6.5 with regard to minimum knee clearances, the depth of the sink, clear floor space, protection from exposed pipes, faucet controls and rough-in plumbing for adjustable sinks. This paragraph includes an appendix note similar to UFAS A4.34.6.5, recommending the provision of a rear drain in order to prevent garbage disposals and other plumbing from obstructing the required clear floor space.

Paragraph (6) requires that cooktops have accessible controls which do not require reaching across burners and a clear floor space allowing either a front or side approach. Cooktops with knee space underneath must be insulated or otherwise protected on the exposed contact surface to prevent burns,

electrical shock, and abrasion. This section and its appendix note recommending counter top ranges with adjustable heights is similar to UFAS 4.34.6.6. The reference to ranges, as used in UFAS, was not included because this section only applies to cooktops. Ovens and ranges are included in the following section.

Paragraph (7) 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 even interior is accessible to the counter space. This paragraph requires a pull-out shelf under a side opening oven extending the full width of the oven and pulling out not less than 10 inches. Ovens are also required to have controls on front panels or on either side of the door. This paragraph and its appendix note explaining the rationale for the provisions are similar to UFAS 4.34.6.7. This section clarifies the difference between floor ovens and wall ovens.

Paragraph (8) provides for refrigerators and freezers to be either: 1) the side-by-side type or, 2) the over and under type, with fifty percent of the freezer within 54 inches and 100 percent of the refrigerator below 54 inches. If the above requirements are not met, the freezer shall be a self-defrosting type of mechanism. The appendix note provided with this section is similar to UFAS, except that the Board has clarified that having the ability to open the door 180 degrees provides greater maneuvering space at the opening by allowing knee and toe clearances at the hinge side by a parallel reach.

Paragraph (9) requires that dishwashers have accessible controls, clear floor space allowing either a front or side approach, and that all rack space be accessible from the front of the machine for loading and unloading dishes. This paragraph is the same as UFAS 4.34.6.9.

Paragraph (10) covers kitchen storage and is identical to UFAS 4.34.6.10. It requires that 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 shall 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. As in UFAS, an appendix note recommends pantry style storage for greater accessibility.

The Board is considering a requirement that a portion of the kitchen storage cabinets be provided

with pull-out shelving that will facilitate access to the rear of the unit.

**Question 61:** Should pull-out shelving be required in kitchen storage? If so, what are the costs associated with such a requirement?

### 13.3.5 Laundry Facilities

This section contains requirements for accessible laundry facilities which are essentially the same as UFAS 4.34.5.7. Paragraph (1) requires laundry facilities and equipment to be on an accessible route. Paragraph (2) requires a minimum of one washing machine and clothes dryer provided in each common use laundry room to be front loading. Under paragraph (3), laundry equipment controls must comply with ADAAG 4.27.

### 13.4 Requirements for Dwelling Units Accessible to Persons with Hearing Impairments

#### 13.4.1 General

#### 13.4.2 Equivalent Facilitation

This section addresses accommodations for persons with hearing impairments and is based on requirements for transient lodging in ADAAG 9.3 (Visual Alarms, Notification Devices and Telephones). Proposed ADAAG 13.4.1 requires auxiliary alarms complying with ADAAG 4.28.4 (Auxiliary Alarms); devices providing visual notification of incoming telephone calls and door knocks in living and sleeping rooms; volume controls complying with ADAAG 4.31.5 (Hearing Aid Compatible and Volume Control Telephones Required by 4.1) for permanently installed phones; and electrical outlets in proximity to telephone connections to facilitate use of portable text telephone devices. Proposed ADAAG 13.4.2 allows, as a means of equivalent facilitation, use of portable devices in lieu of permanent devices if appropriate electrical wiring for their use is provided. This section is consistent with ADAAG 93.3.

### 13.5 Requirements for Dwelling Units Accessible to Persons with Visual Impairments: Reserved

This section reserves requirements for persons with visual impairments. UFAS 4.34 which addresses dwelling units, is the main basis for the requirements in proposed ADAAG 13.3, does not include any specifications pertaining to access for persons with visual impairments. HUD's section 504 regulations require that two percent of the dwelling units in new construction be accessible to persons with visual impairments (24 CFR 8.22). The Board is considering including specific

requirements for persons with visual impairments as part of its final guidelines. Requirements that are under consideration are discussed below.

HUD has recommended certain accommodations for persons with visual impairments under section 504 with regard to its section 202 program, which provides rental subsidies for elderly persons and persons with disabilities. (See Memorandum from James E. Schoenberger, HUD General Deputy Assistant Secretary for Housing, to all Regional Administrators, July 3, 1989). These recommendations are: lighting fixtures which can accommodate 150 watt bulbs for tenants with residual vision; the mounting of cooktop controls on the front and side of ranges; tactile markings for controls; and colors for baseboards, doors, door frames, and windows that contrast with the color of walls and floors.

A number of publications have identified additional recommendations. One publication recommends use of a contrasting color to mark the leading edge of steps. (See "Making Life More Livable", American Foundation for the Blind at 59 (1983)). Another suggested decals placed on sliding glass doors and other large areas of glass at face and chest height (See Duncan, et. al., "Environmental Modifications for the Visually Impaired: A Handbook," Visual Impairment and Blindness at 444 (December 1977)). Another study recommended that doors to upper kitchen cupboards be of the sliding type to reduce the risk of injury posed by doors left ajar. (See Braf, "The Physical Environment and the Visually Impaired", Swedish Institute for the Handicapped at 24 (March 1974)).

**Question 62:** The Board seeks comment on what provisions, if any, are appropriate and should be included in this section. In particular, information is sought on what provisions, if any, are necessary in residential housing to accommodate persons with low vision as well as those who are blind. Where possible, responses should identify any supporting data or other sources, including building codes and State or local requirements and include cost information. Individuals and organizations representing persons who are blind or visually impaired are requested to provide recommendations based on their experience or expertise.

#### 14. Public Rights-of-Way

The need to complement and connect accessible public and private sites and facilities with accessible pedestrian components is recognized in the House Education and Labor Committee Report on the ADA: "... the employment,

transportation, and public accommodation sections of this Act [the ADA] would be meaningless if people who use wheelchairs were not afforded the opportunity to travel on and between the streets." (H. Rept. 101-485, pt. 2, at 84)

Standards directed toward the elimination of architectural barriers have been largely focused on buildings and facilities located on easily defined sites and on the accessible routes that ensure access within buildings and sites. Pedestrian circulation systems in the public right-of-way have not been explicitly addressed, although individual elements, such as walks and curb ramps, are covered by UFAS and ADAAG.

Travel between buildings, districts, and transportation modes requires the connection of individual pedestrian elements such as the public sidewalks, curb ramps, and street crossings of a jurisdiction into an accessible network. The transportation planning and development process offers the most useful model for the development of guidelines for connecting accessible pedestrian elements, components, and networks for a number of reasons. The purpose of a transportation system is to move an individual from one location to another and to provide the major origin/destination linkages that pedestrian routes connect to and from. Transportation systems are not site-specific and they are largely a public service. A pedestrian circulation system performs similar functions. For the most part, transportation facilities and services and pedestrian circulation networks operate within an environment limited by the constraints of topography and existing adjacent development. Both systems are part of the infrastructure of a municipality. They are complementary in that pedestrian routes complete the origin/destination linkages of public transportation.

Research sponsored by the Department of Transportation developed guidelines for the individual elements of the pedestrian circulation network and proposed the first nationwide guidelines for accessible pedestrian networks.<sup>8</sup> Municipalities that applied these planning and implementation strategies developed accessible networks within districts and along routes that served significant local

destinations.<sup>9</sup> A subsequent study conducted by the Department of Transportation and the Federal Transit Administration (formerly the Urban Mass Transportation Administration) followed with an assessment of the physical and operational barriers associated with getting to and from the transportation stops and facilities.<sup>10</sup> This study demonstrates that the goals of accessibility are not adequately served if the design of individual elements such as curb ramps or pedestrian overpasses do not consider the planning context of the sidewalk and intersections they connect.

Accordingly, this section addresses the overall framework for a pedestrian circulation system, as well as the elements and components of such a system. Standards are proposed for sidewalks, curb ramps, crosswalks, and crossing controls with special provisions for drinking fountains, telephones, toilet facilities, and tables, seating and benches located along the pedestrian route. It also covers vehicular elements which are related to the pedestrian network such as on-street parking and roadside emergency communication systems. In addition to addressing the individual elements, this section provides for the connection of those elements within the sidewalk to ensure that pedestrians with disabilities are afforded the opportunity to travel on and between the streets.

#### 14.1 General

This section generally applies ADAAG provisions for buildings and facilities to new construction in public rights-of-way, subject to the modifications contained in this section. It covers work: (1) that is undertaken by or on behalf of a State or local government entity, and (2) that involves elements for pedestrian access, circulation, and use whether by intention or as a consequence of other work. Such elements include sidewalks, curb ramps, crosswalks, crossing controls, drinking fountains, telephones, toilet facilities, fixed tables, seating, benches, and related on-street parking and roadside communication systems that are constructed or installed on or adjacent to a sidewalk or roadway within the limits or scope of a public improvement project. These elements are discussed in the sections that follow.

<sup>8</sup> "Provisions for Elderly and Handicapped Pedestrians" DOT/FHWA (1979); "Guidelines for Making Pedestrian Crossing Structures Accessible" DOT/FHWA (1984); "Planning, Design and Maintenance of Pedestrian Facilities" DOT/FHWA (1984); "Priority Accessible Networks" DOT/FHWA (1980).

<sup>9</sup> "Accessibility for Elderly and Handicapped Pedestrians—A Manual for Cities" DOT/FHWA (1987).

<sup>10</sup> "Planning, Implementing, and Maintaining Accessible Accessways to and from Bus Stops: Existing Problems and Possible Solutions for the Wheelchair Traveler" DOT/UMTA (1983).

An appendix note clarifies that this section is intended to apply special provisions to those pedestrian facilities that are constrained by terrain, vehicular roadways, and existing buildings or elements of the pedestrian network. Other areas or sites constructed or altered as part of a public improvement project, such as plazas or courts where the constraints listed above do not apply, are subject to the applicable provisions of ADAAG 4.1.1 through 4.35.

Where an improvement to the public right-of-way includes a plaza or court, those facilities are subject to the requirements of ADAAG 4.1.1 through 4.35. For example, an accessible route complying with ADAAG 4.3 must be provided connecting accessible elements within the site such as public transportation stops, accessible parking spaces, accessible entrances and other accessible elements provided on the site. Proposed ADAAG 4.2 requires that sidewalks or a continuous passage connect to the accessible route. Where the accessible route exceeds 1:20 (e.g., walks leading to the accessible entrance), and is constructed on a site not covered by proposed ADAAG 14, it must meet the requirements for handrails, level landings, and all other requirements in ADAAG 4.8. See A14.1.

Although the general section applies to new construction, most public improvement projects will occur within limits established by existing adjacent sidewalks, buildings, curbing, and roadway paving. Therefore, it may be difficult to distinguish between new construction and alterations in many public improvement projects. For example, the construction of a new sidewalk for an entire city block must connect on both ends to the existing sidewalks. The sidewalk is new construction even though it occurs within the boundaries of existing sidewalks. Therefore, this section contains provisions for site infeasibility which would normally apply only to alterations.

Vehicular and pedestrian planning within a new subdivision may seem less constrained, but in fact will be subject to limits of grading and filling, and may not always be able to meet all criteria for sidewalk slope. However, curb ramps and adjacent level landings should rarely, if ever, require exception.

Many public improvement projects may involve elements not covered by this section, such as new decorative lighting standards and lanterns, but which may involve altering the sidewalk. When the sidewalk is replaced following construction, it must

comply with the provisions of this section for new construction.

Moreover, structural alterations undertaken in accordance with a jurisdiction's ADA transition plan must comply with the provisions of this section. See 28 CFR 35.150(b)(i).

#### 14.1.1 Definitions

This section defines the key terms used in ADAAG 14.

Continuous passage is defined as a continuous unobstructed pedestrian circulation path within a sidewalk connecting pedestrian elements, systems, and facilities covered by ADAAG 14.

The definitions in ADAAG 3.5 for marked crossing and walk have been included here for reference.

Public improvement project is defined as a public works project consisting of the construction, alteration or installation of site improvements or amenities in the public right-of-way by or on behalf of a State or local government. This definition is derived from common terminology within the planning profession. Examples of public improvement projects include: (1) the construction or installation of site improvements and pedestrian amenities, landscaping, street furniture, and decorative paving, often as part of a downtown revitalization program; (2) the widening or realignment of a street which frequently involves new sidewalk and curb ramp construction; (3) the addition of transit shelters, pedestrian walkways, or bicycle paths for public circulation; (4) the upgrading of a storm or sanitary sewer, surface drainage system, or other utility; (5) the burial of overhead power or telephone lines; and (6) the installation of new area lighting. These projects are largely concerned with the infrastructure of a jurisdiction and are typically planned and budgeted for in a multi-year capital improvements program or as an annual maintenance and repair line item. Federal support may be provided through Community Development Block Grants or Federal Highway Act funding and may already require compliance with the Architectural Barriers Act of 1968 (42 U.S.C. 4151, *et seq.*) or section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794). Projects may be undertaken within clearly defined boundaries or may consist of the installation of a typical item dispersed throughout an area or jurisdiction such as drinking fountains, toilets, benches, or curb ramps.

An appendix note recommends that public entities ensure that developers who provide sidewalks, curb ramps and other pedestrian improvements in the public right-of-way as part of the scope

of a private project comply with the provisions of this section. Similarly, the suburban residential developer who constructs streets and sidewalks as part of a new subdivision in anticipation of a later annexation or donation of public ways to a local government should also comply with these guidelines. Most jurisdictions will already require conformance to their street and highway specifications as a condition of acceptance. See A14.1.1.

Sidewalk is defined as a walk in the public right-of-way bordering a vehicular way as part of an interconnected pedestrian circulation network. This definition is consistent with UFAS 3.5 (Definitions: Walk) and ADAAG 3.5 (Definitions: Walk), and incorporates the definition of "walk" but is limited to those walks that are in the public right-of-way along vehicular ways. Unlike the definition of "walk", the definition of "sidewalk" does not include general pedestrian areas such as plazas and courts which can be designed, altered, and constructed to meet the requirements of 4.1 through 4.35. Sidewalks covered by this section are constrained by the slope of vehicular ways, topography, and existing facilities and pedestrian circulation routes which limit the ability to meet ADAAG 4.1 through 4.35.

