

Increasing Home Access: Designing for Visitability

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Research Report

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AARP's Public Policy Institute informs and stimulates public debate on the issues we face as we age. Through research, analysis and dialogue with the nation's leading experts, PPI promotes development of sound, creative policies to address our common need for economic security, health care, and quality of life.

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FOREWORD

Older persons strongly prefer to continue living independently in their own homes as they age; however, too often, structural barriers in the home prevent those who acquire a physical impairment from aging in place. Furthermore, the widespread inaccessibility of the nation's housing stock makes it difficult for individuals with disabilities of all ages to visit friends and relatives out of the home.

Visitability is a movement that seeks to increase the supply of accessible housing through the inclusion of three basic structural features at the time of home construction: a zero-step entrance, wide doorways, and at least a half bath on the main floor of the home.

To gain a better understanding of the visitability movement and its applicability for independent living as our nation ages, the Public Policy Institute commissioned authors Jordana L. Maisel, Eleanor Smith, and Edward Steinfeld to examine the different types of visitability initiatives and evaluate their potential for improving the prospects for aging independently in one's home and community. In this paper they discuss barriers to the implementation of visitability and opportunities for promoting adoption of these design features in the construction of new homes.

The AARP PPI hopes that this paper will be useful to policymakers, the planning community, the homebuilding industry, homebuyers, and consumer advocates as they work toward the creation of more inclusive housing and livable communities.

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EXECUTIVE SUMMARY

This paper discusses the visitability concept, various implementation strategies, barriers to and benefits of implementation, and future directions. Drawing attention to current housing deficiencies and presenting visitability as a viable solution will enable advocates, builders, policymakers, and consumers to prepare for an aging population. Current trends in health care and community services emphasize aging in place. However, the structural barriers in much of existing housing can prevent older adults and people with disabilities from leading independent lives and participating fully in their communities.

Many houses have steps at all entrances, narrow doorways, and long and narrow hallways and lack an accessible bathroom on the main floor. Though a majority of older Americans prefer to stay in their homes, these barriers can make it difficult for older adults to remain in their homes throughout their aging years. Furthermore, architectural barriers make it difficult for nondisabled people to accommodate visits from friends and relatives who need basic accessibility.

To address this problem, advocates of housing accessibility have developed and promoted a concept known as visitability, a design approach that integrates a few core accessibility features as a routine construction practice into newly built single-family housing. The three core visitability features are a zero-step entrance, doorways with thirty-two inches of clear passage space, and at least a half bath on the main floor with adequate maneuvering room. Visitability advocates say that these features can be easily incorporated into the design and construction of new single-family housing, and are far less costly than modifying a home at the time a resident develops a mobility impairment.

Visitability differs from both full accessibility and universal design. The goal of visitability is to provide a few basic accessibility features, thereby ensuring that, over the short term, a person with mobility limitations can use and visit the homes of friends and family and that, over the long term, few barriers interfere with adapting the home for long-term use by a person with such limitations. Full accessibility provides enough additional features to support long-term use by people with mobility limitations. Universal design provides an even wider array of features that improve usability, safety, and health for a more diverse group of people and abilities.

There are two basic policy approaches to developing visitable housing: voluntary programs, which may or may not include incentives, and mandatory programs, which can apply to all housing or restricted categories of housing.

The National Association of Home Builders (NAHB) supports “voluntary programs promoting accessible design features for single family construction” rather than local and state laws that mandate such features. The NAHB contends that visitable design can be impracticable for certain sites, restrict consumer choice, and raise housing costs. Furthermore, builders state that they have not experienced much demand from consumers for visitable features.

Advocates counter that the basic features of visitability are an inexpensive part of housing design when incorporated at the early stage, that builders have developed innovative design practices for difficult sites, and that many communities with home access requirements have been flexible in enforcing visitability ordinances to

accommodate site or other problems. Advocates also maintain that mandatory visitability ordinances have resulted in a significantly greater number of accessible homes than have voluntary initiatives. At the same time, both advocates and opponents of visitability agree that one impediment to increasing consumer demand for visitable features is that some individuals have overly optimistic expectations about aging and lack information about the visitability features they could request when buying or building a home.

Visitability focuses on new construction, but policymakers and the public also must address the challenge of increasing accessibility in the existing housing stock. Retrofitting existing houses and changing the way new houses are built are both necessary strategies to meet the demand that is emerging as Baby Boomers age.

INTRODUCTION

Surveys show that older persons want to remain in their homes as long as possible. Furthermore, people of all ages with disabilities want the opportunity to live in affordable, accessible housing. However, most existing single-family housing and the great majority of new houses have steps at all entrances and narrow interior doors, particularly bathroom doors. These two design practices can make a home unsafe or uninhabitable for a resident with a disability, and difficult or impossible for a friend or relative with a disability to visit.

The traditional approaches to this problem are to use family resources or publicly financed home modification programs for renovations to remove barriers from existing homes, or to move from the inaccessible home to a different home or an institution. But the cost of using family resources to finance modifications or relocation is prohibitive for many, and public funding for renovations is scarce. As the country faces demographic changes that include growing numbers of older persons, traditional housing practices may become unsustainable.

Federal law requires access for people with mobility impairments only to all new multifamily residences and to a small percentage (5 percent) of single-family units constructed with public funds. **Current housing policy, therefore, does not address the vast majority of single-family homes, in which most people in the United States live.** The visitability movement seeks to address the current gaps in housing availability, affordability, and accessibility in both the public and private housing sectors by including a few key access features as standard construction practice in newly built single-family housing. The goal is to improve the ability of older adults and people with disabilities to visit the homes of their friends and extended family, and at the same time to put in place core access features that permit many people who develop mobility impairments to reside in a home on a short-term basis, or in some cases indefinitely.

A visitable home is marked by three core architectural conditions:

- One zero-step entrance at the front, back, or side of the house, depending on site conditions
- Doorways that provide thirty-two inches of clearance
- At least a half bath on the main floor

Visitability advocates consider these three features the most essential to enable a person with mobility impairments to visit or live in a home, at least temporarily. Sometimes these core features have been described as those most crucial for a person returning home from the hospital after experiencing a severe mobility impairment. The list of features varies slightly among local and state programs. Variations might depend on whether the program is voluntary or mandatory; was instituted early or later in the history of the movement; or is broad in scope, covering many units, or narrower in scope, covering only units receiving certain public benefits. Despite these variations, all visitability initiatives strive to integrate basic accessibility into new single-family housing intended for the open market.

Including these features from the beginning creates a greater supply of accessible homes and reduces the need for residents to spend large sums of money on modifications in the future. Although the visitability features alone will not address the full scope of needs for accessible housing, they can be a cost-effective strategy for increasing the supply of accessible units in a community and contributing to socially cohesive neighborhoods, as residents will less likely be forced to move as they age.

This paper discusses the origins of visitability as an inclusive design strategy and the benefits of providing visitability features in new single-family homes. It offers examples of both regulatory and voluntary initiatives, discusses some barriers to the continued implementation of visitability, and describes strategies that have emerged to promote its future success. The paper also explores the chief reasons why visitability mandates continue to face opposition, primarily from homebuilders; reasons for the perceived limited consumer demand; and why there is nevertheless a strong case for its implementation.

To evaluate the nationwide impact of the visitability movement, the authors of this paper studied, tracked, and compared programs and initiatives. The findings update and build upon previous research by Kochera (2002), Spegal and Liebig (2003), and Maisel (2006). The authors also carried out extensive Internet searches and read postings on visitability discussion and announcement lists, and conducted many telephone interviews with federal, state, and local housing agencies, finance departments, builders, and disability advocates' offices. The authors analyzed these programs, interviewed stakeholders involved in implementation, learned why jurisdictions chose a specific strategy, and, to the extent possible, determined the actual number of visitable homes that have been built as a result of various initiatives.

Advancing visitability requires increasing both its supply and demand. This paper argues for the adoption of visitability by the home construction industry, provides policymakers with examples of available strategies, and educates consumers, both with and without disabilities, to understand the potential value of a visitable home to meet future needs.

AGING OF POPULATION AND PREVALENCE OF DISABILITIES

Researchers and policymakers expect the need for visitable housing to increase in the next few decades as the country's population ages. Since 1900, the percentage of Americans 65 years and older has more than tripled (from 4.1 percent in 1900 to 12.4 percent in 2000), with the actual number of older people increasing eleven-fold (from 3.1 million to 35.0 million) over the same period (Administration on Aging 2002). The U.S. Census Bureau estimates that the number of persons age 65 and older will grow to almost 40 million by the year 2010 and 70 million by 2030 (U.S. Census Bureau 2004).

Demographic trends, including the aging Baby Boomer generation, lower birth rates, and longer life spans, are creating this population shift. Furthermore, advances in medicine and technology are allowing people to survive accidents and illnesses that were once fatal. Millions of Americans have disabilities that impair their mobility. Approximately 22 million persons ages 65 and older reported having physical difficulties in 2006. Of that number, about 14 million persons reported having difficulty walking a quarter of a

mile and 11.5 million reported difficulty climbing ten steps without resting (National Center for Health Statistics, 2006).

Data from the National Health Interview Survey (NHIS) and the Census Bureau's Survey of Income and Program Participation indicate, respectively, that 1.7 million to 2.3 million individuals use wheeled mobility devices. An additional 6.1 million individuals use other devices, such as canes, crutches, or walkers. Beyond those numbers are other individuals who do not use mobility devices but have diseases or conditions such as multiple sclerosis or severe arthritis that make negotiating steps extremely difficult (Kaye, Kang, and LaPlante 2000). Furthermore, the above figures do not include people with injuries that result in a temporary disability.

Many older people have trouble carrying out daily activities such as eating, dressing, and bathing, or household tasks such as housework, laundry, cooking, and using the telephone. According to AARP Public Policy Institute (PPI) analysis of the 2005 NHIS, 4.6 million (13 percent) of the older population had difficulty with at least one daily activity (Houser 2007). In 2005, 25 percent of persons between the ages of 65 and 74 reported a limitation caused by one or more chronic conditions, while 44 percent of persons 75 years and older reported such limitations (HHS, CDC, and NCHS 2007). Most people, particularly people with mobility limitations, can benefit from the reduction in effort and increased safety provided by visitability features.

PHYSICAL BARRIERS IN TODAY'S HOUSING SUPPLY

Between 1990 and 2005, the number of occupied housing units in the United States increased about 16 percent, from 91.9 million to 108.8 million (U.S. Census Bureau 1990, 2005). As the number of housing units grew, so too did the number of households. In 2006, the American Housing Survey reported a total of about 111 million households, about 20 million more than in 1990 (U.S. Census Bureau 1990, 2006). More than 23 percent of these households contained one or more persons age 65 or older (U.S. Census Bureau 2006).

Approximately 70 percent of Americans live in single-family homes (U.S. Census Bureau 2001), and the overwhelming majority of these housing units have barriers that make it difficult or impossible for someone with physical disabilities to enter and exit. Many houses have steps at all entrances and hallways and doorways too narrow for users of wheelchairs or walkers to pass through easily, if at all.

IMPACT OF CURRENT HOUSING CONSTRUCTION PRACTICES

The current design of most houses can compromise people's health and safety, force people to move to different housing, or lead to premature institutionalization (Access Living and the Center for Urban Research and Learning 2000).

LIVING IN UNSAFE, UNHEALTHY HOMES WITH BARRIERS

Many people with severe mobility impairments risk injury from falling while being carried in and out of the home, and they may be unable to exit their homes independently in an emergency. "In 2005, 15,800 persons aged 65 and older died from falls; 1.8 million

older Americans were treated in emergency rooms for their injuries, and 460,000 were hospitalized. Every year, falls among older people cost the nation more than \$19 billion in direct medical costs. By 2020, the total annual cost of these injuries is expected to reach \$43.8 billion” (CDC n.d.).

Narrow bathroom doors keep many wheelchair users from entering their bathrooms, forcing them to rely on other methods of personal hygiene such as bedside commodes and sponge baths. Furthermore, narrow bathroom doors may force people using walkers to maneuver sideways through the door, increasing their risk of falling. Narrow doors also may cause people who cannot walk to adopt unsafe strategies such as lowering themselves out of their wheelchair to scoot on the floor or transferring from their wheelchair to a narrower but dangerous alternative such as a desk chair on casters.



Figure 1: Many bathroom doors are too narrow for a wheelchair to pass through.

Barriers within a home can also increase the work and stress of the caretakers who assist older adults and people with disabilities. Many family caregivers report that they suffer physical injuries as a result of lifting and handling their relatives, as well as psychological health problems such as fatigue, anxiety, and depression (Brown and Mulley 1997). Also, home care clinicians report frustration when the family caregiver fails to implement recommended home modifications to improve an individual’s functioning and safety because of lack of time, resources, or energy (Messecar et al. 2002).

INABILITY TO AGE IN PLACE

According to a 2004 survey conducted for AARP, more than four in five (84 percent) persons age 50 and older strongly or somewhat agree that they would like to remain in their current residence for as long as possible (AARP/Roper Public Affairs & Media Group 2005).

Aging in place offers numerous social and financial benefits. Research shows that independent living promotes life satisfaction, health, and self-esteem, three keys to successful aging. Furthermore, older adults get a sense of familiarity, comfort, and meaning from their own home (Herzog and House 1991). The 2004 AARP survey noted above found that 95 percent of the persons whose home was able to meet their needs very well or somewhat well reported being satisfied with their lives a majority of the time. In contrast, 86 percent of those whose homes did not meet their needs reported being satisfied with their lives the majority of the time.

Researchers have also found a strong correlation between active participation in the community and general life satisfaction (Hendershot 2004). According to the 2000 National Organization on Disability/Harris Survey of Community Participation, 46 percent of people with disabilities, compared with 23 percent of people without disabilities, reported feeling isolated from their communities (Harris Interactive 2000). Data from the 2002 NHIS indicated that building design problems are the most frequently cited barriers to community participation for adults, whether with or without disabilities.

Despite preferences to remain in their homes, many older adults and younger individuals with disabilities could be forced to move to an institutional setting because their homes are ill-equipped to meet their changing needs. Others who remain in their homes but are unable to make necessary renovations risk living with barriers that endanger their safety and limit their ability to participate in the community. Approximately 1.14 million older persons with health and mobility problems have unmet needs for additional

“When people have to leave the neighborhood because their house no longer meets their need, it’s unnecessary. It’s a forced migration in a sense.”

Rocky Marcoux, Commissioner for the Department of City Development, City of Milwaukee, WI

supportive features in their dwelling units (Pynoos 2001). A recent study noted that more than one-third of older adults reported feeling concerned about being forced into a nursing home as a result of barriers in their home. They also said they found it difficult to find and afford help to modify their homes to meet their needs (Hammel et al. 2005).

A move to an assisted living facility or nursing home can impose significant psychological and financial burden. Besides the emotional trauma associated with leaving a home and neighborhood, the financial costs are extremely high. The overall average monthly base fee for an individual in an assisted living facility was \$2,968, or \$35,616 annually as of 2006 (MetLife 2006a). These figures do not include additional fees charged by 23 percent of assisted living facilities, which range from \$750 to \$2,200 monthly (MetLife 2006a). The average cost for a private room in a nursing home is \$206 a day or \$75,190 a year (MetLife 2006b).

Federal and state funds pay for the bulk of nursing home costs. People who enter nursing homes paying out of pocket for their care often exhaust their savings and then must turn to the Medicaid program for assistance. Thus, helping people to remain in their homes could lead to substantial savings for individuals and society as a whole.

INCREASED NEED FOR RENOVATIONS

Accessibility barriers within homes often lead to the need for extensive and expensive renovations or home modifications. The NAHB surveyed remodeling companies in 2007. Seventy-two percent of the respondents reported modifying homes for aging-in-place needs, up from 60 percent in 2006. In addition, 75 percent of remodelers noted an increasing number of requests for aging-in-place features over the past five years (NAHB n.d).

Although home modifications provide necessary support to older adults and individuals with disabilities, making extensive renovations is more costly than having basic access features incorporated in a house during initial construction. In a 2003 AARP survey of persons age 50 and older with disabilities, respondents said that cost was the primary reason they did not make the home improvements they believed they needed to age in place (Gibson et al. 2003).

EVOLUTION OF ACCESSIBLE HOUSING POLICY

FEDERAL HOUSING POLICY

The movement for accessible environments began in the 1950s in response to the needs of disabled veterans and other advocates for people with disabilities. Early efforts focused on public buildings assisted by federal funds, such as post offices. A 1958 conference sponsored by the President's Commission on Employment of the Handicapped, the National Easter Seal Society, and the American National Standards Institute (ANSI) represented the first effort to address building design as an issue for people with disabilities. The voluntary standards that emerged from this gathering were published in 1961 under the title *A117.1 Making Buildings Accessible to and Usable by the Physically Handicapped*.

