Appendix A Analysis of the Proposed Standards

The following document is a summary of the major substantive changes proposed for the scoping and technical requirements of the 1991 Standards at 28 CFR pt. 36 adopted in 1991, as amended in 1994. The full text of the 2004 ADAAG is available for review on the Access Board's web site, www.access-board.gov, along with a chart that shows the relationship between the 1991 Standards and the 2004 ADAAG.

This summary addresses only the major substantive changes that are being proposed. Editorial changes are not discussed. Scoping and technical requirements are discussed together, where appropriate, for ease of understanding the requirements. In addition, this document addresses substantive public comments on specific changes to the proposed standards received by the Department in response to its September 2004 ANPRM. Comments received by the Access Board on the adoption process or on the overall scope of the proposed standards have been addressed in the preamble to this notice. Comments that did not raise major issues are not addressed here.

The ANPRM issued by the Department concerning these proposed standards stated that comments received by the Access Board in response to its development of the guidelines upon which these proposed standards are issued would be considered in the development of this NPRM. Therefore, the Department will not restate here all of the comments and responses to them issued by the Access Board. The Department is supplementing the Access Board's comments and responses with substantive comments and responses in this notice. Comments and responses addressed by the Access Board that also were separately submitted to the Department will not be restated in their entirety here.

Analysis of Sections

Application and Administration

103 Equivalent Facilitation

This section acknowledges that nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

A commenter encouraged the Department to include a procedure for determining equivalent facilitation. The Department believes that the responsibility for determining and demonstrating equivalent facilitation properly rests with the covered entity. The purpose of allowing for equivalent facilitation is to encourage flexibility and innovation while still ensuring access. The Department believes that establishing potentially cumbersome bureaucratic provisions for reviewing requests for equivalent facilitation is inappropriate.

104 Conventions

Proposed section 104.1.1, Construction and Manufacturing Tolerances, provides that all dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points. Section 104.1 notes that all dimensions not stated as a "maximum" or "minimum" are absolute and that all dimensions are "subject to conventional industry tolerances."

Commenters requested that specific new construction allowances and tolerances be made for a variety of materials and designs required by the proposed standards. The Department believes that it is inappropriate for this agency to attempt to establish construction and manufacturing tolerances for every material, element, or design that may be used in new construction. Construction and manufacturing tolerances are best addressed by industry standards, where available, and are built into the specifications in the attached rules.

Section 104.2 provides that where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or facilities shall be provided. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one-half is permissible.

A commenter stated that it is customary in the building code industry to round up rather than down for values less than one-half. As noted here, where the proposed standards provide for scoping, fractional calculations will be rounded to the next whole number. The Department is retaining the portion of section 104.2, Calculation of Percentages, that permits rounding down for values less than one-half where the determination of the required size or dimension of an element or facility involves ratios or percentages. Such practice is standard with the industry, and is in keeping with model building codes.

105 Referenced Standards

Section 105 lists the industry requirements that will be referenced in the proposed standards. This section also clarifies that where there is a difference between a provision of the proposed standards and the referenced requirements, the provision of the proposed standards applies.

Commenters noted that the National Fire Protection Association's (NFPA) referenced standard for fire alarms at section 105.2.5 is based on the NFPA 72 1999 or 2002 edition. The commenters recommended editing the final standards to require compliance with the edition of NFPA that is most recent because it is likely that the NFPA will amend its standards prior to the issuance of final ADA Standards.

The rules that govern the publication of regulations that incorporate private standards by reference require federal agencies to adopt specific editions of the referenced code that

are in existence at the time of issuance of the rules. The Department anticipates that the Access Board will periodically update the ADAAG references. Until then, the Department will retain the reference contained in the 2004 ADAAG.

106 Definitions

Various definitions will be added to the proposed standards and some current definitions will be dropped.

One commenter asked that the term public right-of-way be defined; others asked that various terms and words defined by the 1991 Standards, and that were eliminated from the proposed standards, and other words and terms newly used in the proposed standards be defined.

The Department believes that it is not necessary to add definitions to this text because the proposed regulation at section 106.3 provides that the meanings of terms not specifically defined in the proposed standards, in the Department's regulation, or in referenced standards are to be defined by collegiate dictionaries in the sense that the context implies. The Department believes that this provision adequately addresses these commenter's issues.

Scoping and Technical Requirements

202 Existing Buildings and Facilities

Alterations to Primary Function Areas. A new provision at section 202.4 merely restates a current requirement under Title III, and therefore represents no change for Title III facilities or for those Title II facilities that currently have elected to comply with the 1991 Standards. However, under the revised provisions, state and local government facilities that currently elect to comply with UFAS instead of the 1991 Standards will no longer have that option, and thus will now be subject to the path of travel requirements. The path of travel requirement provides that when a primary function area of an existing facility is altered, the path of travel to that area (including rest rooms, telephones, and drinking fountains serving the area) must also be made accessible, but only to the extent that the cost of doing so does not exceed twenty percent (20%) of the cost of the alterations to the primary function area. The UFAS requirements for a substantial alteration, though different, may have covered some of the items that will now be covered by the path of travel requirement.

Visible Alarms in Alterations to Existing Facilities. The 1991 Standards at sections 4.1.3(14), and 4.1.6(1) and (b), and proposed sections 202.3 and 215.1, Exception require that when existing elements and spaces of a facility are altered, the alterations must comply with new construction requirements. The proposed regulations add a new exception to the scoping requirement for visible alarms in existing facilities that will provide that visible alarms must be installed only when an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

Commenters urged the Department not to include the exception because it will make the safety of individuals with disabilities dependent upon the varying age of existing fire alarm systems. Other commenters suggested that including this section, even with the exception, will result in significant cost to building owners and operators.

The Department believes that the language adopted by the Access Board strikes a reasonable balance between the interests of individuals with disabilities and those of the business community. If undertaken at the time a system is installed whether in a new facility or in a planned system upgrade, the cost of adding visible alarms is reasonable. Over time, existing facilities will become fully accessible to individuals who are deaf or hard of hearing, and will add minimal costs to owners and operators.

203 General Exceptions

Limited Access Spaces and Machinery Spaces. The 1991 Standards at section 4.1.1 contains an exception that exempts "nonoccupiable" spaces that have limited means of access, such as ladders or very narrow passageways, and that are visited only by service personnel for maintenance, repair, or occasional monitoring of equipment from all accessibility requirements. The proposed standards at sections 203.4 and 203.5 expand this exception by removing the condition that the exempt spaces be "nonoccupiable," and by separating the other conditions into two independent exceptions: one for spaces with limited means of access, and the other for machinery spaces. More spaces are exempted by the proposed changes to the exception.

Employee Work Areas. Section 215.3 of the proposed standards provides that employee work areas in newly constructed facilities are required to have wiring systems that are capable of supporting visible alarms. The 1991 Standards, section 4.1.1(3), require visible alarms to be provided where fire alarm systems are provided, but do not require areas used only by employees as work areas to be equipped with accessibility features. As applied to office buildings, the 1991 Standards require visible alarms to be provided in public and common use areas such as hallways, conference rooms, break rooms, and restrooms, where fire alarm systems are provided.

Commenters asserted that the requirements of section 215.3 of the proposed standards would be burdensome to meet. These commenters also raised concerns that all employee work areas within existing buildings and facilities must be equipped with accessibility features.

The commenters' concerns about section 215.3 represent a misunderstanding of the requirements applicable to employee work areas. Newly constructed buildings and facilities merely are required to provide wiring for visible alarm systems that can be added as needed to accommodate employees who are deaf or hard of hearing. This is a minimum requirement without significant impact.

The other issue in the comments represents a misunderstanding of the Department's existing regulatory requirements. Employee common use areas in covered facilities (e.g., locker rooms, break rooms, cafeterias, toilet rooms, and corridors to exits, and other common use spaces) are required to be accessible under the 1991 Standards; areas in which employees are actually performing their jobs are required to enable a person using a wheelchair or mobility device to approach, enter, and exit the area. The proposed rule will require increased access through the circulation path requirement discussed below, but neither the 1991 Standards nor the proposed standards would require employee work stations to be accessible. Access to specific employee work stations would be governed by Title I of the ADA.

Common Use Circulation Paths in Employee Work Areas. The 1991 Standards at section 4.1.1(3), and the proposed standards at sections 203.9; 206.2.8, Exceptions 1, 2, and 3; 402.1; 402.2; 403.5; 405.5; and 405.8 will require employee work areas to be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. The ADA, 42 U.S.C. §§ 12112 (b)(5)(A) and (B), requires employers to make reasonable accommodations in the workplace for individuals with disabilities, which may include modifications to work areas when needed. Providing increased access to the facility at the time of construction or alteration will simplify the process of providing reasonable accommodations when they are needed. The requirement will not apply to existing facilities pursuant to the readily achievable barrier removal requirement. The Department has consistently held that barrier removal requirements do not apply to exclusively employee areas because the purpose of Title III is to ensure that access is provided to clients and customers. See 28 CFR pt. 36, App. B.

The proposed standards will require common use circulation paths within employee work areas to comply with the technical requirements for accessible routes, subject to several exceptions that exempt common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the area:

- Employee work areas, or portions of employee work areas, that are less than 300 square feet and are elevated 7 inches or more above the ground or finish floor, where elevation is essential to the function of the space, are exempt.
- Common use circulation paths within employee work areas that are less than 1,000 square feet and are defined by permanently installed partitions, counters, casework, or furnishings are exempt. Kitchens in quick service restaurants, cocktail bars, and the employee side of service counters are frequently covered by this exception.
- Common use circulation paths within employee work areas that are an integral component of equipment are exempt. Common use circulation paths within large pieces of equipment in factories, electric power plants, and amusement rides are covered by this exception.

 Common use circulation paths within exterior employee work areas that are fully exposed to the weather are exempt. Farms, ranches, and outdoor maintenance facilities are covered by this exception.

The proposed changes also contain exceptions to the technical requirements for accessible routes:

- Machinery and equipment are permitted to reduce the clear width of common use circulation paths where it is essential to the function of the work performed. Machinery and equipment that must be placed a certain way to work properly, or for ergonomics or to prevent workplace injuries are covered by this exception.
- Handrails are not required on ramps, provided they can be added in the future.

Commenters stated that the proposed standards for common use circulation paths in employee work areas are inappropriate, particularly in kitchens, storerooms, and behind cocktail bars where wheelchairs would not be easily accommodated. These commenters further urged the Department not to adopt a requirement that circulation paths in employee work areas be at least 36 inches wide, including those at emergency exits.

The Department believes that the commenters misunderstand the scope of this provision. Nothing in the rule requires all circulation paths in non-exempt areas to be accessible. The Department recognizes that building codes and fire and life safety codes, which are adopted by all the States, require primary circulation paths in facilities, including employee work areas, to be at least 36 inches wide for purposes of emergency egress. Accessible routes also are at least 36 inches wide, therefore, the Department anticipates that covered entities will be able to satisfy the requirement to provide accessible circulation paths by ensuring that their required primary circulation paths are accessible.

Individual employee work stations, such as a grocery checkout counter or an automobile service bay designed for use by one person, do not contain common use circulation paths and are not required to comply. Other work areas, such as stockrooms that typically have narrow pathways between shelves would be required to design only one accessible circulation path into the stockroom. It would not be necessary to make each circulation path in the room accessible.

In addition, the proposed standards include exceptions for common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the areas. The Department believes that these exceptions will provide the flexibility necessary to ensure that this requirement does not interfere with legitimate business operations.

205 and 309 Operable Parts

Sections 4.1.3, and more specifically 4.1.3(13), 4.27.3, and 4.27.4 of the 1991 Standards require operable parts on accessible elements, along accessible routes, and in accessible

rooms and spaces to comply with the technical requirements for operable parts, including height and operation. The 1991 Standards at section 4.27.3 contain an exception that exempts "special equipment [that] dictates otherwise," and electrical and communications systems receptacles not intended for use by building occupants from the technical requirement for the height of operable parts. The proposed changes divide this exception into three exceptions covering operable parts intended only for use by service or maintenance personnel; electrical or communication receptacles serving a dedicated use; and floor electrical receptacles. Operable parts covered by these new exceptions are exempt from all the technical requirements for operable parts. The proposed changes add exceptions that exempt certain outlets at kitchen counters; HVAC diffusers; and redundant controls provided for a single element, other than light switches, from the technical requirements for operable parts. The proposed changes also exempt gas pump nozzles from the technical requirement for activating force at section 309.4.

Reach Ranges. The 1991 Standards set the height for the maximum side reach at 54 inches. The proposed standards at section 308.3 lower that maximum height to 48 inches. The proposed standards also add exceptions for certain elements to the scoping requirement for operable parts.

The 1991 Standards at sections 4.1.3; 4.27.3; and 4.2.6, and the proposed standards at sections 205.1; 228.1; 228.2; 309.3; 308.3; 308.3.1, Exception 2; and 308.3.2 require operable parts of accessible elements, along accessible routes, and in accessible rooms and spaces to be placed within a forward or side reach. The proposed standards also require at least one of each type of depositories, vending machines, change machines, and gas pumps, and at least 5 percent of mailboxes provided in an interior location to meet the technical requirements for a forward or side reach.

The 1991 Standards specify a maximum 54 inch high side reach and a minimum 9 inch low side reach for a reach depth of 10 inches maximum. The proposed standards specify a maximum 48 inch high side reach and a minimum 15 inch low side reach for an unobstructed reach, and a maximum 48 inch high side reach for a reach depth of 10 inches maximum over an obstruction 34 inches maximum in height. Changing the side reach will affect a variety of building elements such as light switches, electrical outlets, thermostats, fire-alarm pull stations, card readers, and keypads.

Commenters were divided in their views on the change to the reach range requirements. Disability advocacy groups and others, including individuals of short stature, supported the modifications to the proposed reach range requirements. Other commenters asserted that the proposed reach range requirements will be burdensome for small businesses to comply with and asked the Department to consider retaining 1991 requirements. These comments argued that the proposed reach range requirements restrict design options, especially in residential housing.

The Department believes that data provided by advocacy groups and others provides compelling evidence that lowered reach range requirements will serve significantly greater numbers of individuals with disabilities, including individuals of short stature,

people with limited upper body strength, and others with limited use of their arms and fingers. This proposal was developed by the Access Board over a prolonged period in which there was extensive public participation. This process did not produce any significant data to indicate that applying this requirement in new construction or during alterations would impose a significant burden.

206 and 402 Accessible Routes

Slope. The proposed standards provide that the running slope of walking surfaces have cross slopes that shall not be steeper than 1:48. The 1991 Standards' cross slope requirement is 1:50.

A commenter recommended increasing the cross slope requirement to allow a maximum of ½ inch per foot (1:24) to prevent imperfections in concrete surfaces from ponding water.

The requirement that a cross slope shall not be steeper than 1:48 adequately provides for water drainage in most situations. Changes to the specifications suggested would double the allowable cross slope and create a significant impediment for many wheelchair users, and others with mobility impairments. Therefore, the Department declines to accept this recommendation.

Accessible Routes from Site Arrival Points and Within Sites. The 1991 Standards at sections 4.1.2(1) and (2) and the proposed changes at sections 206.2.1 Exception 2; and 206.2.2 Exception require, where provided, that at least one accessible route be provided from site arrival points to an accessible building entrance, and at least one accessible route connect accessible facilities on the same site. The proposed standards also add two exceptions that exempt site arrival points and accessible facilities within a site from the accessible route requirements where the only means of access between them is a vehicular way that does not provide pedestrian access.

Comments urged the Department to eliminate the exception that exempts site arrival points and accessible facilities from the accessible route requirements where the only means of access between them is a vehicular way not providing pedestrian access. The Department declines to accept this recommendation because the Department believes that its use will be limited. If it can be reasonably anticipated that the route between the site arrival point and the accessible facilities will be used by pedestrians, regardless of whether a pedestrian route is provided, then this exception will not apply. It will apply only in the relatively rare situations where the route between the site arrival point and the accessible facility dictates vehicular access – for example, an office complex on an isolated site that has a private access road, or a self-service storage facility where all users are expected to drive to their storage units.