The definition is also consistent with the language in the Department of Justice regulations implementing title II of the ADA which address pedestrian walks and walkways in relation to requirements for curb ramps. See 24 CFR 35.150(d)(2) and 35.151(e). It is also consistent with the definition of sidewalk in the California Accessibility Standards. (See title 24, part 2, section 3325 (1989).)

Site infeasibility means, with respect to construction in the public right-of-way, that there are existing physical or site constraints prohibiting the incorporation 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. This definition is derived from the definition of technically infeasible in ADAAG 4.1.6(1)(j) (Accessible Buildings: Alterations) and is applied to new construction because public improvement projects most frequently will occur within limits established by existing adjacent sidewalks, buildings, curbing, and roadway paving.

## 14.2 Sidewalks

### 14.2.1 Minimum Requirements

Proposed ADAAG 14.2 requires that sidewalks have a continuous passage along their length at least 36 inches in width which connects to building entrances and curb ramps, marked crossings, telephones, drinking fountains, toilet facilities, and other elements addressed in this section. The sidewalk or continuous passage must comply with requirements for width, slope, passing space, surface and separation.

The requirements of this section are derived from ADAAG 4.3 (Accessible Route). However, the provisions relating to handrails, level landings on ramps and at doors are not applicable to sidewalks except where the accessible route is coincident with the sidewalk. Therefore, the Board has applied only the requirements for width, passing space, surfaces and slope. In addition, this section requires that a 36 inch continuous passage connect to curb ramps or other sloped areas at street crossings and to the accessible routes on sites as specified in ADAAG 4.1.2(1). ADAAG 4.1.2(1) requires accessible sites to be connected to public transportation stops, sidewalks, and accessible building entrances. A provision requiring the separation of the sidewalk from the vehicular way has been added.

The Board is proposing a requirement for a 36 inch continuous passage along a sidewalk. The Board is not specifying an overall sidewalk width. Sidewalk design and construction, where regulated, is typically the province of a State transportation or highway department, most of which follow Department of Transportation and Federal Highway Administration recommendations. A 1988 study for the Federal Highway Administration proposed that central business district sidewalks be sized according to level of service and that other sidewalks be a minimum of 5 feet in width with a 2-foot planting strip or parkway except in low-density residential areas, where 4 feet was recommended.<sup>11</sup> The Board's proposal for a 36 inch continuous passage can be easily accommodated within these recommendations without special or additional construction. The Board's proposal is consistent with sidewalk requirements in several States, such as California, Massachusetts and North Carolina.

This provision is consistent with ADAAG 4.3.3 (Width), which requires a

36 inch clear width for an accessible route, and is derived from the space required for a comfortable gait by persons using walking aids. ADAAG 4.1.2(1) requires an accessible route to connect accessible elements within a site. This section permits use of the sidewalk, or a portion of it, to satisfy the requirements for an accessible route in ADAAG 4.1.2(1) only if the sidewalk meets all the requirements of 4.3 (Accessible Route).

An appendix note explains that where a required accessible route is coincident with that of the sidewalk or continuous passage along it, the sidewalk or passage must comply with ADAAG 4.3. See A14.2.1. The appendix note further explains that these provisions do not preclude sidewalk segments at different levels or sidewalks with stairs (which are sometimes advantageous in providing access to building entrances on or along steeply sloping sites) provided that a continuous passage serves each accessible entrance and is connected to a continuous accessible sidewalk. Where a sidewalk contains steps or where sidewalk levels diverge, a railing, planter or other barrier separating the levels is recommended. Stairs abutting a sidewalk should have uniform riser heights and uniform tread widths. See A14.2.1.

The appendix note also explains that the cross slope requirements pertain only to the portion of the sidewalk that is required to be 36 inches wide. Cross slopes on portions of sidewalks adjacent to the continuous passage required by proposed ADAAG 14.2 may exceed 2 percent, provided that the adjacent portions are smoothly blended. This may facilitate connecting the clear passage to building entrances, facilities or elements. See A14.2.1.

The appendix note also illustrates how narrow sidewalks immediately adjacent to the curb or roadway can be offset to avoid a non-conforming cross slope at driveway aprons by diverting the sidewalk around the apron. See Fig. A9. Sidewalks separated from the curb or roadway by a planted parkway can accommodate an apron within the width of the parkway. See A14.2.1.

Paragraph (1) requires the least possible running slope to be provided. The maximum slope shall be 1:12. It further requires that the cross slope of the minimum 36 inch passage not exceed 1:50. Handrails are not required. This provision is consistent with ADAAG 4.8.2 (Slope and Rise) and ADAAG 4.3.7 (Slope). Cross slopes are difficult for wheelchair users to manage on relatively flat routes of travel. When combined with steep running slopes, a 1:50 (2 percent) limit is important for

safe travel. Although ADAAG 4.8 (Ramps) requires handrails where the slope of a ramp exceeds 1:20, this exception for handrails on sidewalks is consistent with ADAAG 4.8.5 (Handrails) which does not require handrails on curb ramps.

Due to a variety of existing conditions, it may not be possible for sidewalk slopes to meet all the requirements of ADAAG 4.3.7 (Slope). Therefore, the Board proposes an exception to paragraph (1) where site infeasibility precludes a maximum running slope of 1:12. Site infeasibility is derived from ADAAG 4.1.6(1)(j) and in this section applies to both new construction and alterations. This exception permits a jurisdiction to use site infeasibility where the public right-of-way may be physically constrained by existing construction or extremes of terrain. The Board recognizes that the gradients of pedestrian and vehicular circulation within the boundaries of a jurisdiction are directly tied to topography and the finish grades already established by existing adjacent building and public way construction. In such instances, this provision would require the least possible running slope to be provided.

Paragraph (2) requires sidewalks less than 60 inches in width to provide passing space at reasonable intervals. Passing space must provide a 60 inch by 60 inch minimum clear space or a T-shaped space and have a cross slope not exceeding 1:50. This provision is consistent with ADAAG 4.3.4 (Passing Space). Passing space will typically occur well within the more generous widths of standard urban sidewalks. Passing spaces along narrower sidewalks can generally be accommodated without special construction at building entrances or sidewalk intersections within the 200-foot limitation given a typical municipal block length.

**Question 63:** Is the 200 foot distance between passing spaces appropriate in all areas or should the distance be different for urban, suburban, and rural areas? If not, what should the distances be? Should the volume of pedestrian traffic be a determining factor? If so, how would future development and volume increase be accommodated? What would be the cost of the additional width required to permit a 60 by 60 inch passing space along a 36 inch wide sidewalk?

**Question 64:** California requires level landings at 400 foot intervals along some sidewalks where the slope is extreme. Should the Board include a similar provision in this section? If so, how can it be achieved without

<sup>11</sup> "Planning, Design and Maintenance of Pedestrian Facilities" DOT/FHWA (1989).

increasing the slope of the sidewalk? What increased cost would result?

**Question 65:** The natural terrain in many developed areas such as parts of San Francisco, Seattle, and Pittsburgh, will preclude, in many instances, construction of sidewalks with a running slope of less than 1:12. The Board is interested in local solutions and accommodations for persons with mobility impairments who need access to buildings and facilities on or along steeply sloping sidewalks. How can passing space, cross slope, and level landing provisions be satisfied in such areas? Commenters are encouraged to submit details and figures demonstrating approaches to pedestrian access under such conditions and to provide cost data where available.

Paragraph (3) requires sidewalk surfaces to be firm, stable, and slip resistant and that differences in level between  $\frac{1}{4}$  and  $\frac{1}{2}$  inch be beveled. It further requires that gratings with elongated openings be placed so that the long dimension is perpendicular to the dominant direction of travel. This provision is consistent with ADAAG 4.5.1 (General), ADAAG 4.5.2 (Changes in Level), and ADAAG 4.5.4 (Gratings).

Paragraph (4) requires a separation between pedestrian walkways and vehicular ways. Separations may include but are not limited to curbs, grass or other plantings, or gravel. Components such as curbs, parkways, or other barriers which separate the pedestrian way from the roadway will not be continuous where driveways, or the continuous passage required by ADAAG 14.2.1, cross the separation. This provision is to ensure that edges of the sidewalk are detectable by persons who are blind or who have low vision. These types of separations are usually provided for drainage and safety to separate the pedestrian paths from roadways.

Paragraph (5) requires that where bus passenger loading areas or shelters are provided on or adjacent to sidewalks, they shall comply with ADAAG 10.2.

#### 14.2.2 Historic and Special Use Sidewalks (Reserved)

The Board is considering treating historic sidewalks in a manner similar to ADAAG 4.1.7. A qualified historic sidewalk is one that is listed in, or eligible for listing in, the National Register of Historic Places or designated as historic under an appropriate State or local law. However, special scoping and technical provisions must be developed.

Many historic districts have areas where sidewalks are raised several steps above the roadway or are constructed of materials such as brick, cobblestones,

Belgian blocks, or loose pea gravel on a consolidated base, that are difficult to traverse. Many historic neighborhoods have narrow sidewalks where passage is limited by large, mature trees, raised entrance porches or stairs, and other impediments to pedestrian circulation. Older brick and stone pavings have settled or heaved beyond acceptable limits.

Problems may arise if a portion of a historic sidewalk is removed and replaced as a consequence of a public improvement project. In such cases, historic preservation requirements would generally mandate that the new work match existing adjacent construction.

Special use sidewalks may include boardwalks constructed along beaches or areas which are subject to alternating tides or flooding. Such sidewalks have unique problems and characteristics similar to historic sidewalks.

**Question 66:** How can requirements for historic preservation be reconciled with the provisions of this section for new construction? The Board seeks comment on appropriate scoping and technical provisions for new construction and alterations to historic and special use sidewalks.

Should there be an alternate route provision similar to the exception provided in ADAAG 4.1.7(3)(b)? What means of equivalent facilitation might be appropriate? Is this an issue more properly addressed by program accessibility?

#### 14.2.3 Street Identification and Pedestrian Signage

This provision requires pedestrian informational and directional signage and street identification signs to meet the minimum requirements for character proportion (ADAAG 4.30.2), character height (ADAAG 4.30.3), and finish and contrast (ADAAG 4.30.5).

Although some jurisdictions provide raised and brailled street names and bus stop and route information, the Board has not proposed a requirement for tactile or braille signage at this time because emerging technologies piloted in projects in this country and in Europe suggest that tactile signage may not be the most effective way of providing such information.

Pedestrian information and directional signs, such as markers along the route of an historic trail, the identification of historic elements and buildings on that route, and pedestrian advisory and warning signs can be useful in orientation only if users know where to find them. Signage directing pedestrians around temporary construction or hazards may also need

to be provided. The Board is not aware of research which addresses issues of sign size, location, and standardization with respect to pedestrians with vision impairments. Providing some information in raised letters, such as Pittsburgh's "Boulevard of the Allies" street name sign, could be a protruding object if mounted at a 60 inch height due to the length of the street name (see 14.2.4 below). The Board may include a provision for some tactile signage in the final rule and is seeking information.

**Question 67:** If raised and brailled signage is provided, what pedestrian signs should be covered and how can issues such as sign size, location, and standardization be addressed? What are the costs involved? Is the absence of street name information a significant barrier to persons with visual impairments? Should applications vary according to location, such as urban, suburban, and rural areas?

New developments in audible and radio-transmitted wayfinding information suggest that communications technology may present options preferable to tactile signage such as the transmission of street names. A "smart intersection" pilot project in California is currently testing similar systems for providing information to vehicle drivers. Such technologies may be appropriate for pedestrian use.

**Question 68:** The Board seeks comment on how to provide orientation information contained in pedestrian signage accessible to persons with vision impairments. An audible system may provide access for persons who cannot read because of other disabilities, such as learning disabilities and mental retardation, but would be inaccessible to those who are both deaf and blind. Are there technologies that could accommodate all users? Should applications vary according to location, such as urban, suburban, and rural areas? Where possible, commenters should include cost information.

#### 14.2.4 Protruding Objects

This section parallels ADAAG 4.4 (Protruding Objects) and applies it to public sidewalks and the areas adjacent to them. The provisions for a continuous passage within the sidewalk are intended to accommodate persons with mobility impairments. However, provisions for protruding objects apply to the entire width of a sidewalk because pedestrians with vision impairments will use all portions of the sidewalk.

Paragraph (1) permits objects projecting from walls to protrude a maximum of 4 inches into any portion

of the sidewalk when their leading edges are between 27 inches and 80 inches above the finished surface. Wall mounted objects that are located below 27 inches or above 80 inches may project any amount into the sidewalk provided they do not reduce the continuous passage required by proposed ADAAG 14.2. Free-standing objects mounted on posts or pylons are permitted to overhang their mountings a maximum of 12 inches within the same height limits.

Paragraph (2) requires guardrails or other barriers where headroom along a sidewalk is less than 80 inches. The leading edge of such protective barriers must be at or below 27 inches above the finished surface of the sidewalk.

Pedestrians with vision impairments may be forced to adopt a restricted cane sweep technique on crowded sidewalks. Additionally, the speed with which people walk outdoors may cause them to encounter protruding objects before the cane sweep can detect them. Comments received during the initial rulemaking indicated that the 27-inch maximum requirement is insufficient for cane detection under many circumstances and may constitute a particular hazard along sidewalks. Several comments recommended various heights, but none provided any data as a basis for those suggestions. Commenters also suggested that the Board conduct additional research on the issue of protruding objects.

**Question 69:** Is the maximum 27-inch height for protruding objects sufficient to provide adequate warning to individuals who use canes and those who do not use canes? If adequate warning is not given, what changes should be made to these provisions and what research supports such changes? Should all protrusions between 0 and 80 inches be prohibited? Should post-mounted objects continue to be permitted to overhang their mountings up to 12 inches, instead of the 4-inch limitation applied to wall-mounted objects?

Paragraph (3) provides that fixed objects not covered by paragraph (1) and placed on or along a sidewalk shall not reduce the continuous 36-inch clear passage required by proposed ADAAG 14.2.1. Such objects may include permanently installed trash receptacles, fire hydrants, utility poles, or mail boxes.