This action was followed by congressional passage in 1968 of the Architectural Barriers Act (ABA). The ABA requires access to facilities designed, built, altered, or leased with federal funds. This effort was strongly inspired by the Civil Rights Act of 1964 and later strengthened by the Rehabilitation Act of 1973. Section 504 of that act was the first statutory definition of discrimination that included people with disabilities (Welch and Palames 1995). The act prohibits organizations and employers from excluding or denying individuals with disabilities the opportunity to participate in, and have access to, programs and services provided with public funding. Inaccessible physical facilities cannot be used as a reason for denying access to programs.

In 1980, the American National Standards Institute revised ANSI A117.1 to include specific requirements for accessibility in housing, providing a voluntary standard that could be used as a model for regulations. This was the first accessibility standard to use a scientifically derived database to establish design criteria. Since 1980, the standard, now known as ICC/ANSI A117.1, has been revised and improved several times.

The ABA and the Rehabilitation Act require a small percentage (5 percent) of housing constructed with public funds to have accessible dwelling units. But only people below certain income levels are eligible for publicly funded housing. The Fair Housing Amendments Act of 1988 expanded the scope of housing covered by accessibility laws to all new multifamily housing, *both public and private* (Welch and Palames 1995). The act requires every unit in all newly constructed, multifamily, elevator-equipped housing with four or more units, and all ground-floor units of multifamily residences to be accessible. In 1990, Congress passed the Americans with Disabilities Act (ADA). Title 2 of the ADA applies to state and local government housing programs and reinforces the provisions of Section 504.

The U.S. Supreme Court *Olmstead* decision in 1999 also impacts accessible housing. The decision requires states to administer services, programs, and activities for persons with disabilities “in the most integrated setting appropriate.”¹ That decision prompted new

¹ *Olmstead v. L.C. and E.W.* (98-536) 527 U.S. 581 (1999).

efforts to make homes more accessible, with some states using federal grant programs to provide funding for home modifications.

A bill has been introduced in Congress—the Inclusive Home Design Act—that would increase the supply of visitable houses throughout the country. Representative Jan Schakowsky (D-IL) first introduced the bill in 2003, reintroduced it in 2005, and then introduced it yet again on November 15, 2007, as H.R. 4202. The legislation would cover all single-family homes that receive assistance from the federal government, including construction funding and tax credits. H.R. 4202 would require that single-family homes using federal financial assistance be constructed with at least one zero-step entrance, thirty-two inches of clear passage space for all interior passage doors on the main floor, and an accessible bathroom with at least a toilet and sink on the main level. Like the local visitability legislation that preceded and inspired it, the federal bill permits the zero-step entry to be located on an accessible route at the front, side, or back of the home, or through an attached garage.

UNIVERSAL DESIGN

Universal design, a term coined in the mid-1980s by internationally recognized architect Ron Mace, is a strategy intended to be incorporated into all facets of product and environmental design, including housing. Many people view universal design as a new term for accessible design. However, universal design actually originated out of a critique of accessible design and has a more encompassing philosophy (Steinfeld 1995).

Universal design seeks to make the built environment usable to the greatest extent possible by everyone, regardless of age, ability, or status in life; products and environments are designed for people without disabilities as well as for people with disabilities. Practicing universal design means abandoning the notion of the “average” user entirely and adopting an inclusive and pluralistic model in which design for differences is a key strategy. Aesthetics are an important part of universal design because design features that are identified solely with disability can stigmatize a home and make it unmarketable to the broader population.

The objective of universal design is to introduce higher levels of access and usability within the constraints of affordability and throughout any project or policy. The universal design concept is being introduced into standards and regulations, but it is also being implemented on a voluntary basis as a means to address the lifetime needs of housing consumers, particularly people over 50.

THE EMERGENCE OF VISITABILITY IN THE UNITED STATES

Visitability represents a highly focused strategy in the continuing evolution of accessible housing policy and practice in the United States. Although universal design and visitability originated at approximately the same time, the two movements did not converge during their early years. Whereas universal design emerged from the design and rehabilitation professional communities, visitability started and continues to be driven by grassroots organizers. However, there are important commonalities between the two movements. Both concepts reflect a new paradigm of disability in which a person’s social and physical environment rather than the person’s physical condition is “blamed” for disablement. That is to say, barriers in the environment are said to create the disablement

(Brandt and Pope 1997). Universal design and visitability are also consumer oriented and can appeal to all persons, not just older adults and individuals with disabilities. Visitability is actually an example of universal design from a policy perspective because it applies to housing that is not necessarily occupied by people with disabilities. It provides a foundation for improving the home with additional universal design features, thereby lowering the cost of achieving higher levels of usability. However, unlike universal design, visitability focuses only on housing, includes measurable design criteria, and seeks a rapid change in home construction practices.

Just as universal design and visitability are similar but not identical, there also can be some confusion between visitability and other terms referring to residential design philosophies or standards. For example, some people incorrectly use the terms “visitability and” “design for aging in place” interchangeably. While the two concepts share some essential architectural features, their goals are not identical. Design for aging in place often requires, for a given individual, considerably more features than does basic visitability.

Concrete Change, a disability advocacy group in Atlanta, Georgia, introduced the concept of visitability in the United States in 1987, originally using the term “basic home access.” The founders had been working with the national advocacy group ADAPT, whose message “A lift on every new bus!” culminated in the inclusion of that requirement in the ADA. Transferring that principle to housing, the initiators of the concept envisioned “A zero-step entrance on every new house.”

In 1989, the advocates won their first local victory. The Atlanta affiliate of Habitat for Humanity began incorporating a zero-step entrance and wide interior doors in all their new homes. The term “visitability” was suggested by a young Japanese disability advocate, Yoshi Kawauchi, who was studying in the United States in 1990. He remarked that in Europe “visitability” was used to describe the same concept. This word was immediately adopted because it made explicit that the movement is about all homes, not merely “more housing for the disabled.” A visitable home is not necessarily intended to have the level of accessibility needed by a person with a severe disability. It is intended to be a residence for anyone and to provide core access features for everyone.

Visitability is based on three fundamental principles:

- Accessibility is a civil right and improves quality of life.
- Some basic features of accessibility for new housing units can be provided at minimal cost if good design practices are followed.
- A limited number of essential features will increase the rate of adoption compared with a more extensive list of features (Maisel 2006).

In response to criticism that the three core features of visitability are insufficient, those promoting the concept argue that making widespread changes in routine home construction practices requires a short and highly prioritized list of features (Truesdale Steinfeld 2002). Advocates believe that this philosophy is a feasible way to introduce accessibility into the single-family home market on a widespread basis.

The list of features must also be both short and reasonably inexpensive, advocates say, so as not to undermine housing affordability. Furthermore, the features must benefit a wide range of people, not just people who have disabilities. For example, it would be difficult to provide a full bathroom with a roll-in shower and a bedroom on the first floor of every new house. The additional cost would be significant, and many people (including some people with mobility impairments) prefer a bathtub. In contrast, visitability features generally have little impact on housing designs and can be cost-effective.

“When the Ohio Housing Finance Agency first hired me about a year and a half ago, I started getting acquainted with the agency’s universal design menu that developers could choose from to get extra optional points on their applications for tax credits. I noticed that the policy permitted building several interior access features while omitting a zero-step entrance. That seemed to me like a backwards way of doing things, so I started searching the web for alternatives. . . . That’s where I saw the concept of prioritizing of a few key features, including the entry.”

Debbie Leasure, Data Analyst and Planner, Ohio Housing Finance Agency

A visitable house is defined as a house built deliberately to include:

- A zero-step entrance
- Wide interior doors
- A half bathroom on the main floor

The visitability movement targets housing units not otherwise covered by existing law:

- New single-family homes, duplexes, triplexes, or townhouses (i.e., the housing types not covered by the Fair Housing Act)
- Housing not required by federal law to incorporate access features (e.g., not covered by Section 504 of the Rehabilitation Act, which mandates a percentage of accessible houses when federal funds are used)
- Housing intended for the open market rather than custom built for a specific buyer, such as a person with a disability

TYPES OF VISITABILITY INITIATIVES

Current visitability initiatives² vary significantly, primarily in four ways:

- Geographic regions covered
- Features included
- Strategies by which they are implemented and enforced
- Scope of housing covered

For example, some visitability programs cover housing within an entire state, whereas others affect only cities or counties. Others have a national scope, such as the aforementioned proposed Inclusive Home Design Act. Another difference is that some programs strictly adhere to the three basic accessible features, whereas others include a few additional architectural elements such as lever handles, blocking for grab bars in bathroom walls, and accessible environmental controls.

Visitability programs also vary in how they are implemented. Some are mandatory, with a law or an ordinance requiring builders to include the visitable features during new construction. Others are voluntary. With regard to scope, some ordinances cover only houses constructed with some form of government assistance such as tax breaks, reduction of fees, or down-payment assistance, whereas a few ordinances cover every new house built.

Case Study of Bolingbrook, Illinois

Edward Bannister, a local advocate, began the effort to enact a visitability ordinance in Bolingbrook, a fast-growing community of 70,000 people, about twenty-five miles from Chicago. He obtained support for the idea from Mayor Roger Claar; Dennis Kowalczyz, the director of community development; and Dan Buonamici, the building commissioner, who drafted an ordinance. The village board passed the ordinance unanimously, but the mayor did not sign the measure into law for several years, preferring that builders comply voluntarily. Then in June 2003, the mayor signed the ordinance to ensure that the policy continued under future city leaders. Pulte Homes, one of the biggest homebuilding companies in the United States, is among the builders constructing the homes. As of 2007, the more than 3,500 new homes demonstrate that zero-step entrances can be integrated into the overall design, are practical even in snow country, and are cost-effective even with basements. As attested by Mayor Claar, no moisture problems have been reported at grade entrances, even though the homes have weathered several snowy winters (Claar 2007).

² A complete list of all current state and local visitability programs can be found at <http://www.ap.buffalo.edu/idea/visitability>.

MANDATORY INITIATIVES

In 1992, the city of Atlanta, Georgia, passed the first ordinance requiring basic visitability features in certain private single-family homes or duplexes. The ordinance applies to houses that receive benefits such as tax incentives, city loans, land grants, impact fee waivers, or local dispositions of federal block grants (Kochera 2002). Similar legislation was enacted in Austin, Texas (1998), Urbana, Illinois (2000), San Antonio, Texas (2002), and several other locations. The most recent ordinances were passed in Birmingham, Alabama, in November 2007 and Pine Lake, Georgia, in December 2007. Texas (1999), Georgia (2000), and Kansas (2002) were the first states to pass legislation similar to the Atlanta ordinance.

Not all mandates involve ordinances. Government officials can also change housing development practices by tying access requirements to existing public assistance programs. For example, the board of directors of the Ohio Housing Finance Agency created a policy that makes access features a requirement for developers who take advantage of federal tax credits for affordable housing. Another example is a development built under the auspices of the DeKalb County, Georgia, Housing Authority. The housing authority decided to require visitability features for a program that gives financial assistance to first-time homebuyers of single-family homes. Architects and builders who choose to participate in the program design and build accordingly. This project resulted in more than 100 homes built with basic access, which the builder estimates had an added cost of only \$75 per home (Smith 1994).

The Hope VI program of the U.S. Department of Housing and Urban Development (HUD) is a nationwide example of a programmatic voluntary visitability initiative that ties visitability to existing financial benefits. The Hope VI program was initiated in 1992 to raze large decades-old housing projects for families with low incomes and replace them with new housing providing units for residents of varied incomes. Public housing authorities solicit proposals from developers, who then compete for HOPE VI funding from HUD. Submitted applications are reviewed, scored, and then awarded based on a point rating system. For example, more points are given for past experience, qualified personnel, and project feasibility. During its first years, the HOPE VI program required access features only in the units required by law. In 2000, at the urging of the Disability Rights Action Coalition for Housing, HUD modified its grant applications for Hope VI funding by adding a voluntary point for visitability. The additional point for visitability features appears to have offered enough of an incentive for a number of applicants to commit to visitable construction. HUD reports that more than 90 percent of the 237 applicants to date have committed to incorporating visitability in their construction proposals to enhance their application (Roma Campanile, HUD Office of Public and Indian Housing, personal communication, February 19, 2008).

Visitability has also been bundled with other innovative housing design practices. Austin, Texas, developed the S.M.A.R.T. (safe, mixed income, accessible, reasonably priced, and transit oriented) Housing program to encourage incorporation of several socially responsible features in both single- and multifamily housing developments. Builders who adopt the S.M.A.R.T. program requirements, one of which is visitability, receive fee waivers, fast-track review and permit processing, advocacy by S.M.A.R.T. program staff to solve problems that emerge during development, and a density bonus (e.g., smaller lots without the need to apply for a zoning variance). Since April 2000, about 2,700 homes have been built under the S.M.A.R.T. program. This program has elements of both

mandatory and voluntary policies. Austin and Texas have mandatory visitability laws that apply to publicly supported home construction. While builders are not forced to participate in the program, if they do, the visitability mandate kicks in because of the fee waivers and the use of public funds in the administration of the program. Notably, the S.M.A.R.T. Housing program does not provide tax credits, so there is no long-term negative impact on tax revenues. In fact, the program provides a benefit to builders for developing housing within the city limits, thereby increasing tax revenues by improving the relative advantage of building in the city compared with nearby suburbs (Stuart Hersh, project coordinator, S.M.A.R.T. Housing program, personal communication, April 2008).



Figure 2: Visitable home showing a zero-step entrance in Bolingbrook, Illinois, where nearly all homes have basements.

Common to each of the above examples is that builders who choose to take advantage of existing incentives must at the same time include visitability features.

Although the majority of mandatory initiatives apply only to homes built with public funds, three ordinances require visitability for all new homes, including private homes. Pima County, Arizona, enacted the first comprehensive visitability ordinance in February 2002, requiring a zero-step entry and interior doorways at least thirty inches wide in every single-family home.³ Like other ordinances, it includes waivers for situations when a zero-step entrance is impractical because of site conditions. The ordinance also requires lever door handles, reinforced walls in the ground-floor bathrooms for future installation of grab bars, and reachable electrical controls for someone in a wheelchair.

Bolingbrook, Illinois, passed similar legislation in 2003. In October 2007, Tucson, Arizona, passed a visitability ordinance that covers every new home, mirroring the ordinance enacted several years earlier in the surrounding Pima County.

VOLUNTARY INITIATIVES

Visitability has been implemented through voluntary approaches such as monetary incentives, demonstration programs, certification procedures, and public awareness campaigns. An example of an incentive is the Illinois Accessible Housing Demonstration Grant Program Act enacted in 1999, which grants up to \$5,000 to builders who construct

³ To achieve passage of the Pima County legislation, local advocates accepted the thirty-inch clearance at doorways instead of the ideal thirty-two-inch standard. This compromise was considered acceptable because the thirty-inch clear passage width is wider than standard practice and in fact usable by some wheelchair users. They further recognized that their legislation is much broader in number of units covered than any preceding legislation.

at least 10 percent of the houses in a development with one zero-step entry, wide interior doors, and a few other features.

In some states, initiatives involving new financial benefits for builders or buyers have not been successful because policymakers and even advocates feared they would decrease revenues. In Georgia, the state legislature passed a proposed state law offering a tax break for every home built with basic access, but the governor vetoed it because he determined that it would severely undermine the tax base. The law was supported by builders but opposed by many disability rights activists, partly because they believed that basic accessibility features should be provided as a matter of course and partly because they agreed with the governor that it would reduce state tax revenue needed for other purposes.

Voluntary programs without monetary incentives have also been implemented. One of the earliest was a formalized voluntary program in Irvine, California. In 2000 the city council unanimously agreed to encourage homebuilders to incorporate universal design features in their new homes. Under the agreement, homebuilders were required to present new homebuyers with the Universal Design Features List of Options, which contained a list of thirty-three universal design features available to homebuyers. Despite widespread political support, the initiative had only limited success because no one was designated to promote it. Moreover, records were not kept as to how many builders distributed the list to buyers nor how many homes with access features resulted (Kaminski et al. 2006).

Another voluntary program that did not involve a monetary incentive was a partnership between the Pennsylvania Housing Finance Agency (PHFA), several other Pennsylvania agencies, and Help Yourself Design, Inc., a local accessibility design firm. In their demonstration program, operative from 2003 to 2005, eight volunteer builders constructed a total of fifteen homes. The state-funded project did not provide financial assistance to the builders but did include technical assistance and publicity for the houses. It also included a research activity that documented the costs and other construction-related information. The long-range goal was to produce technical information for builders to demonstrate that visitability is both feasible and inexpensive. The program did not include formal follow-up to discover which builders continued to build visitable homes after the program ended, nor research on the number of buyers who chose to include visitable features if they were offered by builders.

