Zoning for Universal Design and Visitability

By Jennifer S. Evans-Cowley, AICP

According to the 2000 U.S. Census, 20 percent of the American population reported some type of disability.

Of those over the age of 65, 28 percent have a physical disability. As the baby boomers age, these figures will increase. As builders seek to accommodate them, the idea of constructing homes so that people can age in place is growing in popularity. Planners generally like the idea of aging in place, but only a handful of cities are actively using their development codes to mandate universal design and visitability.

WHAT IS UNIVERSAL DESIGN AND VISITABILITY?
The terms universal design and visitability are unfamiliar to many planners. Universal design is the design and production of buildings and products that promote equal opportunity for use by individuals, whether or not they have a disability. The Center for Universal Design, located in the College of Design at North Carolina State University, lists seven principles:
1. Equitable use
2. Flexibility in use
3. Simple and intuitive
4. Perceptible information
5. Tolerance for error
6. Low physical effort
7. Size and space for approach and use

Visitability is another term associated with universal design. Visitability is a movement to change construction standards so that new housing is designed to allow people with mobility impairments to live in the units and visit others. The key features of visitability include wide doorways, at least a half bath on the main floor, accessible placement of electrical controls, and at least one zero-step entrance to a building. Visitability does not ensure complete access in a home, but it ensures that public spaces, such as the entrance, hallways, and bathroom are accessible to someone in a wheelchair. This minimal level of accessibility allows for a person with a disability to access a home, even if that person does not live there, and allows a non-disabled person to continue residing in a home in the event that the person develops a disability.

The Americans with Disabilities Act requires that buildings be accessible to those with disabilities. Planners have incorporated its requirements into zoning codes, such as a specific number of parking spaces to be reserved for those with disabilities. This has typically meant that a ramp was added on the side of a building or an elevator was tucked into a corner. However, those zoning requirements have not been extended to apply to single-family homes. Universal design promotes the idea of creating places that are designed for everyone to access, rather than being retrofitted for accessibility. Some examples include providing no-step ground entryways (to assist those in wheelchairs) with textured surface (to assist the blind), and providing wide interior doors and hallways, bright lighting, handles with a lever rather than a twisting knob, and light controls operated with large

2 University Neighborhood Apartments in Berkeley, California, built by Hearth Homes, is the nation’s first affordable housing built with Universal Design principles. The 27-unit development opened in July 2005.
panels rather than a toggle switch. In the bathroom, grab bars are an important addition. These allow a person in a wheelchair to transfer from the chair to the toilet or bathtub.

**WHY IS UNIVERSAL DESIGN IMPORTANT?**
The number of people in the United States who have disabilities is growing. One reason is that better health care has allowed people with disabilities to live longer lives. In addition, the portion of the population over the age of 65 has been growing, and aging produces a higher likelihood of disabilities. The number of disabled veterans has also grown.

For those with physical disabilities, buildings can serve as a major obstacle to mobility. Providing for accessibility reduces those obstacles, but does not eliminate them. Even if a disabled person lives in an accessible building, it is still difficult for people with disabilities to access the homes of the non-disabled. This inaccessibility makes it difficult for those with disabilities to visit friends and family.

Homes accessible to people with disabilities are just as convenient for the non-disabled. A wide level entrance to a home makes it easier to move furniture into and out of a building, maneuver a stroller, or get around if a household member has a sprained ankle, for example. Almost everyone has experienced a situation where an object had to be disassembled in order to move it through a doorway.

Many people with disabilities and seniors want to age in place, rather than have to move to an assisted living facility or nursing home. It is more expensive to retrofit a non-accessible house than to have the house made accessible to begin with.

If we know that there is a change in the demographics of our communities, planners should be actively seeking ways to help people age in place.

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**BUILDING CODES, UNIVERSAL DESIGN, AND VISIBILITY**

Across the nation, citizens groups advocating for the disabled have been effective in winning passage of state and local legislation that incorporates standards for visibility. According to the University of Buffalo, 14 states have passed such legislation. In 1992, Georgia passed the first visibility legislation, creating the EasyLiving Home Certification program for private homes. This voluntary certification program requires new homes to have a zero-step entry and wide interior passageway doors, a full bathroom with maneuvering space, and a bedroom on the main floor.