#### 14.2.5 Sidewalk Curb Ramps and Other Sloped Areas

This section addresses the technical requirements for curb ramps or other sloped areas. The technical provisions of ADAAG 4.7 (Curb Ramps) have been

modified for applications in the public right-of-way because of constraints imposed by existing conditions.

The Department of Justice regulations implementing title II require that: (1) newly constructed or altered streets, roads, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway; and (2) newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads, or highways. See 28 CFR 35.151(e).

The regulations further provide that program accessibility requirements apply to curb ramps at existing crossings. That is, each public entity is required to ensure the accessibility of the program of providing a pedestrian circulation system by undertaking a self-evaluation (28 CFR 35.105). If structural changes are needed, the public entity must develop its transition plan, identifying locations where curb ramps will be installed at existing street and highway crossings. (28 CFR 35.150(d)(2)). In making alterations to existing sidewalks or facilities, public entities must meet the new construction and alterations requirements of 28 CFR 35.151 (New Construction and Alterations). See 28 CFR 35.150(b)(1).

Paragraph (1) requires a curb ramp or other sloped area to be provided wherever a sidewalk crosses a curb or other barrier (e.g., parkway, berm, or gutter) to a street crossing and requires that it be connected to a continuous passage. This provision is consistent with ADAAG 4.7.1 (Location) and has been modified to incorporate the language in the Department of Justice title II regulations and the concept of continuous passage of this section.

"Other sloped areas" is a term used in Department of Justice title II regulations and is being defined here as an alternative to sidewalk curb ramps where severe slopes and constrained rights-of-way may preclude the installation of conventional curb ramps at pedestrian street crossings. This is further discussed below.

Paragraph (2) requires all curb ramps and other sloped areas to be constructed with the least possible slope. The maximum slope of a curb ramp is 1:12 when measured according to Fig. 59(a). This provision is consistent with ADAAG 4.7.2 (Slope) except that the reference to ADAAG 4.8.2 (Ramp: Slope and Rise) and ADAAG 4.1.6(3)(a) has been eliminated. Two new exceptions addressing severe site constraints have been incorporated in proposed ADAAG 14.2.5(2) and 14.2.5(4). Transitions and

slopes of adjoining surfaces have been incorporated into proposed ADAAG 14.2.5(8).

Other sloped areas is applied in this section to one of two exceptions. The first exception under paragraph (2) (Slope) permits a parallel curb ramp. The second exception in paragraph (4) (Landings) allows an alternative method of measuring the slope.

The exception in paragraph (2) (Slope) permits a ramp to be installed parallel to the run of the sidewalk and curb when site unfeasibility precludes construction of a standard curb ramp. This exception will permit access to a street crossing from narrow rights-of-way or steeply sloping sidewalks. Three figures (58 (a) (b) and (c)) illustrate possible applications. The running slope and cross slope provisions are unchanged. This exception requires a level landing area the width of the ramp and minimum of 60 inches in length at the bottom of the ramp to accommodate a 90 degree turn when entering the perpendicular street crossing, in accordance with ADAAG 4.2.3 (Wheelchair Turning Space). The parallel ramp is taken from the "Illustrated Handbook of the Handicapped Section of the North Carolina State Building Code" (1982).

Paragraph (3) requires a 36 inch minimum width for sidewalk curb ramps and other sloped areas connecting to street crossings. This provision is consistent with the continuous passage width of proposed ADAAG 14.2 and ADAAG 4.7.3 (Width) for accessible routes.

Paragraph (4) proposes a requirement for level landings at curb ramps and other sloped areas at street crossings to provide safe stopping places along these sloping routes. Curb ramps and other sloped areas running in the primary direction of travel must have a level landing at the top that is the width of the ramp or other sloped area and a minimum of 48 inches in length.

Where severe slopes occur in the direction of pedestrian and vehicular travel, perpendicular cross-streets, alleys, and sidewalks typically afford level landing space. Building entrances may provide level landings. Relatively level platforms are normally provided at cross streets to keep water from entering buildings on the lower side of the street. However, level areas will not generally be available at mid-block crossings.

Exception 1 to paragraph (4) allows a landing to be a minimum of 36 inches in length where site infeasibility precludes a 48 inch landing. (See Fig. 60). Where site infeasibility also precludes exception 1, an alternative is provided in exception 2. Exception 2

proposes an alternative method of measuring the slope of a curb ramp or other sloped area (see Fig. 59(b)) where site infeasibility precludes a level landing at the top in accordance with proposed ADAAG 14.2.5(4) or exception 1, or a parallel ramp permitted by proposed ADAAG 14.2.5(2) cannot be provided. The alternative method of measuring slope applies to the side flares and cross slope as well as to the running slope. This is especially relevant to mid-block crossings.

Where there is no level area at an intersection, and the adjoining roadway slope equals or exceeds 1:12 (as permitted by the exception in proposed ADAAG 14.2(1)), it is impossible to provide a curb ramp with a maximum slope of 1:12. Where site infeasibility precludes a curb ramp with a narrow landing at the top or a parallel ramp, the Board is proposing an alternative method of measuring slope relative to the slope of the adjoining roadway. An alternative method is proposed because the traditional method of measuring the slope as shown in Fig. 59(a) cannot be used where the area around the curb ramp is not level. Cross slope and other provisions are unchanged. The Board intends the alternative measuring method to be used only in those limited instances where other provisions and exceptions cannot accommodate site constraints. The Board notes that this alternative method may result in steep slopes but believes it is necessary to provide access. Neither the ADA nor the regulations exempt steeply sloped areas from a requirement to provide curb ramps or other sloped areas at street crossings. Such slopes may not be negotiable by persons using manual wheelchairs but could be negotiated by persons using motorized wheelchairs, scooters and similar conveyances.

**Question 70:** Is the exemption proposed an acceptable solution to providing curb ramps in such steeply sloped areas? If not, is there a better way to ensure accessibility such as a different ramp configuration? Are there situations in which this exception should not be permitted?

Some cities have provided an alternate path as part of a "priority accessible network" to allow persons with disabilities to bypass a steep hill or other barrier.

**Question 71:** Does the designation of an alternate path provide equivalent facilitation? Are there other methods which have been found useful in providing access to facilities on steeply sloping sidewalks? Where possible, commenters should include cost information.

Paragraph (5) requires flared sides on curb ramps and other sloped areas where pedestrians must walk across the ramp, or where curb ramps are not protected by returned curbs. This provision applies ADAAG 4.7.5 (Sides of Curb Ramps) to curb ramps or other sloped areas in the public right-of-way. This provision is consistent with proposed ADAAG 14.2.5(4) which requires a landing at the top of the curb ramp and clarifies that the flared sides shall be 1:12 maximum where the landing length at the top of the curb ramp is at least 36 inches but less than 48 inches. See Figure 12(b).

Paragraph (6) requires curb ramps or other sloped area surfaces to be firm, stable and slip resistant. This provision is consistent with ADAAG 4.5.1 (General).

Paragraph (7) (Detectable Warnings) has been reserved. The Board plans to conduct additional research on detectable warnings and will be issuing a separate notice of proposed rulemaking to suspend certain ADAAG provisions for detectable warnings until January 26, 1995. The Board will consider public comments on that notice, as well as the results of the additional research, before proposing specific requirements for detectable warnings at curb ramps along a circulation route in the public right-of-way.

Paragraph (8) requires counter slopes of adjoining gutters and road surfaces connecting to the curb ramp or sloped area to be 1:20 maximum. This provision applies the requirements of ADAAG 4.7.2 (Slope) for counter slope to the roadway surfaces adjoining curb ramps or other sloped areas. Curb ramps and other sloped areas may not have lips where they meet the gutter or roadway. Transition and gratings provisions found in ADAAG 4.5 (Ground and Floor Surfaces) and 4.7 (Curb Ramps) are also incorporated to cover gratings which may be located in the roadway and otherwise would not be covered by proposed ADAAG 14.2.1(3).

Paragraph (9) requires curb ramps or other sloped areas at marked crossings to be wholly contained within the markings, excluding flared sides. This provision is consistent with ADAAG 4.7.9 (Location at Marked Crossings).

Paragraph (10) requires curb ramps or other sloped areas to be protected and located to prevent their obstruction by parked vehicles. This is consistent with ADAAG 4.7.8 (Obstructions).

Paragraph (11) requires built-up curb ramps or other raised sloped areas to be located so that they do not project into vehicular traffic lanes or into parking

spaces or access aisles. This is consistent with ADAAG 4.7.6 (Built-up Curb Ramps) and ADAAG 4.6.3 (Parking Spaces).

Paragraph (12) contains provisions for diagonal curb ramps or other sloped areas and is identical to ADAAG 4.7.10 (Diagonal Curb Ramps).

Paragraph (13) contains provisions for islands and is identical to ADAAG 4.7.11 (Islands).

#### 14.2.6 Crossing Controls

This section requires crossing controls to have a minimum size control button close to the curb ramp, mounted at a 48 inch height adjacent to a firm, stable, slip resistant surface 30 inches by 48 inches.

Pedestrian-actuated crossing controls are typically provided at intersections based upon traffic conditions and location characteristics that establish the minimum requirements necessary for such an installation. They are generally mounted on the traffic signal pole of the dominant traffic direction. When activated, they interrupt the standard signal cycle in order to provide an interval for pedestrian crossing. In some areas, signals have no regular crossing interval unless activated by pedestrians.

Paragraph (1) requires the button control to be raised or flush and  $\frac{3}{4}$  inches in the smallest dimension. This requirement is consistent with ADAAG 4.10.3 (Hall Call Buttons) which requires hall call buttons in elevators to be a minimum of  $\frac{3}{4}$  inches in the smallest dimension. It further requires that the force required to activate the controls may not exceed 5 lbf. This provision is consistent with ADAAG 4.1.3(13) which requires controls and operating mechanisms in accessible spaces, along accessible routes, or as parts of accessible elements to comply with ADAAG 4.27 (Controls and Operating Mechanisms). Some crossing control buttons are very small or require extreme pressure to depress, making them difficult to operate for persons with limited hand dexterity. Other devices have large buttons which may be easier to use. The Board's proposal requires a control button to be a minimum of  $\frac{3}{4}$  inches.

**Question 72:** Should pedestrian crossing control buttons be required to be larger than  $\frac{3}{4}$  inches? If so, what size should they be? Should the Board require the controls for pedestrian crossings to be two inch square raised buttons that permit activation from any angle? Are such controls available for pedestrian crossings? Are there cost differences between larger and smaller buttons? Are there any problems with

vandalism or maintenance associated with larger control buttons?

Paragraph (2) requires the crossing controls to be located as close as possible to a curb ramp and, to the maximum extent feasible, operable from a level area adjacent to the controls rather than from the sloped surface of the curb ramp itself. This requirement is to ensure that people with disabilities do not have to travel out of their way to activate the signal before crossing the street, and allows a maximum crossing time for those who may travel more slowly.

The technical provisions referenced in paragraphs (3) (Mounting Height) and (4) (Surface) depart slightly from ADAAG 4.2.5 (Forward Reach) and ADAAG 4.2.6 (Side Reach), which allow a maximum reach range of either 48 inches or 54 inches depending on the approach to the object. Paragraph (4) requires a firm, stable and slip resistant surface a minimum of 30 inches by 48 inches to be provided to allow for a forward or parallel approach to the controls. However, paragraph (3) limits the controls to a maximum height of 48 inches. The Manual on Uniform Traffic Control Devices recommends a mounting height between 42 and 48 inches. In proposing a maximum reach range of 48 inches, the Board took into consideration that in inclement weather and colder temperatures people will be wearing coats and jackets which may limit their reach ranges.

**Question 73:** Is a 48 inch mounting height appropriate for persons who use wheelchairs or would a lower height be more useful? Would a lower height be difficult for a person who uses crutches or a person with short stature?

Audible signal, vibro-tactile controls, and radio frequency transmissions to make "WALK/DON'T WALK" indicators accessible to pedestrians with vision impairments are being tested in some communities. Other detectable technologies and applications may be under development. Comments during the initial rulemaking suggested that the Board should require auditory or vibro-tactile crossing signals. The Board is considering a provision for audible or vibro-tactile crossing signals and is seeking additional information.

**Question 74:** The Board is interested in appropriate scoping and technical requirements for auditory or vibro-tactile crossing signals and the experience of jurisdictions that have used such signals. Should there be differences between requirements for noisy urban streets and quiet residential neighborhoods? Should applications vary according to location, such as in urban, suburban, and rural areas or by

levels of pedestrian use? What technology is currently available or under development for such applications? What are the advantages, disadvantages, costs and user preferences of each system?

#### 14.2.7 Marked Crossings

This section requires marked crossings to be delineated with contrasting markings or materials (e.g., paint, brick, tile). An appendix note recommends marked crossings at State and local government buildings and facilities, transportation facilities, places of public accommodation, at irregular intersections, and at mid block crossings.

Locating marked crossings in these areas is also recommended in the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA) and "A Policy on the Geometric Design of Highways and Streets" (1990) published by the American Association of State Highway and Transportation Officials (AASHTO).

Where provided, markings legally establish a crosswalk and therefore function as traffic control devices. They may be needed where high traffic volume makes crossings difficult. They clearly facilitate pedestrian crossing on vehicular ways. Since persons with certain disabilities may take longer to cross traffic lanes, marked crossings may be a critical portion of an accessible circulation path. They are of particular benefit to persons with low vision and may assist them in crossing an intersection. This is especially important where there are irregular crossings such as Y-shaped intersections or mid block crossings.

The greatest number of pedestrian accidents involve children, but the most severe pedestrian accidents involve elderly persons and persons with disabilities. Marked crossings are the single most recommended provision in research conducted on the needs of pedestrians who are elderly or who have disabilities. Elderly persons are involved in a large number of pedestrian accidents. As population, they do more walking than other age groups, both because of less access to vehicles and greater leisure time. Several researchers have found that poor eyesight is the cause of many accidents involving elderly pedestrians; poor hearing is a significant but lesser factor.<sup>12</sup>

The MUTCD observes that:

<sup>12</sup>Temple, "Accidents: Causes and Countermeasures" Pedestrian Research Laboratory, Georgia Institute of Technology (1975).