Certification programs are another voluntary strategy. For example, the EasyLiving Home^{CM} program encourages builders of single-family homes to broaden their market by providing homes that are easy for all persons to live in and visit (<http://www.easylivinghome.org>). Established in Georgia in 2000, the EasyLiving Home^{CM} program was developed by a group of public and private organizations representing the building industry, government, and accessibility advocates.⁴

⁴ The group includes members from AARP of Georgia, Atlanta Regional Commission, Concrete Change, Eastern Seals–Southern Georgia, Fannie Mae Atlanta Partnership Office, Georgia Department of Community Affairs, Governor’s Council on Developmental Disabilities, Homebuilders Association of Georgia, Shepherd Center, Statewide Independent Living Council of Georgia, and Universal Design Alliance.

In addition to the three core elements of visitability, the program requires a bedroom, a full bathroom, some entertainment space, and a kitchen on the main floor. Homes that incorporate these features are inspected individually and receive a seal of approval from the EasyLiving Home^{CM} Coalition. Approximately forty for-profit Georgian homebuilders have paid the fee to participate, and hundreds of certified houses have been constructed over a wide range of locations, lot types, and price points. EasyLiving Home^{CM} affiliates have also been formed in three other states.

Despite its partial success, the program has not been adopted as widely throughout the state as its organizers had hoped. To date, fewer than 900 certified houses have been constructed, while during the same period, more than 300,000 single-family homes were built in Georgia without any access features. Likewise, the three EasyLiving Home^{CM} affiliates in other states so far have collectively produced fewer than fifty houses in their voluntary programs.

POTENTIAL BARRIERS TO VISITABILITY

There are certain real and perceived barriers to implementing visitability. Homebuilders have raised concerns and objections, some states have legal restrictions that may impede adoption of local visitability ordinances, and many consumers may have unrealistic attitudes about their ability to remain in their homes as they age.

HOMEBUILDERS' PERSPECTIVE

As noted above, some individual homebuilders have stepped forward to voluntarily engage in proactive visitability initiatives, such as the EasyLiving Home^{CM} program, the PHFA program, and others. Most homebuilders support voluntary and incentive-based visitability programs; some, in fact, believe that access features can be a marketing advantage. However, while supporting efforts by builders “to develop voluntary programs promoting accessible design features for single-family construction and remodeling,” in 2007, NAHB reaffirmed a policy opposing mandatory visitability laws (NAHB n.d.)

Homebuilder objections to mandated visitability generally involve the following rationales:

- The market will respond if the public demands more accessible housing, but builders find “virtually zero demand for accessible units in many homebuilders’ sales offices” (Lemmon 2007).
- Homebuyers should have the freedom to choose the types of houses they want, not be forced to accept features they may not need or want.
- A blanket regulation for such features as a zero-step entry cannot anticipate the obstacles posed by varied topography (Lemmon 2007).

- Incorporating visitability features increases construction costs, which has a negative impact on affordability for homeowners.

How Courts Have Addressed Visitability

A group of builders challenged in court the Pima County, Arizona, ordinance, the only visitability regulation to be challenged by legal action. The builders argued that the law was unconstitutional, claiming it violated property rights and personal freedom. The suit was filed four days before the ordinance took effect by the Mountain States Legal Foundation, a Denver, Colorado, group, joined by the Southern Arizona Home Builders Association (SAHBA). Meanwhile, the builders petitioned the courts to issue an injunction permitting them to omit the access requirements in the houses built in Pima County during the time they were suing.⁵ The courts refused, so builders began constructing houses incorporating access requirements. Later, the U.S. District Court of the District of Arizona dismissed the case, saying that entities in Colorado lacked jurisdiction to sue in Arizona.

The builders sued again, this time in State Superior Court.⁶ A Tucson builder and SAHBA claimed “that the relevant county ordinance violates the equal protection and privacy clauses of the state constitution” (Lawlor 2004).⁷ Arguing that the ordinance deprived homeowners and builders of a fundamental right to design private homes, SAHBA eventually took its case to the Arizona Court of Appeals. In its verdict, the Court of Appeals unanimously ruled in favor of the ordinance. The homebuilders then attempted to take the case to the State Supreme Court but it refused to hear the case.

⁵ David A. Garber et al. v. Pima County Arizona et al., CIV-02-489-TUC-FRZ.

⁶ Washburn v. Pima County, 206 Arizona 571, and 81P.3D 1030, review denied April 19, 2004.

⁷ The text of that case can be found at <http://www.apltwo.ct.state.az.us/Decisions/CV20030107.pdf>.

ADVOCATES' PERSPECTIVE

To counter builders' assertions that consumers rarely demand visitability and that change should be left entirely to the free market, visitability proponents argue that most homebuyers are not aware of the visitability movement and do not realize that they can ask for these features when building a home. Furthermore, potential buyers of new homes who do request relatively simple changes in the home plan, such as increasing bathroom door widths, may be quoted high prices.

Advocates also say that builders often shape the market rather than merely respond to market demands. For example, builder magazines have publicized ways builders can induce the public to include high-tech electronics as standard options in new homes (Nation's Building News 2006). Also, advocates argue, when people are most likely to need the access features, such as after a traumatic event that causes impaired mobility, they are not in a position to influence the market.

In response to homebuilders' concerns about property rights, visitability supporters point out that public policy already recognizes that homes are not entirely a private matter, since many code items address safety and community aesthetics for the larger public good. For example, not only do codes regulate safety items such as smoke detectors, sprinkler systems, minimum door width for passage doors, and maximum height of stair risers, but many locales also dictate aesthetic issues such as the minimum distance of setbacks from the street, the height grass may be allowed to grow, and a specified additional space for storage in garages so that storage sheds are not erected in yards. Among the most common additions to code in recent years have been sustainable or "green" design features such as energy-efficient windows.

"When I first gave a presentation on visitability to the Senior Services Advisory Board, they looked at me like I was from another planet. They had never heard anyone say that all new houses, or almost all, should have access. Fortunately they were receptive and I explained it . . . starting with the general principle of inclusion, including seniors."

Jay Ruggeri, city councilman who sponsored the Lafayette, Colorado, ordinance

Marketability, Aesthetics, and Construction Issues

Builders of visitable homes report that they have not experienced any difference in the speed with which they sell those homes compared with homes without such features. According to Nick Hammer, president of Help Yourself Designs, Inc., his visitable homes "all sold within the time frame that satisfied the builders. I would say they sold at the same speed as regular houses. One even sold faster than we wanted because we wanted to use it as a show house when it was done, but the buyer wanted it immediately and we could hardly say to the builder he couldn't sell it" (Nick Hammer, personal communication, September 2007). For-profit builders in San Antonio, Texas, and Georgia reported similar findings. A building official in Bolingbrook, Illinois, reported no impact on house sales resulting from the requirements for visitability in his town (Dan Buonamici, personal communication, June 2007). In addition, officials of public housing authorities that made visitable houses available for rent at market rate or for sale for private ownership stated that the nondisabled public readily rented these homes (John Hiscox, personal communication, September 2007).



Figure 3: Visitable home showing a "landscape ramp" in Buffalo, New York.

One contractor, who is experienced in design and construction and who has overseen renovations of more than 2,000 homes of people who became disabled, said that for architects and builders to become proficient at inexpensive, aesthetically pleasing zero-step entrances, they need to plan in advance and to extend their attention from two dimensions to three: to plan not only the elevation but also how the foundation actually fits in the ground on a given lot (Roger Borgenicht, personal

communication, September 2007). Steve Wall, president of Wall Homes and builder of more than 150 visitable houses under the San Antonio, Texas, ordinance, reiterates the need for advance planning: “Planning in advance for garage and front door exposure, to locate the entrance where there is the minimal amount of slope, is very important. . . . We try to put the no-step entrance at the front, and if that is not feasible, then the garage. Often we’re able to do both” (Steve Wall, personal communication, April 2007). A stepless entrance can be created without what is technically considered a “ramp” (i.e., a constructed surface with a slope greater than 1:20 and drop-offs on either side that require protection and railings). Instead, in the great majority of situations, the earth can be graded so that a sidewalk connects directly to a porch or terrace at the same level as the interior floor. This approach is often called a “landscape ramp.”

While zero-step entrances can be easy to accomplish when the home is constructed on a concrete slab, zero-step entrances over basements and crawl spaces require further technical knowledge of most residential builders. Construction details such as lowering the flooring system into a notch in the foundation wall (reverse brick ledge) or hanging the floor joists so that the top surface is level with the top plate of the foundation walls provide the means to avoid the use of a ramp.

In regard to concerns about possible water penetration and moisture damage of homes, proper engineering of the lot can preclude water penetration of houses, just as it does for public buildings. When the entrance is accompanied by a specific requirement that the threshold rise not exceed one-half inch, as required, for example, by the EasyLiving Home^{CM} program, builders sometimes find it difficult to match the level of the interior flooring or carpet to the inner rim of the threshold. This problem can be addressed by installing the threshold a bit higher than the subfloor to accommodate the addition of the finished floor on the inside and planning the outside elevation accordingly. Wall construction is usually protected from moisture damage by keeping the adjoining grade level six inches below the bottom of the siding. Additional ways to protect walls from damage include digging a six-inch trench along the foundation wall and filling it with gravel to ensure that water adjacent to the foundation will drain quickly away, damp-proofing additional courses in masonry construction, or installing a waterproof-membrane undersiding (ice and snow shielding) to protect sheathing and wood studs.



Figure 4: Zero-step entrances are still feasible in snowy Pittsburgh, Pennsylvania.

In communities where large numbers of visitable homes have been built, officials report widespread consumer satisfaction. Virtually no complaints have been voiced to officials in Bolingbrook, Illinois, or Austin, Texas (Dan Buonamici, personal communication, June 2007; Stuart Hersh, personal communication, April 2008). They also report no water damage related to the zero-step entrance. In both communities, which have flat terrain, the no-step entry has generally been provided by grading the lot around each house. Because more care than usual is given to stormwater drainage, the result has been improved stormwater management in developments with visitable housing. Officials also report that consumers notice and value the zero-step entry and comment on the benefits for moving and carrying things in and out of the home and the ease in hosting older relatives.



Figure 5: On steep terrain, a zero-step entrance may be more feasible at the back or side entrance.

In response to the builders' concern that a zero-step entry is not practical in some lots, visitability proponents point out that all known existing and proposed visitability-type laws that involve mandates have exemption provisions for sites that involve unusual difficulties. A zero-step entrance may not be practical in some situations, such as when the first floor level of a house must be located above a floodplain. Another exception is the relatively rare occasion when an infill house is built on a steep lot that has neither a driveway nor a back-alley approach. It is important to note that hilly terrain is not an impediment to cost-effective zero-step entrances. Because the entrance can be located at the back, side, or front of the houses, many options exist for a zero-step entrance. Driveways often provide a means of traversing a steep slope, and a stepless route can proceed from the driveway to the entrance. In cities where visitability ordinances exist, more than 95 percent of the lots have been found amenable to a zero-step entrance (Dan Buonamici, personal communication, June 2007).

COST

Some builders who have no experience in constructing visitability features may overestimate costs. For example, when a Georgian proposed a code change in 1991 to require wider interior doors, the president of the Greater Atlanta Home Builders circulated a letter saying that such a change would "require small houses and apartments to be increased up to 11 percent in size," which, he said, would increase costs by \$2,500 per unit. He further argued that "Because of the cost increase, this code change could deny housing to 15,000 to 20,000 families." Closer inspection of the drawings enclosed as evidence revealed that the cost estimate was based on enlarging the house a few inches for each door that had to be widened, rather than widening the doors within the existing square footage of the house plan. The NAHB used a similar argument to oppose the Fair Housing Act accessibility provisions for multifamily housing.

A HUD-sponsored study demonstrated, in contrast, that dwelling unit plans did not have to be expanded in size to accommodate the required clearances (Steven Winter Associates, Inc. 1993). The plans could easily be modified, with no impact on

marketability, to accommodate the increased opening sizes. Cost estimates by builders who have actually constructed visitable homes have been much lower than estimates projected by builders who have not built such homes. The professional construction cost estimator hired by Pima County, Arizona, estimated the cost at about \$100 for new houses built on a concrete slab, which included \$25 in overhead and profit for the builder.

Experiences in Georgia, Texas, and elsewhere have borne this out. Ed Phillips, executive director of the Home Builders Association of Georgia and a founding member of the voluntary EasyLiving Home^{CM} program, said, “When visitability features are planned in advance by a well-informed builder, [the] typical added cost is very low for a new, single-family detached home. . . . Less than \$100 for homes on concrete slabs, and \$300-600 for homes with crawl spaces or basements” (Concrete Change 2004). Stuart Hersh, a former building official and current coordinator of the S.M.A.R.T. Housing program in Austin, Texas, reported a typical cost of \$200 for visitability features (Stuart Hersh, personal communication, April 2008). Some builders contend that building a zero-step entrance on a concrete slab actually costs less than incorporating steps because less concrete is used. Compared with building on a slab, building a zero-step entrance on a house built over a basement or crawl space is more expensive, but typically not more than \$500 (Dan Buonamici, personal communication, March 2005).

In short, affordability is not compromised if the visitable features are incorporated early in the design process. Zero-step entrances can be inexpensive for several reasons. First, the cost figures refer to new construction, for which the builder can plan, site, and grade for cost-effectiveness. Second, the zero-step entrance can be located at the front, side, or back, or from an attached garage—whatever location is most advantageous. In addition, cost-effective methods have evolved in the field through direct construction experience (Smith and Pace 2007). For example, the city of Bolingbrook has made available to the public drawings illustrating the notched-foundation method many Bolingbrook builders use to construct zero-step entrances over basements (Dan Buonamici, personal communication, March 2005).

With regard to door width, one common misconception is that wider doors are not readily available and are more expensive because they require a special order. This misconception may have arisen because few retail home improvement stores stock the 2'10" door. Because most existing houses do not have doors that size, no demand for them exists in the replacement market. However, builders of new homes purchase their doors from wholesalers, not home improvement stores. When these doors are purchased in bulk, large builders report that the cost of a 2'10" or 3'-0" door is practically identical to that of narrower doors. In a limited study that surveyed five wholesale suppliers across the United States, researchers found that 2'10" doors, when purchased in units of 100, not only were readily available but also cost an average of only \$2 more than 2'8" doors, reflecting the additional material in the door (IDEA Center 2006).

If included during the design phase, the visitability features can be cost-efficient and provide advantages to the general population, not just older adults and consumers with disabilities. These design changes can also significantly increase the value of a home from the perspectives of safety, aesthetics, livability, long-term maintenance, resale, and other factors. Certainly the majority of new home plans already include at least a half bath on the main floor. When this is not the case, the addition of a half bath on the first floor could possibly be recouped by a slightly higher selling price that can be amortized

over thirty years and result in a negligible increase in monthly financing costs (Truesdale and Steinfeld 2002).

LEGISLATIVE OBSTACLES

Some states have legal restrictions that may impede adoption of local visitability ordinances. For example, many mandatory visitability efforts within California and New York have stalled because of laws that limit local legislation from exceeding the requirements of the State Building Construction Code. As a result, some cities in these states have adopted voluntary and incentive-based programs to promote visitability. For example, the California Department of Housing and Community Development drafted a universal design model ordinance in 2005 that identified features a builder must offer if a buyer requests them. Any California city or county may choose to adopt this Model Universal Design Local Ordinance. As in California, New York State law forbids municipalities from passing more stringent guidelines than those of the state. Consequently, cities such as Southampton and Syracuse have pursued voluntary initiatives.

UNREALISTIC EXPECTATIONS ABOUT AGING

Research conducted for AARP in 2003 reported that many Americans age 45 and older “exhibit a strong, and perhaps unrealistic, sense of optimism about the future.” Seventy-five percent of all respondents, and 82 percent of respondents 65 years and older, reported it was at least somewhat likely that they will be able to stay in their current homes for the rest of their life. Only 51 percent perceived any likelihood of needing to make changes to their current home (Mathew Greenwald and Associates, Inc. 2003). This optimistic attitude seems to suggest that many middle-aged adults delay planning for their old age. Greater awareness and more realistic planning by these older Americans could increase demand for accessible housing and have a significant impact on both the marketplace and public policy initiatives.

City and regional planners tend to underestimate the need for accessible housing when they focus on current disability rates in the population rather than the long-term use of houses by people with disabilities. Over the lifetime of a typical house, it will be home to a series of families, which increases the likelihood that a resident of any given house will personally experience a significant disability or host a close friend or relative with a disability. Asked about his motivation to incorporate visitability in his projects, builder Steve Romeyn, president of Windsong Properties, said of his developments, “These are active adult communities. I have a commitment to building these homes with access features. I myself am an ‘active adult’; I’m 57. You never know when someone’s functionality might change. I watched my own parents and grandparents develop some mobility problems” (Steven Romeyn, personal communication, April 2008).

