

**Preliminary Regulatory Assessment
Proposed Amendments to the ADA and ABA Accessibility Guidelines
On Emergency Transportable Housing Units**

Introduction

Section 502 of the Rehabilitation Act requires the Access Board to develop and maintain accessibility guidelines to ensure that the construction and alteration of buildings and facilities covered by the Americans with Disabilities Act (ADA) or the Architectural Barriers Act (ABA) are readily accessible to and usable by individuals with disabilities. The Access Board's current accessibility guidelines for building and facilities were issued in 2004 and are known as the ADA and ABA Accessibility Guidelines. Other federal agencies are required to issue enforceable standards for the construction and alteration of facilities covered by the ADA or ABA that are consistent with the ADA and ABA Accessibility Guidelines.

The Access Board prepared this preliminary regulatory assessment to meet the requirements of Executive Order 13563 (Improving Regulation and Regulatory Review) and Executive Order 12866 (Regulatory Planning and Review) for the Notice of Proposed Rulemaking (NPRM) requesting public comment on proposed amendments to the ADA and ABA Accessibility Guidelines that specifically address emergency transportable housing units that are provided by the Federal Emergency Management Agency (FEMA) or other entities on a temporary site in response to an emergency need for temporary housing. Among other things, Executive Order 13563 directs agencies to propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs; tailor the regulation to impose the least burden on society, consistent with obtaining the regulatory objectives; and, in choosing among alternative regulatory approaches, select those approaches that maximize net benefits. Executive Order 13563 recognizes that some benefits and costs are difficult to quantify and provides that, where appropriate and permitted by law, agencies may consider and discuss qualitatively values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts.

Need for Proposed Rule

The ADA and ABA Accessibility Guidelines contain scoping and technical provisions for residential dwelling units. The scoping provisions specify the minimum number of units required to provide mobility features for individuals with mobility disabilities and the minimum number of units required to provide communication features for individuals who are deaf or have a hearing loss, as well as the accessible features to be provided within each type of unit. The technical provisions specify the design criteria for accessible features within the units.

Emergency transportable housing units provided by the Federal Emergency Management Agency (FEMA) in the aftermath of Hurricanes Katrina and Rita raised issues regarding the application of the scoping and technical provisions for residential dwelling units to emergency transportable housing units. Emergency transportable housing units are used to provide

temporary housing and are not intended to be used as permanent dwellings. They are prefabricated so they can be deployed rapidly in response to an emergency and are installed on temporary sites with minimal site preparation. They are transported on a single transport vehicle over roadways, which results in size and space limitations. Emergency transportable housing units provided in the aftermath of Hurricanes Katrina and Rita typically were about 400 square feet.

The proposed rule would amend the ADA and ABA Accessibility Guidelines to treat emergency transportable housing units as a subclass of residential dwelling units and would add new scoping and technical provisions for such units. The proposed rule also would amend existing scoping provisions for operable parts and platform lifts, and existing technical provisions for ramps, kitchens, and bathrooms to specifically address emergency transportable housing units.

Summary of Major Proposed Provisions

The major proposed provisions for emergency transportable housing units required to provide mobility features and emergency transportable housing units required to provide communication features are summarized separately in the tables below.

Emergency Transportable Housing Units Required to Provide Mobility Features		
Major Proposed Provisions	Summary	Justification - Benefits
Scoping 233.3.1.2 F233.3.1.2 F233.4.1.2	Existing scoping provisions applicable to facilities with residential dwelling units provided by entities not subject to regulations issued by HUD under Section 504 of the Rehabilitation Act currently require at least 5 percent of the units to provide mobility features. These scoping provisions currently apply to emergency transportable housing units. The proposed new scoping provisions would require emergency transportable housing units with mobility features to be provided in accordance with regulations implementing Section 504 of the Rehabilitation Act, the Robert T. Stafford Disaster Relief and Emergency	When individuals and households apply for temporary housing assistance from FEMA, their needs are assessed and they are assigned emergency transportable housing units based on their assessed needs. The proposed new scoping provisions would allow for flexibility to provide emergency transportable housing units with mobility features based on assessed needs.