Crosswalk markings at signalized intersections and across intersection approaches on which traffic stops, serve primarily to guide pedestrians in the proper paths. Crosswalk markings across roadways on which traffic is not controlled by traffic signals or STOP signs must also serve to warn the motorist of a pedestrian crossing point \* \* \*. Marked crosswalks should also be provided at other appropriate points of concentration, such as at loading islands, midblock pedestrian crossings, or where pedestrians could not otherwise recognize the proper place to cross. (MUTCD 3B-18).

Further, AASHTO's "A Policy on Geometric Design of Highways and Streets" (1990) indicates that the major pedestrian-vehicular conflict usually occurs at intersections and indicates that crosswalks are usually necessary at every intersecting street in business districts. (page 545).

MUTCD recommends that street crossings be marked:

\* \* \* at all intersections where there is substantial conflict between vehicle and pedestrian movements \* \* \* [and] \* \* \* at other appropriate points of pedestrian concentration, such as at loading islands, midblock pedestrian crossings, or where pedestrians would not otherwise recognize the proper place to cross. (MUTCD, 3B-23).

A similar recommendation covers established routes to school. (MUTCD, 7C-3). Local jurisdictions may have standard criteria for high pedestrian use areas, including requirements based on pedestrian and traffic flow, special districts, or central business districts.

In some jurisdictions, citizens may request that a marked crossing be installed to facilitate pedestrian crossing. Such a program may be a part of the overall program accessibility requirements of Department of Justice regulations implementing title II. (28 CFR 35.151(d)).

**Question 75:** Should the Board recommend locating marked crossings in areas other than those listed in the appendix, such as at traffic signals? Are there areas where marked crossings should be required? Commenters should provide cost and safety data where possible.

#### 14.2.8 Pedestrian Overpasses and Underpasses

This section requires grade separated pedestrian overpasses and underpasses to be accessible by means of a ramp, elevator, or where permitted by ADAAG 4.1.3(5), a platform lift (wheelchair lift) and to connect to a sidewalk or other pedestrian circulation path.

Overpasses and underpasses built with funds from FHWA have generally been designed with ramps. However, many facilities have not been built with FHWA funds and some of those have

been constructed with a circular ramp. Circular ramps do not meet ADAAG 4.8 and are a particular problem for persons using wheelchairs because they have non-uniform cross slopes which does not permit all wheels to be on the ground at the same time. Also, the lack of level landings does not provide any rest area for persons with limited stamina.

**Question 76:** Are there constraints specific to overpasses and underpasses that could affect accessibility and which are not accommodated by the general provision for site infeasibility? Should there be a specific exception for certain conditions peculiar to overpasses and underpasses?

ADAAG 4.1.3(4) requires stairs to comply with ADAAG 4.9 only where no ramp or elevator is provided. Some ramped crossings may provide both stairs and ramps. Persons with mobility impairments may find lengthy ramps more difficult than stairs complying with ADAAG 4.9 (Stairs).

**Question 77:** Where stairs are provided in addition to a ramp at an overpass or underpass, should the guidelines require such stairs to comply with ADAAG 4.9 (Stairs)? What is the cost differential between stairs complying with ADAAG 4.9 and those which comply with local applicable building codes?

#### 14.3 Drinking Fountains, Telephones, Toilet Facilities, Fixed Seating, Tables and Benches

##### 14.3.1 Minimum Requirements

This section contains scoping provisions for drinking fountains, telephones, toilet facilities, fixed seating, tables and benches where provided on or adjacent to a sidewalk as part of a public improvement project. These elements must be reasonably dispersed within the project area, taking into consideration the proximity and number of existing accessible elements. An appendix note clarifies the dispersal requirement. See A14.3.

Paragraph (1) requires at least 50 percent, but not less than one, of drinking fountains to comply with ADAAG 4.15 (Drinking Fountains and Water Coolers). Where only one drinking fountain is provided it must be accessible to individuals who use wheelchairs in accordance with ADAAG 4.15 (Drinking Fountains and Water Coolers) and to those who have difficulty bending or stooping. This scoping provision is consistent with ADAAG 4.1.3(10) (Drinking Fountains).

Paragraph (2) requires at least 50 percent, but not less than one, of single unit public pay telephones to comply

with ADAAG 4.31.2 through 4.31.8 (Telephones). Where banks of telephones are provided, this provision requires at least one accessible telephone per bank to be provided. In addition, 25 percent, but never less than one, of all other public telephones provided shall be equipped with a volume control. Signage complying with applicable provisions of ADAAG 4.30.7 (Symbols of Accessibility) is also required. This scoping provision is consistent with ADAAG 4.1.3(17)(a) and (b).

Paragraph (3) requires at least 50 percent, but not less than one, of fixed single user toilet facilities provided on a public right-of-way as part of a public improvement project to comply with ADAAG 4.22 (Toilet Rooms). This is a departure from ADAAG 4.1.2(6) which requires all public and common use toilet facilities to comply with ADAAG 4.22. Proposed ADAAG 14.3(3) is intended to cover individual fixed single-user toilet units connected to sanitary sewer lines and not portable units covered by 4.1.2(6). Signage complying with ADAAG 4.30.7 is required to be provided on the accessible units consistent with ADAAG 4.1.2(7). Signage on inaccessible units must indicate the location of the nearest accessible unit.

In some European cities, publicly-provided toilet facilities include permanent installations of prefabricated single-user units dispersed throughout a central business district on street corners. Both kiosk-sized inaccessible and larger accessible units are manufactured. Several U.S. cities are considering similar installations and at least one has initiated a pilot program to test the facilities in use, providing paired installations of inaccessible and accessible units. However, concerns have been raised that the larger accessible toilets could be used for shelter or for illicit activities. The Board is aware of one pilot project that was discontinued because the installation of a universal design accessible unit was reported to have resulted in a high rate of vandalism and abuse, particularly by drug dealers.

**Question 78:** Given such public safety concerns, is the proposed requirement to 50% accessible fixed single-user toilet units appropriate to meet the needs of persons with disabilities? Are there design solutions that would allow for a safe and universally accessible public toilet that could be used by everyone? Are there operational approaches, such as limiting the hours of use, that would allow all units to be accessible without raising concerns about vandalism and illicit activities?

**Question 79:** What are the manufacturing, installation, and maintenance cost differentials of providing and servicing a single standard type of unit versus two types of units?

Card, token, or key access to accessible units have been proposed as a way of avoiding vandalism and other abuses of the larger accessible units. In a pilot project that provided both accessible and non-accessible units, non-accessible units could be entered using coins or tokens, while accessible units required the use of an access card by persons with disabilities. This required special control and distribution procedures that may be viewed as discriminatory. Further, the Board is concerned that restricted access procedures may be subject to abuse and misuse, resulting in the same levels of vandalism and illicit activity as would uncontrolled or coin-operated access to accessible units. If this is so, then limiting access may prove ineffective as a preventive measure.

**Question 80:** How effective have limited access procedures been in similar situations? If restricting access by requiring card, token, or key operation is necessary, in what ways could equivalent facilitation be provided? Should the state or local government having jurisdiction be required to provide cards at all hours the units are operable and within a specified distance from the units?

Paragraph (4) requires at least five percent, but not less than one, of fixed seating and tables to comply with ADAAG 4.32 (Fixed or Built-in Seating and Tables) and five percent, but not less than one, of fixed benches to comply with 4.35.4. This provision is consistent with ADAAG 4.1.3(18).

**Question 81:** Should fixed benches, or some percentage thereof, be required to have armrests? Should some benches be required to have backrests? What technical situations would be appropriate for back height, seat slope, and arm rests? Are the specifications in ADAAG 4.35.4 adequate? Where possible, commenters should provide cost data.

#### 14.4 Vehicular Ways and Facilities

##### 14.4.1 On-Street Parking

Proposed ADAAG 14.4.1 contains provisions for new on-street parking resulting from construction that is part of a public improvement project in areas zoned for business uses, including mixed-use zoning that contains business occupancies. This provision covers parking spaces that are metered, time-limited, or similarly regulated by a

jurisdiction and that are designated by signage. It does not apply to areas in which on-street parking is simply permitted, such as residential neighborhoods and developments.

On-street parking is often more convenient to facilities than off-street parking lots. In small towns and business districts, such parking may be the only public parking that a State or local government provides. Therefore, the Board is proposing a provision that requires a percentage of on-street parking to be accessible where on-street parking is provided.

Proposed ADAAG 14.4.1 requires on-street parking to be provided according to the table in ADAAG 4.1.2(5)(a). The provision requires a minimum 60 inch access aisle to be provided clear of the driving lane. This provision references figures from Texas<sup>13</sup> and the Department of Transportation.<sup>14</sup> The access codes of New Jersey and North Carolina contain similar technical specifications, as does the Board-sponsored UFAS Retrofit Manual (1991). Accessible parallel parking spaces are designed and constructed much like passenger loading zones referenced in ADAAG 4.6.6. The Board is not requiring designated van accessible spaces because side lift vans can exit onto the sidewalk from a standard parking space, provided that access to the sidewalk is not obstructed by fixed or movable objects. Vans with rear lifts should be able to use the spaces shown in Figures 61 (a) and (b), provided that the space is at least 26 feet long.

**Question 82:** What is an appropriate basis for determining the numbers of accessible parking spaces required within the inventory of designated on-street spaces provided by a public entity? The Board is seeking information on the requirements in other States and intends to provide a scoping provision in the final rule. Should the requirements be different for a central business district, a mixed-use area, or near medical and other special facilities? Should the requirement apply only where the sidewalk is a minimum width or where there is a parkway or a space not intended for pedestrian circulation, such as segments normally occupied by trees, benches or other amenities where the accessible aisle could be most easily accommodated? Should the requirement be different for alterations, such as where a street is widened or pedestrian amenities, such

as planters, trees, or benches, as well as parking, are provided as part of a downtown improvement project? What technical and scoping requirements have been developed for accessible or van accessible parallel, angled, or perpendicular on-street parking spaces based upon the total number of spaces provided by a jurisdiction in parking districts or at special uses and facilities? What cost data are available on the provision of accessible on-street parking spaces?

Paragraph (1) requires a curb ramp or other sloped area to be provided to connect the access aisle to the sidewalk and references proposed ADAAG 14.2.5. This provision is consistent with ADAAG 4.6.3 (Parking Spaces).

Paragraph (2) requires accessible parking spaces to be dispersed throughout the project area. An appendix note clarifies that accessible on-street parking spaces provided immediately adjacent to intersections may be served by sidewalk curb ramps, provided that the required access aisle connects to the pedestrian crossing. It also recommends that accessible on-street parking spaces be located in relatively level areas. It should be noted that program accessibility requirements may not be satisfied if a majority of accessible parking spaces are located along steeply-sloping roadways.

**Question 83:** Where a city expands its incorporated limits or provides new on-street parking spaces in outlying areas, the new accessible spaces may be the furthest from business districts. Should there be a provision permitting or requiring the State or local government to provide additional spaces in an existing municipal parking lot if it provides greater accessibility to business districts than does the remote on-street parking? Commenters are encouraged to provide cost data when possible.

Paragraph (3) requires accessible parking spaces to be designated as reserved by a sign showing the symbol of accessibility. It further requires that the sign be located to be visible from a driver's seat. This provision is consistent with ADAAG 4.6.4 (Parking Spaces).

Paragraph (4) requires parking meter controls, including the coin slot, to be located a maximum 48 inches above the sidewalk and that the controls be easy to operate. A firm, stable slip resistance surface must be provided at the controls and connect to a sidewalk. This provision is consistent with ADAAG 4.27.4 (Operation) and ADAAG 4.2.5 (Forward Reach). As discussed under proposed ADAAG 14.2.6 (Crossing Controls), the proposed reach range of

48 inches anticipates that people will be wearing coats and jackets in inclement and cold weather which may limit their reach ranges.

**Question 84:** Is a 48 inch control height appropriate for persons who use wheelchairs or would a lower height be more useful? Would a lower height be difficult for a person who uses crutches? Is there an additional cost associated with a lower control height?

**Question 85:** Currently, 24 States permit no-charge parking at meters for vehicles displaying an authorized parking plate or placard for a person with a disability. In these jurisdictions, parking meters may not need to be accessible unless reciprocity with other jurisdictions is not guaranteed. The Department of Transportation encourages States to extend reciprocal recognition. See 23 CFR 1235.8. Should parking meters be required to be accessible in those jurisdictions that both: (a) exempt vehicles displaying the appropriate plate or placard from parking fees and (b) recognize plates or placards from other jurisdictions?

#### 14.4.2 Roadside Emergency Communications Systems

Roadside call boxes are essential for emergency situations, such as engine failure or accidents, in which it is especially important for all people to get immediate assistance. In particular, some persons with disabilities have extreme sensitivity to cold and cannot wait for assistance in an unheated automobile. The Board is aware of concerns raised about the safety of persons with disabilities getting out of their cars or vans on the highway where uneven terrain and high speed traffic may be a problem, but considers the need for accessible roadside emergency communication to be equally important. People in emergency situations need to have the choice to remain in the vehicle or call for help.

Paragraph (1) requires controls and operating mechanisms to be operable by one hand and not require tight grasping, twisting or pinching of the wrist. It further requires that the force to operate the controls not exceed 5 lbf (22.2N). This provision is consistent with ADAAG 4.1.3(13) which requires controls and operating mechanisms in accessible spaces, along accessible routes, or as parts of accessible elements to comply with ADAAG 4.27 (Controls and Operating Mechanisms). This paragraph further requires the maximum mounting height of such controls to be 54 inches. This provision is consistent with ADAAG 4.2.6 (Side Reach).

<sup>13</sup> Texas Admin. Code title 16 section 68.112(i)(1.5).

<sup>14</sup> "Provisions for Elderly and Handicapped Pedestrians" DOT/FHWA (1980).

In August 1985, the Delaware Architectural Accessibility Board conducted a study in response to complaints by the disability community that the call boxes were mounted too high and blocked by curbs, guard rails and poles. Subject testing and subsequent pole crash testing resulted in a recommendation that controls be mounted at a maximum height of 54 inches, adjacent to a concrete pad. The call boxes tested had a pull requirement of 12 lbs. On this issue, the study noted that it was not possible, " \* \* \* to evaluate the mechanical arrangement to determine whether gearing changes or other modifications could reduce the necessary pull force \* \* \*" and that further study was required. See "Report on the Accessibility and Usability of the Sig Com Motorist Aid Communication System" Delaware Architectural Accessibility Board at 6 (1985).