Texas and Kansas have passed legislation requiring visibility for homes receiving public funding. Florida passed legislation requiring that all new homes have a bathroom on the ground level. Vermont, in a 2000 law, requires all homes built on a speculative basis to include visibility standards.

At least 24 cities also have passed visibility legislation modifying their building code, including:

- Atlanta (1992)
- Freehold Borough, New Jersey (1997)
- Austin, Texas (1998)
- Irvine, California (1999)
- Fort Worth, Texas (2000)
- Visalia, California (2001)
- San Mateo County, California (2001)
- Albuquerque, New Mexico (2002)
- San Antonio, Texas (2002)
- Onondaga County, New York (2002)
- Pima County, Arizona (2002)
- Long Beach, California (2002)
- Iowa City, Iowa (2002)
- Pittsburgh (2002)
- Chicago (2003)
- Houston (2004)
- Arvada, Colorado (2005)
Percent. According to researchers Claar and Bowen (see Resources box), this reduced the fears of the local homebuilders.

Arvada, Colorado, which adopted a visibility ordinance in 2005, recognized a changing demographic in the community. The Comprehensive Plan for the City of Arvada specifically mentions universal design. As part of the objectives the plan states, “The city will explore how to include universal design principles in new development projects.” Assistant city manager Vicki Reier says, “People like to live in Arvada, and we want to build so people can age in place and not have to move for accommodations.”

The ordinance applies to all single-family and duplex homes built in a group of seven or more units and requires a step-free entrance, wider interior doors on the ground floor level, wider hallways, and accessible first-floor bathrooms for a minimum of 15 percent of the units built. An additional 15 percent of the homes constructed must provide a step-free entrance, a maximum slope of 1:12, and an entrance door at least 32 inches in width. The city has also developed a fee-in-lieu of visibility. The developer must pay $2,500 for each uninstalled visible building codes, see the October 2002 issue of Zoning News, “Visibility Issues Drive Building Code Changes.”

ZONING FOR UNIVERSAL DESIGN IN HOWARD COUNTY, MARYLAND

The last decade produced many changes in local building codes. However, zoning codes can also play a role in promoting universal design. Howard County, Maryland, requires universal design features to be incorporated in age-restricted adult housing units through its zoning ordinance.

The county’s General Plan 2000 indicated that, over the next 25 years, the county’s population over the age of 55 would increase from 19 percent to 31 percent of the total population, or 46,000 people. This will result in significant changes in the county’s housing needs as more residents age in place or decide to “downsize” to reduce their home ownership burdens and as larger numbers of older adults move into the county to be closer to their families. The plan identified three goals related to housing for seniors:

- Provide housing for older adults within stable and attractive communities through maintenance, renovation, and modification of existing homes;
- Produce new housing that meets the needs of older adults while not detracting from the existing neighborhoods; and
- Provide affordable and diverse housing to meet the needs of low- and moderate-income seniors.

In an effort to meet these goals, the county council directed the Department of Planning and Zoning to work with the departments of Housing and Community Development; Inspections, Licenses and Permits; Citizen Services; and the Commission on Aging to develop a Seniors Housing Master Plan, which was completed in December 2004. A countywide survey found that 70 percent of older residents want to remain in their homes or nearby.