In fact, one recent research study estimates that, conservatively, 25 percent of new houses built today at some point will have a resident with severe long-term mobility impairment. When a more broadly defined measure of mobility impairments is used, the proportion rises to 60 percent. When the researchers included visitors with disabilities in their estimates, the probability increased to 97 percent using the broader measure (Smith, Rayer, and Smith 2008). Because it is not possible to predict in which house a resident will develop a disability or which house will host a visitor with a disability, these findings underscore the need for policies that promote widespread access.

Moreover, visitability provides benefits to a wide range of users beyond homeowners and visitors with long-term disabilities. Nuclear families, friends, and other relatives who may need to use adaptive equipment because of short-term disabilities, parents pushing strollers into a home, or movers carrying furniture can all benefit from stepless entrances, wider hallways, and larger doorways. Visitability features also make it easier for emergency first responders such as firefighters and medical technicians to exit homes while helping crisis victims, and thus save lives.

EVALUATING VISITABILITY STRATEGIES

One measure of the effectiveness of various strategies is the number of houses that resulted. As of December 2007, fifty-seven state and local initiatives had been adopted in the United States, of which thirty-three (58 percent) are mandatory and the other twenty-four are voluntary. Unfortunately, not all of these initiatives identify a local entity responsible for implementation and enforcement, and therefore no one tracks results in a formal manner (Spegal and Liebig 2003).

However, some programs do formally track results, and even with limited data available, local government officials report that about 30,000 visitable homes have been built as a result of mandatory ordinances (see table 1). Pima County, Arizona, whose ordinance applies to all new homes, has the greatest number of visitable homes, with more than 15,000 built. The second, third, and fourth largest supply of visitable homes can be found in San Antonio, Texas (more than 7,000), Bolingbrook, Illinois (more than 3,500 and Austin, Texas (more than 3,000). Locations with smaller numbers make up the rest of the total.

Location	Visitable homes resulting from a mandatory ordinance	Visitable homes resulting from a voluntary program
Pima County, Ariz.	15,000	
San Antonio, Texas	7,000	
Bolingbrook, Ill.	3,500	
Austin, Texas	3,100	
EasyLiving Home ^{CM}		950
Pennsylvania		18
Demonstration homes		< 30
Totals	28,600	1,000

Note. Numbers are approximate.

No definitive information exists comparing the number of homes built as a result of mandatory visitability programs with the number built as a result of voluntary visitability programs. However, research comparing the effectiveness of mandatory and voluntary programs for other forms of inclusive housing is available (Brunick, Goldberg, and Levine 2003). In response to the lack of affordable housing in many areas, municipalities are turning to inclusionary zoning practices (ordinances that require that a given share of new construction be affordable to people with low to moderate incomes). In comparing mandatory and voluntary inclusionary zoning practices, researchers found that local governments increasingly favor mandatory programs because these programs—

- Generate more units of affordable housing
- More effectively reach a wide spectrum of individuals
- Provide more uniformity and predictability in their implementation and enforcement. (Brunick et al. 2003)

The data available on visitability suggest that, as with affordable housing efforts, mandatory programs generally yield better results. Compared with the estimated 30,000 visitable homes built under mandatory legislation, fewer than 1,300 visitable houses have been built under identified voluntary programs. Omitted from that estimate are houses built with access in age-restricted communities. While there are no legal requirements for access in open-market homes within these communities, no research has been done to uncover how many of these developments voluntarily incorporate access.

Besides total number of houses, effectiveness can be assessed by evaluating the features or scope of visitability initiatives. Although more subjective, this approach recognizes that not all visitability initiatives are equal. Some municipalities have mandatory programs that they define as visitability, but they do not include all three of the features associated with visitability (e.g., Naperville, Illinois, which has requirements for interior features but does not require a zero-step entrance). Other mandatory programs require not only the basic visitability features but also a few other universal design features. With regard to scope, some mandatory initiatives apply both to homes that receive public funding and to homes built entirely with private funds (e.g., Bolingbrook, Illinois, and Pima County, Arizona). Others apply only to homes for which the builder or buyer receives a financial benefit from specific government programs (e.g., Atlanta, Georgia; San Antonio, Texas; and St. Petersburg, Florida).

In the mandates tied to government funding, the type of funding that triggers the requirements ranges widely. For example, San Antonio casts a broad net in its definition of financial assistance, including developments that receive tax increment financing. In contrast, most

“Early on we started out by planning some voluntary initiatives. We thought of crafting a list of features that builders could voluntarily offer their buyers. But we soon realized that wasn’t going to lead to anything substantial. Then a Council person suggested we work on impacting the small percentage of homes Tucson builds with government subsidies—around 50 per year. If we had gone with that, we’d have a total of only a couple of hundred houses by now . . . as opposed to the thousands we’re getting through the ordinance. Ultimately, we realized that home construction is much like assembly-line construction. You lower the cost of including these features if you require them to be added to every home.”

Bill Altaffer, advocate for the Pima County, Arizona, ordinance and subsequent Tucson, Arizona, ordinance.

(For more information see page 76 in appendix II.)

statewide visitability laws define government assistance narrowly and therefore may produce fewer than a hundred visitable houses per year. However, this may be changing. In Maryland, visitability legislation was proposed in the 2007–2008 legislative session that would require several access features in all new homes built in the state. Although it did not pass, the proposal received bill numbers and hearings in both the State Senate and the House of Representatives (Tonya Gilcrist, deputy director, Independence Now, Inc., personal communication, December 2007, February 2008).

The data suggest that mandatory visitability initiatives yield a greater number of visitable homes than do voluntary efforts. Basic access is an example of a public policy arena where government influence and legislation may need to be put into play as they have for other issues related to health, safety, and environmental protection. When mandatory initiatives are not feasible, consumer awareness campaigns and voluntary efforts can be pursued. Voluntary efforts may be most effective where a mandatory program is already in place. Austin’s S.M.A.R.T. Housing program is a good example.

Determining the most appropriate type of action in any context requires careful consideration by policymakers, homebuilders, and advocates. The strategy selected for a specific jurisdiction often reflects the resources available and the political climate at the time. Regardless of the implementation methods selected, new social policies should create housing initiatives that allow older adults to age in affordable and accessible homes and to maintain social contact in the homes of friends and extended family. Incorporating more innovative and cost-effective design practices into the new housing stock will help create a larger supply of homes that support older adults’ housing preferences.

CURRENT OBSTACLES TO ACCESSIBLE HOUSING PRACTICE

New Urbanism is a movement in architecture and planning that began in the late 1970s and is gaining popularity in response to urban sprawl and what many believe is a missing sense of community in conventional suburban developments. New Urbanism stresses many features beneficial to older adults or people with disabilities, such as walkable neighborhoods, a dense mixture of residential and commercial uses, and ample public transportation. However, the movement often employs traditional housing designs that may be inaccessible.

Traditional Neighborhood Development (TND) proponents place great value on using multiple exterior steps to ensure residents’ privacy and, in the New Urbanists’ view, encourage residents to socialize on porches. Consequently, many TND developments are in conflict with the goals of visitability. But alternative TND design concepts can provide opportunities to build visitable housing. Architectural features other than steps can be



Figure 6: The alley provides these Austin, Texas homes with a zero-step entrance through the garage.

used to convey a traditional appearance. If steps are desired at the front of a house, a zero-step entrance can be constructed at the side or rear with alley access. Grading and landscape design can be used to provide an accessible route to the zero-step entrance and still be compatible with historic values.

A related issue involves the replacement of housing in areas affected by natural disasters. Hurricane Katrina damaged or destroyed approximately 850,000 housing units on the Gulf Coast in August 2005 (Espinoza 2006). The redevelopment of that region presented an opportunity to introduce visitable homes. However, after the hurricane, Mississippi Governor Haley Barbour organized the Commission on Recovery, Rebuilding and Renewal, which quickly began promoting and adopting TND principles without regard for visitability. But even New Urbanists complain that Federal Emergency Management Agency guidelines for rebuilding require extraordinarily high floor levels in some areas (up to eight feet above grade) that make it difficult to build livable and affordable replacement houses. It is true that rebuilding houses close to grade in flood-prone areas could result in greater water damage. But building houses that will not support older adults and people with disabilities may also be counterproductive, especially when existing examples demonstrate that it is possible to provide access while also raising homes above street grade. This issue requires a serious dialogue among visitability advocates, housing technology experts, disaster planners, and code enforcement officials.

Another problem that has yet to be systematically addressed is the application of overly strict design guidelines in neighborhoods with Historic Preservation status. In one widely publicized case in Washington, D.C., Richard Lucas, a 90-year-old resident who had developed a mobility impairment, was initially prevented by the city's historic preservation staff from making access improvements to his house. According to the city's architectural historian, the modification would detract from the existing pattern of "porches of similar height and depth." After a year of Lucas being turned down for his proposed modifications, HUD's Fair Housing Division became involved. Under pressure from federal agencies, the city approached the resident's lawyers to begin settlement talks (Fisher 2008). When new housing is constructed in such neighborhoods, historic preservation agencies and accessibility advocates need to work together to find solutions that retain the historic appearance of houses to the greatest extent feasible while reflecting the realities of changing demographics and expectations. The current requirements originated during an era when fewer people lived with disabilities and when motorized wheelchairs and scooters were not widely available. They also neglect historic precedents for house

Mueller: A Visitable TND Case Study

Mueller is a large TND community in Austin, Texas, built on an abandoned airfield. Each house is raised off grade as much as forty-two inches. But each house is also served by a rear alley where garages are located. Garage floors are at the same elevation as the main floor of the house. Careful regrading of the flat site positioned the alleys above the grade of the streets but slightly lower than the main floor of the houses. The short driveways are used as "ramps" to provide grade-level access from the rear. Alleys are used for stormwater management and channel runoff from the rear of the lots to the streets where the storm sewers are located. Thus, carefully planned block design in three dimensions supported better stormwater management and provided zero-step entries while still including raised front porches.

designs that are not raised off grade. It is noteworthy that many historic neighborhoods are served by alleys that provide a good opportunity to provide access from the rear of a house. In fact, alleys are traditionally places where the aesthetic controls applied to the front of houses are relaxed.

NEW DIRECTIONS AND OPPORTUNITIES

Innovative strategies for incorporating accessibility features are emerging, such as new certification and code efforts that incorporate basic accessibility features.

One emerging direction is the growing realization that visitability and sustainability are compatible practices. A broad application of this is the recent addition of accessibility to the Leadership in Energy and Environmental Design (LEED) Green Building Rating System™. Originally developed in 1998, the LEED program is a nationally accepted benchmark for certifying high-performance green buildings (U.S. Green Building Council n.d.). The new LEED–Neighborhood Development certification program is the first national standard for neighborhood design and includes a credit for “universal accessibility.” To receive the credit, 20 percent of all single-family units must include a zero-step entrance on an accessible route, wide interior doors, maneuvering space in bathrooms and kitchens, blocking in bathroom walls to allow future grab bars, reachable electrical controls, and a step-free path through the first floor of the home (U.S. Green Building Council 2007). The credit acknowledges that incorporating basic access at the time of construction decreases the waste of energy and materials required by renovations and housing relocations, making neighborhoods both more sustainable and inclusive.

Besides aligning with other design movements, additional progress can be made by working with building codes. The ICC/ANSI A117.1 standard for accessible design is the national consensus standard referenced by most building codes in the country. The committee that promulgates the standard is currently developing a new section with technical design criteria for visitability. Developing consensus-based technical standards for visitability features will reduce confusion about exactly how to design a zero-step entry, an accessible bathroom, and accessible doorways. When completed, the standard can be referenced by visitability laws and programs, thus promoting uniformity in applications and aiding in their interpretation.

Habitat for Humanity International and its local affiliates also play a critical role in advancing the visitability movement. On its Web site, Habitat for Humanity International states its commitment to creating basic access to all new homes. “Throughout the United States, Habitat affiliates are encouraged



Figure 7: One of the approximately 800 visitable Habitat for Humanity houses in Atlanta, Georgia.

to build with special attention to wheelchair accessibility for both homeowners and visitors” (<http://www.habitat.org>). While some local affiliates, such as the Atlanta chapter, have adopted visitability standards for all of their houses, not all affiliates have done so. In these affiliates an accessible home is built only if the family first buying the home has a member with a disability. Because Habitat often has fifty or more volunteers working on any one house, there is high potential to promote visitability through networks of volunteers. Proponents for visitability can also approach their local affiliate to encourage a visitability policy.

MOVING FORWARD

Numerous avenues exist to increase the spread of visitability.

Public awareness campaigns are needed to educate individuals on the urgency of changing typical homebuilding practices and to induce a wide range of buyers to demand access features. With respect to the visitability movement, the mass media has played a limited role. The first media outlets to spread the idea in the late 1980s and early 1990s were small disability rights magazines. Visitability began to be noted by name in major newspapers such as the *Chicago Tribune* and the *New York Times* and in articles dispersed through the Associated Press only after local ordinances appeared. As activity surrounding the Inclusive Home Design Act increases, more national media outlets likely will pick up the story. Additional media attention should be embraced and encouraged. Moreover, sophisticated, professionally crafted advertising campaigns, such as the “stop smoking” campaign, have yet to be devised. Newer media opportunities like online social networking groups and YouTube might also prove to be a fruitful means of raising public awareness and involvement.

Innovations can also be achieved through communication channels established by existing nonmedia social networks (Rogers 2003). Disability rights advocates and independent living centers are two networks actively reaching out to opinion leaders at local and national levels to promote visitability. The movement could be strengthened by advocates targeting additional social networks such as professional organizations, real estate development interests, and organizations serving older people and broader-based disability organizations, and by these groups reaching out to join forces with advocates.

Bundling visitability with other innovative housing concepts is another strategy that is supported by research in diffusion of innovation (Rogers 2003). By coupling the visitability requirement with sustainability, affordability, mixed-income development, and safety, each goal gets a boost from the other. Bundling with related concepts increases the constituency for each innovation and develops and expands awareness and knowledge of each innovation faster. For example, Larrie Del Martin, director of the Atlanta affiliate of Habitat for Humanity, says that besides building all of their homes visitable, “We build all our homes to Earthcraft certification [a program certifying buildings that incorporate green-friendly features]” (Larrie Del Martin, personal communication, April 2008).

Further research can be another means to increase the likelihood that more visitable homes will enter the housing stock and that the features included are those most needed. Unanswered research questions include the following: How much public money is

currently spent on removing barriers from existing houses, and which specific barriers are most frequently removed? Can visitable homes prevent or forestall the need to relocate or move into a facility such as a nursing home? What, if any, modifications are made to visitable homes after homeowners move in, and why? What marketing strategies are the most effective for persuading a buyer to choose a home with access features? Answers to these and other questions undoubtedly will help builders, buyers, and policymakers as they chart the future course.

Visitability first emerged from the work of younger participants in the disability rights movement, but it has critical significance to older and younger populations as well. While it is legitimate to claim one's own personal identity, it is to the advantage of younger people with disabilities and older people who may or may not have disabilities to promote mutual respect and work together. For instance, younger people with disabilities have benefited from older Americans' campaign to preserve Social Security, and older people have benefited from the Olmstead decision that affirmed the right of individuals with disabilities to live in their communities. The two groups have reason to make common cause in many important issues, including accessible and abundant public transportation, access to health care, and the opportunity to live in affordable, accessible, and integrated housing, of which visitability is an essential component.



Figure 8: Visitability benefits a diverse population, including individuals who use mobility devices, bicycle riders, and parents with strollers.

As the visitability movement moves forward, old and young disability advocates, design and planning professionals, homebuilders, and homebuyers must become engaged in the movement to increase adoption. Supporters must continue to draw awareness by attracting media outlets, influential leaders, and policymakers to the cause. Advertising and social marketing campaigns could be very influential in encouraging the implementation of visitability from both the demand and supply sides. From educating homeowners and builders to drafting new legislation, the approach supporters choose may vary, but the opportunities for involvement are legion.