Additionally, the specific device tested required pulling a handle through a specified range to activate the transmission of a signal. The study suggested that lowering the box below 54 inches could interfere with this operation. Also, the study raised issues regarding snow removal and build-up covering the call boxes.

**Question 86:** The Board seeks information on whether the 5 lbf requirement can be met. Are there existing devices or systems that currently comply?

**Question 87:** The Board is considering a requirement for a mounting height of 48 inches and is seeking information on whether it can be achieved.

Paragraph (2) requires the system to provide both visual and auditory acknowledgement of call receipt and not require voice communication. This provision is consistent with ADAAG 4.10.14 (Emergency Communications). The system studied by Delaware did not require voice communication and provided an auditory call confirmation (beep) feature. The study recommended that future models incorporate a visual indicator as well.

Paragraph (3) requires that a firm, stable, slip resistant surface that is a minimum of 30 inches by 48 inches be provided immediately adjacent to the call box. Typically this will consist of a concrete pad with a level surface. ADAAG 4.2.6 (Side Reach) specifies a maximum depth of 10 inches for a side reach height at 54 inches. The Delaware study noted that such pads were frequently placed a significant distance from the pole on which the call box was mounted and recommended that the pads be placed a maximum distance of 21 inches from the mounting, which is consistent with the 48 inch maximum

height requirement in ADAAG 4.25.3 (Height).

This provision requires the level area to be connected to the roadway shoulder, sidewalk or pedestrian path, but does not require that paved shoulders or sidewalks be provided. However, it does require that a person using a wheelchair be able to reach the level area from the roadway shoulder. This would prohibit the level area from being separated from the roadway by a ditch, gutter, curb, or other barrier.

**Question 88:** Some jurisdictions have considered providing persons with disabilities cellular phones in lieu of providing accessible call boxes. How can such a distribution be accomplished especially for non-residents? How can communication be provided in areas (country or rural areas) where there is no cellular phone capability and limited, if any, call boxes provided? Should such a system be permitted as an alternative to making roadside emergency communication systems accessible? What are the costs associated with such systems?

#### 14.5 Alterations

This section requires elements that are altered in the scope of a public improvement project, to be altered to comply with the applicable provisions of ADAAG 4.1.6 Accessible Buildings: Alterations and proposed ADAAG 14.

An alteration, as defined in ADAAG 3.5, means any change to a building or facility that affects or could affect the usability of the building or facility or any part thereof.

Alteration sections of the guidelines typically follow new construction provisions and include provisions that are somewhat less stringent. An alteration section would also typically include exceptions for technical infeasibility to allow for existing constraints that might preclude strict compliance with the provisions for new construction. However, construction in the public right-of-way has characteristics that are not usually found in the construction of buildings and facilities on well-defined sites. As explained in the preamble to proposed ADAAG 14.1, new construction in the public right-of-way has many of the characteristics of an alteration because it must fit within the confines of roadways and buildings and must connect to an existing pedestrian circulation network. For this reason, an allowance for site infeasibility has been included in the provisions for new construction in this section. Therefore, the allowances for site constraints are not confined only to alterations and the alteration section

here simply references the guidelines for new construction.

When a pedestrian route is modified, each element that is a part of the modification must be brought into compliance with the applicable sections of these requirements. Additionally, the Board encourages jurisdictions to consider each project as an opportunity to further the accessibility of its pedestrian network and should not unnecessarily restrict the scope of work so as to avoid the requirements for new accessible elements or construction. For example, utility work that removes part of a sidewalk adjacent to an intersection might not involve breaking through the curb face. Therefore, no curb ramp would be installed. In such a case, however, there is an opportunity to install a curb ramp with very little additional cost. The replacement of a length of sidewalk, removed to permit the installation of new curbs and gutters, presents an opportunity to bring at least a continuous passage into compliance with new construction standards.

Furthermore, ADAAG 4.1.6(1)(a) requires that alterations not decrease accessibility. For example, the installation of decorative lighting, lanterns, or other elements such as street furniture, landscaping, hydrants, transformers, signals, or kiosks located within a sidewalk or right-of-way shall not restrict a required width of passage.

Replacing a section of sidewalk damaged by the encroachment of tree roots will fall into the category of repair and maintenance and the replaced section must meet adjacent existing surfaces at its edges. However, the replacement of a block-long sidewalk segment removed for the installation of below-grade piping should be treated as new construction if it affords the opportunity to remedy the slope, cross slope, surface or other deficiency in accessibility.

The Board recommends that jurisdictions review their standard contract language and specifications to ensure that such considerations supersede the requirement to "restore to existing conditions" where the work is performed by outside contractors.

#### 14.6 Temporary Work

This section applies ADAAG 4.1.1(4) (Temporary Structures) to temporary work in the public right-of-way, whether it be new construction, alterations, or maintenance and repair. It requires (1) barriers to protect pedestrians from hazards along the circulation path and (2) appropriate identification of an alternate accessible

circulation path around any obstructions.

Temporary work may be a particular hazard to pedestrians with vision impairments who may have memorized the circulation routes and are not provided with accessible directions to the proper path. Jurisdictions and their contractors should ensure that barriers meet the specific needs of pedestrians as detailed in proposed ADAAG 14.2.4 Protruding Objects.

Further, the removal, even for only a short time, of a curb ramp or other accessible element may preclude access to buildings, facilities, or areas by a person using a wheelchair or require a lengthy, circuitous route to bypass such barriers in order to reach regular destinations. The alternate route should be equally convenient and accessible for all sidewalk users and should be clearly marked to avoid extra travel distance.

#### Regulatory Process Matters

##### Preliminary Regulatory Impact Analysis

These guidelines are issued to provide guidance to the Department of Justice 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 must be consistent with these guidelines. These guidelines meet the criteria for a major rule under Executive Order 12291 and this Notice of Proposed Rulemaking has been reviewed by the Office of Management and Budget pursuant to that order.

The Board has prepared a Preliminary Regulatory Impact Analysis (PRIA) which has been placed in the docket and is available for public inspection at the Board's office. The PRIA includes a cost impact analysis for certain accessibility elements and a discussion of the regulatory alternatives considered. The Board encourages comment on the PRIA as well as the submission of any data that would assist the Board in estimating the costs and benefits of the proposed rule.

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 costs for installation are 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 the initial rulemaking 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 PRIA, the Board analyzed those provisions that pertain only to buildings and facilities constructed or operated by State and local governments which are covered by title II of ADA. Included in the analysis were: jury boxes and witness stands, adaptability to fixed judges' benches, clerks' stations, speakers' rostrums and raised daises, drinking fountains, security systems, two-way communication systems, electrical outlets, wiring and conduit for communication systems, grab bars in bathrooms, visual alarms and notification devices, platform lifts and elevators, passing space on sidewalks, crossing controls, and on-street parking. The PRIA also discusses the indirect costs of the accessibility elements such as maintenance, operation and opportunity costs.

##### Preliminary Regulatory Flexibility Act Analysis

Under the Regulatory Flexibility Act, the publication of a proposed rule requires the preparation of a preliminary 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 PRIA. The Board has chosen to exercise that option and will thus address the impact of the guidelines on small entities as part of the PRIA.

The Board would also like to point out that 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 Board would point out that 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 PRIA discusses the impacts of these guidelines on public entities. This discussion serves the purposes of a

Federalism Statement under Executive Order 12612 for purposes of this rule.

##### List of Subjects in 36 CFR Part 1191

Buildings and facilities, Civil rights, Individuals with disabilities.

Authorized by vote of the Board on July 15, 1992.

**Kathleen Parker,**  
Chairman, Architectural and Transportation Barriers Compliance Board.

For the reasons set forth in the preamble, it is proposed to amend part 1191 of title 36 of the Code of Federal Regulations as follows:

#### PART 1191—AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES

1. The authority citation for 36 CFR part 1191 continues to read as follows:

**Authority:** Americans with Disabilities Act of 1990, Pub. L. 101-336, 104 Stat. 370 (42 U.S.C. 12204).

##### Appendix to Part 1191—Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities

2. The Appendix to part 1191 is amended as follows:

a. In section 1. Purpose, the second paragraph is amended by removing the words "sections 5 through 10" and adding in their place "the special application sections" and by adding "-1980" after "ANSI A117.1" in the last sentence.

b. In section 1. Purpose, the third paragraph is amended by adding "-1980" after "ANSI A117.1" in the first sentence.

c. In section 3.5 Definitions, the definition for "Alteration" is amended by adding the words "place of" immediately following "for the use of a" in the first sentence; by adding a comma after the word "accommodation" in the first sentence; by removing the word "or" which follows the word "accommodation" in the first sentence; and by adding "or a State or local government entity" in the first sentence to follow "commercial facility,".

d. Section 3.5 Definitions, by adding a definition for "Continuous Passage" in alphabetical order.

e. Section 3.5 Definitions, by revising a definition for "Dwelling Unit".

f. Section 3.5 Definitions, by adding a definition for "Public Improvement Project" in alphabetical order.

g. Section 3.5 Definitions, by adding a definition for "Sidewalk" in alphabetical order.

h. Section 3.5 Definitions, by adding a definition for "Site Infeasibility" in alphabetical order.

i. In section 3.5 Definitions, the definition for "Transient Lodging" is amended by adding the words "and residential facilities" immediately following the words "medical care facilities" in the first sentence; by removing the words "one or more dwelling units or" in the first sentence; and by adding the words "and other facilities used on a transient basis" in the last sentence immediately following the words "and dormitories".

j. In section 4.1.1 Application, paragraph (1) General is amended by removing the words "required to be accessible by 4.1.2 and 4.1.3," in the first sentence; by removing the words "required to be accessible by 4.1.6" in the first sentence; and by removing the words "these guidelines," in the first sentence.

k. In section 4.1.1 Application, paragraph (2) Application Based on Building Use is amended by removing the words "5 through 10" in the first sentence; by removing the words "for restaurants and cafeterias, medical care facilities, business and mercantile,

libraries, accessible transient lodging, and transportation facilities" and adding in their place the words "based on building use".

l. In section 4.1.3 Accessible Buildings: New Construction, Exception 1 in paragraph (5) is amended by adding the words "places of public accommodation and commercial" in the first sentence immediately following the words "Elevators are not required in".

m. Section 4.1.3(17) Public Telephones, paragraph (c), by adding new paragraphs (c)(iv) and (c)(v).

n. Section 4.1.3(17) Public Telephones, by adding an exception to paragraph (d).

o. In section 4.1.6 Accessible Buildings: Alterations, paragraph (k)(i) is amended by adding the words "place of public accommodation or commercial" in the first sentence immediately following the words "an elevator in an altered".

p. In section 4.1.7 Accessible Buildings: Historic Preservation, paragraph (1)(a) is amended by removing the words "5 through 10" in the first sentence and by revising the exception in paragraph (1)(a).

q. Section 7.2 Sales and Service Counters, Teller Windows, Information Counters, by redesignating paragraph (3) as paragraph (4) and by adding new paragraph (3).

r. Section 10.4.1 New Construction, by revising paragraph (8) Security Systems.

s. By adding new sections 11 through 14.

t. In the appendix to the appendix, by redesignating note A7.2(3) as note A7.2(4) and by adding new note A7.2(3)(iii).

u. In the appendix to the appendix, by adding note A10.4.1(8).

v. In the appendix to the appendix, by adding notes A11.0 through A14.4.2(3).

The additions and revisions of the appendix to part 1191 are published and other parts of the appendix are republished to read as follows:

**Appendix to Part 1191—Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities**

\* \* \* \* \*

BILLING CODE 0150-01-M

## 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 Standards 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.

## 3. MISCELLANEOUS INSTRUCTIONS AND DEFINITIONS.

### 3.5 Definitions.

**Alteration.** An alteration is a change to a building or facility made by, on behalf of, or for the use of a place of public accommodation, commercial facility, or a State or local government entity 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, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. 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.

**Continuous Passage.** See 14.1.1.

**Dwelling Unit.** See 13.1.

**Public Improvement Project.** See 14.1.1.

**Sidewalk.** See 14.1.1.

**Site Infeasibility.** See 14.1.1.

**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 and other facilities used on a transient basis.

## 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.

#### 4.1.3 Accessible Buildings: New Construction.

Accessible buildings and facilities shall meet the following minimum requirements:

(5)\* One passenger elevator complying with 4.10 shall serve each level, including mezza-

nines, in all multi-story buildings and facilities unless exempted below. If more than one elevator is provided, each full passenger elevator shall comply with 4.10.

**EXCEPTION 1:** Elevators are not required 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. The elevator exemption set forth in this paragraph does 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 this exemption but a full passenger elevator is nonetheless planned, that elevator shall meet the requirements of 4.10 and shall serve each level in the building. A full passenger elevator that provides service from a garage to only one level of a building or facility is not required to serve other levels.

.....  
(17) Public Telephones:  
.....

(c) The following shall be provided in accordance with 4.31.9:  
.....

(iv) If an interior public pay telephone is located in a judicial, legislative, or regulatory facility subject to section 11, then at least one interior public text telephone shall be provided.

(v) If an interior public pay telephone is located in a public area in a detention or correctional facility subject to section 12, then at least one interior public text telephone shall be provided in at least one public area. In addition, if an interior public pay telephone is provided in the secured area of such a facility, then at least one public text telephone 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 outlets are prohibited for purposes of security or safety.  
.....

**4.1.6 Accessible Buildings: Alterations.**

(1) General\*\*\*  
.....

(k) **EXCEPTION:**

(i) These guidelines do not require the installation of an elevator in an altered place of public accommodation or commercial facility that is less than three stories or has less than 3,000 square feet per story unless the building is a shopping center, a shopping mall, the professional office of a health care provider, or another type of facility as determined by the Attorney General.  
.....

**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 requirement 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 State and local government programs and 28 CFR 36.405(b) for places of public accommodation and commercial facilities.  
.....

## **7.2 Sales and Service Counters, Teller Windows, Information Counters.**

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(3) In buildings or facilities owned or operated by a State or local government:

(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 do not have a cash register but at which goods or services are sold or distributed, at least one of each type shall comply with 7.2(2).