The county planning department created a committee to decide which universal design features should be required. The county wanted to balance affordability and adaptability. Howard County recognized that housing costs were already high and wanted to determine which universal design features have the highest cost/benefit ratio.
UNIVERSAL DESIGN FEATURES FOR SR-I DISTRICT IN HOWARD COUNTY, MARYLAND

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<tr>
<th>Required</th>
<th>Desired</th>
<th>Optional</th>
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<tr>
<td>Accessible path between parking and the dwelling units for apartments</td>
<td>Visual smoke detectors</td>
<td>Security system and visual identification of visitors</td>
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<td>All common areas must meet ADA standards for apartments</td>
<td>Smooth vertical transitions between rooms</td>
<td>Handrails on both sides of all stairs</td>
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<td>No-step entrance to community buildings and all dwellings</td>
<td>Maneuvering space at entrance, between main living areas, and in front of appliances</td>
<td>Grab bars in bathrooms</td>
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<td>Front door must be 36 inches wide with exterior lighting of the entrance</td>
<td>Low-maintenance exterior materials</td>
<td>Curbless shower</td>
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<td>All interior doorways at least 32 inches in width</td>
<td>Covered main entry</td>
<td>Multilevel or adjustable kitchen counters</td>
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<td>Hallways at least 36 inches in width</td>
<td>Lever handles and anti-scall devices on all plumbing fixtures</td>
<td>Pull-out shelves in kitchen base cabinets</td>
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<td>Complete first floor living area with master bedroom and bath (or elevator if multistory apartment)</td>
<td>Slip-resistant flooring</td>
<td>Hand-held showerhead</td>
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<td>Lever handles on interior and exterior doors</td>
<td>Five-foot turning radius or T turn in kitchen and bath</td>
<td>Task lighting in kitchen, bath, and other work areas</td>
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<td>Structural blocking for grab bars in bathroom walls near toilet and shower</td>
<td>Switches, doorbells, thermostats, and breaker boxes no more than 48 inches above the floor</td>
<td>Lighting in closets and pantries</td>
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<td>Electrical receptacles at least 15 inches above the floor</td>
<td>Adjustable closet rods and shelving</td>
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The county created the R-SI District (Residential: Senior Institutional). This district allows age-restricted adult housing and other uses such as health care facilities, nursing homes, religious uses, day treatment facilities, and government uses. The district requires that at least 10 percent of the dwelling units be for moderate-income persons. In addition, the county created a PSC (Planned Senior Community) District that allows age-restricted housing, assisted living facilities, and nursing homes. The district allows a density of eight units per acre on sites that can accommodate at least 50 units.

As part of the R-SI zoning district requirements, developments must incorporate universal design features from the guidelines of the Department of Planning and Zoning, which identify required, recommended, and optional features. “Plan submittals must include descriptions of the design features of the proposed dwellings to demonstrate their appropriateness for the age-restricted population,” the guidelines say.

Howard County chose to require features that are critical and relatively inexpensive as part of initial construction, but which would be costly to retrofit. Features that are relatively expensive to retrofit in the future are classified as desirable or optional.

Developers of senior housing found the universal design guidelines helpful in creating new housing projects. The county plans to strengthen the universal design guidelines as the market demands more features. The county recognizes that new construction will be relatively limited compared to the 97,000 existing housing units and that there is still a need to retrofit and renovate older homes.

As a step toward more housing with universal design features, the county is educating residents, real estate agents, and remodelers about using universal design features to renovate existing homes. They are also educating residents and homebuilders about the value of visibility in all new residential construction.

The county is also working to educate residents about universal design features and the likelihood that they will be disabled in the future. The county recognized that many adults over 55 don’t perceive themselves as seniors that need universal design features or that their needs will change over time.

Education will be critical in helping ensure that adults demand features that will allow them to age in place.

Howard County was able to successfully implement the county’s General Plan by creating a Seniors Housing Master Plan and amending the zoning ordinance. The result is that new housing specifically designed for seniors will incorporate universal design and visibility principles.

Seniors in Howard County will be able to age in place more easily.

ZONING FOR UNIVERSAL DESIGN IN OTHER LOCATIONS

Andres Duany’s SmartCode incorporates visitability standards. The SmartCode requires a zero-step entrance from an accessible path at the front, side, or rear of each building; all interior doors to be at least 32 inches in width and there must be a bathroom on the main floor of each building. Sarasota, Florida, has adopted the SmartCode.