Another commenter suggested that the language of section 406.1, General, is confusing because it states that curb ramps on accessible routes shall comply with the guidelines,

and that the 1991 Standards provide that curb ramps shall be provided wherever an accessible route crosses a curb.

The Department declines to change this language because the change is purely editorial, resulting from the overall changes in the format. It does not change the substantive requirement. Under the revised format, all elements within a required accessible route must be accessible; therefore, if the accessible route crosses a curb, a curb ramp must be provided.

Limited-use/Limited-application Elevators and Private Residence Elevators. The 1991 Standards at sections 4.1.3(5), Exception 1, and the proposed standards at sections 206.2.3, Exception 1 and 2; and 206.6, Exception 1 and 2 include exceptions to the scoping requirement for accessible routes that exempt certain facilities from connecting each story with an elevator. If a facility is exempt from the scoping requirement, but nonetheless installs an elevator, the 1991 Standards require the elevator to comply with the technical requirements for elevators. The proposed standards add a new exception that allows a facility that is exempt from the scoping requirement to install a limited-use/limited-application (LULA) elevator. LULA elevators are permitted as an alternative to platform lifts. The proposed standards also add a new exception that permits private residence elevators in multi-story dwelling and transient lodging units. The proposed standards contain technical requirements for LULA elevators and private residence elevators.

A commenter questioned the value of permitting LULA elevators because, as was claimed, these elevators often are unreliable. LULAs are smaller than other elevators and have limited travel distance. They are in all other respects subject to the same safety and reliability standards as other elevators. The Department believes that because LULAs will be permitted only in situations where accessible vertical access is not now required, their use will not diminish required access and may, in fact, encourage covered entities to provide vertical access in situations where it is not now being provided.

Accessible Routes to Tiered Dining Areas in Sports Facilities. The 1991 Standards at sections 4.1.3(1) and 5.4 and the proposed changes at section 206.2.5 and Exception 3 require an accessible route to be provided to all dining areas in new construction, including raised or sunken dining areas. The proposed standards will add a new exception for tiered dining areas in sports facilities. Dining areas in sports facilities are typically integrated into the seating bowl and are tiered to provide adequate lines of sight for individuals with disabilities. The new exception requires an accessible route to be provided to at least 25 percent of the tiered dining areas in sports facilities. Each tier must have the same services and the accessible route must serve the accessible seating.

Accessible Routes to Press Boxes. The 1991 Standards at sections 4.1.1(1) and 4.1.3(1) cover all areas of newly constructed facilities required to be accessible, and an accessible route to connect accessible entrances with all accessible spaces and elements within the facility. Section 201.1 of the proposed standards requires that all areas be accessible. The proposed changes at sections 206.2.7(1) and (2) add two exceptions that exempt

small press boxes that are located on bleachers with entrances on only one level, and small press boxes that are free-standing structures elevated more than 12 feet, from the accessible route requirement when the aggregate area of all press boxes in a sports facility does not exceed 500 square feet. The Department anticipates that this change will significantly reduce the economic impacts on smaller sports facilities, such as those associated with high schools or community colleges.

Entrances. The 1991 Standards at sections 4.1.3(8), (a)(i), and (a)(ii); and 4.1.6(1)(h) require at least fifty percent (50%) of public entrances to be accessible. Additionally, the 1991 Standards require the number of accessible public entrances to be equivalent to the number of exits required by applicable building and fire codes. With very few exceptions, building and fire codes require at least two exits to be provided from spaces within a building and from the building itself. Therefore, under the 1991 Standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Instead of requiring accessible entrances based on the number of public entrances provided or the number of exits required (whichever is greater), section 206.4.1 of the proposed standards will require at least sixty percent (60%) of public entrances to be made accessible. The revision is intended to achieve the same result as the 1991 Standards. Thus, under the proposed standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Where multiple public entrances are planned to serve different site arrival points, the 1991 Standards at section 4.1.2(1) and section 206.2.1 of the proposed standards require at least one accessible route to be provided from each type of site arrival point provided, including accessible parking spaces, accessible passenger loading zones, public streets and sidewalks, and public transportation stops, to an accessible public entrance that serves the site arrival point.

The U.S. Small Business Administration Office of Advocacy and other comments recommended retaining the 1991 requirement for fifty percent (50%) of public entrances of covered entities to be accessible. These commenters also raised concerns about the impact upon existing facilities.

The Department believes that these commenters misunderstand the 1991 Standards. As explained above, the current requirements generally require more than fifty percent (50%) of entrances in small facilities to be accessible. Model codes require that most buildings have more than one means of egress, thus, most buildings have more than one entrance, and now these buildings must have more than one accessible entrance. Requiring at least sixty percent (60%) of public entrances to be accessible is not expected to result in a substantial increase in the number of accessible entrances compared to the current requirements. The 1991 Standards and the proposed standards also contain exceptions that limit the number of accessible entrances required in alterations to existing facilities. When entrances in an existing facility are altered and the facility has an accessible entrance, the entrance being altered is not required to be accessible, unless a

primary function area also is altered and then an accessible path of travel must be provided to the primary function area to the extent the cost is not disproportionate. The Department anticipates retaining the requirement for accessible entrances. However, in order to ensure the Department is fully informed about the potential results of retaining the requirement, the Department is asking for detailed comments about this issue.

Alterations to Existing Elevators. When a single space or element is altered, the 1991 Standards at sections 4.1.6(1)(a) and (b) require the space or element to be made accessible. When an element in one elevator is altered, the proposed standards at section 206.6.1 will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator.

The proposed standards at sections 407.2.1 Exception - 407.4.7.1.2 Exception also contain exceptions to the technical requirements for elevators when existing elevators are altered that further minimize the impact of the revision:

- Existing elevators are permitted to have recessed call buttons.
- Existing call buttons and keypads are permitted to be located at 54 inches above the finish floor, measured to the centerline of the highest operable part.
- Existing call buttons are not required to be ¾ inch minimum in the smallest dimension.
- Existing call buttons are not required to have visible signals to indicate when each call is registered and when each call is answered.
- A visible and audible hall signal is not required to be provided at the hoistway entrance of existing elevators to indicate the direction of car travel.
- Existing visible hall signals are not required to be centered at 72 inches minimum above the finish floor and 2 ½ inches minimum measured along the centerline of the element.
- Existing hall signals are not required to meet the requirements for frequency and range of audible signals.
- Existing manually operated hoistway swing doors are permitted if the door opening provides a clear width of 32 inches minimum, and the force for pushing or pulling open the door is 5 pounds maximum.
- Existing manually operated doors are not required to provide a reopening device that automatically stops and reopens the car door and hoistway door if the doors are obstructed by an object or a person.

- A power operated car door with a door opening that provides a clear width of 32 inches minimum is permitted in an existing elevator.
- Existing elevator car configurations that provide a clear floor area of 16 square feet, and provide 54 inches minimum inside clear depth and 36 inches minimum clear width are permitted.
- Where a new car operating panel with accessible elevator car controls and tactile markings is provided in an existing elevator, existing car operating panels are not required to be made accessible.
- Existing car control buttons with floor designations are permitted to be located 54 inches maximum above the finish floor where a parallel approach is provided.
- Existing car control buttons with floor designations are permitted to be recessed.
- Where space on an existing car operating panel precludes the placement of tactile markings immediately to the left of the control button, the markings are permitted to be placed as near to the control button as possible.

Commenters expressed concerns about the requirement that when an element in one elevator is altered, the proposed standards at section 206.6.1 will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator. Commenters noted that such a requirement is burdensome and will result in costly efforts without significant benefit to individuals with disabilities.

The Department believes that this requirement is necessary to ensure that when an individual with a disability presses a call button, an accessible elevator will arrive. The Department believes that the effort required to meet this provision is minimal in the majority of situations, and the benefit to individuals with disabilities not having to wait unnecessarily for an accessible elevator to make its way to them arbitrarily outweighs any minor burden of programming corresponding elevators.

Elevator Leveling. Section 407.4.4, Leveling, provides that each car must automatically level to ½ inch at floor landings.

Accessible Routes in Dwelling Units with Mobility Features. The UFAS, at sections 4.34.1 and 4.34.2, require the living area, kitchen and dining area, bedroom, bathroom, and laundry area where provided in dwelling units with mobility features to be on an accessible route. Where dwelling units have two or more bedrooms, at least two bedrooms are required to be on an accessible route.

The proposed changes at sections 233.3.1.1, 809.1; 809.2; 809.2.1 and 809.4 will require all spaces and elements within dwelling units with mobility features to be on an accessible route. These proposed changes exempt unfinished attics and unfinished

basements from the accessible route requirement. These proposed changes also include an exception to the dispersion requirement that permits single-story dwelling units or "flats" to be constructed, where multi-story dwelling units are provided. A "flat" eliminates the need to provide a residential elevator or platform lift to connect stories.

Location of Accessible Routes. The 1991 Standards, section 4.3.2(1), require accessible routes connecting site arrival points and accessible building entrances to coincide with general circulation paths, to the maximum extent feasible. The proposed regulation requires all accessible routes to coincide with or be located in the same general area as general circulation paths. Additionally, a new provision specifies that where a circulation path is interior, the required accessible route must also be located in the interior of the facility, where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings. The proposed changes at section 206.3 will explicitly require all accessible routes to coincide with or be located in the same general area as general circulation paths. Designing newly constructed interior accessible routes to coincide with or to be located in the same area as general circulation paths will not typically present a difficult design challenge and is expected to impose limited design constraints. The revision will have no impact on exterior accessible routes. The 1991 Standards and proposed standards also require accessible routes to be located in the interior of the facility, where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings.

Location of Accessible Routes to Stages. The 1991 Standards at section 4.33.5 require an accessible route to connect the accessible seating and the performing area. Proposed section 206.2.6 will require the accessible route to directly connect the seating area and the accessible seating, stage, and all areas of the stage, where a circulation path directly connects the seating area and the stage. The 1991 Standards require and the proposed changes also will require an accessible route to connect the stage and ancillary areas used by performers such as dressing rooms. The proposed standards do not require an additional accessible route to be provided to the stage. Rather, the changes specify where the accessible route to the stage, which is required by the 1991 Standards, must be located.

207 Accessible Means of Egress.

General. The 1991 Standards at sections 4.1.3(9); 4.1.6(1)(g); and 4.3.10 establish scoping and technical requirements for accessible means of egress. The proposed changes at section 207.1, Exception 1 reference the International Building Code for scoping and technical requirements for accessible means of egress. Relevant proposed sections include 216.4.

The 1991 Standards require the same number of accessible means of egress to be provided as the number of exits required by applicable building and fire codes. The International Building Code (IBC) requires at least one accessible means of egress and at least two accessible means of egress where more than one means of egress is required by other sections of the code. The proposed changes are expected to have minimal impact

since the model fire and life safety codes, which are adopted by all the States, contain equivalent requirements with respect to the number of accessible means of egress.

The 1991 Standards require areas of rescue assistance or horizontal exits in facilities with levels above or below the level of exit discharge level. Areas of rescue assistance are spaces that have direct access to an exit, stair, or enclosure where individuals who are unable to use stairs can go to call for assistance and wait for evacuation. The proposed standards will now incorporate the requirements established by the IBC. The IBC requires an evacuation elevator designed with standby power and other safety features that can be used for emergency evacuation of individuals with disabilities in facilities with four or more stories above or below the exit discharge level, and allows exit stairways and evacuation elevators to be used as an accessible means of egress in conjunction with areas of refuge or horizontal exits. The proposed change is expected to have minimal impact since the model fire and life safety codes, adopted by most States, already contain parallel requirements with respect to evacuation elevators.

The 1991 Standards exempt facilities equipped with a supervised automatic sprinkler system from providing areas of rescue assistance, and also exempt alterations to existing facilities from providing an accessible means of egress. The IBC exempts buildings equipped with a supervised automatic sprinkler system from certain technical requirements for areas of refuge, and also exempts alterations to existing facilities from providing an accessible means of egress.

The proposed standards will require signs that provide direction to or information about functional spaces to meet certain technical requirements. The proposed standard at section 216.4 addresses exit signs. This section requires exit signs at doors to be raised with Braille characters, and also requires directional exit signs and signs at areas of refuge to have appropriate visual characteristics. This section is consistent with the requirements of the IBC. Signs used for means of egress are covered by this scoping requirement. The proposed requirements specifically identify signs used for means of egress and require the signs to meet certain technical requirements.

Standby Power for Platform Lifts. The proposed regulations at section 207.2 will require standby power to be provided for platform lifts that are permitted to serve as part of an accessible means of egress by the IBC. The IBC permits platform lifts to serve as part of an accessible means of egress in a limited number of places where platform lifts are allowed in new construction. The 1991 Standards and the proposed regulations similarly limit the places where platform lifts are allowed in new construction. ADAAG 4.1.3 (5) Exception 4 (a) through (d); sections 206.7.1 through 206.7.10 of the proposed regulations.

Commenters urged the Department to reconsider provisions that would require standby power to be provided for platform lifts. Concerns were raised that ensuring standby power is too burdensome. The Department views this issue as a fundamental life safety issue. Lift users face the prospect of being trapped on the lift in the event of a power failure if stand-by power is not provided. The lack of stand-by power could be life-

threatening in situations where the power failure is associated with a fire or other emergency. The use of a platform lift is generally only one of the options available to covered entities. Covered entities that are concerned about the costs associated with maintaining standby power for a lift may wish to explore design options that would permit the use of a ramp.

208 and 502 Parking Spaces

General. Where parking spaces are provided, the proposed standards at sections 4.1.2 (5)(a) and (7) and 7(a), and the proposed changes at section 208.1 and Exception require a specified number of the parking spaces to be accessible. The proposed changes add a new exception that exempts parking spaces used exclusively for buses, trucks, delivery vehicles, law enforcement vehicles, or for purposes of vehicular impound from the scoping requirement for parking spaces. If a lot containing parking spaces for these vehicles is used by the public, the lot is required to have an accessible passenger loading zone.

The proposed standards require accessible parking spaces to be identified by signs that display the International Symbol of Accessibility. At section 216.5 and Exceptions 1 and 2 new changes will add two new exceptions that exempt accessible parking spaces from the signage requirement. The first exception exempts sites that have four or fewer parking spaces from the signage requirement. The second exception exempts residential facilities where parking spaces are assigned to specific dwelling units from the signage requirement.

Commenters stated that the first exception, by allowing a parking lot with four or fewer spaces not to post a sign at its one accessible space, is problematic because it could allow all drivers to park in accessible parking spaces. The Department believes that this exception provides necessary relief for small business entities that may otherwise face the prospect of having between twenty-five percent (25%) and one hundred percent (100%) of their limited parking area unavailable to their customers because it is reserved for the exclusive use of persons with accessible tags or parking placards. The proposed standards still require these businesses to ensure that at least one of their available spaces is designed to be accessible.

A commenter stated that accessible parking spaces must be clearly marked. The Department notes that section 502.6, Identification, provides that parking spaces must be identified by signs that include the International Symbol of Accessibility. Additional signs are required to identify van accessible spaces. Also, section 502.3.3, Marking, requires that access aisles are to be marked so as to discourage parking in them.

Access Aisle. The advisory note accompanying section 502.3 provides that it is preferable that the accessible route connecting parking spaces to accessible entrances not pass behind parked vehicles.

Commenters questioned why this advisory note would permit the placement of individuals with disabilities in the path of moving vehicles. The Department believes that the proposed standards appropriately recognize that not all parking facilities provide separate pedestrian routes. Section 502.3 provides the flexibility necessary to permit designers and others to determine the most appropriate location of the access route in connection to the accessible entrances. If all pedestrians using the parking facility are expected to share the vehicular lanes, then the ADA permits covered entities to use the vehicular lanes as part of the accessible route. The advisory note, however, calls attention to the fact that this practice, while permitted, is not ideal. Accessible parking spaces must be located on the shortest accessible route of travel to the facility's entrance. Accessible parking spaces and the required accessible route should be located where individuals with disabilities do not have to cross vehicular lanes or pass behind parked vehicles to have access to the entrance. If it is necessary to cross a vehicular lane because, for example, local fire engine access requirements prohibit parking immediately adiacent to a building, then a marked crossing should be used as part of the accessible route to the entrance.