REFERENCES

- AARP/Roper Public Affairs and Media Group of NOP World. 2005, May. Beyond 50.05. A Report to the Nation on Livable Communities: Creating Environments for Successful Aging. Washington, D.C.: AARP.
- Access Living and the Center for Urban Research and Learning. 2000. Barriers to Independence: A Study of Housing and Personal Assistance Issues for People with Disabilities Residing in Nursing Homes. Chicago, Ill.: Loyola University.
- Administration on Aging. 2002. A Profile of Older Americans: 2001. Washington, D.C.: U.S. Department of Health and Human Services.
- Brandt, Jr., E. N., and A. M. Pope, eds. 1997. Enabling America: Assessing the Role of Rehabilitation Science and Engineering. Washington, D.C.: National Academy Press.
- Brown, A. R., and G. P. Mulley. 1997. Injuries Sustained by Caregivers of disabled elderly People. *Age and Ageing* 26: 21-23.
- Brunick, N., L. Goldberg, and S. Levine. 2003. Voluntary or Mandatory Inclusionary Housing? Production, Predictability, and Enforcement. Chicago, Ill.: Business and Professional People for the Public Interest.
- Centers for Disease Control and Prevention (CDC). n.d. Preventing Falls among Older Adults. <http://www.cdc.gov/ncipc/duip/preventadultfalls.htm> (accessed March 19, 2008).
- Claar, R. 2007. Keynote presentation at Visitability: Moving towards Livable, Sustainable Housing + Communities in Canada Think Tank, May 11-13 2007, in Winnipeg, Manitoba.
- Concrete Change. 2004. Builder Exec Affirms Low Cost of Visitability!! <http://www.concretechange.org/buildersaffirm.htm> (accessed November 30, 2007).
- Espinoza, C. 2006. Through the Eyes of the Storm: A Book Dedicated to What Katrina Washed Away. White River Junction, Vt.: Chelsea Green Publishing Company
- Fisher, M. 2008. Human Dignity Also Needs to Be Preserved. *Washington Post*, January 10, pp. B1.
- Gibson, M. J., M. Freiman, S. Gregory, E. Kassner, A. Kochera, F. Mullen, S. Pandya, D. L. Redfoot, A. Straight, and B. Wright. 2003, April. Beyond 50.03: A Report to the Nation on Independent Living and Disability. Washington, D.C.: AARP.
- Hammel, J., L. Fogg, J. Sanford, D. Walens, J. G. Dahl, A. Gossett, K. Pietraszk, and K. Jopa. 2005. The Impact of Home Modification Services on Community Living and Participation Outcomes For People Who Are Aging with Disabilities: Final Report. RRF Grant #2001-328. Chicago, Ill.: University of Illinois at Chicago.
- Harris Interactive. 2000. Community Participation Survey. Executive Summary. <http://www.nod.org/index.cfm?fuseaction=Feature.showFeature&FeatureID=863>. (accessed July 7, 2008).

- Hendershot, G. 2004. Building Design Is Leading Barrier to Community Participation. Washington, D.C.: National Organization on Disability.
- Herzog, A. R., and J. S. House. 1991. Productive Activities and Aging Well. *Generations* 15 (1): 49–54.
- Houser, A. 2007. Long-Term Care. Washington, D.C.: AARP Public Policy Institute. http://assets.aarp.org/rgcenter/il/fs27r_ltc.pdf. (accessed July 8, 2008).
- IDEA Center. 2006. Door Costs. Buffalo, N.Y.: IDEA Center.
- Kaminski, S., S. Mazumdar, J. DiMento, and G. Geis. 2006. The Viability of Voluntary Visitability: A Case Study of Irvine’s Approach. *Journal of Disability Policy Studies* 17 (1): 49–57.
- Kaye, H. S., T. Kang, and M. P. LaPlante. 2000. Mobility Device Use in the United States. *Disability Statistics Report 14*: 1–60. Washington, D.C.: U.S. Department of Education, NIDRR.
- Kochera, A. 2002. Accessibility and Visitability Features in Single-family Homes: A Review of State and Local Activity. Report #2002-03. Washington, D.C.: AARP Public Policy Institute.
- Lawlor, J. 2004. Arizona Court Upholds Wheelchair Access Regulations. *American Planning Association* 70 (3): 37.
- Lemmon, W. 2007, April 19. Reality Check from the Homebuilder’s Sales Floor. http://pcj.typepad.com/planning_commissioners_jo/2007/04/reality_check_f.html (accessed November 20, 2007).
- Maisel, J. 2006. Toward Inclusive Housing and Neighborhood Design: A Look at Visitability. *Community Development: Journal of the Community Development Society* 37 (3): 26-34.
- Maisel, J. 2007. Existing Visitability Initiatives. Buffalo, N.Y.: IDEA Center.
- Mathew Greenwald & Associates, Inc. 2003. These Four Walls . . . Americans 45+ Talk about Home and Community. Washington, D.C.: AARP Public Policy Institute.
- Messecar, D. C., P. G. Archbold, B. J. Stewart, and J. Kirschling. 2002. Home Environmental Modification Strategies Used by Caregivers of Elders. *Research in Nursing and Health*, 25: 357–70.
- MetLife. 2006a. The MetLife Market Survey of Assisted Living Costs. Westport, C.T.: MetLife Mature Market Institute®.
- MetLife. 2006b. The MetLife Market Survey of Nursing Home & Home Care Costs. Westport, C.T.: MetLife Mature Market Institute®.
- National Association of Home Builders. n.d. Policy Single Family Accessibility or Visitability. <http://www.nahb.org/generic.aspx?genericContentID=37885&print=true> (accessed November 18, 2007).
- Nation’s Building News. 2006. Group Provides Expertise on Home Electronics Options. <http://www.nbnnews.com/NBN/issues/2006-02-06/Building+Products/index.html>. (accessed July 8, 2008).

- National Center for Health Statistics. 2006. Difficulty in Physical Functioning by Age, Sex, and Race/Ethnicity: United States, 1997-2006. NHIS (NHIPL06a). Trends in Health and Aging. <http://www.cdc.gov/nchs/agingact.htm>. Accessed on July 9, 2008.
- Pynoos, J. 2001. Meeting the Needs of Older Persons to Age in Place: Findings and Recommendations for Action. <http://www.homemods.org/library/pages/Commission11%20on%20Elderly%20Housing%202001.htm> (accessed September 10, 2003).
- Rogers, E. M. 2003. Diffusion of Innovations (5th ed.). New York: Free Press.
- Smith, E. 1994, August. Visitability. Mainstream: Magazine of the Able-Disabled, 18: 28-30.
- Smith, E., and R. Pace. 2007. Entryways: Creating Attractive, Low-cost Zero Step Entrances [DVD]. Decatur, G.A.: Georgia Department of Community Affairs.
- Smith, S. K., S. Rayer, and E. A. Smith. 2008. Aging and Disability: Implications for the Housing Industry and Public Policy in the United States. Journal of the American Planning Association 74 (3): 1-18.
- Spegal, K., and P. Liebig. 2003. Visitability: Trends, Approaches, and Outcomes. Los Angeles: University of Southern California, The National Resource Center on Supportive Housing and Home Modification.
- Steinfeld, E. 1995. *Universal Design as Innovation*. Buffalo, N.Y.: IDEA Center.
- Steven Winter Associates, Inc. 1993. The Cost of Accessible Housing. Washington, D.C.: U.S. Department of Housing and Urban Development.
- Truesdale, S., and E. Steinfeld. 2002. Visit-ability: An Approach to Universal Design in Housing. Buffalo, N.Y.: RERC on Universal Design and the Built Environment.
- U.S. Census Bureau. 1990. Decennial Census data. <http://factfinder.census.gov> (accessed January 9, 2008).
- U.S. Census Bureau. 2001. American Housing Survey. http://www.census.gov/hhes/www/housing/ahs/ahs01_2000wts/ahs01_2000wts.html (accessed October 2, 2007).
- U.S. Census Bureau. 2004. U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin: 2000-2050. <http://www.census.gov/ipc/www/usinterimproj/> (accessed January 12, 2008).
- U.S. Census Bureau. 2005. American Housing Survey National Tables: 2005. <http://www.census.gov/hhes/www/housing/ahs/ahs05/ahs05.html> (accessed January 9, 2008).
- U.S. Census Bureau. 2006. Selected Social Characteristics in the United States: 2006. American Community Survey. http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=01000US&-ds_name=ACS_2006_EST_G00_&-lang=en&-caller=geoselect&-format (accessed January 9, 2008).

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, and National Center for Health Statistics. 2007. Health, United States, 2007 with Chartbook on Trends in the Health of Americans. DHHS Publication No. 2007-1232.

U.S. Green Building Council. 2007. Pilot version: LEED for neighborhood development rating system. Washington, D.C.: U.S. Green Building Council.

U.S. Green Building Council. n.d. LEED. <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19> (accessed October 1, 2007).

Welch, P., and Palames, C. 1995. A brief history of disability rights legislation in the United States. In Welch, P. (Ed.), Strategies for teaching universal design. Boston, MA: Adaptive Environments Center.

APPENDIX A: EXISTING VISITABILITY INITIATIVE ANALYSIS

		Mandates Tied to Public Funds	Mandates For All New Homes, Including Privately Financed	Builder Incentives	Consumer Incentives	Consumer Awareness Programs/Certificate Programs
Location	City/Local Ordinances	Atlanta, GA (1992)	Naperville, IL (2002)	Permit waivers/Reduced fees in Southampton, NY (2002)	Freehold Borough, NJ (1997)	Irvine, CA (1999)
		Austin, TX (1998)	Pima County, AZ (2002)	Houston, TX (2004)	Southampton, NY (2002)	San Mateo County (2001)
		Urbana, IL (2000)	Bolingbrook, IL (2003)		Rebate in Escanaba, MI (2003)	Visalia, CA (2001)
		Fort Worth, TX (2000)			Pittsburgh, PA (2006)	Albuquerque, NM (2001-2002)
		Long Beach, CA (2002)				Howard County, MD (2001)
		San Antonio, TX (2002)				Onondaga County (2002)
		Iowa City, IA (2002)				Syracuse, NY (2003)
		Chicago, IL (2003)				Sacramento, CA (2003)
		St. Louis County (2003)				Prescott Valley, AZ (2005)
		St. Petersburg, FL (2004)				Montgomery County, MD (2007)
		Toledo, OH (2005)				
		Auburn, NY (2005)				
		Scranton, PA (2005)				
			Arvada, CO (2005) 15% of new homes			

		Mandates Tied to Public Funds	Mandates For All New Homes, Including Privately Financed	Builder Incentives	Consumer Incentives	Consumer Awareness Programs/ Certificate Programs
Location	City/Local Ordinances	Milwaukee, WI (2006)				
		Davis, CA (2007)				
			Lafayette, CO (2007) 25% of new homes			
		Rockford, IL (2007)				
		Dublin City, CA (2007)				
		Tucson, AZ (2007)				
		Pine Lake, GA (2007)				
	State Ordinances	Texas (1999)	Florida (1989)	Accessible Housing Demonstration Grant Program Illinois (2002)	Tax credit incentives in Georgia (1999)	New Mexico (2001)
		Georgia (2000)	Vermont (2000)	PHFA Research Project Pennsylvania (2004)	Tax credit incentives in Virginia (1999)	Easy Living Home Project in Georgia (2002)
		Minnesota (2001)				
		Kansas (2002)				
		Kentucky (2003)				
		Oregon (2003)				
		New Jersey (2005)				
		Michigan (2006)			Tax credit incentives in Pennsylvania (2006)	
		Ohio (2007)				

APPENDIX B: CASE STUDY INTERVIEWS

Builders	Residents	Advocates	Public Officials
Baron Houser (<i>President, Be Homes, LLC, San Antonio, Texas</i>)	Bob Goodman (<i>Resident, East Lake Commons, Ga.</i>)	Bill and Collette Altaffer (<i>Advocates, Pima County, Ariz.</i>)	Debbie Leasure (<i>Data Analyst and Planner, Ohio Housing Finance Agency</i>)
Nick Hammer (<i>President, Help Yourself Designs, Inc., DuBois, Pa.</i>)	Mr. X (<i>San Antonio, Texas</i>)	Darrel Christenson (<i>Director of Community Integration, Arizona Bridge to Independent Living, Phoenix, Ariz.</i>)	Jay Ruggeri (<i>City Councilman, Lafayette, Colo.</i>)
Roger Thomas (<i>Homebuilder, Thomas Group Communities, Ga. EasyLiving Home^{CM}</i>)	Melinda Kontos (<i>Amherst, N.Y.</i>)	Edward Bannister (<i>Bolingbrook, Ill.</i>)	Larrie Del Martin (<i>Executive Director, Atlanta Habitat for Humanity</i>)
Steve Romeyn (<i>Owner/President, Windsong Properties, Ga. EasyLiving Home^{CM}</i>)	Patsy Peterson (<i>Pa.</i>)	Roger Borgenicht (<i>Executive Director, ASSIST, Salt Lake City, Utah</i>)	Rocky Marcoux (<i>Commissioner for the Department of City Development, Milwaukee, Wis.</i>)
Steve Wall (<i>President, Wall Homes, San Antonio, Texas</i>)	Dorthelia Foster (<i>Bolingbrook, Ill.</i>)	Sue Hart (<i>Housing Visibility Chairperson, Michigan Association of Centers for Independent Living, Flint, Mich.</i>)	John Hiscox (<i>Executive Director, Macon, Ga., Housing Authority</i>)
			Stuart Hersh (<i>Coordinator, S.M.A.R.T Housing Program, Austin, Texas</i>)
			Roger Claar (<i>Mayor, Bolingbrook, Ill.</i>)

Name: Baron Houser

Position: President

Organization: Be Homes, LLC

Location: San Antonio, Texas

Mr. Houser is one of the builders who has built some private, single-family homes under the auspices of the San Antonio, Texas, ordinance.

It's my understanding that you have built single-family houses that have universal design (UD) features such as a zero-step entrance and interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Correct.

About how long have you been doing that?

We began with this adaptation in March 2006, and we have three full series of homes that incorporate the UD design criteria. These three series of homes represent twenty-one home designs.

What type of houses are they in terms of price range and so on?

They're single-family, owner-occupied, ranging in price from the 80s to the mid 200s. To control the slope we are currently using a full post-tension foundation design.

How many houses of this type has your company put up so far?

134.

When it comes to marketing, have you found the homes with the access features easier to sell, harder to sell, or neither?

The buyers don't even notice the features, unless we point them out. We consider UD design to be a selling tool. They like the more open feel of the floor plan. The house doesn't look like it was designed for someone in a wheelchair. It's beautiful, whether it's a small home or a larger one.

When we point out the features, we mention the changing demographic, how their mom or dad might want to visit or to live there sometime. We call them "homes built for any stage of life." They accommodate for the whole life span. People have responded very positively to that.

What features do you include?

3'0" doors, four-foot hallways, blocking in the bathroom walls in case people need grab bars in the future, and much more. We think features like this are such a good idea we put them even in the houses that are not covered by the city ordinance.

How many of them have zero-step entrances, and where on the house have you been locating that entrance?

About 90 percent. In the other 10 percent, the topography made it unfeasible. We put the zero-step entry from the garage into the house. By doing the ramp in the garage, the homeowner does not have to exit the home to come back through the front door. The garage is a safer, more convenient location to enter the home.

What would you say about overall costs?

The cost of the wider doors is negligible. For the zero-step entrances, I'd say about \$400. The larger cost is associated with the plan design. We have an architect on staff. It is somewhat difficult to get architects wrapped around the idea. As to cost, it's hard to isolate the cost in plan change triggered by the UD features because at the same time we were designing for the access features we were also designing to meet changes for several codes, not connected to UD, such as the IBC [International Building Code]. But it's a significant factor. The key is to design all the plans with access, make it the default.

Can you think of any advice with regard to construction you would give another builder just starting out that would make the construction process smooth?

I'd say, meet with all the tradepeople and vendors and suppliers and subcontractors early on, the engineers and so on. Unless the crew is communicated to properly, there will be problems because they are accustomed to doing things in another way. We met with them up front and I think that prevented a lot of potential problems.

What's your very frank opinion of why so few builders around the country are building homes with the basic access features like a zero-step entrance and the wider doors?

They're used to doing things their way. They don't want to redesign plans due to potential cost. Further, the architect then must convey the new designs to the wall and truss builders, etc. So, the opportunity for error in product would greatly increase with new plans. They think the extra expense has shown little reward to date, but if it becomes law that's not an option.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis?

I'm not politically motivated that way. We use it as a selling feature; whether it was law or voluntary, we've done it because I feel it is the right thing to do.

Can you think of any other advice you would give another builder that would make the process of constructing the features go smoothly?

You can't fight progress. It's going to happen. They ought to embrace the adaptability and encourage it. They can expect to have a wider range of clients who appreciate it. In short, embrace the change.

Name: Nick Hammer
Position: President
Organization: Help Yourself Designs, Inc.
Location: DuBois, Pa.

Nick Hammer coordinated a program under which builders voluntarily included basic access features in homes.

When and how did you first hear the term *visitability*?

About ten years ago, when Tom Wenner [a local advocate] approached me.

It's my understanding that you have built single-family houses that have a zero-step entrance and interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes. In the program I was involved in, where the visitable houses were built, I was not the direct builder. I was more of a designer and resource person but I was directly involved during the building process of all the houses.

What factors led up to you starting to get involved with visitable homes?

Early on I was designing and building furniture for people with spina bifida. Then that morphed into getting involved in housing. Under a grant program that paid for rehabs of houses of low-income people who had developed disabilities, I was the contractor for about fifty rehabs of houses. I saw that at least 75 percent of the rehabbing could have been avoided if a few simple features had been in place to begin with. Then an opportunity came up to get involved in a three-year program, funded by the Pennsylvania Housing Finance Agency, to produce visitable new housing, and that was a natural transition for me—an inevitable trajectory.