(iii)\* In addition, at counters or teller windows with solid partitions or safety glass 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-thru 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 control complying with 4.31.5. Hand-operable communication devices, if provided, shall comply with 4.27.

(4)\* Assistive Listening Devices. (Reserved)

\*\*\*\*\*

## **10.4 Airports.**

### **10.4.1 New Construction.**

\*\*\*\*\*

(8)\* Security Systems. In airports owned or operated by State or local government entities, 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 accessible, 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.

\*\*\*\*\*

**11.0 Judicial, Legislative, and Regulatory Facilities****11. JUDICIAL, LEGISLATIVE, AND REGULATORY FACILITIES.**

**11.1\*** In addition to the requirements in 11, judicial, legislative and regulatory facilities shall comply with the applicable provisions of 4.1 through 4.35. 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 complying with 4.3 which coincides with the circulation path provided for all persons using the element. The elements shall comply with the following provisions.

(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 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 or witness stand. Fixed counters in the witness stand shall comply with 4.32. Clear floor space for a front approach shall be provided. The maximum height of controls and operating mechanisms shall be 48 in (1220 mm) and comply with 4.27.3 and 4.27.4.

**EXCEPTION:** In alterations to existing facilities where it is technically infeasible to provide a fixed means of vertical access to the witness stand or jury box, clear floor space shall be provided to accommodate a portable ramp as long as jurors or witnesses with disabilities are inside the defined area of the jury box or witness stand.

(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, Clerks' Stations, Speakers' Rostrums, and Raised Daises. Fixed judges' benches, clerks' stations, speakers' rostrums and a minimum of one raised dais shall be adaptable and comply with 4.32. Clear floor space for a front approach shall be provided. The maximum height of controls and operating mechanisms shall be 48 in (1220 mm) and comply with 4.27.3 and 4.27.4. If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 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 and Litigants' Stations. Fixed or built-in stations, including tables for bailiffs, court reporters and litigants, shall provide clear floor space for a front approach and shall comply with 4.32. The maximum height of controls and operating mechanisms shall be 48 in (1220 mm) and comply with 4.27.3 and 4.27.4. If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 5(b).

(6) Fixed Lecterns. Fixed lecterns shall comply with 4.32 and clear floor space for a front approach shall be provided. The maximum height of controls and operating mechanisms shall be 48 in (1220 mm) and comply with 4.27.3 and 4.27.4.

**11.3 Jury Assembly Areas and Jury Deliberation Areas****11.3 Jury Assembly Areas and Jury Deliberation Areas.**

**11.3.1** Where the following elements or spaces are provided in areas used for jury assembly or deliberation, each element or space shall be accessible and on an accessible route complying with 4.3:

(1) Refreshment Areas. Refreshment areas, kitchenettes and fixed refreshment dispensers shall comply with 9.2.2(7).

(2)\* Fixed or Built-in Seating and Tables. At least 5 percent, but not less than one 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.

(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.

EXCEPTION: Doors and doorways shall be exempt from 4.13.6, 4.13.9, 4.13.11 and 4.13.12 in those areas where detainees are escorted by security personnel at all times.

(2) Restrooms. Toilet facilities shall comply with 4.22 and bathing facilities shall comply with 4.23. Where privacy screens are provided, they shall not intrude on the clear floor space required for fixtures or the accessible route.

(3) Beds. Beds shall have a minimum 36 in (915 mm) clear width maneuvering space located along one side. Where more than one bed is provided in a cell, the clear space provided at adjacent beds may overlap.

(4) Drinking Fountains and Water Coolers. Where provided, 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.

(5) Fixed or Built-in Seating and Tables. At least one fixed or built-in seating and table or counter shall comply with 4.32.

(6) Fixed Benches. Fixed benches shall be a minimum of 24 in by 48 in (610 mm x 1220 mm) and 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 accessible and located on an accessible route complying with 4.3.

## 11.5 Restricted and Secured Entrances

(1) Cubicles and Counters. If fixed cubicles are provided, at least five percent, but not less than one, of each side of the fixed cubicle shall comply with 4.32. Where a counter is provided without cubicles, a portion on both sides at least 36 in (915 mm) in length shall comply with 4.32.

(2) Partitions. Solid partitions or safety glass that separate visitors from detainees shall comply with 7.2(3).

(3) Signage. Accessible cubicles or counters shall be identified on each side by the International Symbol of Accessibility. This symbol shall be displayed as required in 4.30.7.

**11.5 Restricted and Secured Entrances.** Where provided, at least one restricted entrance and at least one secured entrance to the facility shall comply with 4.14, in addition to the entrances required by 4.1.3(8). Restricted entrances differ from public entrances in that they are used by judges, court personnel and other parties on a controlled basis. Secured entrances are used by detainees and detention officers. 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.

**11.6 Security Systems.** 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.

**EXCEPTION:** Doors and doorways 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.

**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 vision and hearing impairments:

- (a) Duplex electrical outlets; and
- (b) Wiring, conduit, or raceways.

(2) Within the courtroom, electrical outlets and wiring, conduit, or raceways shall be provided to serve the litigants' stations, clerk's station, court reporter's station, jury box, witness stand, and the judge's bench.

(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 juror 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.

**12.0 Detention and Correctional Facilities**

(3) Receivers. The minimum number of receivers shall be 4 percent of the room occupant load, as determined by applicable State or local codes, but not less than two, whichever is greater.

(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 the 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 public and common use areas serving accessible cells or rooms are required to be designed and constructed to comply with section 4.

**12.2 Entrances.**

**12.2.1 Secured Entrances.** Where provided, at least one secured 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). Secured entrances are those entrances used only by inmates or detainees and security personnel and not the general public.

**12.2.2 Security Systems.** Where security systems are provided at public entrances required to be accessible by 4.1.3(8), 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.

EXCEPTION: Doors and doorways 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.

**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. If fixed cubicles are provided, at least five percent, but not less than one, of each side of the fixed cubicle shall comply with 4.32. Where a counter is provided without cubicles, a portion on both sides at least 36 in (915 mm) in length shall comply with 4.32.

(2) Partitions. Solid partitions or safety glass separating visitors from inmates or detainees shall comply with 7.2(3).

(3) Signage. Accessible cubicles or counters shall be identified on each side by the International Symbol of Accessibility. This symbol shall be displayed as required in 4.30.7.

**12.4 Holding and Housing Cells or Rooms: Minimum Number.**

**12.4.1\* Holding Cells and General Housing Cells or Rooms.** [Reserved]

**12.4.2 Special Holding and Housing Cells or Rooms.** [Reserved]

**12.4.3 Accessible Cells or Rooms for Persons with Hearing Impairments.** [Reserved]

**12.4.4 Medical Care Facilities.** Medical care facilities providing physical or medical treatment or care shall comply with the applicable requirements of section 6, if persons may need assistance in emergencies and the period of stay may exceed twenty-four hours.

**12.4.5 Alterations to Cells or Rooms.** When cells or rooms are being altered in an existing facility, or portion thereof, at least [percentage specified for new construction] 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.

**12.5 Requirements for Accessible Cells or Rooms****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, the following elements or spaces serving accessible cells or rooms shall be accessible and connected by an accessible route. At least one of each type of common area, amenity, space, or element provided for other housing cells or rooms in the same category of housing shall be accessible.

(1) **Doors and Doorways.** All doors and doorways on an accessible route shall comply with 4.13.

**EXCEPTION:** Doors and doorways in those areas where detainees or inmates are escorted by security personnel at all times shall be exempt from 4.13.6, 4.13.9, 4.13.11 and 4.13.12.

(2) **Restrooms.** At least one toilet facility shall comply with 4.22 and one bathing facility shall comply with 4.23. Where privacy screens are provided, they shall not intrude on the clear floor space required for fixtures and the accessible route.

(3) **Beds.** Beds shall have a minimum 36 in (915 mm) clear width maneuvering space located along one side. Where more than one bed is provided in a room or cell, the clear space provided at adjacent beds may overlap.

(4) **Drinking Fountains and Water Coolers.** Where provided, 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 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 or tables within, or serving,

accessible cells or rooms shall comply with 4.1.3(18).

(6) **Fixed Benches.** Fixed benches shall be a minimum of 24 in by 48 in (610 mm x 1220 mm) and 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.** At least one of each type of fixed or built-in storage facility provided, such as cabinets, shelves, closets, and drawers, shall contain storage space complying with 4.25. Additional storage may be provided outside of the dimensions required by 4.25.

(8) **Controls.** All controls intended for operation by inmates shall comply with 4.27.

(9) **Room 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 Visual Alarms and Telephones.**

**12.6.1 General.** Auxiliary visual alarms complying with 4.28.4 shall be provided in cells or rooms which are served by audible emergency warning systems and which house inmates or detainees who are allowed independent means of egress. Permanently installed telephones shall have volume controls complying with 4.31.5.

**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 visual alarms and communication devices made available by the operator of the facility.

**13. ACCESSIBLE RESIDENTIAL HOUSING.**

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

## 13.1 General

section 4. "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 that are made available for the use of residents of a building or the guests thereof; these areas include, but are not limited to, hallways, lounges, lobbies, laundry rooms, refuse rooms, mail rooms, recreational areas and passageways among and between buildings.

**EXCEPTION:** Where multiple recreational facilities, such as tennis courts, are provided for public or common use, then at least one of each type shall be designed and constructed to comply with section 4.

**13.1\* General.** This section applies to single-family and multifamily dwelling unit facilities constructed or altered by, for, or on behalf of a State or local government entity. For purposes of this section, the term "dwelling unit" means a single unit which provides a kitchen or food preparation area, in addition to rooms and spaces for living, bathing and sleeping.

**13.2 Minimum Number and Dispersion.**

**13.2.1 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, 13.4, and 13.5.

(a) Dwelling Units with Roll-in Showers.  
[Reserved]

(b) Dwelling Units with Bathtubs.  
[Reserved]

(2) In addition to those accessible dwelling units required 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 and 13.5.

(3) 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).

**13.2.2\* New Construction: Dispersion.**

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: unit size and configuration, cost, amenities within or serving dwelling units, and location with respect to amenities.

**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, 13.4 and 13.5 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 both 13.4 and 13.5 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, 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.

**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, 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

**13.3 Requirements for Accessible Dwelling Units**

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 complying with 4.6 shall be on an accessible route 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); and

(b) Where parking is provided for visitors, 2 percent of the spaces, but not less than one, shall be accessible.

**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) (i) **Elevators.** If provided, elevators shall comply with 4.10.

(ii) **Equivalent Facilitation.** 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 to and in accessible spaces shall comply with 4.13.

(7) **Entrances.** At least one accessible entrance to the dwelling unit shall 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.

(9) **Controls.** All controls in accessible spaces shall comply with 4.27. 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.

**EXCEPTION:** This requirement shall not apply to controls, such as air distribution registers, which must be placed in or close to ceilings for proper air circulation.

(10) **Alarms.** If emergency warning systems are provided, they shall include audible alarms complying with 4.28.2 and auxiliary alarms complying with 4.28.4.

(11) **Bathrooms.** At least one full bathroom shall comply with 13.3.3. A full bathroom shall include a water closet, a lavatory, and a bathtub or a shower.

(12) **Kitchens.** The kitchen shall comply with 13.3.4.

(13) **Living Spaces.** The following spaces shall be accessible and shall be on an accessible route:

(a) The living area.

(b) The dining area.

(c) The sleeping area or bedroom 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) Patios, decks, terraces, balconies, carports, and garages, if provided on an accessible level within 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 the 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.** If laundry facilities are provided, they 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.** All doors to accessible bathrooms shall comply with 4.13 and shall not swing into the clear floor space required for any fixture.

## 13.3 Requirements for Accessible Dwelling Units

(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 their 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.** 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.

(2) Clear Floor Space. A clear floor space at least 30 in by 48 in (760 mm by 1220 mm) complying with 4.2.4 that allows either a forward or a parallel approach by a person using a wheelchair shall be provided at all appliances in the kitchen, including the range

or cooktop, oven, refrigerator/freezer, dishwasher, and trash compactor. Maneuvering space complying with 4.2.3 shall be provided. Laundry equipment located in the kitchen shall comply with 13.3.5.

(3) Controls. All controls in kitchens shall comply with 4.27.

(4) Counters. At least one 30 in (760 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 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, 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 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. Cooktops shall comply with 13.3.4(2) and 13.3.4(3). 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

**13.4 Requirements for Dwelling Units Accessible to Persons with Hearing Impairments**

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, including those with cooktops, shall comply with 13.3.4(2) and 13.3.4(3). Ovens shall be of the self-cleaning type or be located adjacent to an adjustable height counter with knee space below. (See Fig. 52). 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 having knee spaces underneath shall be insulated or otherwise protected on the exposed contact surfaces to prevent burns, abrasions, or electric shock. Where knee space is provided, the clear floor space may overlap the knee space by 19 in (485 mm) maximum. Ovens shall have controls on front panels and may be located on either side of the door.

(8)\* Refrigerators and Freezers. Refrigerators and freezers shall comply with 13.3.4(2) and 13.3.4(3). 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 meet the following requirements:
  - (i) Have at least 50 percent of the freezer space no higher than 54 in (1370 mm) above the floor.
  - (ii) Have 100 percent of the refrigerator space and controls no higher than 54 in (1370 mm) above the floor.

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.

(9) Dishwashers. Dishwashers shall comply with 13.3.4(2) and 13.3.4(3). Dishwashers shall have all rack space accessible from the front of the machine for loading and unloading dishes.

(10)\* Kitchen Storage. Kitchen storage cabinets, drawers, and shelf areas shall comply with 4.25 and 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 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.** In dwelling units required to be accessible by 13.2.1, auxiliary visual alarms complying with 4.28.4 shall be provided if an emergency warning system or single station emergency alarm is provided. Visual notification devices shall also be provided in living and sleeping rooms to alert occupants of incoming telephone calls and a door knock or bell. Notification devices shall not be connected to auxiliary visual alarm signal appliances. Permanently installed telephones shall have volume controls complying with 4.31.5. An accessible electrical outlet within 48 in (1220 mm) of each telephone connection shall be provided to facilitate the use of a text telephone.

**13.4.2 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 sleeping rooms to enable persons with hearing impairments to utilize portable visual alarms and communication devices provided by the operator of the facility.