Van Accessible Parking Spaces. The 1991 standards at sections 4.1.2 (5)(b), 4.6.3; 4.6.4; and 4.6.5 require one in every eight accessible parking spaces to be van accessible. Proposed changes will require one in every six accessible parking spaces to be van accessible.

A commenter asked whether automobiles other than vans may use van accessible parking spaces. The ADA regulations do not prohibit automobiles other than vans from using van accessible parking spaces. The Department does not distinguish between automobiles that are actual "vans" versus other vehicles such as trucks, station wagons, SUVs, or other automobiles because many vehicles other than vans may be used by individuals with disabilities to transport mobility devices.

Commenters' opinions were divided on this proposal. Facility operators and others asked for a reduction in the number of required accessible parking spaces, especially the number of van accessible parking spaces because they claimed these spaces often are not used. Individuals with disabilities, however, requested an increase in the scoping requirements for these parking spaces.

The Department is aware that a strong difference of opinion exists between those who use such spaces and those who must provide or maintain them. Therefore, the Department is not proposing to increase the total number of accessible spaces. The only change that is being proposed is to increase the proportion of spaces that must be accessible to vans and other vehicles equipped to transport mobility devices.

Direct Access Entrances from Parking Structures. Where levels in a parking garage have direct connections for pedestrians to another facility, the 1991 Standards, 4.1.3(8)(b)(i), require at least one of the direct connections to be accessible. The proposed changes at section 206.4.2 require all of the direct connections to be accessible.

209 and 503 Passenger Loading Zones and Bus Stops

Passenger Loading Zones at Medical Care and Long-term Care Facilities. Sections 6.1 and 6.2 of the 1991 Standards and proposed section 209.3 require medical care and long-term care facilities, where the period of stay exceeds 24 hours, to provide at least one passenger loading zone at an accessible entrance. The 1991 Standards also require a canopy or roof overhang at the passenger loading zone. The proposed standards will not require a canopy or roof overhang.

Commenters urged the Department to reinstate the existing requirement for a canopy or roof overhang at passenger loading zones at medical care and long-term care facilities. While the Department recognizes that a canopy or roof overhang may afford useful protection from inclement weather conditions to everyone using a facility, it is not clear that the absence of such protection would impede access by individuals with disabilities. Therefore, the Department declines to reinstate that requirement.

Passenger Loading Zones. Where passenger loading zones are provided, the 1991 Standards, at sections 4.1.2(5) and 4.6.6, require at least one passenger loading zone to be accessible. The proposed changes at sections 209.2.1, 503.2, 503.3, 503.3.1, 503.3.2, 503.3.3, and 503.4 Exception, will require facilities such as airport passenger terminals that have long, continuous passenger loading zones to provide one accessible passenger loading zone in every continuous 100 linear feet of loading zone space. The 1991 Standards and the proposed standards include technical requirements for the vehicle pull-up space (96 inches wide minimum and 20 feet long minimum). Accessible passenger loading zones must have an access aisle that is 60 inches wide minimum and extends the full length of the vehicle pull-up space. The 1991 Standards provide that the access aisle may be on the same level as the vehicle pull-up space, or on the sidewalk with a curb ramp. The proposed changes will require the access aisle to be on the same level as the vehicle pull-up space and to be marked so as to discourage parking in the access aisle.

Commenters expressed concern that certain covered entities, particularly airports, cannot accommodate the proposed requirements to provide passenger loading zones, and urged a revision that would require one passenger loading zone located in reasonable proximity to each building entrance served by the curb.

Commenters raised a variety of issues about the requirements at section 503 stating that the requirements for an access aisle, width, length, and marking of passenger loading zones are not clear and do not fully meet the needs of individuals with disabilities, and stated that these requirements may run afoul of state or local requirements, or may not be needed because many passenger loading zones are typically staffed by doormen or valet parkers. The wide range of opinions expressed in these comments indicates that this provision is controversial. However, none of these comments provides sufficient data to enable the Department to determine that the requirement is not appropriate.

Valet Parking and Mechanical Access Parking Garages. The 1991 Standards, sections 4.1.2(5)(a) and (e), and the proposed changes, sections 208.2, 209.4, and 209.5 require

parking facilities that provide valet parking services to have an accessible passenger loading zone. The proposed standards will extend this requirement to mechanical access parking garages. The 1991 Standards contain an exception that exempts valet parking facilities from providing accessible parking spaces. The proposed standards also will eliminate this exception. The reason for not retaining the provision is that valet parking is a service, not a facility type.

Commenters questioned why the exception for valet parking facilities from providing accessible parking spaces is being eliminated. The provision is being eliminated because valet parkers may not have the skills necessary to drive a vehicle that is equipped to be accessible, including use of hand controls, or when a seat is not present to accommodate a driver using a wheelchair. In that case, permitting the individual with a disability to self-park may be a required reasonable modification of policy for a covered entity.

210 and 504 Stairways

The 1991 Standards provide that stairs are required to be accessible only when they provide access to floor levels not otherwise connected by an accessible route (e.g., an elevator, lift, or ramp). The proposed standards at sections 210.1 and 504.2 will require all newly constructed stairs that are part of a means of egress to comply with the requirements for accessible stairs, which cover treads, risers, and handrails. In existing facilities, where floor levels are connected by an accessible route, only the handrail requirement will apply.

Commenters were divided in their response to this provision. The Department believes that it strikes an appropriate balance by focusing the expanded requirements on new construction.

211 and 602 Drinking Fountains

Sections 4.1.3(10)(a) and 4.1.3(b), 4.15.2, 4.15.5(1) and 4.15.5(2) of the 1991 Standards, and the changes proposed at sections 211.1, 211.2 Exception; 211.3 Exception, 602.2 Exception, 602.4, and 602.7 require drinking fountains to be provided for wheelchair users and for people who stand. The 1991 Standards require wall and post-mounted cantilevered drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and free standing or built-in drinking fountains to provide clear floor space for a parallel approach. The proposed changes require drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and include an exception for a parallel approach for drinking fountains installed at a height to accommodate very small children. The changes also include a technical requirement for drinking fountains for standing persons.

One commenter recommended that the mounting height of drinking fountains should take into consideration the increased use of three-wheeled electric scooters and the increasing size of wheelchairs. The Department is aware that the use of three- and four-wheeled

electric scooters may be increasing and that wheelchairs may be larger than in the past; however, no reliable data is yet available indicating specific dimensions that may be needed to provide access to individuals using these devices. Therefore, at the present time, the Department intends to retain the proposed requirements.

212 and 606 Kitchens, Kitchenettes, Lavatories, and Sinks

The 1991 Standards at sections 4.1.1; 4.24.1; 4.24.3; 4.24.5; and 9.2.2(7) contain technical requirements for sinks, but only have specific scoping requirements for sinks in transient lodging. Proposed sections 212.3 will require at least 5 percent of sinks in each accessible space to comply with the technical requirements for sinks. The technical requirements address clear floor space, height, faucets, and exposed pipes and surfaces. The 1991 Standards and the proposed changes require the clear floor space at sinks to be positioned for a forward approach, and knee and toe clearance to be provided under the sink. The 1991 Standards allow the clear floor space at kitchen sinks and wet bars in hotel guest rooms with mobility features to be positioned for either a forward approach with knee and toe clearance, or for a parallel approach. The proposed changes include a broader exception that permits the clear floor space to be positioned for a parallel approach at kitchen sinks in any space where a cook top or conventional range is not provided, and at a wet bar.

A commenter stated that it is unclear what the difference is between a sink and a lavatory, and that this is complicated by requirements that apply to sinks (5 percent accessible) and lavatories (at least 1 accessible). The term "lavatory" generally refers to the specific type of plumbing fixture required for hand washing in toilet and bathing facilities. The more generic term "sink" applies to all other types of sinks located in covered facilities.

A commenter recommended that the mounting height of sinks and lavatories should take into consideration the increased use of three-wheeled electric scooters and some larger wheelchairs. The Department is aware that the use of three-wheeled electric scooters and larger wheelchairs may be increasing; however, although no reliable data is yet available, the Access Board is working to obtain data that may be used to develop design guidelines that provide access to individuals using these mobility devices.

213, 603, 604, and 608 Toilet and Bathing Facilities, Rooms, and Compartments

General. Where toilet facilities and bathing facilities are provided, they must comply with section 213.

A commenter recommended that all accessible toilet facilities, toilet rooms, and compartments should be required to have signage indicating that such spaces are restricted solely for the use of individuals with disabilities. The Department believes that it is neither necessary nor appropriate to restrict the use of accessible toilet facilities. Like many other facilities designed to be accessible, accessible toilet facilities can provide a necessary level of usability for a wide range of individuals with and without disabilities.

Ambulatory Accessible Toilet Compartments. The proposed changes at sections 213.3.1 and 604.8.2 will require multi-user men's toilet rooms where the total of toilet compartments and urinals is six or more to contain at least one ambulatory accessible compartment. The 1991 Standards count only toilet compartments for this purpose. The proposed standards will establish parity with multi-user women's toilet rooms.

Urinals. Men's toilet rooms with only one urinal will no longer be required to provide an accessible urinal. Such toilet rooms will still be required to provide an accessible toilet compartment.

Commenters urged that the exception be eliminated. This change will provide flexibility to many small businesses. This provision does not alter the requirement that all common use restrooms must be accessible. Therefore, the Department declines to eliminate the exception.

Multiple Single-user Toilet Rooms. Where multiple single-user toilet rooms are clustered in a single location, fifty percent (50%), rather than the currently required one hundred percent (100%), will be required to be accessible by proposed section 213.2. Accessible single-user toilet rooms will have to be identified by the international symbol of accessibility.

Hospital Patient Toilet Rooms. An exception has been added in section 223.1 that provides that toilet rooms that are part of critical or intensive care patient sleeping rooms will no longer be required to provide mobility features.

Water Closet Location and Rear Grab Bar. Sections 604.2 and 604.5.2, Exception 1 of the proposed changes will allow greater flexibility for the placement of the centerline of water closets, and will permit a shorter grab bar where there is not enough space due to special circumstances (e.g., because a lavatory is located next to the water closet in dwelling units and the wall behind the lavatory is recessed so that the lavatory does not overlap the clear floor space at the water closet). The 1991 Standards contain no exception for grab bar length, and require the centerline to be exactly 18 inches from the side wall, while the proposed requirement will allow the centerline to be between 16 and 18 inches from the wall.

Commenters recommended that the centerline location of water closets should be 18 inches plus or minus 1 inch because people are becoming larger and the toilet paper dispensers are becoming larger and protrude into the 18 inch space. Other commenters suggested that the proposed requirement will increase the overall size of toilet rooms unnecessarily and recommended smaller dimensions.

The Department is aware that this issue has sparked debate of a highly speculative nature. The Department is not aware of clear evidence that the dimensional change adopted by the Access Board and the model code organizations is incorrect or unworkable. Therefore, the Department will retain the requirement.

Water Closet Clearance. Proposed section 604.3 represents a change where a lavatory is installed adjacent to the water closet. The 1991 Standards allow lavatories to be placed 18 inches minimum from the water closet centerline, which precludes side transfers. To allow greater transfer options, the proposed standards prohibit lavatories from overlapping the clear floor space at water closets, except in dwelling units.

Commenters urged the Department not to adopt section 604.3 claiming that it will require single-user toilet rooms to be two feet wider than the requirements now provide, and this additional requirement will be difficult to meet.

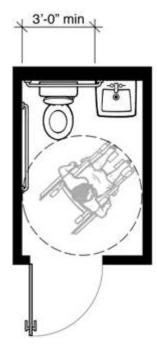
The requirements at section 604.3.2 specify how required clearance around the water closet can overlap with specific elements and spaces. An exception, that applies only to residential dwelling units, permits a lavatory to be located no closer than 18 inches from the centerline of the water closet. The requirements at section 604.3.2 increase accessibility for individuals with disabilities.

Toilet Room Doors. Section 603.2.3 of the proposed rule permits the doors of single user toilet or bathing rooms with in-swinging doors to swing into the required turning space, but not into the clear floor space required at any fixture. Section 603.2.3 Exception 2 permits the door to swing into the clear floor space of an accessible fixture if a clear floor space that measures 30 inches by 48 inches is available outside the door swing in single-user toilet rooms.

Concerns were raised that permitting doors of single user toilet or bathing rooms with inswinging doors to swing into the clearance around any fixture will result in inaccessibility to individuals using larger wheelchairs and scooters. The Department believes the provision is sufficient to meet the needs of individuals using larger scooters and wheelchairs.

The Department prepared a series of figures illustrating comparisons of the minimum size single-user toilet rooms. These figures show typical examples that meet the minimum requirements of the proposed rule.

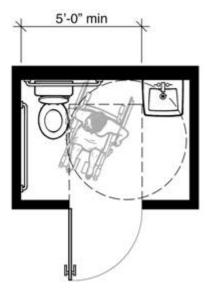
Comparison of Minimum Size Single-User Toilet Room Layouts With Fixtures Side-by-Side



Plan-1A: 1991 Standards Minimum with Out-swinging Door

5'-0" X 7'-3" • 36.25 Square Fee

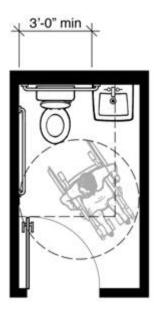
This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. The size of this space is determined by the minimum width required for the water closet and lavatory between the side walls, the minimum wheelchair turning space, and the space required for the out-swinging door. A lavatory with knee space can overlap the clear floor space required for the water closet provided that at least 36 inches of clearance is maintained between the side wall next to the water closet and the lavatory, see, 1991 Standards 4.17.3 and Fig. 28. A wheelchair turning space meeting section 4.2.3 of the 1991 Standards must be provided. The size of this room requires that the entry door swing out. The room would be larger if the door was inswinging.



Plan-1B: 2004 ADAAG Minimum with Out-swinging Door

7'-0" X 5'-0" • 35.00 Square Feet

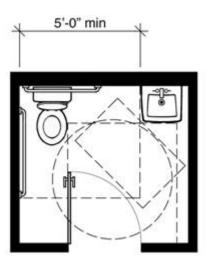
This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2004 ADAAG. Features include: five foot minimum width between the side wall of the water closet and the lavatory; 60 inch minimum circular wheelchair turning space; and 36 inch by 48 inch clear maneuvering space for the out-swinging entry door. The 2004 ADAAG requires a floor clearance at a water closet that is a minimum of 60 inches wide by 56 inches deep regardless of approach, section 604.3.1. Except in residential dwelling units, no other plumbing fixtures can be located in this clear space, section 604.3.2. The 2004 ADAAG, at section 304.3, allows the turning space to extend into toe and knee space provided beneath fixtures and other elements, section 304.3. Required maneuvering space for the entry door (inside the room) must be clear of all fixtures. If the door had both a closer and latch then additional space would be required to the latch side, section 404.2.4.1 and Figure 404.2.1 (c). This layout is three point five percent (3.5%) smaller than the accompanying Plan-1A: 1991 Standards Minimum with Out-swinging Door example.



Plan-2A: 1991 Standards Minimum with In-swinging Door

5'-0" X 8'-6" • 42.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. Depending on the width of the hallway and other circulation issues, it can be preferable to swing the entry door into the toilet room. Businesses and public entities typically prefer to have an in-swinging door. The in-swinging door increases overall room size because it cannot swing over the required clear floor space at any accessible fixture, 1991 Standards 4.22.2. This increases the room depth from Plan-1A. The door is permitted to swing over the required turning space shown as a 60 inch circle.