When was that program in operation?

From 2003 through 2005.

How many visitable homes were built during the program?

Fifteen houses, by eight builders.

What type were they in terms of style, cost, and so on?

They are single-family homes built for the open market, all but one with basements, ranging in cost from about \$175,000 to \$350,000. Some were one-story, some two-story.

Did the builders get paid or subsidized for putting in the features?

No, the grant money went for advertising brochures for them, a Web site, a visitability booklet, staff salaries, tech support, and so on.

What features do the houses have?

At least one zero-step entrance, of course—about half the builders ended up putting on two zero-step entrances, one from the garage and the other at the front, even though that was not required. All interior doors with wide passage space—mostly 3'0" doors. Then when they got into it, most builders went ahead and did some extra things on their own, like blocking in the bathroom walls for grab bars if needed, lever door handles. A few even did roll-in showers. All these extras were just suggestions; we stood back and offered help when needed.

So the local code permitted no-step to the house from the garage?

Right. Some builders did not know recent code change eliminated the requirement for a step up. We informed the builders of that.

How did the builders come into the program?

They volunteered after the program was publicized, and some we approached and asked. Some said no. The main reason for the no's was fear the houses wouldn't sell, that they would look institutional, and buyers wouldn't want them. It's difficult to get a builder to do something if it is perceived as a risk. One guy was building 200 units in a 55-and-over community and had no access features planned. Roads were already laid out so it was almost impossible to change elevation at that point. He is a very nice guy personally but he said, "Nobody has asked me for the features." I told him, "That's because you haven't pointed out to them they may need the features." I think builders have a social responsibility on this.

The builders easiest to bring in to the program were those who had direct experience with their parents getting disabled or their own broken leg. Young, healthy, stalwart builders were difficult to deal with.

So, how fast did the houses actually sell compared with houses without the features?

All sold within the time frame that satisfied the builders. I would say they sold at the same speed as regular houses. Some sold before they were finished. One even sold faster than we wanted because we wanted to use it as a show house when it was done, but the buyer wanted it immediately and we could hardly say to the builder he couldn't sell it.

How easy or difficult has it been to incorporate the features, construction-wise?

There weren't any major construction problems because almost all had done commercial work or had built a house for a disabled person. For the basements, they all used the ledge [notched foundation] method which is nothing new; it's been in use for decades for situations not related to access, like to lower the height profile of a house to not exceed height requirements. The Housing Resource Center did help the builders with design details for making sure moisture did not penetrate.

For the interiors, to get the needed door widths, they didn't have to do any major redrawing of the plans. Most could just use their Chief Architect software to make any changes.

How much cost did the zero-step entrances and the wider doors add?

Three or four hundred dollars per home.

You mentioned materials. What materials did you make?

The Web site, some construction detail drawings for the entrances, and we also provided two types of brochures for the builders to use for advertising. One showed people with disabilities using the features, and the other showed people without disabilities, like pushing a stroller in the entrance, and just mentioned verbally that the house provided easy use for disabled people. The builders preferred the second one. We also produced a visitability booklet and that has gotten a good bit of positive response. [The Basic Access Toolbox, available as a free download at <http://www.visitabilitypa.com>]

Have there been any positive follow-ups in terms of additional houses since the three-year project ended?

After the program ended at least three of the builders have built more visitable houses. One said he now does it automatically whether people ask for or not—John Holohan from Liberty Homes. All eight builders felt positive about the features. I would like to see builders just go ahead and do the basics in all their houses, not just present it as an option.

Can you think of any advice you would give another builder who was just starting out with visitable construction that would make the process of constructing the features go smoothly?

Expect to spend more time on the job site to get subs [subcontractors] familiar with the idea. The subs are the make or break point, and they have to understand how the finished product is going to work, especially for the first house.

Also, the siting of the house is extremely important—the builder should stay on-site with the excavator. It's like any learning curve.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis?

I used to think that overregulation was a big curse, but I'm beginning to think that getting it into code is the only way that will work. The voluntary methods are just not working.

If it was a code requirement, the builders wouldn't be worrying that they were being asked to do something the competition wasn't doing. It would make things equal.

Have you gotten any negative or positive feedback from prospective buyers or actual buyers/residents about the access features in their house?

No negative feedback. One or two did ask why they did not have entry steps, but when the program was explained, they had no problem with it. Most people didn't even notice the features. For instance, one couple did not notice the access till it was pointed out when they signed the contract. They were enthusiastic about it and later volunteered as models for the brochure photo shoot in their house—carrying furniture through the doors and so on. A few weeks later the woman broke her knee and wrote a glowing letter to the program about how glad she was to have the features.

What's your very frank opinion of why so few builders are building homes with visitable features?

Lack of knowledge on the part of builders is pretty devastating. NAHB has been counterproductive. They flatly refuse to do anything just because someone wants them to. One of the builders in our project was a past national president of NAHB, then director of the NAHB resource center. He admitted that the organization is a problem on this issue. NAHB should be talking it up, educating their members about how easy it is to do the basics, but all they're doing is fighting legislation.

If AARP was aggressive enough to urge the people who read their magazine to get buyers to demand it, that would help. AARP as an organization should be sending letters to big builders.

Name: Roger Thomas
Profession: Homebuilder
Organization: Thomas Group Communities
Location: Georgia
Member of the EasyLiving Home^{CM} program.

It is my understanding that you have built single-family houses that have a zero-step entrance and interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes. My wife Barb and I started out in Ohio twelve years ago building homes for “empty-nesters,” people 55 and over.

I had aging parents and grandparents, and I was doing most of the maintenance on their homes. They were staying in their existing houses but as they grew older the houses did not work very well for them. I was doing all the maintenance. At that time I had a hardware store and an animal feed store. I went to Ohio State University and began researching what the alternatives were, and I ran across a group called Epcon that was building ranch-style condominiums. They were putting up small communities with a clubhouse and offering management services like upkeep of exteriors of homes and landscape for a monthly fee. These communities were not age-restricted, but many of the buyers were older people. Some were younger, such as single women in their 40s. I bought a franchise and our first project was building seventy-six homes in Marion, Ohio. I saw an underserved market, and I wanted to help people and make their lives better. After about two years, I bought a franchise in Cobb County, Georgia.

It’s getting tougher to do, which is sad.

What type of EasyLiving^{CM} or “visitable” houses have you built?

They have all been age-designated communities. We have two different products: attached condominiums, which are four-plexes or duplexes, and also detached houses with nice courtyards at the side. All our houses have the entire living area on the main floor. A few have stairs with storage areas leading to an upper floor. They are owner-occupied homes in the \$275,000 to \$300,000 range.

We left the franchise system and began designing our own plans.

When it comes to marketing, did you find the homes with the access features easier to sell, harder to sell, or neither? Have your homes been selling well?

The problem hasn’t been sales; it’s been getting permission to build the way this market needs its homes to be built. The homeowners’ association members have come out in droves to oppose our efforts to get permits. These homeowners’ groups are well organized. By and large they don’t get a lot of input from the people in our market because our market is not very vocal. Typically our market might be people from the community who are now in their 60s, who have lived in

their existing houses for twenty or thirty years. They want to downsize and have their maintenance taken care of, and they need a house that is affordable.

The Home Owners Associations (HOAs) are mostly made up of younger people, and they want to keep yards big and homes big; they want houses more expensive than the houses they live in so their property values go up. So they fight our proposals to build denser communities where older people can have smaller yards, more walkable distances, and the smaller, more affordable houses that meet their needs. This is a problem all across the country, I hear from other builders.

The HOAs also maintain that more density will mean more cars, but our typical population doesn't impact traffic heavily. They don't have as many cars, don't take as many trips, and they tend to drive at off-hours, not rush hour.

Cobb County government has been forward-thinking on this issue. They passed a residential senior living (RSL) ordinance in Cobb. That designation is truly age-restricted, and building homes with basic access standards is a requirement for when receiving RSL zoning permission. [These standards include at least one zero-step entrance with an ADA-type threshold, a bedroom on the main, and a full bathroom on the main with designated maneuvering space beside each fixture.]

The RSL is better than nothing, but a lot of the public doesn't "get it." It's very frustrating to us. For instance, the HOAs still have requirements that a house cannot be less than 1,600 square feet. That is more space than an elderly widow living alone usually wants or needs, yet we have to build it that way, and it impacts affordability very negatively. They also require more expensive exterior materials like stone, and don't allow vinyl siding or other less expensive products. That impacts affordability too.

Do you have an estimate of how many homes with basic access features you've built in Georgia?

I'd say roughly 450. In our new design, we try to get what people are asking for. They don't see themselves as being old or senior citizens—they're insulted by that. They want nice bathrooms, nice bedrooms, and lots of closet space. Can't be a lot more expensive than the house they're moving out of. And, they like the nice clubhouse.

Are there any other access features in the homes beyond the zero-step entrance and wide interior doors?

EasyLiving^{CM} home features. Condos meet the EasyLiving^{CM} standard. It's a great program and it never occurred to me to not join. I like the fact that it's required in the ordinance. We put in lever handles, and we'll do grab bars if needed. We'll customize.

There are lots of other builders now, but we were the first. A lot of folks have knocked off our product. It is actually good to compare because we think we do a better job. Even after the sale we really look after the customer. This customer is a little harder to sell to—they make a lot of visits to check it out. We try to sell them on the lifestyle; they don't want to be isolated as they are in existing houses.

They like the idea of a clubhouse generally, although the clubhouse is not required by the zoning. There are also wine and cheese parties, walking clubs, etc.

Are you aware of any people who use walkers or wheelchairs in the community?

Yes. For example, one woman has a son who has MS [multiple sclerosis] who lives with her. They have two masters on the main. We have people in Jazzies [a brand of electric scooter] who are just all over the place (with respect to their abilities).

We have to change our mindsets. We still have our old mindsets. We're going to have people who may have another thirty years to live after they retire. They may be in retirement for as long as they worked, maybe working part-time.

The beauty of these communities is that they work well for widows and widowers. People start to blossom. They don't want to be in boneyards. My grandmother was 99 when she died. When she turned 90 we tried to get her into an assisted living facility but she didn't want to be with all the old people. We have to think about them as if they were us.

How easy or difficult has it been to incorporate the features, construction-wise?

Interior 2'10" doors—all suppliers have them—getting them was an issue a few years ago. Now there is no surcharge. They are the same price range—a couple dollars more maybe. Not an oddity. The big problem is the threshold—the ADA threshold. Doing it through the garage is easy. Doing it through the front door is harder—how it seals and how it matches the interior flooring takes a lot of work. We need to find really good suppliers who have a good product.

We usually try to do the front door and from the garage. Sometimes we've had issues with inspectors where the sidewalk is too close to grade. Inspectors are seeing a drainage problem where there is none.

What would you say about the cost of these features?

On a slab I don't think there is any cost because we just merely bring the slope up to the garage. Coming up to the front door is more problematic.

The new condo designs we make ourselves. I'm trying to get a good front entrance with enough coverage overhead to take care of even a big wind with a rain.

There is really no reason why a single-family home can't have a zero-step entrance. There are no problems with the doors. The EasyLiving^{CM} standard doesn't cost more. I think people are missing the boat. People had better start building houses that they have multiple buyers for; for example, people who are single again—divorced lady who is single again. It's a low-maintenance lifestyle where a great deal is taken care of by management.

Did you have to change your house plans, and if so how much of a problem is that?

We design from scratch. Thinking about it, if you had it in a CAD [computer-aided design] program, it's so easy to change things. You're talking mainly about door sizes. It's maybe a little harder to get some maneuvering space.

Have you gotten any negative feedback from prospective buyers or actual buyers/residents about the access features in the house?

We've had a lot of negative comments about having bathrooms with the toilet sitting out. They wanted a separate little room for the toilet, so I drew it out by hand. Some people notice door swing; if you explain it to them, they say, "I'm not in a wheelchair." They think they are never going to grow old or use a wheelchair. Salespeople have to explain to a lot of people who just don't get it.

We also get real positive responses. It all depends on people's personalities. There are different personality types; the tiger personality is real upbeat, but the owl type will want to analyze everything and want to pick it apart.

It can be done in such a way that it really looks good. You don't really realize that it's different. You'd never think it's for a handicapped person. Nobody notices the wider doorways anyway. Moving in it's a great thing to have a little more space.

Some developments specifically targeting older buyers build their typical homes with no access features. Have you noticed that?

I have been to some communities targeting this market, which is unbelievable when you think about it. They are selling the massive clubhouse, and sometimes the houses are almost an afterthought. If nobody calls them on it, they're probably not going to change their ways.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis? Please say why.

That's a good question. You know, there probably do need to be building codes that embrace these issues. The scary part about a law is that the law writers often don't get it right. If it's done right, adding access requirements to the code doesn't add anything to the cost, unlike some code requirements that actually do add cost to the house, like green-requirement low-energy windows and improved efficiency of the air conditioners. They are a good thing, really. The short answer is yes, if the law is done right; if the legislators don't screw it up, it would be good.

The wonderful thing about how EasyLiving^{CM} has done this is they keep it clear and simple; they fully explain what is required and ways to accomplish it. My biggest fear is that lawmakers would start making home access a federal issue like ADA. Architects roll their eyes when they talk about ADA because it's unclear what is wanted, and you get some ridiculous requirements. The federal government hardly ever gets things right on things like that.

Is there any additional question you wish I had asked you?

How do we get the ability to get the politicians and the public to embrace what we want to do?

To make a long story short, it's a great business to be in. It really improves people's lives. The main frustration is the homeowner groups don't get it.

Name: Steve Romeyn

Position: Owner/President

Organization: Windsong Properties

Member of the EasyLiving Home^{CM} program.

It's my understanding that you've voluntarily built houses that have a zero-step entrance and interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes, I've been building EasyLiving^{CM}-certified homes ever since I started Windsong Properties, four years ago.

What factors led you to start building these homes?

These are active adult communities. I have a commitment to building these homes with access features. I myself am an "active adult"; I'm 57. You never know when someone's functionality might change. I watched my own parents and grandparents develop some mobility problems. It doesn't make sense to build homes in an active adult community that lack access. You would not want to have to move out of your house. Many of my buyers are thinking of this as their last house. I know we have four residents who use electric wheelchairs.

I have to give some credit to my fellow builder Tony Perry, too. He told me about the program and he was enthusiastic about it.

What type of houses have you built?

They are single-family, owner-occupied, in three different neighborhoods. The price range is about \$185,000 to \$400,000. We include lots of features beyond the basics required by the EasyLiving^{CM} program. For instance, we include lever door handles, easy-use faucets, easy-use windows, etc. All of our doors are 3'0".

How many houses do you have up so far?

About 200.

Are there younger people living there too?

The developments are designated "active adult." Two are "age targeted," meaning we are hoping to attract active adults, and the other one is age restricted, which we prefer to call "age qualified." The latter has to meet the requirements of HOPA [i.e., HUD's directives for the Housing for Older Persons Act], which we needed to do in order to get special zoning permission to build. What the communities offer is attractive to the younger buyer too; for instance a professional, single woman in her 40s who just doesn't have time for yard work and wants the advantage that the landscaping is taken care of by management.

In our neighborhoods, we develop the sites as well as build on them. We pay attention to the usability of the development as a whole, such as well-planned sidewalks with gentle grades.

Where on the houses do you locate the zero-step entrances?

We try to put them on the front. Often we have one on the front and through the garage—both. On the high-end houses we're doing now, we have high front porches that people want, and in those cases we're just putting the entrances in the garages.

Do you build all on concrete slabs, or some with basements?

We have ten with basements, and they have tested my dedication to the EasyLiving^{CM} home concept. Getting that to work has not been easy.

What method have you used to get a zero-step entrance over basements, and what has the added cost been?

In ordinary foundations, the flooring system sits on top of the foundation wall. In ours, we built the outside rim of the foundation wall about a foot higher and set the flooring system down inside it. This cost us about \$4,000 extra. It is well worth it to us, though. These buyers are usually considering this as their last house, and it has to be right for them.

What about costs for the houses on concrete slabs? What would you say was the extra cost for the basic EasyLiving^{CM} features, not the extras like the lever door handles?

One hundred to five hundred dollars. The wider doors are a little more expensive. Part of the cost is the cost in time of the extra supervision required. The subs are doing things differently than usual and you have to stay on top of it to make sure it is right. What's hard for builders is to change their product.

Did you have to change your house plans, and if so how much of a problem is that?

We were able to do it seamlessly. We designed new plans when I switched to this type of housing. I did it myself, with my Softplan CAD system. If a guy has an existing plan, the chances are he would need to redraw it, not just putting in a bigger door, but a bigger hall that accepts the door, and so on. But lots of people are happy to do CAD work. It doesn't require an architect, and the plan doesn't have to be professionally stamped.

When it comes to marketing the houses, have you found that the access features make the houses harder to sell, easier, or neither?