## 14.0 Public Rights-Of-Way

### 13.5 Requirements for Dwelling Units Accessible to Persons with Visual Impairments: Reserved.

## 14. PUBLIC RIGHTS-OF-WAY.

**14.1\* General.** In addition to the requirements of 4.1 through 4.35, unless otherwise provided in this section, all areas, elements, and facilities in the public right-of-way intended for pedestrian access, circulation, and use that are constructed or installed on or adjacent to a sidewalk within the limits or scope of a public improvement project shall comply with 14.

### 14.1.1 Definitions.

**Continuous Passage.** A continuous unobstructed pedestrian circulation path within a sidewalk connecting pedestrian areas, elements, and facilities covered by Section 14.

**Marked Crossing.** A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

**\*Public Improvement Project.** A public works project consisting of the construction, alteration or installation of site improvements or amenities in the public right-of-way by or on behalf of a State or local government.

**\*Sidewalk.** A walk in the public right-of-way along a vehicular way that is part of a pedestrian circulation network.

**Site Infeasibility.** Existing physical or site constraints which 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 to provide accessibility.

**Walk.** An exterior pathway with a prepared surface intended for pedestrian use, including general pedestrian areas such as plazas and courts.

### 14.2 Sidewalks.

**14.2.1\* Minimum Requirements.** Sidewalks, or a continuous passage along their length, shall provide a clear width of 36 in (915 mm)

minimum, connect to the accessible route required by 4.1.2(1) and elements covered by section 14, and shall comply with the following requirements:

(1)\* **Slope.** The least possible running slope shall be provided and shall not exceed 1:12. Cross slopes shall not exceed 1:50 (2 percent). Handrails are not required on sidewalks.

**EXCEPTION:** Where site infeasibility precludes a running slope of 1:12, the least possible running slope shall be provided.

(2) **Passing Space.** 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 or a T-shaped turning space as shown in Figure 3 and may be provided at landings at new building entrances required by ADAAG 4.1.2(1) or at the intersection of two sidewalks. The passing space at the intersection of two sidewalks shall have the minimum possible running slope and a cross slope that does not exceed 1:50 (2 percent).

(3) **Surfaces.** Surfaces shall be firm, stable and slip resistant. Differences in level up to 1/4 in (6.5 mm) may be vertical and without edge treatment. (See Fig. 7(c)). Differences in level between 1/4 in and 1/2 in (6.5 mm and 13 mm) shall be beveled with a slope no greater than 1:2. (See Fig. 7(d)). Gratings shall have spaces no greater than 1/2 in (13 mm) wide in one direction. (See Fig. 8(g)). Gratings with elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (See Fig. 8(h)).

(4)\* **Separation.** Sidewalks shall be 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.

(5) **Bus stops.** Where bus passenger loading areas or bus shelters are provided on or adjacent to sidewalks, they shall comply with 10.2.

### 14.2.2 Historic and Special Use Sidewalks (Reserved).

**14.2.3 Street Identification and Other Pedestrian Signage.** Where provided for pedestrian use, informational and directional

## 14.2 Sidewalks

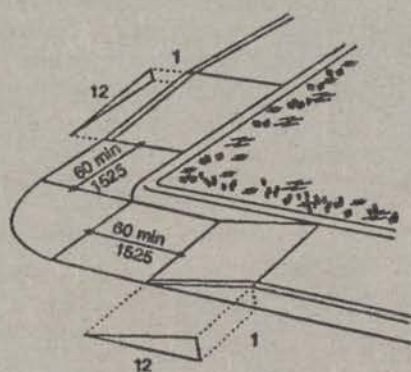
signage, and street identification signs shall comply with 4.30.2, 4.30.3, and 4.30.5.

### 14.2.4\* Protruding Objects.

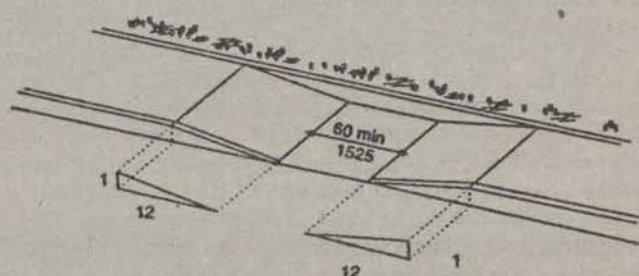
(1) General. Objects projecting from walls (e.g., signs, telephones, canopies) with their leading edges between 27 in and 80 in (685 mm and 2030 mm) above the finished sidewalk shall protrude no more than 4 in (100 mm) into any portion of a sidewalk. Objects mounted with their leading edges located less than 27 in (685 mm) or more than 80 in (2030 mm) above the finished sidewalk may project any amount provided that they do not reduce the required continuous passage along the sidewalk. 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 ground or finished sidewalk provided that they do not reduce the required continuous passage along the sidewalk.

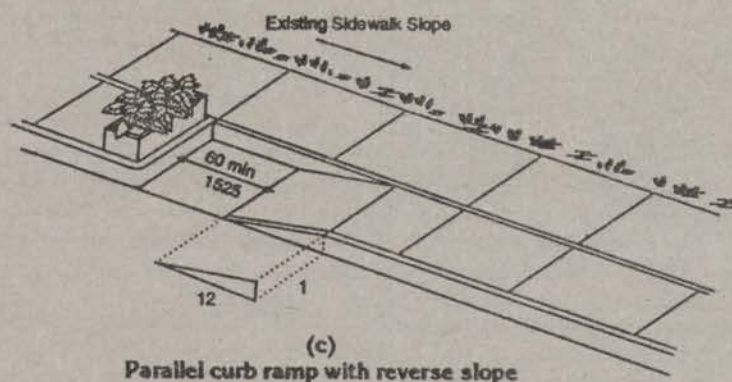
(2) Head Room. Guardrails or other barriers shall be provided when the vertical clearance of an area along or adjoining a sidewalk or continuous passage is less than 80 in (2030 mm) high. Leading edges of such barriers shall be located a maximum of 27 in (685 mm) above the finished sidewalk, as shown in Figure 8(c-1).



(a)  
Parallel curb ramp in narrow  
sidewalk at intersection



(b)  
Parallel curb ramp in narrow  
sidewalk at midblock crossing



(c)  
Parallel curb ramp with reverse slope

Fig. 58

Examples of Parallel Curb Ramps

## 14.2 Sidewalks

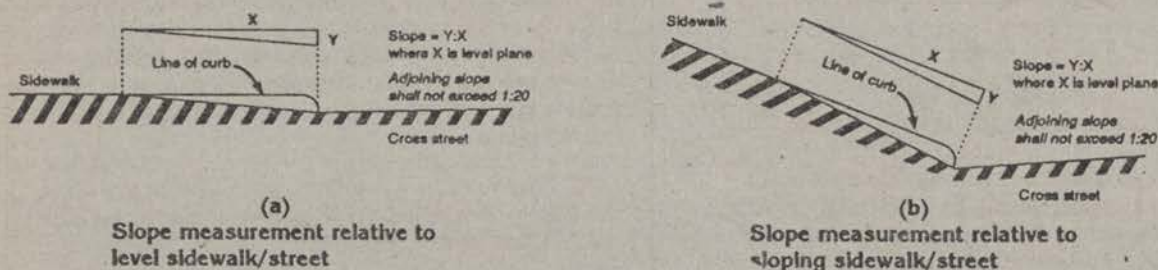


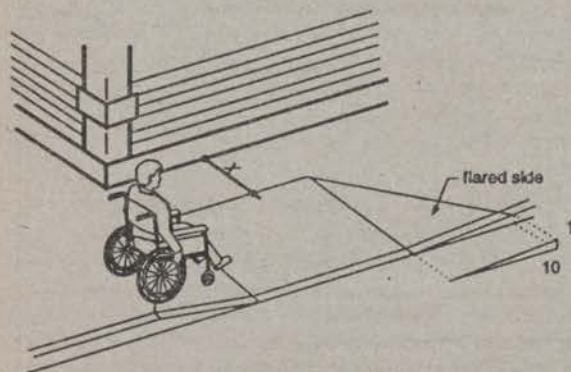
Fig. 59

## Measurement of Curb Ramp Slopes

(3) Clear Width. Fixed objects not covered by paragraph (1) shall not reduce the continuous passage required by 14.2.1.

#### 14.2.5 Sidewalk Curb Ramps and Other Sloped Areas.

(1) Location. A curb ramp or other sloped area complying with 14.2.5 shall be provided wherever a pedestrian circulation path crosses a curb or other barrier (e.g., parkway, berm, or gutter) to a street crossing and shall be connected to a continuous passage. Handrails are not required on sidewalk curb ramps or other sloped areas connecting to street crossings.



1. X shall be equal to or greater than 36 in (915 mm).
2. If X is less than 48 in (1220 mm), then the slope of the flared sides shall not exceed 1:12.

Fig. 60

## Level Landing at Top of Curb Ramp

(2) Slope. The least possible slope shall be used for any curb ramp or other sloped area. The maximum slope shall be 1:12 when measured as shown in Figure 59(a).

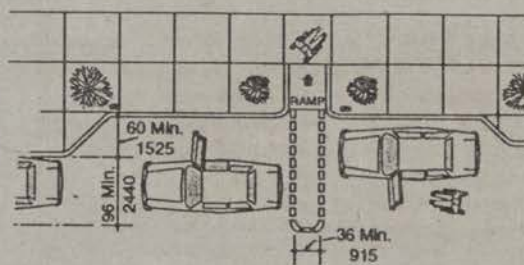
EXCEPTION: Where site infeasibility (e.g., steeply sloped roadways or constrained right-of-way) precludes the installation of a curb ramp, a sloped area parallel to the curb with its gradient measured according to Figure 59(a), may be provided. (See Fig. 58). The least possible slope shall be provided for any parallel sloped area. The maximum slope shall be 1:12. The cross slope shall be no greater than 1:50 (2 percent). A landing which has a minimum of 60 in (1525 mm) clear in the direction of the running slope shall be provided at the bottom of the sloped area. The surface slope of the landing shall not exceed 1:50 (2 percent) in all directions.

(3) Width. Curb ramps or other sloped areas shall be 36 in (915 mm) wide minimum, exclusive of flared sides.

(4) Landings. A landing the width of the curb ramp and 48 in (1220 mm) in length shall be provided at the top of the curb ramp or other sloped area and shall be connected to the continuous passage. The surface slope of landings shall not exceed 1:50 (2 percent) in all directions.

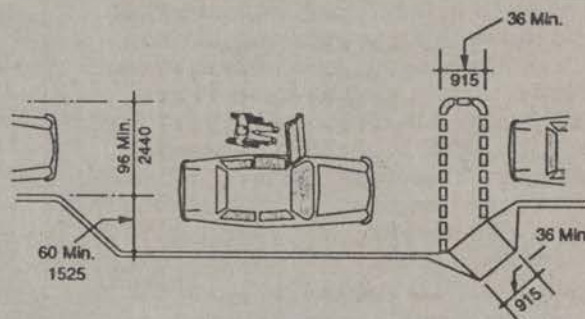
EXCEPTION 1: Where site infeasibility precludes the installation of a 48 in (1220 mm) landing length at the top of the curb ramp or other sloped area, a landing a minimum of 36 in (915 mm) in length may be provided. (See Fig. 60).

## 14.2 Sidewalks



(a)

Two accessible parallel parking spaces in series, separated by an access aisle, with both driver-side and passenger-side access demonstrated.



(b)

Single accessible parallel parking space with driver-side access demonstrated; passenger side access can be provided by parking in line with standard on-street spaces.

Fig. 61

Examples of Parallel On-Street Parking

**EXCEPTION 2:** Where the 36 in (915 mm) level landing allowed in Exception 1 above, or a parallel ramp complying with 14.2.5(2) Exception cannot be provided, a sloped area connecting to the street crossing with its gradients (i.e., running slope, cross slope, side flare slope) measured from a plane parallel to that of the street, as shown in Figure 59(b), may be provided. The least possible slope shall be used for any sloped area connecting to a street crossing. The maximum slope shall be 1:12. The cross slope shall be no greater than 1:50 (2 percent).

(5) **Sides of Curb Ramps or Other Sloped Areas.** Curb ramps or other sloped areas located where pedestrians must walk across the ramp, or where curb ramps are not protected by returned curbs, shall have flared sides. The slope of the flare shall be 1:10 maximum. Where the landing at the top is at least 36 in (915 mm) but less than 48 in (1220 mm), the slope of the flares shall be 1:12 maximum. (See Fig. 60). Curb ramps or other sloped areas with returned curbs may be used where pedestrians would not normally walk across the ramp from the side. (See Fig. 12(b)).

(6) **Surface.** The surfaces of curb ramps or other sloped areas shall be firm, stable and slip resistant.

(7) **Detectable Warnings.** [Reserved]

(8) **Adjacent Surfaces.** Counter slopes of adjoining gutters and road surfaces connecting to the curb ramp or sloped area shall be 1:20 maximum. (See Fig. 59(a)). Transitions from curb ramps to gutters or streets shall be flush and free of abrupt changes. Gratings located in adjacent walking surfaces shall have spaces no greater than 1/2 in (13 mm) wide in one direction. (See Fig. 8(g)). Gratings with elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel. (See Fig. 8(h)).

(9) **Location at Marked Crossings.** Curb ramps and other sloped areas at marked crossings shall be wholly contained within the markings, excluding any flared sides. (See Fig. 15).

(10) **Obstructions.** Curb ramps and other sloped areas shall be protected or located to prevent their obstruction by parked vehicles.

(11) **Built-up Curb Ramps or Other Sloped Areas.** Built-up curb ramps or other sloped areas shall be located so that they do not project into vehicular traffic lanes or into parking spaces or access aisles. (See Fig. 13).

(12) **Diagonal Curb Ramps or Other Sloped Areas.** Diagonal (or corner-type) curb ramps or other sloped areas with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. Bottoms of

## 14.2 Sidewalks

diagonal curb ramps or other sloped areas shall have a 48 in (1220 mm) minimum clear space as shown in Figure 15(c) and (d). Diagonal curb ramps or other sloped areas provided at marked crossings shall have the 48 in (1220 mm) minimum clear space within the markings. (See Fig. 15(c) and (d)). Diagonal curb ramps or other sloped areas with flared sides shall have a segment of straight curb at least 24 in (610 mm) long located on each side of the curb ramp or other sloped area and within the marked crossing. (See Fig. 15(c)).