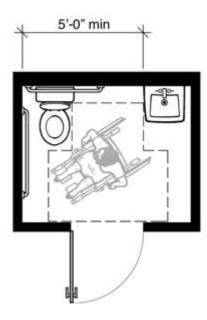


Plan-2B: 2004 ADAAG Minimum with In-swinging Door

7'-0" X 6'-6" • 45.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2004 ADAAG when the entry door swings into the room. In the proposed standards an exception allows the entry door to swing over the clear floor spaces and clearances required at the fixtures if a clear floor space complying with section 305.3 (30 inches by 48 inches) is provided outside the arc of the door swing, section 603.3.3 exception 2. The required maneuvering space for the door, section 404.2.4.1 and figure 404.2.4.1(a), also is a factor in room size. This clear space cannot be obstructed by the plumbing fixtures. Note that this layout provides more space for turning when the door is closed than Plan-1B.

This layout is seven percent (7%) larger than the accompanying Plan-2A: 1991 Standards Minimum with in-swinging Door example.



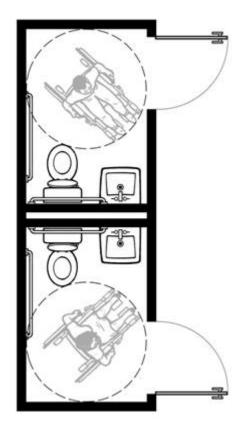
Plan-3: Meets Both 1991 Standards 2004 ADAAG

7'-0" X 5'-9" • 40.25 Square Feet

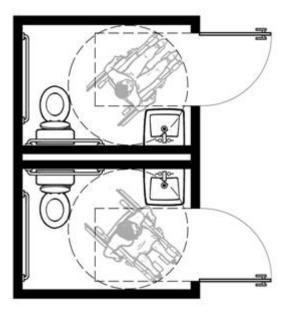
This plan shows an example of a single-user toilet room that meets the minimum requirements of both the 1991 Standards and 2004 ADAAG. A T-shaped turning space has been used, 1991 Standards Figure 3(a) and 2004 ADAAG Figure 304.3.2, to maintain a compact room size. An out-swinging door also minimizes the overall layout depth and cannot swing over the required clear floor space or clearance at any accessible plumbing fixture.

This layout is eleven percent (11%) larger than the Plan-1A: 1991 Standards Minimum with outswinging Door example shown at the beginning of these plan comparisons.

Comparison of Minimum Size Single-user Toilet Room "Pairs" With Fixtures Side-by-Side



Plan-1A Pair: 1991 Standards Minimum with Out-swinging Doors Two 5'-0" X 7'-3" rooms 72.50 Square Feet Total



Plan-1B Pair: 2004 ADAAG Minimum with Out-swinging Doors
Two 7'-0" X 5'-0" Rooms
70.00 Square Feet Total

Above are a men's/women's room configuration comparison for Plans 1A and 1B.

Shower Spray Controls. In accessible bathtubs and shower compartments, sections 607.6 and 608.6 of the proposed standards will require shower spray controls to have an on/off control and to deliver water that is 120°F (49°C) maximum. Currently, neither feature is required by the 1991 Standards, but may be required by plumbing codes. Meeting the latter specification will require either controlling the maximum temperature at each shower spray unit or at the hot water supply.

Shower Compartments. The 1991 Standards at sections 4.21.2; 9.1.2; 4.21.5; and 4.21.7, and the proposed standards at sections 608.1; 608.2.1; 608.2.3; 608.4; 608.5.3; and 608.7, Exception contain technical requirements for transfer-type and roll-in shower compartments. The proposed standards provide more flexibility than the 1991 Standards as follows:

- Transfer-type showers are 36 inches by 36 inches. The proposed standards specify that these dimensions are measured at the center point of opposing sides to accommodate molded compartments with rounded bottom edges.
- The 1991 Standards and the proposed standards permit a ½ inch maximum curb in transfer-type showers. The proposed standards add a new exception that permits a 2 inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½ inch curb will disturb the structural reinforcement of the floor slab.
- Roll-in showers are 30 inches minimum by 60 inches minimum. Alternate roll-in showers are 36 inches by 60 inches minimum, and have a 36 inch minimum opening on the long side of the compartment. The 1991 Standards require alternate roll-in showers in a portion of accessible hotel guest rooms, but provision of this shower type in other facilities is generally permitted as an equivalent facilitation. The 1991 Standards require a seat to be provided on the side with the opening; and require the controls to be located on the side adjacent to the seat. The proposed standards will permit alternate roll-in showers to be used in any facility; only require a seat in hotel guest rooms only; and allow location of controls on the back wall opposite the seat as an alternative.

A disability advocacy group and others raised concerns that adding a new exception that permits a 2 inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½ inch curb will disturb the structural reinforcement of the floor slab, will impair the ability of individuals with disabilities to use transfer-type showers.

The exception permitting an increased maximum curb in transfer-type showers is allowed only when structural barriers prevent full compliance, therefore the Department believes its use will be restricted to limited situations. The exception is intended to provide some flexibility to provide accessibility where the existing structure precludes full access.

Toilet and Bathing Rooms. Section 603, Toilet and Bathing Rooms, provides the technical requirements for toilet and bathing rooms.

Commenters recommended that section 603, Toilet and Bathing Rooms, should include requirements for unisex toilet and bathing rooms. These commenters suggested that unisex toilet and bathing rooms are most useful as companion care facilities.

Model plumbing and building codes require single-user (unisex or family) toilet facilities in certain occupancies, primarily assembly facilities, covered malls, and transportation facilities. These toilet rooms provide flexibility for persons needing privacy so that they can obtain assistance from family members or persons of the opposite sex. When these facilities are provided, both the 1991 Standards and proposed standards require that they be accessible. The Access Board did not scope unisex toilet facilities because plumbing codes generally determine the number and type of plumbing fixtures to be provided in a

particular occupancy and often determine whether an occupancy must provide separate sex facilities in addition to single-user facilities. However, the Access Board did provide scoping at section 213.2.1 to coordinate with model plumbing and building code requirements which will permit a small toilet room with two water closets or one water closet and one urinal to be considered a single-user toilet room provided the room has a privacy latch. In this way, a person needing assistance from a person of the opposite sex can lock the door to use the facility while temporarily inconveniencing only one other user. These provisions strike a reasonable balance and pose a lesser impact on covered businesses and other occupancies required to provide fewer plumbing fixtures.

A commenter recommended that in shower compartments rectangular seats as provided in section 610.3.1 should not be permitted as a substitute for L-shaped seats as provided in 610.3.2.

The proposed standards do not indicate a preference for either rectangular or L-shaped seats in shower compartments.

214 and 611 Washing Machines and Clothes Dryers

The proposed standard, sections 214.2-3, 611.3, and 309.3 will specify the number of machines of each type required to be accessible (1-2 depending upon the total number provided). An exception will permit the maximum height for the tops of these machines to be 2 inches higher than the general requirement for high reach maximums over an obstruction.

A commenter objected to the scoping provision for accessible washing machines and clothes dryers stating that the probability that more than one accessible machine will be needed at the same time would appear to be low in the context of transient lodging.

The scoping in this provision is based on the relative size of the facility rather than the identity of the covered entity. The Department assumes that the size of the facility (and, therefore the number of accessible machines provided) will be determined by the covered entities' assessment of the demand for laundry facilities. The Department declines to assume that people with disabilities will have less use for accessible facilities in transient lodging than in other public accommodations.

216 and 703 Signs

The following types of signs, though they are not specifically subject to the 1991 Standards for raised character and Braille signs, will now be explicitly exempted by sections 216.1, Exceptions 1-3, 216.2, Exception, 216.3, 703.4.1, and 703.4.2, Exception. These types of signs include: seat and row designations in assembly areas; occupant names, building addresses; company names and logos; signs in parking facilities (except those identifying accessible parking spaces and means of egress); and exterior signs identifying permanent rooms and spaces that are not located at the door to

the space they serve. This requirement also will clarify that the exception for temporary signs applies to signs used for seven days or less.

The proposed standards retain the option to provide one sign where both visual and tactile characters are provided or two signs, one with visual, and one with tactile characters.

217 and 704 Telephones

Drive-up Public Telephones. Where public telephones are provided, the 1991 Standards, at section 4.1.3(17)(a), and proposed section 217.2, Exception, require a certain number of telephones to be wheelchair accessible. The proposed requirement adds a new exception that exempts drive-up public telephones.

Public Telephone Volume Controls. Current sections 4.1.3(17), 4.30.7(2), and 4.31.5 require all wheelchair accessible public telephones and twenty-five percent (25%) of all other public telephones to have volume controls, and to be identified by signs. Proposed changes at sections 217.3 and 704.3 will require all public telephones to have volume controls, and will delete the requirement for identifying signs. The 1991 Standards require volume control telephones to provide a minimum gain of 12 dB and a maximum gain of 18 dB. A proposed change will require a gain up to 20 dB minimum and an automatic reset.

The proposed change is expected to have minimum impact since the proposed scoping and technical requirements are consistent with guidelines and standards issued by the Access Board under section 255 of the Telecommunications Act of 1998 (36 CFR 1193.43(e), and Section 508 of the Rehabilitation Act of 1973, as amended, (36 CFR 1194.23(f)) which require all new telephones to have volume controls.

TTY. Section 4.1.3(17) of the 1991 Standards require a public TTY if there are four or more public pay telephones at a site and at least one is in an interior location. Proposed changes, 217.4.2, will require that a building or facility provide a public TTY on each floor that has four or more public telephones, and in each telephone bank that has four or more telephones as proposed by sections 217.4.1, 217.4.3, 217.4.3.1, 217.4.3.2, 217.4.4, 217.4.5, 217.4.6, 217.4.7, and 217.4.8.

Another commenter stated that requiring installation of telephones within the proposed reach range requirements would adversely impact the public and telephone owners and operators. According to the commenter, people without disabilities will not use telephones that are installed within the reach range requirements because they may be inconvenienced by bending to operate these telephones, and, therefore, owners and operators will lose revenues because of the reduction in use.

This comment misunderstands the scoping requirements for wheelchair accessible telephones. Proposed section 217.2 provides that where one or more single units are provided, only one unit per floor, level, or exterior site is required to be wheelchair accessible. However, where banks of telephones are provided, only one telephone in

each bank is required to be wheelchair accessible. The Department believes these scoping requirements for wheelchair accessible telephones are reasonable and will not result in burdensome obligations or lost revenue for owners and operators.

218 and 810 Transportation Facilities

Detectable Warnings. Detectable warnings are a distinctively textured surface of truncated domes that is identifiable by cane and underfoot. The 1991 Standards at sections 4.1.3(15); 4.7.7; 4.29.2; 4.29.5; 4.29.6; and 10.3.1(8) require detectable warnings at curb ramps, hazardous vehicular areas, reflecting pools, and transit platform edges. The proposed revisions at sections 218.2; 218.3; 810.5; 810.5.2; 705.1; 705.1.1; 705.1.2; 705.1.3; and 705.2 only require detectable warnings at transit platform edges. The proposal will change the technical specifications for the diameter and spacing of the truncated domes. The proposal also deletes the requirement for the material used to provide contrast to be an integral part of the truncated domes and for the truncated domes to contrast in resiliency or sound-on-cane contact from adjoining walking surfaces at interior locations.

The proposed revisions to the 1991 Standards apply to detectable warnings on developed sites. They do not apply to the public-right-of-way. Scoping for detectable warnings at all locations other than transit platform edges has been eliminated from this rule. However, because detectable warnings have been shown to significantly benefit individuals with disabilities at transit platform edges, the proposed standards will provide scoping and technical requirements for detectable warnings at transit platform edges.

219 and 706 Assistive Listening Systems

Signs. Section 216.10 requires each covered assembly area to provide signs at each auditorium to inform patrons that assistive listening systems are available. However, an exception to this requirement permits assembly areas that have ticket offices or ticket windows to display the required signs at the ticket window.

A commenter recommended eliminating the exception at 216.10 because, for example, people who buy tickets through the mail, by subscription, or on-line may not need to stop at a ticket office or window upon arrival at the assembly area. The Department believes that an individual's decision to purchase tickets before arriving at a performance does not limit the discretion of the assembly operator to use the ticket window to provide other services to its patrons. The Department is retaining the exception at 216.10 to permit the venue operator some flexibility in determining how to meet the needs of its patrons.

Audible Communication. The 1991 Standards at section 4.1.3(19)(b) require assembly areas where audible communication is integral to the use of the space to provide an assistive listening system if they have an audio amplification system or an occupant load of 50 or more people and have fixed seating. The proposed standards at section 219 will require assistive listening systems in spaces where communication is integral to the space and audio amplification is provided, and in courtrooms.

The 1991 Standards require receivers to be provided for at least 4 percent of the total number of seats minimum. The proposed standards at section 219.3, will revise the percentage of receivers required according to a table that correlates the required number of receivers to the seating capacity of the facility. Small facilities will continue to provide receivers for 4 percent of the seats. The required percentage declines as the size of the facility increases. The changes proposed also will require at least twenty-five (25%), but no fewer than two, of the receivers to be hearing-aid compatible. Assembly areas served by an induction loop assistive listening system will not have to provide hearing-aid compatible receivers.

Commenters were divided in their opinion of this change. The Department believes that the reduction in the required number of assistive listening systems for larger assembly areas will meet the needs of individuals with disabilities. The new requirement to provide hearing-aid compatible receivers should make assistive listening systems more usable for people who have been underserved until now.

Concerns were raised that the requirement to provide assistive listening systems may have an adverse impact on restaurants. This comment misunderstands the scope of coverage. The proposed standards define the term "assembly area" to include facilities used for entertainment, educational, or civic gatherings. Restaurants would fall within this category only if they are presenting programs to educate or entertain diners, and if the restaurant provides an audio amplification system.

Same Management or Building. The proposed standards add a new exception that allows multiple assembly areas that are in the same building and under the same management, such as theaters in a multiplex cinema and lecture halls in a college building, to calculate the number of receivers required based on the total number of seats in all the assembly areas, instead of each assembly area separately, where the receivers are compatible with the assistive listening systems used in each of the assembly areas.

Mono Jacks, Sound Pressure, etc. Section 4.33.7 of the 1991 Standards does not contain specific technical requirements for assistive listening systems. The proposed changes at sections 706.1, 706.2, 706.3, 706.4, 706.5, and 706.6 will require assistive listening systems to have standard mono jacks; and will require hearing-aid compatible receivers to have neck loops to interface with telecoils in hearing aids. The proposed changes also specify sound level pressure, signal-to-noise ratio, and peak clipping level. Currently available assistive listening systems meet the proposed technical requirements.

220 and 707 Automatic Teller Machines and Fare Machines

Proposed changes at section 707 will add specific technical requirements for speech output, privacy, tactilely discernable input controls, display screens, and Braille instructions to current general accessibility requirements. Exceptions will be made that relate to the type of network or information provided (for example, audible tones will not be required for visible output where privacy is desirable). The 1991 Standards require

these machines to be accessible to and independently usable by people with visual impairments, but do not contain any technical specifications.

The Department received comments on this provision from the banking industry that focused primarily on the effects on operating policies and existing equipment. Those issues have been addressed in the preamble to the NPRM.

221 Assembly Areas

Aisle Stairs and Ramps. The 1991 Standards sections 4.1.3 and 4.1.3(4) require that interior, and exterior, stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access shall comply with the technical requirements for stairs found in section 4.9. The proposed section 210.1 requires that stairs that are part of a means of egress shall comply with the technical requirements for stairs in proposed section 504. The 1991 Standards currently do not contain any exceptions for aisle stairs in assembly areas. The proposed section 210.1, Exception 3, adds a new exception that exempts aisle stairs in assembly areas from the technical requirements for stairs found in proposed section 504, including the handrail technical requirements found in proposed section 505.