We've had tremendous success selling the product. I've never heard any negative responses from prospective buyers, including from those of all ages. Our job when selling houses is to point out the features of the house. I'm convinced some of our buyers would not have bought if we hadn't had the features.

So you train your salespeople to point out the advantages?

Yes. They say, “Your movers will love it.” They talk about how if your in-laws come to visit, someone with mobility problems, this is a great thing. Also it’s easier to come into your house carrying groceries because there’s no step to trip on. Safety and convenience.

I ask myself, “Why wouldn’t every builder do this in an active adult community?” Actually, there’s a big national builder building several active adult communities in the Atlanta area, and there is no access at all in their models.

Why do you think that is? What are they thinking?

Probably they’re saying, “There is a cost associated with it, and I can sell my houses at a lower cost. Will the buyer recognize the value in access?” They are coming from a strictly builder background—they’re not tuned in to sociopsychological factors.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis?

I like having this advantage and if there were a law I wouldn’t have that edge over other builders. If there were a law, everyone would be doing it. Also, building code comes out every day forcing builders to do various things. For instance, just recently the code for handrails on steps changed, and we hadn’t been informed of it. When the inspector came out, he told us our steps had to be rebuilt. So, should access be a rule or a recommendation? When the government mandates things that have a cost associated, that’s a problem. I think it would be much better to be voluntary. With smoking, I can see why there needs to be regulation, because that impacts other people. But, if I want to build a house for myself, and we want to build three steps between every room so we get lots of exercise that should be my privilege. I object to government telling me that I have to make my house accessible.

You know, I also build my houses with EarthCraft certification [a Georgia program that certifies green/sustainable homes]. I think green building will be mandated before long; some features already are. It’s voluntary now but it will be mandatory because people will realize we all have to change how energy is used, like having low-energy windows. [Pause] How is that different from EasyLiving? I don’t really know, as I think about that. EarthCraft costs in labor and materials and time. The big question is will the buyer pay for energy features? I think they will.

The buyers will determine what happens. If they don’t buy inaccessible houses, the builders won’t build them. The advocates’ campaign for change would be more effective if they targeted buyers rather than builders.

For me, it’s not just a marketing thing. It’s the right thing to do.

It’s very powerful for me to drive through our neighborhoods and see one person walking, another one jogging, another person using a walker, another one with an electric wheelchair. It seems like the people there are having one big party.

Name: Steve Wall

Position: President

Organization: Wall Homes

Location: Based in Dallas/ Fort Worth, Texas. Also builds in Houston, Austin, and San Antonio, Texas

Mr. Wall is one of the builders who has built some private, single-family homes under the auspices of the San Antonio, Texas, ordinance.

It's my understanding that you have built single-family houses that have a zero-step entrance and interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

That's right.

About how long have you been doing that?

About two years.

Are there any other access features in the homes beyond the zero-step entrance and wide interior doors?

Not that I know of.

What factors led you to start building these homes? Was it the San Antonio city ordinance?

We had a joint venture in South San Antonio. Harry Houseman was the developer. It wasn't really about the city ordinance. It was a special master plan for that community involving zoning and a deed restriction.

What type of these basic-access houses have you built?

Single-family detached, all built on a concrete slab. The prices range from about \$120,000 to \$220,000. They are all in intergenerational communities, not age-restricted.

Do you have an estimate of how many homes of this type you have built or supervised?

Roughly 150.

I see you build in several cities. Where are the 150 houses located?

The majority are in San Antonio, but intermittently we build them in other communities.

What influences your decision to put access in the ones where access is not required?

We do this when the customers ask for it. We do a lot of customization. In that way, we offer a little more than some companies.

Have you gotten any negative feedback from prospective buyers or actual buyers/residents about the access features in the house?

Never.

Have you gotten any positive feedback?

Yes, they like it, even if they're not older people. I guess it's just the convenience. Convenience is convenience.

How easy or difficult has it been to incorporate the features in terms of construction?

Usually it's not too difficult.

What would you say about the cost of these features?

The main issue is the zero-step entrance. Sometimes it adds nothing, depending on the slope of the lot. I would say it averages \$400 to \$500 extra. The 2'10" doors we use are only a couple of dollars more than narrower doors.

Did you have to change your house plans, and if so how much of a problem is that?

We changed the plans a little bit. But it doesn't cost too much to change the plans. We have an architect on staff that uses AutoCAD. We do customization for everyone, so there is no real major cost issue.

What's your frank opinion of why so few builders are building homes with visitable features?

I think for the most part, with your large builders, it's harder for them to change and do things differently. By nature change is just difficult.

Can you think of any advice you would give another builder that would make the process of constructing the features go smoothly?

On the no-step entry, be sure that the side you put the garage on is on the higher side if the lot is sloped. Planning in advance for garage and front door exposure, to locate the entrance where there is the minimal amount of slope, is very important. Sometimes you can flip the house plan to achieve that. We try to put the no-step entrance at the front, and if that is not feasible, then the garage. Often we're able to do both. We go the second mile in that way.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis?

That's an interesting question. There are so many different reasons a person might need the access. A young person might need it if they become injured. A builder should be required to do it on request. He should not be able to send people away. If it's requested, he should have to do it at a fair price because I don't think that's too difficult.

Do you mention the access features in your printed ad materials?

Not directly, but our emphasis on customization implies it. Our company motto is
“Your Idea of Home.”

Name: Bob Goodman

Location: East Lake Commons, Decatur, Ga.

Mr. Goodman is a resident of East Lake Commons, a cohousing community. The community has sixty-seven houses, and all the homes were built with at least one zero-step entrance and wide interior passage doors.

How long have you lived in the house?

About four years, and about four in another house in the same community.

Do you know what caused the house to have the access features?

Concrete Change influenced the community to make the decision before ground was broken.

Is it your impression that the community has broad support for that?

I have heard only one person voice opposition. I can't remember what reason that person gave.

Are you aware of any access features besides the zero-step entrance and wide doors that were incorporated into the house?

No.

Have you experienced any downsides in having any of the features?

Only getting the bathroom door widened. We were surprised to find the unit was not as advertised. Almost all the houses had the agreed-on wide bathroom door, but a few got skipped, and ours was one of those. Since two members of the community use wheelchairs, it became very important to me that each unit be accessible to everybody. In order to pay for the door, an agreement was made where Jack [the developer] paid a third, the architect paid a third, and the community paid a third.

Overall, which one of the following best describes how you feel about having the features?

- Would strongly prefer not to have them
- Would somewhat prefer not to have them
- Neutral
- Somewhat glad to have them

Very glad to have them

Have you had any visitors who use a mobility aid such as a cane, a walker, crutches, or a wheelchair, or otherwise have trouble walking up steps?

Yes. One friend who uses a wheelchair and another who had neuropathy in her feet and was blind due to diabetes.

Approximately how many times for these individuals?

Approximately ten times.

For what types of occasions?

Sometimes for community-related committee meetings, playing games, a surprise retirement party given for me, music rehearsals for a community holiday party...various kinds of occasions.

Have you or anyone who lives in your house experienced a short-term mobility impairment that required use of a mobility aid such as crutches, a walker, or a wheelchair, or in some other way made it difficult to walk? If so, please describe the situation.

Yes. My wife, Liz, had two broken feet at different times and an unrelated foot surgery. She used a wheelchair and/or crutches each time. All three incidences occurred over a six-month time period. It would have been “a bear” getting in and out of house if there were steps. She actually was able to wheel into the bathroom.

Liz gave a lot of thought to the absence of a bedroom on the main floor. She slept on the sofa at times when her feet were healing.

Have you on occasion spoken positively or negatively about the features or the visitability concept to persons who don't live in your house?

When visitors come to the community I mention visitability as a community quality or trait. Often times people check out ELC [East Lake Commons] at a potluck, etc. That is often when I explain cohousing, hit on visitability, explain the origins of Eleanor's work, and explain that visitability is not always standard in cohousing.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis?

I think there should be laws. Although the first occupants might not need anything at the present time, or future occupants might need or not need these features, you don't have any idea who's going to be living in the houses next and next and next. Visitability features could be easily included in building codes similar to square footage requirements, hookups to water, and setbacks from street. These features would be kind of an extension of existing requirements. It is similar to issues that deal with equal rights and excluding people because of their race. If the features themselves keep people out, it's equivalent to other kinds of discrimination, which are already illegal.

Name: Mr. X

Location: San Antonio, Texas

Resident of a home built under the auspices of the city ordinance requiring access in certain privately owned single-family homes.

It's my impression that your house has a zero-step entrance and has interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes.

How long have you lived in the house?

I've lived here a little over two years.

At what point did you notice or become aware of the access features? (When you first moved in? After a short time? At this moment when asked? Or, whenever?)

I noticed it shortly after I moved in.

Do you know what caused the house to have the access features?

I think it is a building rule. All the houses in this area are the same way.

Do you personally or does someone who lives in your house have a long-term physical problem that makes it difficult to walk up stairs?

Yes, I have severe knee pain from an old injury.

Have you or anyone who lives in your house ever had a short-term mobility problem such as a sprained ankle or a back problem that made it difficult to walk up stairs?

I have three kids who are involved in sports and they've had several minor injuries where the entrance was easier for them. A couple of times they were on crutches and the entrance made it less dangerous for them to come in because there was less danger of falling.

Have you experienced any ways the zero-step entrance has made the house easier to use?

Yes, for me the flat entrance helps because of my knee problems.

Have you experienced any downsides or problems about the zero-step entrance?

No.

Have you experienced any ways the wide bathroom door has made the house easier to use?

About the same.

Have you experienced any downsides or problems about the wide bathroom door?

No. It doesn't seem much wider.

Overall, which one of the following best describes how you feel about having the features?

- Would strongly prefer not to have them
- Would somewhat prefer not to have them
- Neutral
- Somewhat glad to have them
- Very glad to have them

Somewhat glad to have them

Do you know if there are any access features besides the zero-step entrance and wide doors that were incorporated into the house?

I'm unsure about that.

Have you had any visitors who use a mobility aid such as a cane, a walker, crutches, or a wheelchair, or otherwise have trouble walking up steps?

My mother uses a walker. She has visited several times and she noticed it is easier for her to get in.

Are there any access features you wish you had in your house that you don't?

I wish the bathrooms would be bigger.

Have you on occasion spoken positively or negatively about the features or the visitability concept to persons who don't live in your house?

No.

Do you think laws should require new houses to have access features or do you think that instead of laws, access features should be incorporated on a voluntary basis?

I don't really have an opinion on that, one way or the other.

Is there anything else you might want to say on this general subject?

When we bought a new couch, the delivery men liked how easy it was to get the couch in the door.

Are you willing to have your first name and initial used in the article or do you prefer not to have your name used?

Prefer not.

Name: Melinda Kontos

Location: Amherst, N.Y.

Resident of a demonstration home built by the IDEA Center to showcase universal design.

It's my impression that you live in a single-family detached house that has a zero-step entrance and interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes.

Do you personally have a long-term or permanent mobility impairment that makes it impossible or very difficult to walk up steps? Does anyone else who lives in the house have such impairment?

Yes, I have MS.

How long have you lived in the house?

On October 4 (2007), it will be two years.

At what point did you notice or become aware of the access features?

It was my husband. He went to the 2005 Horizon Home Show House because we had another house that was split level at the time. We bought that house when I was young, fit, and beautiful. As time went on, the MS kicked in and the house became too difficult to live in.

We looked at different options. First we were going to build in Georgia to live near my husband's son, but that didn't work out. Then, we were going to go to another builder—and we even gave him money to begin building—but he didn't "get it." He didn't understand why all of the doors had to be wider and he insisted on steps down to the patio. I was getting so frustrated that we had to stop working with him.

Then, the newspaper had advertisements for the Horizon Home Show, which was here, and it had an article about a universal home, so my husband went to check it out. He came home and he said, "You have to see this house." So, he put me in the car and we went back and there I met Danise Levine (the architect) and Richard Bergman (the builder), and we fell in love with the house.

Did the presence of these features influence your decision to buy this home?

Absolutely! Absolutely!

Do you think the presence of these features increases or decreases the value of the home?

Increases. Well, because there's not going to be a time in your life when a "normal" person doesn't have a disability. Anybody can live in this house. You don't have to be disabled or old, and no one can anticipate how your life is going to be in fifteen or twenty years. And, if you live in a two-story house with laundry

in the basement, there may be a time when you won't be able to use them. We all think we're going to live forever, but it doesn't work that way.

Do you know why the house has the access features?

I don't know why the builder got into it; he calls it aging in place. Maybe it is because his father was old. I'm not sure what the real impetus was. But, it's a great idea.

I also think that there is a total absolute lack of understanding with most builders; they don't understand or want to understand. Thankfully, he did. I was deteriorating in my old house. I like to keep my house clean and do things by myself and I got my life back, frankly.

Are you aware of any access features besides the zero-step entrance and wide doors that were incorporated into the house?

Higher toilets, grab bars, a roll-in shower, vanities with knee space, a super duper wide shower door in the master bathroom so I can roll right on in.

There are also things that are just convenient, like a sprinkler system, a first-floor laundry, wide closet doors, and a closet where I can pull down the higher shelves, a pullout mirror—all the different shelves are at all different levels.

In the kitchen, there are different height countertops and the countertop is level with the stovetop, so if I have a heavy pot on the stove (like when I'm boiling pasta), I can move it from the stove to the countertop by just pushing it. And, the countertops at the peninsula, the composite is burn-proof and cut-proof. So, you can even cut directly on it.

And the refrigerator has pullout shelves, but maybe all do? This one does. The microwave is above the oven and the door opens down. So, you can pull a pan out and set it on the door until you're ready to carry it over to the counter. The dishwasher is higher and easy for bending over. Anything that makes it easier for my husband makes it easier for me, and anything that makes it easier for me makes it easier for my husband.

Also, there are no thresholds out to the porch, so I can go out and get some sun and there is a ramp in the garage. There are two stairs for my husband, and then there is a railing and a slight slope all the way up to the house for me.

Oh, I love this. There are pullout drawers in the kitchen. This is a big plus for me because I can get pots and pans out and cook, which I love to do, which I couldn't do in my old house.

The windows have latches at the bottom and are easy to crank out and there are lever handles on all the doors.

The front of the house has a gentle slope. It is convenient and it is easy to get down to the mailbox without hurting yourself. I just tried it on my new iBot.

Have you experienced any benefits in having any of the features?

My whole life has turned around to what it was before the MS kicked in. You can deal with everyday routine things. And I don't have to worry about when my husband is coming home; I can zip around and do everything myself.

Have you experienced any downsides in having any of the features?

No.

Have you had any visitors who use a mobility aid such as a cane, a walker, crutches, or a wheelchair, or otherwise have trouble walking up steps? If so, how many different individuals?

The builder brought a man who lives downtown in an apartment building and he has post-polio syndrome. His biggest fear is how he is going to get out if there is a fire and his wife isn't home. And, he came by and rolled around and decided that this is what he wanted.

We also have a very, very dear friend (actually, he's known my husband for almost forty years). They are both artists/art teachers. He also had polio as a little boy and he has a complete brace on his left leg and he walks with crutches. And he comes here and it is great. At our old house, he couldn't go up and down the stairs to visit us.

Also, I have a friend who is very pregnant. She came over and it was just as easy and helpful for her.

It is just easier for everyone.

Did any of them notice or comment on the presence of the access features, either positively or negatively?

Everyone is very positive. And, as a matter of fact, we'll be outside and people come by (and there are big, huge, two-story, monster houses around us) and they come by and they say "I wish we built a ranch," and these are strangers saying this. And my friend has severe knee problems and needs surgery and she can't live in her place. She loves coming here.

Are there any access features you wish you had in your house that you don't?

The powder room should have been about a foot wider. It would have been nice if it had been a foot deeper. I would have been able to pull the wheelchair in and get into the closet. Literally, that's the only thing; but, I use the powder room all the time so it's not that big of a concern.

Have you on occasion spoken positively or negatively about the features or the visitability concept to persons who don't live in your house?

Always positive. This is the perfect house.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis? Please say why.

It's an individual choice if you're building house. If that's what you want—go ahead.

If it's something like an apartment complex or a hotel, they should know the laws and what constitutes a room that is handicap accessible—and it's more than a grab bar. Anything that has anything to do with a community should definitely have that option available to people and have contractors that know what they're doing.

In the long run, people are going to have to realize it's not like the old days when people with disabilities were sent away. A little bit of convenience and consideration would make a big difference for a lot of people. For private homes and apartments I think there should be more than one designated for people with disabilities. There are seniors, people who have accidents.

Does your home have a basement?

Yes. But, I've never been in the basement. There's no reason for me to go there because everything I need is up here.

But this house has all the bells and whistles; it blew my mind when I first saw it.

I am happy we found this and happy that I met Richard (builder) and Danise (the architect) and found this house. My old house provided no quality of life for me (or for my husband).

It's a wonderful thing.