(13) Islands. Raised islands in crossings shall be cut through level with the street or have curb ramps or other sloped areas 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 Fig. 15(a) and (b)).

#### 14.2.6 Crossing Controls.

(1) Controls. Where provided, buttons shall be raised or flush and be a minimum of 3/4 in (19 mm) in the smallest dimension. The force required to activate controls shall be no greater than 5 lbf (22.2N).

(2) Location. Where provided, controls shall be located as close as possible to the curb ramp and, to the maximum extent feasible, shall permit operation from a level area immediately adjacent to the controls.

(3) Mounting Height. Where provided, pedestrian-actuated crossing controls shall be a maximum of 48 in (1220 mm) above the sidewalk.

(4) Surface. A firm, stable and slip resistant area a minimum of 30 in by 48 in (915 mm by 1220 mm) shall be provided to allow for a forward or parallel approach to the controls.

**14.2.7\* Marked Crossings.** Where provided, marked crossings shall be delineated with contrasting markings or materials (e.g., paint, brick, tile).

**14.2.8 Pedestrian Overpasses and Underpasses.** Grade-separated pedestrian overpasses and underpasses shall be connected to a sidewalk or other pedestrian circulation path by means of a ramp or elevator complying with 4.8

or 4.10 or, where permitted by 4.1.3(5), a platform lift (wheelchair lift) complying with 4.11.

**14.3\* Drinking Fountains, Telephones, Toilet Facilities, Fixed Seating, Tables and Benches.** Where provided on or adjacent to a sidewalk as part of a public improvement project, the following elements shall be reasonably dispersed within the project area, taking into consideration the proximity and number of existing accessible elements:

(1) Drinking Fountains. At least 50 percent, but not less than one, of each drinking fountain provided shall comply with 4.15. Where only one drinking fountain is provided it 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; 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.

(2) Public Pay Telephones. Where single unit public pay telephones are provided, at least 50 percent, but not less than one, shall comply with 4.31.2 through 4.31.8. 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. Where two or more banks of telephones are provided, at least one telephone complying with 4.31.2 through 4.31.8 shall be mounted with the highest operable part no higher than 48 in (1220 mm). In addition, 25 percent, but not 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. Signage complying with applicable provisions of 4.30.7 shall be provided.

(3) Single User Toilet Facilities. At least 50 percent, but not less than one, of fixed single user toilet facilities shall comply with 4.22. Signage complying with 4.30.7 shall be provided on accessible units. In addition, signage complying with 4.30.2, 4.30.3, and 4.30.5 shall be provided on the inaccessible units indicating the location of the nearest accessible unit.

## 14.4 Vehicular Ways and Facilities

(4) Fixed Seating, Tables, and Benches. At least five percent, but not less than one, of the fixed seating and tables provided in a public improvement project shall comply with 4.32. At least five percent of fixed benches provided in a public improvement project shall have a minimum 24 in by 48 in (610 mm by 1220 mm) seating area, mounted 17 in to 19 in (430 mm to 485 mm) above the finished surface. Clear floor space shall be provided alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. The structural strength of the bench and attachments shall comply with 4.26.3.

### 14.4 Vehicular Ways and Facilities.

**14.4.1 On-Street Parking.** Where new on-street paid or time-limited parking is provided and designated in districts zoned for business uses, accessible on-street parking spaces shall be provided in accordance with the table in 4.1.2(5)(a). A 60 in (1525 mm) wide minimum access aisle shall be provided. The driving lane shall not encroach on the required access aisle. (See Fig. 61).

(1) Curb Ramps. A curb ramp or other sloped area complying with 14.2.5 shall connect the access aisle to the sidewalk by a continuous passage which is a minimum of 36 in (915 mm) wide.

(2)\* Location. Accessible on-street parking spaces shall be dispersed throughout the project area.

(3) Signage. Accessible parking spaces shall be designated as reserved by a sign that complies with 4.30.7. Such signs shall be located so as to be visible from a driver's seat.

(4) Parking Meters. Where provided, parking meter controls shall be a maximum of 48 in (1220 mm) above the sidewalk or pedestrian circulation path. 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 (22.2N). A firm, stable and slip-resistant area a minimum of 30 in by 48 in (760 mm by 1220 mm), with the least possible slope, shall be provided at the controls and shall be connected to the sidewalk by a continuous passage that is a minimum of 36 in (915 mm) wide.

### 14.4.2 Roadside Emergency Communications Systems.

(1) Controls. Where provided, controls and operating mechanisms at roadside emergency communications system call boxes shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The highest operable part shall be at 54 in (1370 mm) above the finished grade at the call box location. The force required to activate controls shall be no greater than 5 lbf (22.2N).

(2) Communications. The system shall accommodate both visual and auditory acknowledgement of call receipt and shall not require voice communication.

(3)\* Surface. A firm, stable, slip resistant surface a minimum of 30 in by 48 in (760 mm by 1220 mm) shall be provided a maximum of 10 in (255 mm) from the vertical plane of the face of the call box and shall be connected to the roadway shoulder, sidewalk, or pedestrian path by a continuous passage that is a minimum of 36 in (915 mm) wide.

**14.5 Alterations.** If existing elements are altered in the scope of a public improvement project, they shall be altered to comply with the applicable provisions of 4.1.6 and section 14.

**14.6 Temporary Work.** Construction and repair projects within the public right-of-way that affect pedestrian circulation elements, routes, or facilities shall comply with 4.1.1(4).

(1) Construction sites in the public right-of-way shall be protected with barriers to warn of hazards on the circulation path.

(2) The temporary circulation path from building entrances along a sidewalk or continuous passage to the nearest accessible street crossing shall be clearly marked.

## Appendix

**APPENDIX:**

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**A7.0 Business and Mercantile.**

**A7.2(3)(iii) Counter or Teller Windows with Partitions.** Methods of facilitating voice communication may include grills, talk-thru baffles, and other devices mounted directly into the partition which users can speak directly into for effective communication. Such methods should be designed or placed so that they can be used at both a standard height and a lower height appropriate for a person in a seated position.

**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.

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**A10.4 Airports.**

**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 passengers with disabilities the ability to travel with the same ease and convenience as the general public.

**A11.0 Judicial, Legislative and Regulatory Facilities.**

**A11.1** All public use 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 Courtrooms, Hearing Rooms, and Chambers.**

**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, Speakers' Rostrums, and Raised Daises.** Where courtrooms are assigned on a temporary basis, equipment should be on hand so that accessibility can be accomplished 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 and Litigants' 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 Jury Assembly Areas and Jury Deliberation Areas.**

**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 Courthouse Holding Facilities.**

**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 grills, 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.

**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 Electrical Outlets, Wiring, and Conduit for Communication Systems.** All courtrooms, hearing rooms (including

**A12.0 Detention and Correctional Facilities**

judges' chambers when used as hearing rooms), jury deliberation and jury orientation rooms, and meeting rooms designated for public use should be designed to take advantage of current and emerging technologies for providing information to persons with vision and hearing impairments. Since such persons may be litigants, jurors, witnesses, 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, section 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 a duplex outlet 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 7 courtrooms and 3 are assigned to criminal matters, 2 are assigned to civil matters and 2 are assigned to family law matters, then section 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, section 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 require public entities to take such steps as may be necessary to ensure effective communication with individuals with hearing impairments. See 28 CFR 35.160. 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 public and common use areas serving accessible cells or rooms are required to be accessible. In detention and correctional facilities, public areas would include visiting areas and other areas available to the general public. 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, and medical facilities. 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.

**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 grills, 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.

## A13.0 Accessible Residential Housing

### A12.4 Holding and Housing Cells or Rooms: Minimum Number.

**A12.4.1 Holding Cells and General Housing Cells or Rooms.** 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. Consequently, it is recommended that consideration be given to the placement of some accessible cells or rooms in shift areas to allow for the greatest flexibility in housing persons with disabilities.

### A13.0 Accessible Residential Housing.

**A13.1 General.** 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 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.

### A13.2 Minimum Number and Dispersion.

**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. For instance, it would not be acceptable to offer only one bedroom accessible units when units with two and three bedrooms are also offered in the same facility. In addition, the availability of

amenities such as view or the proximity to fitness facilities must also be comparable. For example, it is not acceptable to locate all accessible units on a side of a building overlooking an interior courtyard while inaccessible units are provided with 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, 13.4 and 13.5 (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 sections 13.4 and 13.5 must be provided in addition to those which are accessible to people with mobility, hearing and vision impairments until the two percent minimum is achieved in units accessible to persons with hearing impairments and persons with visual impairments.

### A13.3 Requirements for Accessible Dwelling Units.

**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 ovens are 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.

**A14.0 Public Rights-of-Way**

**A13.3.4(8) Refrigerator 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.

**A14.0 Public Rights-of-Way.**

**A14.1 General.** This section applies access provisions to pedestrian areas, elements, and facilities constrained by terrain, vehicular roadways, and existing buildings or elements of the pedestrian circulation network. Other areas or sites constructed or altered as part of a public improvement project such as plazas or courts where the constraints listed above do not apply are subject to the applicable provisions of ADAAG 4.1.1 through 4.35. (See appendix note A14.2.1).

**A14.1.1 Definitions.**

**Public Improvement Project.** Public improvement projects undertaken by or on behalf of a State or local government include, but are not limited to, work in the public right-of-way such as the construction or installation of site improvements and pedestrian amenities; the widening or realignment of a street, and the upgrading of a sewer, drainage system, or other utility. These projects are largely concerned with the infrastructure of a jurisdiction and are typically planned and budgeted in a multi-year capital improvements program or as an annual maintenance and repair line item. Projects may be undertaken within clearly defined boundaries or may consist of the installation of a typical item (e.g., drinking fountains, toilets, benches, curb ramps) dispersed throughout an area or jurisdiction.

Public entities which may later accept pedestrian circulation elements and networks constructed by

private entities should ensure, through the permit process, that such elements and systems meet the requirements of this section.

**Sidewalk.** Unlike the definition of "walk", the definition of "sidewalk" does not include general pedestrian areas such as plazas and courts which can be designed, altered, and constructed to meet the requirements of 4.1 through 4.35. A court or plaza within the public right-of-way may be surrounded by sidewalks. While the sidewalk must conform to adjacent road slope and connect to existing sidewalks, which limits the ability to fully comply with 4.1 through 4.35, a newly-constructed court or plaza, like public sites generally, can be graded so that walks within it can either provide a slope less than 1:20 or meet the requirements for ramps in ADAAG 4.8.

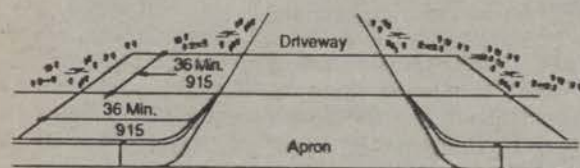
**A14.2 Sidewalks.**

**A14.2.1 Minimum Requirements.** Section 4.1.2(1) requires accessible elements on a site to be connected by an accessible route. Where the required accessible route is coincident with that of the sidewalk or continuous passage along it required by 14.2.1, the requirements of 4.3 prevail. The provisions of section 14 do not preclude sidewalk segments at different levels or sidewalks with stairs (which are sometimes advantageous in providing access to building entrances on or along steeply sloping sites) provided that a continuous passage within the sidewalk serves each accessible entrance and is connected to a continuous accessible sidewalk. Where a sidewalk contains steps or where sidewalk levels diverge, a railing, planter or other barrier separating the levels is recommended. Stairs abutting a sidewalk should have uniform riser heights and uniform tread widths.

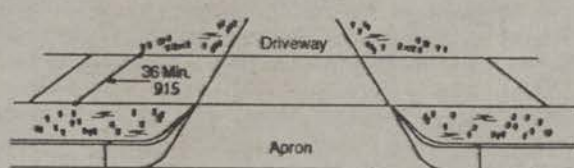
**A14.2.1(1) Slope.** Cross slopes on portions of sidewalks adjacent to the continuous passage required by 14.2 may exceed 1:50 (2 percent) provided that the adjacent portions are smoothly blended. This may facilitate connecting the clear passage to building entrances, facilities or other pedestrian circulation elements.

**A14.2.1(4) Separation.** Narrow sidewalks immediately adjacent to the curb or roadway may be offset to avoid a non-conforming cross slope at driveway aprons by diverting the sidewalk around the apron. Sidewalks separated from the curb or roadway by a planted

## A14.2 Sidewalks



(a)  
Sidewalk without parkway where  
continuous passage by passes apron



(b)  
Sidewalk with parkway

Fig. A9

Sidewalks at Driveway Aprons

parkway can accommodate an apron within the width of the parkway. (See Fig. A9).

**A14.2.4 Protruding Objects.** These provisions apply to the entire width of a sidewalk. Many objects on or along a 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 rule regarding maintenance of accessible features. (See 28 CFR 35.133). Tree branches should also be trimmed periodically to comply with provisions for required head room.

**A14.2.7 Marked Crossings.** Marked crossings should be provided at the following areas: State and local government buildings and facilities, transportation facilities, places of public accommodation, at irregular intersections, and at mid block crossings.

**A14.3 Drinking Fountains, Telephones, Toilet Facilities, Fixed Seating, Tables and Benches.** Drinking fountains, telephones, toilet facilities and fixed seating, tables, and benches shall be reasonably dispersed within the project area. However, where one area of the 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, the distribution may be uniformly dispersed or dispersed in the same proportion as all units as required by the public improvement project.

## A14.4 Vehicular Ways and Facilities.

**A14.4.1(2) Location.** Accessible on-street parking spaces located immediately adjacent to intersections may be served by sidewalk curb ramps, provided that the path of travel from the access aisle to the curb ramp is within the pedestrian crossing area. To the maximum extent feasible, accessible on-street parking should be located in level areas.

**A14.4.2(3) Surface.** The level surface at the call box must be connected to the roadway shoulder, sidewalk or pedestrian path. This does not require that paved shoulders or sidewalks be provided, but it does require that a person using a wheelchair be able to reach the level surface from the roadway shoulder. This would prohibit the level surface from being separated from the roadway by a ditch, gutter, curb, or other barrier.