The 1991 Standards at section 4.8.5 now exempt aisle ramps that are part of an accessible route, from providing handrails on the side adjacent to seating. The proposed regulations at section 405.1 exempt aisle ramps, adjacent to seating in assembly areas and <u>not</u> serving elements required to be on an accessible route, from complying with all the technical requirements for ramps proposed in section 405. Where aisle ramps in assembly areas serve elements required to be on an accessible route, the proposed regulation will require that the aisle ramps comply with the technical requirements for ramps in proposed section 405. The proposed standards will not require a handrail on an aisle ramp at adjacent seating because proposed sections 505.2 and 505.3 provide exceptions for aisle ramp handrails. Section 505.2 proposes that in assembly areas, a handrail may be provided at either side or within the aisle width when handrails are not provided on both sides of aisle ramps. Section 505.3 proposes that, in assembly areas, handrails need not be continuous in aisles serving seating.

Wheelchair Spaces/Companion Seats. The proposed standards at section 221 reduce the number of wheelchair spaces and companion seats required in assembly areas that seat more than 500 patrons. The 1991 Standards at 4.1.3 (19)(a) provide that assembly areas with more than 500 seats must provide six wheelchair spaces plus one additional wheelchair space for each additional 100 seats. Sections 221.2; 221.2.1.1; 221.2.1.2; and 221.2.1.3 of the proposed standards provide that assembly areas that have 501 to 5000 seats must provide six wheelchair spaces plus one additional wheelchair space for each additional 150 seats (or fraction thereof) between 501 and 5000. Assembly areas that have more than 5000 seats must provide 36 wheelchair spaces plus one additional wheelchair space for each 200 seats (or fraction thereof) over 5000. Both the 1991 Standards and the proposed standards require assembly areas to provide a companion seat adjacent to each wheelchair space.

The proposed changes clarify that the scoping requirements are to be applied separately to general seating areas, and to each luxury box, club box, and suites in stadiums and arenas. In performing arts facilities with tiered boxes, the scoping requirement is applied to the total number of seats in the tiered boxes, and the wheelchair spaces are required to be dispersed among at least twenty percent (20%) of the tiered boxes.

Commenters questioned why scoping requirements for assembly areas are being reduced. During the development of the 2004 ADAAG, industry providers, particularly those for larger stadium-style assembly areas, supplied data to the Access Board demonstrating the current scoping requirements for large assembly areas often exceed the demand. Based on the data provided to the Access Board, the Department now believes the reduced scoping requirements will adequately meet the needs of individuals with disabilities, while balancing concerns of the industry.

Commenters raised concerns that the proposed changes clarifying requirements for scoping of seating areas to each luxury box, club box, and suites in stadiums and arenas could result in no wheelchair and companion spaces available for individuals with disabilities. These comments appear to misunderstand the proposed requirements. The rule will require that each luxury box, club box, and suite must be accessible. In addition, the remaining seating areas must contain the number of wheelchair and companion seating locations specified in the rule. In performing arts facilities with tiered boxes, the scoping requirement is applied to the total number of seats in the tiered boxes, and the wheelchair spaces are required to be dispersed among at least twenty percent (20%) of the tiered boxes. For example, if a performing arts facility has 20 tiered boxes with 5 fixed seats in each box, at least 4 wheelchair spaces must be provided in the boxes, and they must be dispersed among at least 4 of the 20 boxes.

One commenter asked that scoping requirements for larger assembly areas be reduced even more than what was proposed. Although the commenter referenced data demonstrating that wheelchair spaces in larger facilities with seating capacity of 70,000 or more may not be used by individuals with disabilities, the data was not based on actual results, but was calculated at least in part based on probability assumptions.

A commenter recommended that section 221.4, Designated Aisle Seats, be changed to require that aisle seats be on an accessible route, and be integrated and dispersed throughout an assembly area. Aisle seats, by their nature, are located with the general seating, and integration occurs automatically. The issue of dispersing aisle seats or locating them on accessible routes is much more challenging. The Access Board specifically requested public comment on the question of whether aisle seats should be required to be located on accessible routes. After reviewing the comments, the Access Board concluded that this could not be done without making significant and costly changes in the design of most assembly areas. However, section 221.4 requires that access aisle seats be the aisle seats closest to accessible routes. The Department concurs in that conclusion. Regarding the dispersion of aisle seats, the Department notes that the location of the seats is dictated to a great extent by the fact that they must be located on

an aisle and on or close to an accessible route. In small facilities, very few seats meet those criteria. Therefore, the Department declines to propose further changes.

Wheelchair Space Overlap in Assembly Areas. The 1991 Standards at sections 4.3.3 and the proposed changes at sections 402.1; 402.2; 403.5.1; 802.1.4; and 802.1.5 require walkways that are part of an accessible route to have a 36 inch minimum clear width. The changes proposed specifically prohibit accessible routes from overlapping wheelchair spaces. This change is consistent with the technical requirements for accessible routes, since the clear width of accessible routes cannot be obstructed by any object. The proposed standards also specifically prohibit wheelchair spaces from overlapping circulation paths. An advisory note clarifies that this prohibition applies only to the circulation path width required by applicable building codes and fire and life safety codes since the codes prohibit obstructions in the required width of assembly aisles.

The revision does not present any difficult design challenges and is expected to have minimal impact. Where a main circulation path is located in front of a row of seats that contains a wheelchair space and the circulation path is wider than required by applicable building codes and fire and life safety codes, the wheelchair space may overlap the "extra" circulation path width. Where a main circulation path is located behind a row of seats that contains a wheelchair space and the wheelchair space is entered from the rear, the aisle in front of the row may need to be wider in order not to block the required circulation path to the other seats in the row, or a mid-row opening may need to be provided to access the required circulation path to the other seats.

Line-of-Sight. Proposed section 221.2.3 frames the basic comparability requirement in terms of viewing angles providing that "wheelchair spaces shall provide spectators with . . . viewing angles that are substantially equivalent to, or better than, the . . . viewing angles available to all other spectators." This applies to all types of assembly areas, including stadium-style movie theaters, sports arenas, and concert halls.

Commenters stated that the qualitative viewing angle language contained in section 221.2.3 is not appropriate for an enforceable regulatory standard unless the terms of such language are defined. Other commenters requested definitions for viewing angles, an explanation for precisely how viewing angles are measured, and an explanation for precisely how to evaluate whether one viewing angle is better than another viewing angle. The proposed regulatory language is sufficient to provide a performance standard for designers, architects, and others necessary to provide viewing angles required by the proposed standard. The Department believes that as a general rule, the vast variety of sizes and configurations found in assembly areas requires it to establish a performance standard for designers to adapt to the specific circumstances of the venue that is being designed. The requirement is to design so that lines of sight for wheelchair spaces offer a choice of viewing angles well within the range of viewing angles offered to others. The Department has proposed, in section 36.406 of this NPRM, to provide more explicit requirements for stadium-style theaters.

Another commenter inquired as to what determines whether a choice of seating locations or viewing angles is better than that available to all other spectators. The answer to this question varies according to each assembly area that is being designed. That is why the regulation must provide performance standards applicable to all facilities. Nevertheless, the Department believes that for each specific facility that is designed, the owner, operator, and design professionals will be able to distinguish easily between seating locations and associated lines of sight from these seat locations that are desirable and those that are not.

Stadium-style Movie Theaters. The Department will implement provisions specific to line-of-sight issues in stadium-style movie theaters. The horizontal and vertical dispersion requirements set forth in proposed section 221.2.3.1 and 221.2.3.2 may be adopted in their entirety and will apply independently of any line-of-sight requirements of the 1991 Standards at 4.33.3. The proposed line-of-sight regulations recognize the importance of viewing angles to the movie going experience and are aimed at ensuring that movie patrons with disabilities are provided views of the movie screen comparable to other theater patrons. Some commenters supported regulatory language that would require stadium-style theaters to meet standards of accessibility equal to those of nonstadium-style theaters, with larger theaters being required to provide accessible seating locations and viewing angles equal to those offered to individuals without disabilities.

A commenter noted that stadium-style movie theaters, sports arenas, music venues, theaters, and concert halls each pose unique conditions that require separate and specific standards to accommodate patrons with disabilities, and recommended that the Department provide more specific requirements for sports arenas, music venues, theaters, and concert halls. The Department believes that these proposed standards have been drafted in a way that will provide sufficient flexibility to adapt them to the wide variety of assembly venues covered.

Vertical Access. Section 4.33.3 of the 1991 Standards requires wheelchair spaces to be located in more than one area where the seating capacity exceeds 300 and to provide a choice of admission prices. Under the 1991 Standards, sports facilities typically locate some wheelchair spaces on each accessible level of the facilities.

The proposed standards at sections 221.2.3.2 and 206.6 do not require wheelchair spaces to be dispersed based on admission prices because pricing is not always established at the design phase and may vary by event. The proposed standards will require wheelchair spaces to be vertically dispersed at varying distances from the screen, performance area, or playing field. The revised provisions also will require wheelchair spaces to be located in each balcony or mezzanine served by an accessible route. Sports facilities can meet the requirements by locating some wheelchair spaces on each accessible level of the facilities, which is consistent with the current requirements.

Companion Seats. The 1991 Standards at section 4.33.3 require at least one fixed companion seat to be provided next to each wheelchair space. Proposed changes at

sections 221.3 and 802.3 will permit companion seats to be readily removable, but will not require the seats to be designed so they can also serve as wheelchair spaces when removed.

One commenter recommended that there should be a requirement at section 802.3 that when companion seats are fixed, each seat shall be identified by a sign or marker as a companion seat. The Department believes that it is not necessary to identify the companion seat with an accessibility symbol because its placement adjacent to the wheelchair location makes it easily identifiable.

Commenters urged the Department to ensure that companion seats are positioned in a manner that places the user at the same shoulder height as their companions using mobility devices. The Department recognizes that some facilities have created difficulty by locating either the wheelchair space or the companion seat on a different floor elevation (often a difference of one riser). The proposed standards at section 802.3.1 address this problem by requiring the wheelchair space and the companion seat to be on the same floor elevation. This should prevent any vertical discrepancies that are not the direct result of differences in the sizes and configurations of wheelchairs.

Designated Aisle Seats. Existing requirements at section 4.1.3(19)(a) require one percent (1%) of fixed seats in assembly areas to be designated aisle seats. Designated aisle seats must have either no armrests or folding or retractable armrests on the aisle side of the seat.

Proposed sections 221.4; 802.4; 802.4.1; and 802.4.2 base the number of required designated aisle seats on the number of aisle seats, instead of all the seats in a sports facility as the 1991 Standards require. At least five percent (5%) of the aisle seats are required to be designated aisle seats and to be located closest to accessible routes. This option will almost always result in fewer aisle seats being designated aisle seats compared to the 1991 Standards. Sports facilities typically locate designated aisle seats on, or as near to, accessible routes as permitted by the configuration of the facilities.

Dispersion of Wheelchair Spaces and Lines of Sight in Assembly Areas. The 1991 Standards at section 4.33.3 require wheelchair spaces to be an integral part of any fixed seating plan in assembly areas and to be dispersed, when the seating capacity exceeds 300. The 1991 Standards also require wheelchair spaces to provide individuals with disabilities lines of sight comparable to the sightlines available to other spectators in assembly areas. The Department interprets comparable sightlines as requiring wheelchair spaces in sports stadiums and arenas to provide lines of sight over standing spectators to the playing field, where spectators are expected to stand during events. The Department also interprets comparable lines of sight as requiring wheelchair spaces in stadium-style movie theaters to provide viewing angles comparable to those provided to other spectators.

The proposed revisions at sections 221.2.2; 221.2.3; 221.2.3.1, Exceptions 1; 221.2.3.2, Exceptions 1 and 2; 802.2; 802.2.1; 802.2.1.1; 802.2.1.2; 802.2.2; 802.2.2.1; and

802.2.2.2 add specific technical requirements for providing sightlines over seated and standing spectators; and require wheelchair spaces to provide individuals with disabilities choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to other spectators. The proposed changes also clarify the dispersion requirements. Wheelchair spaces must be dispersed horizontally and vertically. The revisions include exceptions for assembly areas that have 300 or fewer seats, where the wheelchair spaces are located in the 2nd or 3rd quartile of the total row length and provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility. The revisions are expected to have minimal impact since they are consistent with the Department's interpretations of the 1991 Standards.

The 1991 Standards contain an exception that permits wheelchair spaces to be clustered in steeply sloped bleachers and balconies. The proposed changes will require wheelchair spaces to be located at the entry points to bleachers, and in each balcony or mezzanine that is on an accessible route.

Lawn Seating in Assembly Areas. The 1991 Standards, section 4.1.1(1), require all areas of newly constructed facilities to be accessible, but do not contain a specific scoping requirement for lawn seating in assembly areas. The proposed standards at section 221.5 specifically will require lawn seating areas and exterior overflow seating areas without fixed seats to connect to an accessible route. The accessible route does not have to extend through the lawn seating area.

A commenter recommended that in section 221.5, Lawn Seating, there should be a requirement for at least one level area for wheelchair seating on an accessible route. The Department believes that unless a lawn seating area has fixed or designated seating locations that would trigger scoping requirements for wheelchair locations, an assembly provider can satisfy its nondiscrimination obligations by ensuring that there is an accessible route to the area to enable people with disabilities who can take advantage of lawn seating to do so.

222 and 803 Dressing, Fitting, and Locker Rooms

Dressing rooms, fitting rooms, and locker rooms in sports or recreation facilities will be required to meet the accessibility requirements of proposed sections 222 and 803. Where rooms are provided in clusters, five percent (5%) but at least one room in each cluster will have to be accessible.

Proposed sections 225.2.1 and 811 will require lockers to meet accessibility requirements. Where lockers are provided in clusters, 5 percent but at least one locker in each cluster will have to comply. Under the 1991 Standards, only one locker of each type provided had be accessible.

Commenters stated that many retail establishments and clothing stores, in particular, are concerned with a changed provision on the placement of benches and other accessibility-

related elements and features in customer dressing and fitting rooms that may require redesigns of entire changing areas or loss of sales or inventory space that will be redirected to the enlarged dressing and fitting rooms. Comments also expressed opposition to the accessibility requirements for locker rooms for similar reasons.

The Department reminds the commenters that the requirements in the standards are designed to apply to new construction and alterations. The Department believes that in these situations creative designers can mitigate the impact of the changes.

224 and 806 Transient Lodging Guest Rooms

General. The minimum number of guest rooms required to be accessible in transient lodging facilities is covered by section 224. Access is addressed for people with disabilities, including people with mobility impairments at section 224.2, and people who are deaf or hard of hearing at section 224.4.

The U.S. Chamber of Commerce and others representing the hotel industry provided comments opposing the current requirements for guest rooms accessible to individuals with mobility impairments stating that statistics provided by the industry demonstrate that all types of accessible guest rooms are unused. They further claimed that the proposed requirements are too burdensome to meet in new construction, and that the proposed requirements will result in a loss of hotel living space. By contrast, commenters representing people with disabilities urged the Department to increase the number of guest rooms required to be accessible.

The number of rooms accessible to people with mobility impairments and the number accessible to people with communication impairments in the proposed standards are consistent with the 1991 Standards and with IBC. The Department continues to receive complaints about the lack of accessible guest rooms throughout the country. Accessible guest rooms are used not only by individuals using mobility devices such as wheelchairs and scooters, but by individuals with a variety of physical impairments such as those using walkers, canes, and crutches.

Data provided by the Disability Statistics Center at the University of California, San Francisco that demonstrated the number of adults who use wheelchairs has been increasing at the rate of six percent per year from 1969 to 1999; and by 2010, it is projected that two percent of the adult population will use wheelchairs. In addition to people who use wheelchairs, three percent of adults used crutches, canes, walkers, and other mobility devices in 1999; and the number is projected to increase to four percent by 2010. Thus, by 2010, up to six percent of the population may need accessible guest rooms.