Before passing a zoning ordinance that requires modifications to the building code, a community should review state legislation related to the building code. If your state has a uniform dwelling code, this may prevent
municipalities from creating and enforcing stricter standards for buildings except in certain situations. Some states prohibit any changes to building codes at the local level, while others prohibit reducing code requirements below standards set by the state. For example, New York, California, and Wisconsin all have uniformity clauses in their building code requirements that prohibit cities from making any changes. In California, disability advocates are working to create state-level enabling legislation that would allow local governments to enact visitability laws.

It is important to determine if a visitability ordinance is a planning ordinance or a building ordinance. One could reasonably argue that visitability ordinances are planning ordinances, not building codes. Planning ordinances routinely deal with the interior of homes, including height, materials, number of bedrooms, and house size. If the code requirements are placed in the zoning ordinance, as in the case of Howard County, then it is clearly a planning ordinance. If it is viewed as a planning ordinance, then the state-level building codes are irrelevant as long as the visitability requirements exceed the state building code requirements.

Planners have a variety of other options to incorporate visitability into the zoning code. For example, the zoning code could include density or other development bonuses to developers who incorporate visitability principles. Another option is to require an impact fee for accessibility, similar to the method used by Howard County.

CONCLUSION

While a number of communities have passed legislation, planners are still largely unaware of the concepts of visitability. Planners need to increase their knowledge of disability issues. If visitability and other forms of access legislation are to be effective, planners and other design professionals must be aware of the problems that people with disabilities face in accessing the built environment.

Concrete Change, an international association that promotes visitability for the disabled, is actively mobilizing support for basic accessibility to dwelling units. Their website provides useful information on the principles of universal design and sample ordinances from across the United States. Another source for helpful information about universal design is the Universal Design Handbook (see Resources).

There are a variety of ways in which planners can become engaged in promoting universal design and visitability principles. Baltimore County, Maryland, developed a brochure, “Your New or Remodeled Home Becomes Visitable When You Choose These Top 10 Options.” The city of Irvine, California, developed a web page that provides information about universal design and links to area builders who integrate universal design into housing construction.

Before drafting an amendment to the building or zoning code, planners should include housing for seniors as part of the housing element of their community’s comprehensive plan. This should then translate into requirements in the zoning ordinance. Howard County illustrates how goals related to senior housing can be translated successfully into zoning requirements. After the plan and ordinance are in place, it is important to evaluate the success of the ordinance.

RESOURCES

**Websites**

Center for Universal Design: www.design.ncsu.edu/cud

Concrete Change: www.concretechange.org

State-level building codes: www.firstsourceonl.com

**Other Resources**


Property owners who acquired their property before the adoption of a land-use regulation may assert a claim against the government if they believe the regulation has reduced the value of their property.

A number of states are following Oregon’s unfortunate example. A Measure 37 clone, the Property Fairness Initiative, will be on the ballot this November in Washington. Planners in Georgia are working to keep a similar measure from passing the legislature in that state. And most recently, a petition was filed to put a Measure 37 clone on the ballot in a borough in Alaska. Zoning Practice subscribers should keep their cursor pointed to APA’s website where we will track legislative, legal, and electoral developments with such measures.

On March 23, the Oregon Supreme Court declared the state’s billboard regulations violative Article I, Section 8, of the state constitution because the Oregon Motorist Information Act [ORC 377.700 to 377.840 and 377.992 (1999)] distinguishes between on-site signs (which don’t require a permit or fee) and off-site signs for which a permit and fee are required. Outdoor Media Dimensions, Inc. v. Department of Transportation, 2006 WL ____ (Ore. 2006). The example the court noted was “a gas station visi ble from a highway may, without a permit, carry the messa ge ‘Gas for Sale,’ but it may not carry the message ‘Eat at Joe’s: 10 Miles Ahead.’” The court struck the permit and fee requirement for outdoor advertising signs, rather than declare the entire OMIA invalid. Oregon legislators must now go back to the drawing board and refashion the state’s billboard regulations or risk losing federal funds through the Highway Beautification Act.

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Cover photo courtesy of the Thomas Crane Public Library in Quincy, Massachusetts. The library was retrofitted to provide universal access.