	<p>Assistance Act, and the ADA. These regulations prohibit discrimination on the basis of disability. Compliance with these regulations would ensure that individuals with mobility disabilities who need units with mobility features are provided such units.</p>	
<p>Ramps Exception 2 to 405.2 Exception to 405.6</p>	<p>The proposed new exceptions to the technical provisions for ramps would permit a steeper and longer entry ramp for single unit installations of emergency transportable housing units at private home sites where existing physical or site constraints would prohibit the installation of an entry ramp that complies with the technical provisions for ramps.</p>	<p>The floor level of emergency transportable housing units is elevated above the ground. Ramps are installed at the entrances to units with mobility features. If sufficient space is not available on a private home site to install an entry ramp that complies with the technical provisions for ramps, a unit with mobility features may not be provided at the site. The proposed new exceptions would allow a steeper and longer entry ramp in such situations so individuals with mobility disabilities can have units with mobility features provided at their private home sites while their homes are rebuilt and avoid relocation to a group site.</p>
<p>Kitchen Work Surface Exception to 804.3</p>	<p>The proposed new exception would permit a kitchen table complying with the technical provisions for tables, all kitchen counter tops at 34 inches high maximum, and an electrical outlet within reach of the table to be provided instead of a kitchen work surface complying with the technical provisions for kitchen work surfaces.</p>	<p>Kitchens in emergency transportable housing units have limited storage space. A kitchen work surface complying with the technical provisions for kitchen work surfaces would reduce the storage space. The proposed new exception would provide accessible kitchen work surfaces for individuals with mobility disabilities without reducing the storage space.</p>
<p>Kitchen Counter Top Electrical Outlets Exception 3 to 205.1</p>	<p>Existing exceptions currently permit one of the electrical outlets provided above a length</p>	<p>Kitchens in emergency transportable housing units have fewer electrical outlets than</p>

Exception 3 to F205.1	of kitchen counter top that is uninterrupted by a sink or appliance to not comply with the technical provisions for operable parts. The proposed rule would amend these exceptions so they would not apply to emergency transportable housing units required to provide mobility features. This may result in electrical outlets installed in the face of kitchen base cabinets.	kitchens in other types of residential dwelling units. The proposed amendments to the existing exceptions would make all the electrical outlets accessible to and usable by individuals with mobility disabilities.
Water Shut-Off Valve Exception 11 to 205.1 Exception 11 to F205.1	The proposed new exceptions would permit a single water shut-off valve complying with the technical provisions for clear floor space and reach ranges to be provided in emergency transportable housing units required to provide mobility features.	Space constraints in emergency transportable housing units can limit access to water shut-off valves in kitchens and bathrooms. The proposed new exceptions would provide access to a single water shut-off valve for individuals with mobility disabilities.
Kitchen Sink Water Spray Unit 606.4	The proposed new provision would require a water spray unit to be provided at the kitchen sink in emergency transportable housing units required to provide mobility features.	The proposed new provision would facilitate dish washing by individuals with limited reach and dexterity.
Folding Seat in Roll-In Shower 608.4	The proposed new provision would require a folding seat to be provided in a roll-in shower in emergency transportable housing units required to provide mobility features.	The proposed new provision would enable individuals with mobility disabilities to use roll-in showers if shower chairs are unavailable in the aftermath of a disaster.
Bedrooms 809.2.4.1 809.2.4.2	The proposed new provisions would: <ul style="list-style-type: none"> • Require clear floor space positioned for a parallel approach to be located on one side of a bed and to be on an accessible route; and • Prohibit accessible routes, maneuvering clearances, and turning spaces in bedrooms less than 70 	The proposed new provisions would make the bedrooms accessible to and usable by individuals with mobility disabilities.

	square feet from overlapping space occupied by furniture supplied with the unit in emergency transportable housing units required to provide mobility features.	
Bedroom Lighting Control 809.2.4.3	The proposed new provision would require a means to control at least one source of lighting in the bedroom from the bed in emergency transportable housing units required to provide mobility features.	Bedrooms in emergency transportable housing units typically provide overhead lighting controlled by a wall switch near the bedroom door. The proposed new provision would result in providing a bedside lamp, an additional wall switch near the bed, or remote control device that can be operated from the bed so individuals with mobility disabilities can transfer in and out of bed safely.
Weather Alert Systems 809.2.5	The proposed new provision would require weather alert systems provided in emergency transportable housing units required to provide mobility features to comply with the technical provisions for clear floor space and reach ranges.	The proposed new provision would make the weather alert systems accessible to and usable by individuals with mobility disabilities.

Emergency Transportable Housing Units Required to Provide Communication Features		
Major Provisions	Summary	Justification - Benefits
Scoping 233.3.2.2 F233.3.2.2 F233.4.2.2	Existing scoping provisions applicable to facilities with residential dwelling units provided by entities not subject to regulations issued by HUD under Section 504 of the Rehabilitation Act currently require at least 2 percent of the units to provide communication features. These scoping provisions currently apply to emergency transportable	When individuals and households apply for temporary housing assistance from FEMA, their needs are assessed and they are assigned emergency transportable housing units based on their assessed needs. The proposed new scoping provisions would allow for flexibility to provide emergency transportable housing units with communication features based