Some commenters have asked the Department to clarify and simplify the dispersion requirements set forth in section 224.5, in particular the scope of the term "amenities." Section 224.5 requires that guestrooms with mobility features and guestrooms with communication features "[s]hall be dispersed among the various classes of guest rooms,

and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. When the minimum number of guest rooms required . . . is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds and amenities." This general dispersion requirement is intended to effectuate Congress' directive that a percentage of each class of hotel rooms is to be fully accessible to persons with disabilities. See H.R. Rep. No. 101-485 (II) at 391. Accordingly, the promise of the ADA in this instance is that persons with disabilities will have an equal opportunity to benefit from the various options available to hotel guests without disabilities, from single occupancy guestrooms with limited features (and accompanying limited price-tags) to luxury suites with lavish features and choices. The inclusion of section 224.5 is not new to the requirements, as substantially similar language was contained in section 9.1.4 of the 1991 Standards.

Commenters have specifically asked the Department to clarify what is meant by various terms used in section 224.5 and its advisory: "class," "type," "options," and "amenities." The Department envisions that all of these terms are not to be considered terms of art, but will be used as in their normal course. For example, "class" is defined by Webster's Dictionary as "a division by quality." "Type" is defined as "a group of . . . things that share common traits or characteristics distinguishing them as an identifiable group or class." Accordingly, these terms are not intended to convey different concepts, but are used as synonyms. Section 224.5 and its advisory require dispersion in such a varied range of hotels and lodging facilities that the Department believes that the chosen terms are appropriate to convey what is intended. Dispersion required by this section is not "one size fits all" and it is imperative upon each covered entity to consider its individual circumstance as it applies this requirement.

Commenters have raised concern that the factors included in the advisory to section 224.5 have been expanded. The advisory provides: "[f]actors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided." As previously discussed, the advisory materials provided by the Access Board are meant to be illustrative and do not set out specific requirements. In this particular instance, the advisory materials for section 224.5 set out some of the common types of amenities found at transient lodging facilities, and include common sense concepts as view, bathroom fixtures and smoking status. The intention of these factors is to indicate to the hotel industry the sorts of considerations that the Department, in its enforcement efforts since the enactment of the ADA, has considered as amenities that should be made available to persons with disabilities, just as they are made available to hotel guests without disabilities.

Commenters for the hotel industry have offered several recommendations for addressing dispersion. One option includes the flexibility to use an equivalent facilitation option similar to that provided in 9.1.4(2) of the 1991 Standards. While the Department believes this is a legitimate option for existing hotels subject to readily achievable barrier removal, the Department does not view this as an acceptable option for those facilities subject to

the new construction or alterations requirements, unless it can be demonstrated that it would not be feasible to provide accessibility through compliance with the guidelines. Because Congress made it clear that each class of hotel room be available to individuals with disabilities, the Department declines to adopt such a limitation. In considering the comments of the hotel industry and the Department's enforcement efforts in this area, the Department will consider (and seeks comment on) whether the dispersion requirements should be applied proportionally, or whether it meets the requirements of section 224.5 if access to at least one guest room of each type is sufficient.

Some commenters have requested a specific exemption for small hotels of 300 or fewer guestrooms from dispersion regarding smoking rooms. The advisory to section 224.5 contains specific references to smoking and nonsmoking guestrooms as examples of the types of amenities to be considered for dispersion. The ADA requires that individuals with disabilities are entitled to the same range of options as persons without disabilities, and, therefore, the Department declines to add an exemption. It is noted, however, that the existence of this language in the advisory does not require a hotel that does not offer smoking guestrooms at its facility to do so only for individuals with disabilities.

Guest Rooms with Communication Features. The 1991 Standards at sections 9.1.2 and 9.2 require hotels to provide a minimum number of guest rooms with mobility features based on the total number of guest rooms in the facility. These requirements provide that an additional minimum number of guest rooms shall provide roll-in showers. A number of other guest rooms as well as all guest rooms that are required to provide mobility features and roll-in showers also must be equipped with communication features for individuals who are deaf or hard of hearing.

Commenters suggested that the proposed requirements for scoping and dispersion of guest rooms for people with mobility impairments and guest rooms with communication features are too complex for the industry to effectively implement. The Department believes the requirements are clear and that these requirements are necessary to provide equal opportunity for travelers with disabilities.

The proposed revisions at section 224.4 effect no change from the 1991 Standards with respect to the number of guest rooms required to provide communication features. The scoping requirement is consolidated into a single table, instead of appearing in three sections as in the 1991 Standards. The revised provisions also limit the overlap between guest rooms required to provide mobility features and guest rooms required to provide communication features. At least one, but not more than ten percent (10%), of the guest rooms required to provide mobility features also can provide communication features.

Visible Alarms in Guest Rooms with Communication Features. The 1991 Standards at sections 9.3.1 and 4.28.4 require transient lodging guest rooms with communication features to provide either permanently installed visible alarms that are connected to the building fire alarm system, or portable visible alarms that are connected to a standard 110-volt electrical outlet and are both activated by the building fire alarm system and provide a visible alarm when the single station smoke detector is activated.

The proposed changes at sections 806.3; 806.3.1; and 702.1 will require transient lodging guest rooms with communication features to provide permanently installed visible alarms complying with the NFPA 72, National Fire Alarm Code (1999 or 2002 edition). The NFPA 72 contains technical requirements for visible alarms in sleeping areas, and requires combination smoke alarms and visible notification appliances that are connected to the building's electrical system.

The revised provisions will add a new exception for alterations to existing facilities that exempt existing fire alarm systems from providing visible alarms, unless the fire alarm system itself is upgraded or replaced, or a new fire system is installed. Transient lodging facilities that alter guest rooms are not required to provide permanently installed visible alarms complying with the NFPA 72 if the existing fire alarm system has not been upgraded or replaced, or a new fire alarm system has not been installed.

The U.S. Small Business Administration Office of Advocacy and others stated that small providers of transient lodging guest rooms raised concerns about the proposed changes to prohibit the use of portable visible alarms used in transient lodging guest rooms. These commenters recommended retaining current requirements that allow the use of portable visible alarms

People who are deaf or hard of hearing have reported that portable visible alarms used in transient lodging guest rooms are deficient because the alarms are not activated by the building fire alarm system, and the alarms do not work when the building power source goes out in emergencies. The proposed revision is consistent with the model building codes and fire and life safety codes, which are adopted by all the States and require newly constructed transient lodging facilities to provide smoke alarms in guest rooms.

Vanity Counter Space. Proposed section 806.2.4.1 provides that if vanity counter top space is provided in nonaccessible transient lodging guest toilet or bathing rooms, comparable vanity space must be provided in accessible hotel guest toilet or bathing rooms.

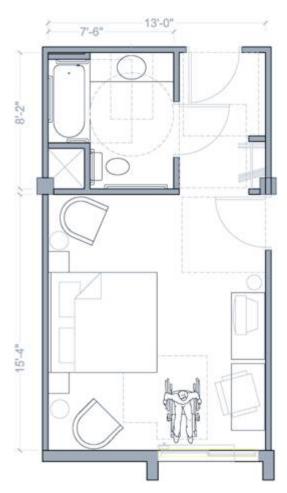
A commenter questioned whether in existing facilities vanity countertop space may be provided through the addition of a shelf. In some circumstances, the addition of a shelf in an existing facility may be a reasonable way to provide access. However, this is a determination that must be made on a case-by-case basis.

Shower and Sauna Doors in Transient Lodging Facilities. Section 9.4 of the 1991 Standards and section 206.5.3 of the proposed regulations require doors in transient lodging guest rooms that do not provide mobility features to have at least 32 inches clear width. Congress directed this requirement to be included so individuals with disabilities can visit guests in other rooms. See, H. Rept. 101-485, pt. 2, at 118 (1990); S. Rept. 101-116, at 70 (1989). Proposed section 224.1.2 will add a new exception to clarify that shower and sauna doors are exempt from the requirement.

Platform Lifts in Hotel Guest Rooms and Dwelling Units. The 1991 Standards at section 4.1.3(5), exception 4, and proposed sections 206.7 and 206.7.6 limit the places where platform lifts are permitted to be used as part of an accessible route. The proposed regulations add a new scoping requirement that permits platform lifts to be used to connect levels within transient lodging guest rooms and dwelling units with mobility features.

The Department prepared figures showing that the proposed requirements can be met without significant loss of hotel living space in hotel guest rooms or other areas. New construction requirements can be met without difficultly.

The following Department prepared figures illustrate accessible hotel rooms that meet minimum requirements of 2004. These illustrations demonstrate that 12 and 13 foot wide accessible hotel rooms based on ADAAG 2004 do not decrease the size of rooms from the 1991 Standards.



PLAN 1a: ACCESSIBLE 13 foot wide hotel room based on 2004 ADAAG.

Plan provides a tub, vanity, open closet, and suite door at column.

Furnishings include a king bed and seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

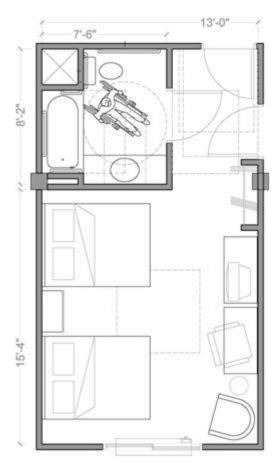
This figure represents an accessible 13 foot wide hotel room with a king bed, seating, and a vanity. (Spaces with an "X" serve as a plumbing / mechanical chase).

This figure demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom includes a vanity counter top space. § 806.2.4.1. As the tub is recessed, the water closet's rear grab bar is "24 inches long ... centered on the water closet ... due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space ... shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap," § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" along its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap ... accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. "Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide . . ." with a lavatory at the end. § 607.2.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 1b: ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides a tub, vanity, open closet, and suite door in the vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

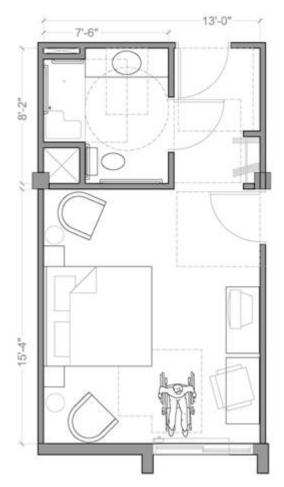
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings include two queen beds, additional seating and a vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The drawing demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The bathtub is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space ... shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. Clearance adjacent to the bathtub shall extend the length of the tub and shall be 30 inches wide, minimum. § 607.2

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 2a: ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides a standard roll-in shower, comparable vanity, open closet, and suite door at column.

Furnishings include a king bed, and seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

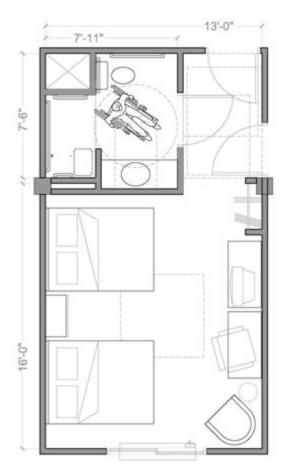
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door at the column. Furnishings here include a king bed, additional seating and a vanity. (Spaces with an "X" serve as a plumbing / mechanical chase).

This drawing demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom includes a "comparable vanity counter top space." § 806.2.4.1. As the roll-in shower is recessed, the water closet's rear grab bar is "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space . . . shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" along its back wall, by "56 inches," \S 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, \S 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." \S 604.3.2. The roll-in shower is 30 inches wide and 60 inches deep . . . \S 608.2.2. A 30 inch wide minimum by 60 inch long minimum clearance shall be provided adjacent to the open face of the shower compartment." \S 608.2.2.1

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space" § 309.2, within "the reach ranges." § 309.3.



PLAN 2b: ACCESSIBLE 13 ft wide hotel room based on 2004 ADAAG.

Plan provides an 'alternate' roll-in shower, comparable vanity, open closet, and suite door in the vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 20004 ADAAG 2004 compliant design.

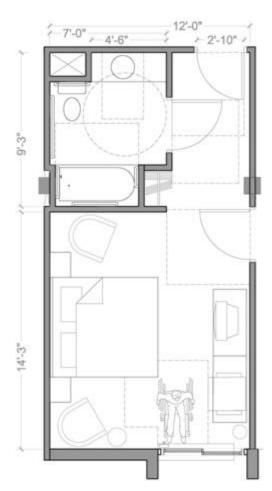
This figure represents an accessible 13 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings here include queen beds, and a vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The figure demonstrates that an accessible 13 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The alternate roll-in shower is recessed, so the water closet's rear grab bar is only "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space . . . shall be provided within the room" § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap. § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall, § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. The 'alternate' roll-in shower is "36 inches wide and 60 inches deep . . . a 36 inch wide minimum entry shall be provided." § 608.2.3

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. A single clear floor space between two beds is sufficient, as it "shall not be required on both sides of a bed." § 806.2.3 Exception. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space" § 309.2, within "the reach ranges." § 309.3.



PLAN 3a: ACCESSIBLE 12 ft wide hotel room based on 2004 ADAAG.

Plan provides a bathtub, comparable vanity, open closet, and suite door in the room.

Furnishings include a king bed, and additional seating.

There is no loss of hotel living space, with this 2004 ADAAG compliant design.

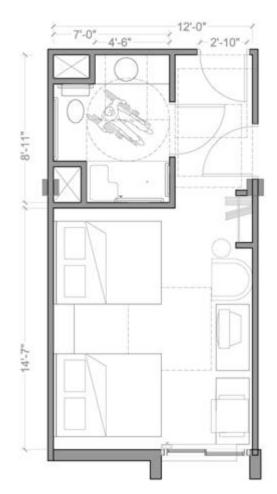
This figure represents an accessible 12 foot wide hotel room with an open closet, and an adjoining suite door in the room. Furnishings here include a king bed, additional seating, and a comparable vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

This figure demonstrates that an accessible 12 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The lavatory is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space . . . shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap. § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance" § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. "Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide." § 607.2.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. The sleeping area has "a clear floor on both sides of a bed." § 806.2.3. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.



PLAN 3b: ACCESSIBLE 12 ft wide hotel room based on 2004 ADAAG.

Plan provides a standard roll-in shower, comparable vanity, open closet, and suite door in vestibule.

Furnishings include queen beds.

There is no loss of hotel living space, with this 2004 ADDAG compliant design.

This figure represents an accessible 12 foot wide hotel room with an open closet, and an adjoining suite door in the vestibule. Furnishings include queen beds and a comparable vanity. (Spaces with an "X" serve as a plumbing/mechanical chase).

The figure demonstrates that an accessible 12 foot wide hotel room based on 2004 ADAAG does not decrease the size of the room from the 1991 Standards.

This bathroom has a "comparable vanity counter top space." § 806.2.4.1. The lavatory is recessed, so the water closet's rear grab bar is reduced to "24 inches long . . . centered on the water closet . . . due to the location of a recessed fixture adjacent to the water closet." § 604.5.2 Exception 1. A "turning space ... shall be provided within the room," § 603.2.1, where "required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap, § 603.2.2. This "60 inches diameter" turning space is "permitted to include knee and toe clearance." § 304.3.1.

Minimum clearance at the water closet is "60 inches" at its back wall, by "56 inches," § 604.3.1, with the centerline of the water closet at the minimum 16 inches from the side wall § 604.2. "The required clearance around the water closet shall be permitted to overlap . . . accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance." § 604.3.2. Adjacent to the shower, a 30 inch wide by 60 inch long clearance is required, § 608.2.2.1.

In the living/sleeping area a "T-shaped space within a 60 inch square" serves as a turning space. § 304.3.2. A single clear floor space between two beds is sufficient, as it "shall not be required on both sides of a bed." § 806.2.3 Exception. All doors have the required maneuvering clearances. § 404.2. At least one of the operable windows must be accessible, on an accessible route for "operation by occupants." § 229.1. Environmental controls [AC unit] must have a "clear floor space," § 309.2, within "the reach ranges," § 309.3.

225 and 811 Storage

Proposed section 225 provides that where storage is provided in accessible spaces, at least one of each type shall comply with the Standards. Self-service shelving is required to be on an accessible route, but is not required to comply with the reach range requirements. These requirements are consistent with the 1991 Standards. Proposed section 225.3 will add a new scoping requirement for self-storage facilities. Facilities with 200 or fewer storage spaces will be required to make at least five percent (5%) of the storage spaces accessible. Facilities with more than 200 storage spaces will be required to provide 10 accessible storage spaces, plus make at least two percent (2%) of the storage spaces over 200 accessible.

Commenters recommended that the Department adopt language requiring public accommodations to provide access to all self-service shelves and display areas available to customers. Other comments opposed this requirement as too burdensome on retail and other entities and that significant revenue will be lost if this requirement is implemented.

Any fixed or built-in self-service shelves or storage are required to be on accessible routes, but not all shelves are required to be within reach. Because the shelves are permitted to exceed the reach ranges, not all merchandise on the shelves will be accessible.

226 and 902 Dining Surfaces and Work Surfaces

The proposed standards at section 226.1 provide that where dining surfaces are provided for the consumption of food or drink, at least five percent (5%) of the seating spaces and standing spaces at the dining surfaces will comply with section 902. Section 902.2 requires the provision of accessible knee and toe clearance.

The U.S. Chamber of Commerce and others requested that cocktail style tables be exempt from the technical requirements for knee and toe clearance. "Cocktail-style tables" are not a defined term. The proposed standards apply to fixed or built-in tables provided for the consumption of food. If cocktail-style tables (that is, tables typically built for use by individuals who are standing) are fixed equipment, they will be subject to the rule. Furniture that is not fixed or built-in would be subject to the nondiscrimination requirements of the rule.

Commenters stated that basing accessible seating on seating spaces and standing spaces is problematic and urged a return to the 1991 Standard of requiring accessible seating based on fixed dining tables. Consistent with long-standing interpretation, the requirements in the ADA regulations will be applied to fixed building elements. The scoping change merely takes into account that tables may vary in size so that basing the calculation on the number of the tables rather than on the number of people that may be accommodated by the tables could unnecessarily restrict opportunities for people with disabilities.

The 1991 Standards at sections 7.2(1), (2), (i), (ii), and (iii), and the proposed changes at sections 904.4, Exception; 904.4.1, Exception; and 904.4.2 contain technical requirements for sales and service counters. The 1991 Standards generally require counters to have an accessible portion at least 36 inches long and no higher than 36 inches. The revised requirements will specify different lengths for the accessible portion of counters based on the type of approach. Where a forward approach is provided, the accessible portion of the counter must be at least 30 inches long and no higher than 36 inches, and knee and toe space must be provided under the counter. Where a parallel approach is provided, the accessible portion of the counter must be at least 36 inches long and no higher than 36 inches. The revised requirements add a new exception for alterations to counters in existing facilities that permits the accessible portion of the counter to be at least 24 inches long, where providing a longer accessible counter will result in a reduction in the number of existing counters or existing mailboxes.

The revised requirements clarify that the accessible portion of the counter must extend the same depth as the sales or service counter top. Where the counter is a single-height counter, this requirement applies across the entire depth of the counter top. Where the counter is a split-height counter, this requirement applies only to the customer side of the counter top. The employee-side of the counter top may be higher or lower than the customer-side of the counter top.

Proposed section 227.5 clarifies the requirements for food service lines. Queues and waiting lines serving counters or check-out aisles, including queues and waiting lines for food service must be accessible to individuals with disabilities.

Commenters recommended that the Department consider a regulatory alternative exempting small retailers from the new knee and toe clearance requirement and retaining existing wheelchair accessibility standards for sales and service counters. These commenters believed that the proposed knee and toe clearance requirements will cause a reduction in the sales and inventory space at check-out aisles and other sales and service counters.

The proposed standards, as do the current requirements, permit covered entities to determine whether they will provide forward or parallel approach. So any business that does not wish to provide the knee or toe clearance may avoid that option. However, the Department believes that permitting a forward approach without requiring knee and toe clearance is not adequate to provide accessibility because the person using a wheelchair will be prevented from coming close enough to the counter to see the merchandise or to transact business with a degree of convenience that is comparable to that provided for other customers. A parallel approach to sales and service counters also can provide accessibility required by the proposed standards. Individuals using wheelchairs can approach sales and service counters from a side, and, assuming the necessary elements, features, or merchandise necessary to complete a business transaction are within the

reach range requirements for a side approach, the needs of individuals with disabilities can be met effectively.

229 Windows

A new requirement at section 229.1 provides that if operable windows are provided for building users, then at least one window in an accessible space must be equipped with controls that comply with section 309.

Commenters supported including this provision in the regulations, but some commenters asked whether the five-pounds (5 lbs.) of force requirement of section 309 applies to the window latch itself or only the force required to open the window. Section 309 applies to all controls and operating mechanisms, so the latch must comply.

230 and 708 Two-way Communication Systems

New provisions at sections 230.1 and 708 require two-way communications systems to be equipped with visible as well as audible signals.

231 and 808 Judicial Facilities and Courtrooms

Accessible Courtroom Stations. Proposed requirements at sections 231.2, 808, 304, 305, and 902 provide increased accessibility at courtroom stations. Clear floor space for a forward approach will be required for all courtroom stations (judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, court reporters' stations and litigants' and counsel stations). Other applicable specifications include accessible work surface heights and toe and knee clearance.

Accessible Jury Boxes and Witness Stands. Vertical access by ramp, elevator, or platform lift will have to be fully in place at the time of construction or alteration as required by section 206.2.4.

Raised Courtroom Stations Not for Members of the Public. Proposed section 206.2.4, Exception 1 provides that raised courtroom stations that are used by judges, clerks, bailiff, and court reporters will not have to provide full vertical access when first constructed or altered if they are constructed to be easily adaptable to provide vertical accessibility.

A comment asserted that there is nothing inherent in clerks' stations, jury boxes, and witness stands that require them to be raised. While it would, of course, be easiest to provide access by eliminating height differences among courtroom elements, the Department recognizes that accessibility is only one factor that must be considered in the design process of a functioning courtroom. The need to ensure the ability of the judge to maintain order, the need to ensure sightlines between the judge, the witness, the jury, and other participants, and the need to maintain the security of the participants all affect the design of the space. The Department believes that the proposed standards have been

drafted in a way that will achieve accessibility without unduly constraining the ability of a designer to address the other considerations that are unique to courtrooms.

Commenters argued that permitting courtroom stations to be adaptable rather than fully accessible at the time of new construction likely will lead to discrimination in hiring of clerks, court reporters, and other court staff. The Department believes that the provisions will facilitate, not hinder, the hiring of court personnel who have disabilities. All courtroom work stations will be on accessible routes and will be required to have all fixed elements designed in compliance with the proposed standards. Elevated work stations for court employees may be designed to add vertical access as needed. Because the original design must provide the proper space and electrical wiring to install vertical access, the change should be easily accomplished.

232 Detention Facilities and Correctional Facilities

New provisions at section 232 establish requirements for the design and construction of cells in detention and correctional facilities. Alterations to cells shall not be required to comply, except to the extent determined by the Attorney General. The Department has proposed new requirements in 28 CFR § 35.152.

233 Residential Facilities

General. Revised provisions in section 233 will now include specific scoping and technical provisions that apply to new construction and alteration of residential facilities. As part of this revision, section 9.5, which established scoping and technical requirements for homeless shelters, group homes, and similar social service establishments, has been deleted. The Department has proposed language in the NPRM at section 28 CFR section 36.406 that will provide that most social service establishments now subject to section 9.5 will be subject to requirements for residential facilities rather than the requirements for transient lodging. This approach will harmonize federal accessibility obligations under both the ADA and section 504 of the Rehabilitation Act of 1973, as amended. Dwelling units provided by places of education will be subject to the design requirements for transient lodging.

Galley Kitchens. New requirements at section 804.2 require a 60-inch clearance space in so-called galley kitchens, which have cabinets and appliances on opposite walls, if there is only one entry to the kitchen.

New provisions at sections 804.2; 804.2.1; and 804.2.2 also specify clearances between opposing base cabinets, counters, appliances, or walls based on the layout of the kitchen:

• "U-shaped" kitchens, which are enclosed on three contiguous sides, are required to have 60 inches minimum clearance between opposing base cabinets, counters, appliances, or walls.

- "Pass through" kitchens, which have two entries, are required to have 40 inches minimum clearance between opposing base cabinets, counters, appliances, or walls.
- Kitchens that do not have a cooktop or conventional range are exempt from the clearance requirements.

The revision will impact small dead-end or single-entry "galley" kitchens with base cabinets, counters, and appliances on two opposing walls. The 1991 Standards require this "galley" kitchen to have 40 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls. In multi-family residential facilities, kitchens, bathrooms, and closets are located along interior walls, and space constraints may limit adding a second entry to the kitchen.

If a "galley" kitchen does not have two entries, the revised provisions require the kitchen to have 60 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls. For a typical small "galley" kitchen that is 8 feet long, increasing the width of the kitchen to provide 60 inches clearance will add approximately 13 square feet to the kitchen

One commenter supported the provisions of section 804, Kitchens and Kitchenettes, but sought clarification whether this section applies to residential units only, or to lodging and office buildings as well. Section 212 makes section 804 applicable to all kitchens and kitchenettes in covered buildings.

Residential Facilities. The UFAS at section 4.1.4(11) contains scoping requirements for the new construction of housing. The proposed standards will revise and update these requirements. Sections 233.1; 233.2; 233.3; 233.3.1; 233.3.1.1; 233.3.1.2; and 233.3.2 differentiate between entities subject to the HUD regulations implementing section 504 of the Rehabilitation Act, and entities not subject to the HUD regulations. The HUD regulations apply to recipients of federal financial assistance through HUD, and require at least five percent (5%) of dwelling units in multi-family projects of five or more dwelling units to provide mobility features and at least two percent (2%) of the dwelling units to provide communication features. The HUD regulations define a project unique to its programs as "one or more residential structures . . . 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." To avoid any potential conflicts with the HUD regulation, the proposed regulation requires entities subject to the HUD regulations to comply with the scoping requirements in the HUD regulations, instead of the scoping requirements in the Department's proposed regulation.

For entities not subject to the HUD regulations, the proposed regulations require at least five percent (5%) of the dwelling units in residential facilities provide mobility features, and at least two percent (2%) of the dwelling units provide communication features. The proposed regulations define facilities in terms of buildings located on a site. The proposed regulations permit facilities that contain 15 or fewer dwelling units to apply the

scoping requirements to all the dwelling units that are constructed under a single contract, or are developed as whole, whether or not located on a common site.

The proposed regulation defers to HUD and agencies responsible for issuing regulations under Section 504 of the Rehabilitation Act to determine the extent to which accessible features are to be provided in publicly funded dwelling units offered for sale.

Alterations to Residential Facilities. The UFAS at sections 4.1.6 require federal, state, and local government housing to comply with the general requirements for alterations to facilities. Applying the general requirements for alterations to housing can result in partially accessible dwelling units where single elements or spaces in dwelling units are altered.

The proposed regulations at sections 202.3 Exceptions 3; 202.4; 233.3; 233.3.4; 233.3.4.1; and 233.3.4.2 Exception contain specific scoping requirements for alterations to dwelling units. Dwelling units that are not required to be accessible are exempt from the general requirements for alterations to elements and spaces and for alterations to primary function areas.

The scoping requirements for alterations to dwelling units generally are based on the requirements in the current UFAS.

- Where a building is vacated for purposes of alterations and has more than 15 dwelling units, at least five percent (5%) of the altered dwelling units are required to provide mobility features and at least two percent (2%) of the dwelling units are required to provide communication features.
- Where a bathroom or a kitchen is substantially altered in an individual dwelling unit and at least one other room is also altered, the dwelling unit is required to comply with the scoping requirements for new construction until the total number of dwelling units in the facility required to provide mobility features and communication features is met.

As with new construction, the proposed regulations permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site. The proposed regulations also permit a comparable dwelling unit to provide mobility features where it is not technically feasible for the altered dwelling unit to comply with the technical requirements.

234 and 1002 Amusement Rides

Section 234 provides accessibility guidelines for newly designed and constructed amusement rides. Mobile and temporary rides are exempt from these requirements. Altered rides will be required to provide accessible load or unload areas, but no changes will be required to the ride itself unless the structural or operational characteristics of the

ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer.

Accessible Route. Proposed sections 206.2.9 and 1002.2 will require an accessible route to serve each ride, including the load/unload area.

One commenter asked that section 234, Amusement Rides, make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides. Sections 206.2.9, Amusement Rides, and 1002.2, Accessible Routes, make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides.

Wheelchair Space or Transfer Seat or Transfer Device. New sections 234.3 and 1002.4-6 provide that each new amusement ride, except for mobile/temporary rides and a few additional excepted rides, will be required to provide at least one type of access by means of one wheelchair space or one transfer seat or one transfer device (the design of the transfer device is not specified).

Commenters representing industry concerns urged the Department to revise the requirements for wheelchair space and transfer seats and devices because the majority of amusement rides are too complex to be reasonably modified or reengineered to accommodate the majority of individuals with disabilities. They argued that the experience of amusement rides will be significantly reduced if the proposed requirements are implemented.

These proposed standards were developed with the assistance of an advisory committee that included representation from the design staffs of major amusement venues and people with disabilities. The Department believes that the resulting guidelines reflect sensitivity to the complex problems posed in adapting existing rides by focusing on new rides that can be designed from the outset to be accessible. To permit maximum design flexibility, the guidelines permit the designers to determine whether it is more appropriate to permit people who use wheelchairs to remain in their chairs on the ride, or to provide for transfer access.

Maneuvering Space in Load and Unload Area. Specified maneuvering space as required by new sections 234.2 and 1002.3 in the load/unload area of each amusement ride will be required.

Sign. Section 216.12 requires signs at entries to queues and waiting lines identifying type and location of access for the amusement ride.

A member of the amusement parks and attractions industry raised concerns that smaller amusement parks tend to purchase used rides more frequently than new rides, and that the conversion of a used ride to provide the proposed accessibility may be difficult to ensure because of the possible complications in modifying equipment to provide accessibility.

The Department agrees with this commenter. The Department notes, however, that the proposed standards will require modifications to used amusement rides only if a ride is undergoing an alteration intended to change its structural or operational characteristics. The Department expects that the focus of the requirements for rides that are not new will be to ensure that these rides are served by an accessible route and have accessible load/unload areas for the benefit of those people with disabilities who are able to use the ride. Mobile or temporary amusement rides that are set up for short periods of time generally will not be covered by the proposed regulations. However, the ADA authorizes the Department to require covered entities to provide general nondiscrimination opportunities to individuals with disabilities. Therefore, the Department will require mobile or temporary amusement rides that are set up for short periods of time to be on an accessible route.

235 and 1003 Recreational Boating Facilities

These sections require accessible boat slips to be provided.

Accessible Route. Newly added sections 206.2.10 and 1003.2 require an accessible route to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps.

Commenters raised concerns that because of water level fluctuations it may be difficult to provide accessible routes to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps. The guidelines take this into account. A number of exceptions are provided from the general proposed standards requiring accessible routes in order to take into account the difficulty of meeting accessibility requirements due to fluctuations in water level.

Accessible Boarding Piers. If provided at boat launch ramps, new sections 235.3 and 1003.3.2 provide that five percent (5%) of boarding piers, but at least one, will have to be accessible.

Accessible Boat Slips. New sections 235.2 and 1003.3.1 provide that a specified number of boat slips in each recreational boating facility will be required to meet specified accessibility standards. The greater the number of slips provided, then the larger number of slips must be accessible, e.g., if 100 boat slips are provide, 3 must be accessible, or if 500 boat slips are provided, 7 must be accessible. Accessible slips will have to be dispersed throughout the boat slip area.

236 and 1004 Exercise Machines and Equipment

Accessible Route to Exercise Machines and Equipment. An accessible route will be required to serve accessible exercise machines and equipment by new provision 206.2.13.