	housing units. The proposed new scoping provisions would require emergency transportable housing units with communication features to be provided in accordance with regulations implementing Section 504 of the Rehabilitation Act, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, and the ADA. These regulations prohibit discrimination on the basis of disability. Compliance with these regulations would ensure that individuals who are deaf or have a hearing loss and need units with communication features are provided such units.	on assessed needs.
Residential Dwelling Unit Smoke Alarms 809.3.1.2	The proposed new provision would require residential dwelling unit smoke alarms with built-in visible alarms to provide either a commercial light and power source along with a secondary power source, or a non-commercial alternating current power source along with a secondary power source.	The proposed new provision is consistent with the National Fire Protection Association (NFPA) 72 National Fire Alarm Code. It would ensure that residential dwelling unit smoke alarms with built-in visible alarms have a secondary power source in the event the primary power source fails so that individuals who are deaf or have a hearing loss are alerted when the alarms are activated.
Weather Alert Systems 809.3.4	The proposed new provision would require weather alert systems provided in emergency transportable housing units required to provide communication features to provide both audible and visible output.	The proposed new provision would make the weather alert systems accessible to and usable by individuals who are deaf or have a hearing loss.

Entities Affected by Proposed Rule

The Robert T. Stafford Disaster Relief and Emergency Assistance Act authorizes FEMA to provide temporary housing assistance to individuals and households in response to a major

disaster or emergency declared by the President. See 42 U.S.C. 5174 and 5192. FEMA provides emergency transportable housing units where there is a need for temporary housing and a lack of available housing resources in the affected area. A review of the websites of state agencies and nongovernmental organizations that provide services in response to disasters did not show that these entities currently provide emergency transportable housing units. The preamble to the NPRM includes a question that requests information on whether state, local, or tribal governments or nongovernmental organizations provide emergency transportable housing units for people who need temporary housing in response to disasters.

Emergency transportable housing units provided by FEMA are covered by the ABA and are required to comply with the accessibility standards for residential facilities issued by the Department of Housing and Urban Development (HUD). See 42 U.S.C. 4151 and 4153. HUD's current accessibility standards for residential facilities are the Uniform Federal Accessibility Standards (UFAS). When HUD updates its accessibility standards for residential facilities to be consistent with the ADA and ABA Accessibility Guidelines, newly constructed and altered emergency transportable housing provided by FEMA would be required to comply with HUD's updated accessibility standards. The preliminary regulatory assessment estimates the total additional costs that FEMA would incur on an annual basis assuming HUD updates its accessibility standards for residential facilities to be consistent with the ADA and ABA Accessibility Guidelines, as amended by the proposed rule.

Benefits

The U.S. Census Bureau estimates that for the civilian non-institutionalized population aged 5 and older living in the United States:

- 27.4 million people (11.9 percent) have difficulty with ambulatory activities of the lower body and 19.0 million people (8.2 percent) have difficulty with upper body physical tasks;
- 8.5 million people (3.7 percent) have difficulty performing one or more activities of daily living such as getting around inside the home, getting into or out of bed, taking a bath or shower, getting to or using the toilet, dressing, and eating;
- 3.3 million (1.4 percent) used a wheelchair or other wheeled mobility device and 10.2 million (4.4 percent) used a cane, crutches, or walker to assist with mobility; and
- 7.8 million people (3.4 percent) have difficulty hearing.¹

¹ U.S. Census Bureau, Americans with Disabilities:2005 (Issued December 2008) available on the web at: <http://www.census.gov/prod/2008pubs/p70-117.pdf>.

The proposed rule seeks to ensure that newly constructed and altered emergency transportable housing units are readily accessible to and usable by this population. The Summary of Major Proposed Provisions discusses the justification for and benefits of the proposed provisions for this population. These benefits are difficult or impossible to quantify.

Costs

FEMA’s planning estimate is to maintain an inventory of 2,500 emergency transportable housing units ready to deploy in response to disasters. As of March 2012, FEMA had approximately 2,065 units in its inventory. FEMA’s current policy is to have 20 percent of the units in its inventory comply with UFAS. FEMA periodically purchases new units to replenish its inventory.

When FEMA purchases new units, the units are constructed to FEMA’s requirements. Costs are attributed to the proposed provisions if it would result in FEMA requiring newly constructed units to provide a feature that it would not otherwise require and manufacturers would incur additional costs to construct the feature that would increase the cost of the units. FEMA reviewed the proposed rule and consulted with five manufacturers to determine whether any costs would be attributed to the proposed provisions. FEMA determined that no additional costs would be attributed to the proposed provisions for emergency transportable housing units required to provide communication features since it currently requires smoke alarms with built-in visible alarms and weather alert systems with both audible and visible output in all newly constructed units.

For emergency transportable housing units required to provide mobility features, FEMA determined that costs would be attributed to the proposed provisions for kitchen counter top electrical outlets, a single water shut-off valve, a kitchen sink water spray unit, and a bedroom lighting control. FEMA’s unit cost estimates for these proposed provisions are shown in the table below. No costs would be attributed to the proposed provision for folding seats in roll-in type showers since FEMA currently requires folding seats to be provided in roll-in type showers.