Concerns were raised that the requirement to provide accessible routes to serve accessible exercise machines and equipment will be difficult for some facilities to provide,

especially some transient lodging facilities that typically locate exercise machines and equipment in a single room. The Department thinks that this requirement is a reasonable one for new construction and alterations. Barrier removal issues are addressed separately in section 36.304.

Exercise Machines and Equipment. Newly added sections 236 and 1004 will require one of each type of exercise machine to meet clear floor space specifications. Types of machines are generally defined according to the muscular groups exercised or the kind of cardiovascular exercise provided.

Commenters were divided in response to this issue. Some supported requirements for accessible machines and equipment; others urged the Department not to require accessible machines and equipment because of the costs involved. The Department believes that this provision strikes an appropriate balance in ensuring that people with disabilities, particularly those who use wheelchairs will have the opportunity to use the exercise equipment provided by a public accommodation. Providing access to exercise machines and equipment recognizes the need and desires of individuals with disabilities to have the same opportunity as other patrons to enjoy the advantages of exercise and maintaining health.

237 and 1005 Fishing Piers and Platforms

Accessible Route. Sections 206.2.14 and 1005.1 will require an accessible route to each accessible fishing pier and platform. The exceptions described under recreational boating will apply to gangways and floating piers.

Accessible Fishing Piers and Platforms. Newly added sections 237 and 1005 will require at least twenty-five percent (25%) of railings (if provided) to be of a specified maximum height so that a person seated in a wheelchair could cast a fishing line over the railing and dispersed among the piers and platforms. If railings, guards, or handrails are provided, accessible edge protection, clear floor or ground space, and turning space will be required.

238 and 1006 Golf Facilities

Accessible Route. Sections 206.2.15 and 1006.2 and 1006.3 require an accessible route to connect all accessible elements within the boundary of the golf course and, in addition, to connect golf car rental areas, bag drop areas, teeing grounds, putting greens, and weather shelters. An accessible route also will be required to connect any practice putting greens, practice teeing grounds, and teeing stations at driving ranges that will be required to be accessible. An exception permits the accessible route requirements to be met, within the boundaries of the golf course, by providing a "golf car passage" (the path typically used by golf cars) if specifications for width and curb cuts are met.

Accessible Teeing Grounds, Putting Greens, and Weather Shelters. Sections 238.2 and 1006.4 will require that golf cars will have to be able to enter and exit each putting green

and weather shelter. Where two teeing grounds are provided, the forward teeing ground, will be required to be accessible (golf car can enter and exit). Where three or more teeing grounds are provided, at least two, including the forward teeing ground, shall be accessible.

A national advocacy organization supported requirements for teeing grounds, particularly requirements for accessible teeing grounds. Accessible teeing grounds are essential to the full and equal enjoyment of the golfing experience.

Accessible Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges. Newly added section 238.3 requires that five percent (5%) but at least one of each of practice putting greens, practice teeing grounds, and teeing stations at driving ranges must permit golf cars to enter and exit.

239 and 1007 Miniature Golf Facilities

Accessible Route to Holes. Sections 206.2.16, 239.3, and 1007.2 will require an accessible route to connect accessible miniature golf course holes and will be required from the last accessible hole on the course directly to the course entrance or exit; generally, the accessible holes will have to be consecutive ones. Specified exceptions will be available for accessible routes located on the playing surfaces of holes.

Accessible Holes. At least fifty percent (50%) of golf holes on miniature golf courses will be required by new sections 239.2 and 1007.3 to be accessible (includes specified clear space at start of play).

240 and 1008 Play Areas

Accessible Route to Play Components. Sections 206.2.17, 240.2.1-2, and 1008.2-3 will require that accessible routes be provided within each play area. Where required, accessible ground surfaces for play areas will follow special rules, incorporated by reference from nationally recognized standards for accessibility and safety in play areas, including those issued by the American Society for Testing and Materials (ASTM). The accessible route will have to connect to at least one ground level play component of each different type provided (e.g., for different experiences such as rocking, swinging, climbing, spinning, and sliding); to at least fifty percent (50%) of elevated play components (some exceptions will be provided from general accessible route rules); and to one or two entry points to soft contained play structures. If elevated play components are provided, the play area will have the option of either locating a specified additional number of its different types of ground level components on the accessible route or meeting a higher standard of accessibility for the elevated components (namely, fifty percent (50%) of the elevated components will have to be connected by a ramp and the connected components will have to be of at least three different types).

A commenter noted that the proposed standards allow for the provision of transfer steps to elevated play structures based on the number of elevated play activities, but asserted that transfer steps have not been documented as effective means of access.

The guidelines recognize that play structures are designed to provide unique experiences and opportunities for children. The proposed rule provides for play components that are accessible to children who cannot transfer from their wheelchair, but it also provides opportunities for children who are able to transfer. Children often interact with their environment in ways that would be considered inappropriate for adults. Crawling and climbing, for example, are integral parts of the play experience for young children. Permitting the use of transfer platforms in play structures provides some flexibility for creative playground design.

Accessible Play Components. Play components (including ground level, elevated, and soft contained play structures) will be required to be on an accessible route, including elevated play components that are required to be connected by ramps, and will themselves have to comply with accessibility requirements (including specifications for turning space and clear floor space and for play tables and transfer entry points and supports).

A commenter expressed concerns that the general requirements of section 240.2.1, Play Areas, and the advisory accompanying section 240.2.1, General, conflict. The comment asserts that section 240.2.1 provides that the only requirement for integration of equipment is where there are two or more required ground level play components, while the advisory appears to suggest that all accessible components must be integrated.

The commenter misinterprets the requirement. The ADA mandates that people with disabilities be able to participate in programs or activities in the most integrated setting appropriate to their needs. Therefore, all accessible playground equipment must be integrated into the general playground setting. Section 240.2.1 specifies that where there is more than one accessible ground level play component, the components must be both dispersed and integrated.

Ground Surfaces. Section 1008.2.6, Ground Surfaces, provides that ground surfaces on accessible routes must comply with ASTM requirements.

A commenter recommended that the Department closely examine the requirements for ground surfaces at play areas. The Department is aware that there is an ongoing controversy about ground surfaces arising from a concern that some surfaces that meet the ASTM requirements at the time of installation will become inaccessible if they do not receive constant maintenance. The Access Board is also aware of this issue and is undertaking research to explore solutions to the problems. The Department would caution covered entities selecting among the ground surfacing materials that comply with the ASTM requirements, that they must anticipate the maintenance costs that will be associated with some of the products. Permitting a surface to deteriorate so that it does

not meet the proposed standards would be an independent violation of the Department's ADA regulations.

241 and 612 Saunas and Steam Rooms

Saunas and steam rooms will be required by sections 241 and 612 to meet accessibility requirements, including accessible turning space and an accessible bench. Where they are provided in clusters, five percent (5%), but at least one sauna or stream room in each cluster will have to be accessible.

Commenters raised concerns that the safety of individuals with disabilities outweighs the usefulness in providing accessible saunas and steam rooms. The Department believes that there is an element of risk in many activities available to the general public. One of the major tenets of the ADA is that individuals with disabilities should have the same opportunities as other people to decide what risks to take. It is not appropriate for covered entities to prejudge the abilities of people with disabilities.

242 Swimming Pools, Wading Pools, and Spas

Accessible Means of Entry to Pools. At least two accessible means of entry will be required for larger pools (300 or more linear feet) and one entry will be required for smaller pools as required by section 242.2. This section requires that at least one entry will have to be a sloped entry or a pool lift; the other could be a sloped entry, pool lift, a transfer wall, or a transfer system (technical specifications for each entry type are included).

Accessible Means of Entry to Wading Pools. Sections 242.3 and 1009.3 require that at least one sloped means of entry will be required into the deepest part of each wading pool.

Accessible Means of Entry to Spas. Sections 242.4 and 1009.2, 1009.4, and 1009.5 require spas to meet accessibility requirements, including an accessible means of entry. Where spas are provided in clusters, five percent (5%) but at least one spa in each cluster will have to be accessible. A pool lift, a transfer wall, or a transfer system will be permitted.

Commenters, including individuals with disabilities and state entities, supported the proposed scoping and technical requirements for swimming pools. A national association representing the interests of recreation and park providers recommended that existing inaccessible swimming pools need only provide one means of access when meeting program access requirements under Title II or readily achievable barrier removal obligations under Title III. These issues are addressed elsewhere in this proposed rule.

243 Shooting Facilities with Firing Positions

Sections 243 and 1010 will require an accessible turning space for each different type of firing position at a shooting facility if designed on site. Where fitting positions are provided in clusters, five percent (5%), but at least one position of each type in each cluster will have to be accessible.

Additional Technical Requirements

304 Turning Space

The turning space is required to be 60 inches diameter minimum and is permitted to include knee and toe clearance.

Commenters urged the Department to retain the turning space requirement, but exclude knee and toe clearance from being permitted as part of this space. They argued that wheelchairs and other mobility devices are becoming larger and that more individuals with disabilities are using electric three- and four-wheeled scooters.

The Department recognizes that there is a growing perception that the 1991 Standards, which are based on wheelchair dimensions, may not adequately meet the needs of people using some larger electric scooters. However, there is no consensus about the appropriate dimension on which to base revised requirements. The Department is aware that the Access Board is financing an extensive study of this issue in order to determine if new requirements are warranted. The Department plans to wait for the results of this study before changing the specifications in the Department's rules.

404 Doors, Doorways, and Gates

Automatic Door Break-out Openings. The proposed standards do not contain any technical requirement for automatic door break out openings. The proposed standards at sections 404.1; 404.3; 404.3.1; and 404.3.6 will require automatic doors that are part of a means of egress and that do not have standby power to have a 32 inch minimum clear break out opening when operated in emergency mode. The minimum clear opening width for automatic doors is measured with all leaves in the open position. Automatic biparting doors or pairs of swinging doors that provide a 32 inch minimum clear break out opening in emergency mode when both leaves are opened manually meet the technical requirement. The proposed regulation includes an exception that exempts automatic doors from the technical requirement for break-out openings when accessible manual swinging doors serve the same means of egress.

Maneuvering Clearance or Standby Power for Automatic Doors. The 1991 Standards, section 4.13.6, do not require maneuvering clearance at automatic doors. Section 404.3.2, Exception of the proposed regulation will require automatic doors that serve as an accessible means of egress to either provide maneuvering clearance or to have standby

power to operate the door in emergencies. This provision has limited application and will affect, among others, in-swinging automatic doors that serve small spaces.

Commenters urged the Department to reconsider provisions that would require maneuvering clearance or standby power for automatic doors. They assert that these requirements would impose unreasonable financial and administrative burdens on all covered entities, particularly smaller entities. The Department declines to change these provisions because they are fundamental life-safety issues. The requirement applies only to doors that are part of a means of egress that must be accessible in an emergency. If an emergency-related power failure prevents the operation of the automatic door, a person with a disability could be trapped unless there is either adequate maneuvering room to open the door manually, or there is a back-up power source.

Thresholds at Doorways. The 1991 Standards at section 4.13.8 require thresholds at doorways not to exceed ½ inch; and thresholds at exterior sliding doors not to exceed ¾ inch. Proposed sections 404.1 and 404.2.5 will require thresholds at all doorways that are part of an accessible route not to exceed ½ inch. The 1991 Standards and the proposed regulations require raised thresholds that exceed ¼ inch to be beveled on each side with a slope not steeper than 1:2. The proposed standards include an exception that exempts existing and altered thresholds that do not exceed ¾ inch and are beveled on each side from the requirement.

407 Elevators

Section 407.4.8.2, Audible Indicators, and section 407.4.8.2.1, Signal Type, provide that an elevator signal shall be an automatic verbal annunicator that announces the floor at which the car is about to stop.

A commenter noted that requiring an audible signal for elevators is important; however, the requirement that the signal be a verbal annunicator, presumably in English, is troubling to building owners and operators whose buildings may be located in multilingual communities or international tourist destinations. The commenter suggested that the 1991 Standard's requirement for chimes or tones, once for up and twice for down, should be retained and the requirement for a verbal annunciation deleted from the proposed standards.

The proposed standards, at section 407.2.2.3 permit building operators to choose an audible signal or a verbal annunciator to indicate the direction in which the elevator is traveling. Section 407.4.8 provides an additional requirement for a verbal annunciator to identify the floor at which the elevator is stopping. This requirement is for an announcement within the elevator car to notify passengers of floor arrival. The Department will retain the requirement as drafted because the verbal annunciator provides more detailed locator information than would be provided by just the use of an audible signal. The Department notes, however, that nothing in the guidelines would preclude a building operator from providing this information in a language – or languages – other than English when the building operator deems it appropriate.

505 Handrails

The proposed standards add a new technical requirement for handrails along walking surfaces. The 1991 Standards at sections 4.8.5(2), (3); 4.9.4(2), (3); 4.26.2; and 4.26.4, and proposed sections 505.5; 505.6 Exception 2; 505.7; 505.7.1; 505.7.2; 505.8; 505.10 and Exception 3; and 505.10.3 contain technical requirements for handrails. The revised regulations provide more flexibility than the 1991 Standards as follows:

- The 1991 Standards require handrail gripping surfaces to have edges with a minimum radius of ½ inch. The revised regulations will require handrail gripping surfaces to have rounded edges.
- The 1991 Standards require handrail gripping surfaces to have a diameter of 1½ inches to 1½ inches, or to provide an equivalent gripping surface. The revised regulations will require handrail gripping surfaces with a circular cross section to have an outside diameter of 1¼ inches to 2 inches. Handrail gripping surfaces with a non-circular cross section must have a perimeter dimension of 4 inches to 6¼ inches, and a cross section dimension of 2¼ inches maximum.
- The 1991 Standards require handrail gripping surfaces to be continuous, and to be uninterrupted by newel posts, other construction elements, or obstructions. The revised regulation will require handrail gripping surfaces to be continuous along their length and not to be obstructed along their tops or sides. The bottoms of handrail gripping surfaces must not be obstructed more than twenty percent (20%) of their length. Where provided, horizontal projections must occur at least 1½ inches below the bottom of the handrail gripping surface. An exception permits the distance between the horizontal projections and the bottom of the gripping surface to be reduced by ½ inch for each ½ inch of additional handrail perimeter dimension that exceeds 4 inches
- The 1991 Standards require handrails at the bottom of stairs to extend at least 12 inches plus the width of one tread beyond the bottom riser. The revised regulations will require handrails at the bottom of stairs to extend a horizontal distance at least equal to one tread depth beyond the last riser nosing. The revised regulations add a new exception for alterations to existing facilities that exempts handrails at the top and bottom of ramps and stairs from providing full extensions where it will be hazardous due to plan configuration.

A commenter noted that handrail extensions are currently required at the top and bottom of stairs, but the proposed regulation does not include this requirement, and urged the Department to retain the current requirement. Other commenters questioned the need for the extension at the bottom of stairs.

The Department's proposed guidelines, in sections 505.10.2 and 505.10.3 will require handrail extensions at both the top and bottom of a flight of stairs. The requirement that

handrails extend an additional 12 inches at the bottom of stairs was deleted by the Access Board in response to public comments.

Commenters noted that the revised regulations will require handrail gripping surfaces with a circular cross section to have an outside diameter of 2 inches, and that this requirement would impose a physical barrier to individuals with disabilities who need the handrail for stability and support while accessing stairs.

The requirement permits an outside diameter of 1½ inches to 2 inches. This range allows flexibility in meeting the needs of individuals with disabilities and designers and architects. The Department is not aware of any data indicating that an outside diameter of 2 inches would pose any adverse impairment to use by individuals with disabilities.

Handrails Along Walkways

The 1991 Standards do not contain any technical requirement for handrails provided along walkways that are not ramps. The proposed standards regulations, section 403.6, will specify that where handrails are provided along walkways that are not ramps, they shall comply with certain technical requirements. The proposed change is expected to have minimal impact.