Proposed Provisions	FEMA Unit Cost Estimates
Kitchen Counter Top Electrical Outlets Exception 3 to 205.1 and F205.1	\$150 - \$500
Single Water Shut-Off Valve Exception 11 to 205.1 and F205.1	\$200 - \$500
Kitchen Sink Water Spray Unit 606.4	\$75
Bedroom Lighting Control 809.2.4.3	\$60
Total	\$485 - \$1,135

FEMA provided low and high unit cost estimates for the kitchen counter top electrical outlets. The high unit cost estimate assumes additional costs for custom made base cabinets that may be needed for electrical outlets installed in the face of the cabinets. FEMA also provided

low and high unit cost estimates for the single water shut-off valve. The high unit cost estimate assumes that the units would have a sprinkler system and would need some redesign of the plumbing system. FEMA currently does not require the units to provide a sprinkler system and the high unit cost estimate for the single water shut-off valve would apply if FEMA would require the units to provide sprinkler systems in the future.

The number of emergency transportable housing units that FEMA deploys varies by disaster and from year to year. The number of units deployed during the four year period from 2008 to 2011 is shown in the table below. FEMA sometimes provides UFAS units to applicants who do not have a disability due to lack of inventory of other units.

Emergency Transportable Housing Units Deployed by FEMA					
Year	Number of Disasters	Total Units Deployed	UFAS Units	Other Units	Percentage UFAS Units
2008	5	3,798	369	3,429	10%
2009	5	1,353	201	1,152	15%
2010	3	51	3	48	6%
2011	14	4,036	420	3,616	10%
Total	27	9,238	993	8,245	11%
4-Year Average	7	2,310	248	2,061	11%

The total additional costs that FEMA would incur assuming HUD updates its accessibility standards for residential facilities to be consistent with the ADA and ABA Accessibility Guidelines, as amended by the proposed rule, are estimated under three scenarios.

Scenario 1: 4-Year Average Deployment from 2008 to 2011

Under this scenario, the total additional costs that FEMA would incur on an annual basis are based on the average number of emergency transportable housing units deployed by FEMA from 2008 to 2011. During this period, FEMA deployed an average of 248 UFAS units per year. The scenario assumes that FEMA would purchase the same number of new units with mobility features annually to replenish the inventory. FEMA’s total additional annual costs under Scenario 1 are shown in the table below.

Scenario 1: Additional Annual Costs Based on 4-Year Average Deployment from 2008 to 2011		
Number of New Units Purchased Annually with Mobility Features	Low Estimate (\$485 per unit)	High Estimate (\$1,135 per unit)
248	\$120,280	\$281,480

Scenario 2: 20 Percent of Units in Inventory Provide Mobility Features

Under this scenario, the total additional costs that FEMA would incur on an annual basis are based on its planning estimate to maintain an inventory of 2,500 emergency transportable housing units and its current policy to have 20 percent of the units in the inventory comply with

UFAS. The scenario assumes that FEMA deploys the entire inventory each year and would purchase 500 new units with mobility features annually to replenish the inventory. FEMA’s total additional annual costs under Scenario 2 are shown in the table below.

Scenario 2: Additional Annual Costs Based on 20 Percent of Units in Inventory Provide Mobility Features		
Number of New Units Purchased Annually with Mobility Features	Low Estimate (\$485 per unit)	High Estimate (\$1,135 per unit)
500	\$242,500	\$567,500

Scenario 3: Disasters Equivalent to Hurricanes Katrina and Rita

Under this scenario, the total additional costs that FEMA would incur are based on disasters equivalent to Hurricanes Katrina and Rita. During Hurricanes Katrina and Rita, FEMA deployed 145,000 emergency transportable housing units. The scenario assumes three different levels of assessed need for units with mobility features: 14,500 (10 percent), 21,700 (15 percent), and 29,000 (20 percent). FEMA’s total additional costs under Scenario 3 are shown in the table below. The costs may be incurred over more than one year depending on whether the disasters occur in the early part or late part of the year, and the manufacturing capacity and production time needed to construct large numbers of units.

Scenario 3: Additional Costs Based on Disasters Equivalent to Hurricanes Katrina and Rita		
Number of New Units Purchased with Mobility Features	Low Estimate (\$485 per unit)	High Estimate (\$1,135 per unit)
14,500	\$7,032,500	\$16,457,500
21,700	\$10,548,750	\$24,686,250
29,000	\$14,065,000	\$32,915,000

Conclusion

The Access Board has made a preliminary determination based on the preliminary regulatory assessment that the benefits of the proposed amendments would justify the costs; that the proposed amendments would impose the least burden on society, consistent with obtaining the regulatory objectives; and that the regulatory approach selected would maximize net benefits.

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