It's great that there are people out there who realize that not everyone is the same and that people's needs change over time.

Name: Patsy Peterson

Location: Pennsylvania

Resident of a visitable home built under a program sponsored by the Pennsylvania Housing Finance Agency.

It's my impression that your house has a zero-step entrance and has interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes.

How long have you lived in the house?

A little over three years.

Do you know what caused the house to have the access features?

My builder did it on spec for some reason or another. Our houses are all Energy Star and so on. He tries to get people to put in solar heat too, but they haven't gone for that.

Do the other houses in the neighborhood have access features?

Some probably do. I don't really notice that part too much. His model house does. But a lot of people don't choose to put in the access features. I don't know why that is, because it's an active adult community, you would think they might want that.

Why do you imagine they turn down the access features?

Maybe they think it will be too different. Or maybe they're thinking about resale value. All your life everything is for resale value, and not thinking about yourself, what you need for yourself. For instance, how will I stay in this house if I need access and it's not there? It seems like not many people are thinking that way.

If the builder had given you a choice, do you think you would have wanted the features at that time?

If he had asked me, I probably would have been a little nervous. I would have seen it as something different.

But now I like it. The nicest thing is the garage entrance. You don't have to go up a step with your packages.

So there's a zero-step entrance both at the front and through the garage?

Right.

Do you have a basement?

Yes, a full basement.

Have you experienced any downsides or problems about the zero-step entrances?

No downsides. I thought maybe we would get mice or something; but nothing like that has happened. No water in the door.

Have you or someone who lives in your house had a long-term or short-term mobility impairment?

Well, actually a couple of years ago I fell down when I was walking my dog. I injured both legs. I had to use a walker for a while. The thing I liked best was the high toilet. It made it so much easier to get up. My daughter doesn't like the high toilet, though. She and her husband and children live about an hour away, and they visit often. She has two little boys and the high toilet and bathroom sink are hard for them to use.

Do you think laws should require new houses to have access features or do you think that instead of laws, access features should be incorporated on a voluntary basis?

I think we already have too many laws. People should just start expecting it—buyers, builders, everyone—because we're all getting older.

Overall, I think it's a wonderful product and I can't imagine why anyone wouldn't want it. I like the openness, the wide doors; I like the fact that if my mother came to visit she could use the house easily. She's 85 years old. She's slowing down and uses a walker sometimes.

Name: Dorthelia Foster

City: Bolingbrook, Ill.

Resident of a visitable home built under Bolingbrook's ordinance requiring access in every new home.

It's my impression that your house that has a zero-step entrance and has interior doors wide enough for a wheelchair to pass through, including the bathroom door. Is that correct?

Yes.

How long have you lived in the house?

Six years.

At what point did you first notice or become aware of the access features?

Before we moved in, I noticed that we could walk right in the front door without a step; I also noticed that the powder room was easier to use. In my other house, I had to go in the door and then twist my body around to close the door. In this one, the door swings out into the hall, so there is more space to move about. That makes it easier to clean the powder room too.

On moving day is when I really noticed the entrance. There was snow on the ground, and as we left the older house, which had a step and a narrow door, the refrigerator fell over when the movers were bringing it out. When they got over to this house, the movers themselves commented on how much easier it was to move in the furniture.

So, has snow been a problem with your zero-step entrance?

Our porch area has a roof over it. We might get a little bit of snow on the porch, it's not a problem. The problem was in the old house with snow on steps and ice underneath the snow.

Did you know what caused the house to have the access features?

I didn't really know. That was not one of the reasons I bought it.

Have you personally or has someone who lives in your house had a short-term or long-term mobility impairment?

No.

Does your house have a basement?

Yes. The door to the basement is not as wide as the other doors, and we wish it were. It's not as convenient. We store furniture and things down there, and it's difficult to get it through the door.

Are there any access features you don't like as much?

One thing I don't like is all these outlets are up high. That's okay in most of the rooms, but in the master bedroom there are so many cords and it doesn't look attractive. One day I'm going to get one of those wrappers to make the cords look better.

Have you had any visitors who use a mobility aid such as a cane, a walker, crutches, or a wheelchair, or otherwise have trouble walking up steps?

My sister has started to use a cane for her MS, and she walks right in. On her good days she can even come in without a cane. It is certainly easier for her. She visits several times a year.

Have you noticed any downside of the no-step entrance?

No.

Any other benefits?

When I had my kitchen redone, the workers had their materials set up in the garage. There are two steps into the house from the garage, so sometimes the workers who had a lot to carry would come around to the front to avoid the steps in the garage. Also we've noticed it when having furniture delivered, when it's brought in on a dolly.

And it's easier for people who come on Christmas or Thanksgiving, bringing in packages and so forth. For me too, it's much easier to walk right in.

Do you think laws should require new houses to have access features or do you think that instead of laws, access features should be incorporated on a voluntary basis?

I would think laws should say part of the houses for every development should be required to have access, like for parking places. There should always be some houses available to people with disabilities.

I've heard that you've done some things to help along the visitability movement. Would you say a word about that?

I opened the house for a visitability tour shortly after we moved in, then later I let a TV crew shoot some film in my home and interview me, which became part of a segment shown on the TV community channel. Some of my friends would tell me, "I saw you on TV."

Is there anything else you might want to say on this general subject?

Another thing I like about the downstairs is that the stair is in the center of the house. You can take a wheelchair and go in a circle around the stairway. The hallway and the area in the kitchen are wide enough that you can go around and access the entire downstairs, and get to every room on the first floor. I like that openness.

Name: Bill and Collette Altaffer

Location: Pima County, Ariz.

(Because Bill and Collette have worked closely together as an advocacy team, they were interviewed together. The letter B indicates Bill's answers, and the letter C indicates Collette's answers.)

What type or types of advocacy have you tried? For example, trying to get a visitability law, trying to convince a local builder to do visitable houses, etc.

B: We initiated and shepherded the first law in the United States to mandate access in all new houses [in Pima County, Arizona]. We also helped our local government successfully quash the only lawsuits against visitability that have taken place in the United States. Now we're working to get the same mandate within the City of Tucson.

How did you first hear about visitability?

B: I subscribe to a lot of disability newsletters and magazines. As early as 1998 I read about visitability, and in 1999 I started working on it locally. I was a member of Tucson's Commission on Disability Issues [CODI] and a member of the steering committee of the Muscular Dystrophy Association's National Task Force on Public Awareness. I wrote a report for CODI that included information I'd gathered about Atlanta, Austin, etc. and really started promoting the concept.

What motivated you to start working on that?

B: I found the Concrete Change Web site and garnered a lot of information.

C: Certainly, personally, we had a hard time finding a house where we didn't have to make hugely expensive exterior renovations. And to visit others, I had to transfer Bill to a manual wheelchair and bump him up the steps.

What led you to use the term "inclusive home design" in the title of your bill, as opposed to "visitability"?

B: It was the local demographics and the realization that disability would affect all of us, whether we have a disability temporarily or permanently or whether we would become a caregiver. Inclusive home design was a more accurate term because it was about starting to create the possibility to age in place. Our climate is very attractive to older people, so we have an even larger older population than many parts of the country.

What was your next step after you had compiled the report?

C: We took that report, with the blessing of CODI, to the mayor and the city council. We got a lot of early support from the council. Some members were in complete support until they were contacted by the Home Builders Association.

B: Two council members set up a series of six meetings between the advocates, the builders, and city staff. Over a long period of time, there was a slow transition

by some members on the council from support to nonsupport. This was pretty clearly due to pressure from the homebuilders.

C: The whole discussion was continuously double-sided. You had the city lawyers saying it was unconstitutional.

B: But we had a lawyer—me—on the advocates' side who can look at the law and disagree with that assessment. Then besides the legality issue, there was the other component, the builders saying this could not be done. So we had to bring in architects and whomever we could find with a building background to refute the builders' claims that construction would be unfeasible. We were lucky in that there was a person serving on the commission who was a retired architect. There was also a city architect who supported us. The commission hired a cost estimator who had a building background, and he said, "No, it will not cost you these tens of thousands of dollars" [which the homebuilders were contending]. He was a fellow Certified Professional Estimator and past national president of the American Society of Professional Estimators, with forty years of experience in the construction industry.

What was his estimate of the cost of incorporating the features?

B: His estimate was around \$100 per home, and that included a \$25 profit for the builder. He was a great guy who went to a lot of meetings for us.

C: When we got to the end of the meetings, we had a promise from a council member that she was going to bring forth two proposals: one would apply only to homes built with government funding, and the other would apply to all new single-family homes, duplexes, and triplexes. [The Fair Housing Act already requires access in residential buildings of four or more units.]

Moving our efforts from the city to the county was a bit of a fluke. There had been a lot of press about the issue. Someone called us to tell us the county had worked on this at one time. We learned that there in fact had been some earlier efforts in the county to move toward this, so we expanded our efforts to the county. And the rest is history.

This became a big political thing. It was decided that the county and the city would kind of work together, each supporting the other. Then at the last minute, the woman on city council who had said she would make two proposals pulled her support. We had another council person who did a complete 180, too. So the county said, "We're moving forward."

B: The chair of the county board of supervisors, Raul Grijalva, who has now gone on to Congress in the House of Representatives, became our primary champion. He put his chief aide in charge of it, and they met with us almost weekly. He made available to us the county attorney, as well as county staff, to draft their version of the ordinance. The county board of supervisors member, Richard Elias, who took over Raul's position, has also been especially helpful. He's continued to champion the work.

By September of 2001, it was becoming clear that the city would not move forward with the ordinance. We devoted our efforts to the county, and after a series of public hearings, the county passed the ordinance in February of 2002. Since we wanted to make the transition as easy as possible for the builders, we had asked the county to insert a provision that kept the ordinance from taking effect for four months in order to give the builders time to adapt their floor plans. The county required us to meet with the builders during this four-month period to iron out any differences we might have. After seven additional meetings, we found one small glitch in the ordinance, so the county amended it in June, and at our request they added four more months to the implementation date. The ordinance took effect on October 8, 2002.

So then came the lawsuits?

B: Right, four days before the ordinance took effect. The first lawsuit was filed by a group in Denver, the Mountain States Legal Foundation, joined by the Southern Arizona Home Builders Association.

The suit contended that the ordinance was unconstitutional and violated their property rights. Meanwhile, the builders tried to get the courts to issue an injunction to keep them from having to incorporate the Inclusive Home Design features in the homes they were building while they were suing. But the courts refused, so the houses started going up. The Federal Court dismissed the case, saying there was lack of jurisdiction. The county attorney was handling the legal defense for the ordinance.

After the builders lost that suit, they sued again, this time in State Superior Court [Washburn v. Pima County, 206 Arizona 571, 81P.3D 1030, review denied April 19, 2004]. They claimed that the ordinance violated their state constitutional rights to privacy and equal protection. That court ruled in favor of the ordinance, so the homebuilders appealed to the state appeals court. That court also ruled in favor of the ordinance, so the homebuilders tried to take the case to the State Supreme Court. They refused to hear the case, effectively ending the legal action against the ordinance.

The Pima County Ordinance has produced the most houses of all the ordinances so far. How many would you say are up?

C: I'd say sixteen or seventeen thousand by now.

That must give you quite a gratified feeling.

B and C: Yes.

You mentioned you had about four boxes of materials. What kinds of materials are in them?

C: Oh God, you name it. One whole box of all the legal work, notes from all the meetings, any article that has anything remotely to do with this, we saved it.

B: Any article that would support the rational basis for implementing this kind of policy. For example, the number of people with arthritis in Arizona. After we would read an article, we would do more research on that subject line, and print that out. We were looking for documentation that supported a rational basis for implementing this legislation. When it was challenged in court, the county attorney needed documentation and he would come to us, and we would put it into a report for him.

Who were some of your allies in this work?

C: Major organizations like the Muscular Dystrophy Association, Pima Council on Aging.

B: Very, very important

C: The Students' Disability Resources Centers at the University of Arizona and Pima College. Quite a few groups gave support.

What did they do to help?

C: They wrote letters, spoke before public bodies like the board of supervisors, and so on.

Who organized them? You guys?

C: Pretty much.

Who opposed your work?

B: Well, the builders, of course. They sued, they exaggerated costs, and they exaggerated construction difficulty. They pressured officials. They made misstatements to the press.

Did anyone else oppose?

B: We'd rather not comment on that right now. We're right in the midst of working to get the county ordinance replicated in the City of Tucson. Opposition does seem to be less intense than the first time around. People may be realizing the effects of building with barriers. I'm hearing more and more about how much the city and county are spending on retrofits. That can't help but make inclusive design a logical practice, for anyone who thinks about it.

Is there anything you did along the way, in terms of the process, that you would do differently when you look back?

C: We certainly would have had all our support information gathered as early as possible.

B: Early on we started out by planning some voluntary initiatives. We thought of crafting a list of features that builders could voluntarily offer their buyers. But we soon realized that wasn't going to lead to anything substantial. Then a council person suggested we work on impacting the small percentage of homes Tucson

builds with government subsidies—around fifty per year. If we had gone with that, we'd have a total of only a couple of hundred houses by now, as opposed to the thousands we're getting through the ordinance.

Ultimately, we realized that home construction is much like assembly-line construction. You lower the cost of including these features if you require them to be added to every home. We realized that the requirements were an elegant, simple, and cost-effective way to address the long-term problems of disabilities and aging in place. So we pressed for 100 percent, with exceptions for unusually difficult sites, and that is what was passed.

C: Any time you put voluntary on something it just doesn't happen. It's just too easy for the status quo to keep doing what they're already doing.

B: One thing that would have been very helpful would have been an actual visitability building code that applies to single-family residential construction. It would have been great to have a code available, written by a nationally recognized code-writing body. In some instances cities can write their own codes, depending on state laws. But in Arizona, counties are limited to adopting codes that have been promulgated by a national code, or else adopting the code written by the nearest incorporated jurisdiction, which in this case was Tucson.

We took the ICC/ANSI [International Code Council/American National Standards Institute] standards, and from that we culled what would make an inclusive home design. But the homebuilders contended that it was not a "code" but rather a "standard." The courts did not agree, since the International Code Council is a nationally recognized code-writing organization. A national model accessibility code for single-family houses, duplexes, and triplexes would certainly make it easier for local communities to create an ordinance similar to ours. And it would provide the homebuilders with a model code that's clear, definitive, and consistent.

In your overall campaign, was there anything that worked particularly well?

C: The cost estimator. The documentation. We certainly learned to adapt; you have to adapt to whatever happens as you go along. It's important to have a very dedicated team, with experience in the field, and enough people so that everybody can take a break because it is intense work; people have to take a break. But not so many on the core team that it becomes unwieldy.

Is there anything else you might want to say on this general subject?

C: If you have a disability, you already have a major strike against you as an advocate. You have less time, less energy. You have issues of physical energy, all the extra things you have to do, arranging attendant care, arranging transportation, all of that and more, just to be an advocate.

B: I think the most difficult thing across the whole country is going to be the split between the people who advocate mandatory versus those who advocate voluntary. Voluntary is not going to accomplish what needs to happen, nor will it compensate for the millions of inaccessible homes that already exist.

Name: Darrel Christenson
Position: Director of Community Integration
Organization: Arizona Bridge to Independent Living
Location: Phoenix, Ariz.

What type or types of advocacy have you tried?

We've worked on passing visitability ordinances to require the basic access features in certain houses.

How and when did you first hear about visitability?

Nine years ago, shortly after first coming to work at Arizona Bridge to Independent Living.

How did your visitability work in Phoenix begin?

Six years ago I joined with others who were working for a visitability ordinance in Phoenix. We were part of the housing subcommittee of the Mayor's Commission on Disability Issues.

What existing materials did you use in your efforts?

We distributed information from the Concrete Change Web site.

Did you make any materials of your own?

We adapted some of the Concrete Change materials with local data, contact information, and so on.

Please describe the process, actions, or steps that have been involved in the advocacy effort you have participated in. Please feel free to go into a lot of detail.

Over a period of several years the housing committee held monthly planning meetings and from there planned our action steps. We educated the public on the issue, and met often to explain the issue to city council members.

Who were some of your allies in this work?

Several of the city council members became supporters. At first the mayor expressed support also. We were able to pass a small ordinance that requires 6 percent of the new houses within a quarter mile of the new light rail to have access—the single-family houses and townhouses that aren't covered by the Fair Housing Act. It was called the Liz Carabine Ordinance to honor a strong advocate who had passed away. I'd say about thirty houses have been built so far along the rail.

Then we moved forward, working on a broader ordinance that would cover 6 percent of all new houses in Phoenix. Then we were stopped short by some strong opponents.

Who opposed your work?

All along, the only people coming to our meetings other than the advocates was a person from the Home Builders Association, a person from the Multi-Family Housing Council, and a Realtor. The meetings were open to the public, but almost always the only people not on the committee who came were those people. When we started planning for a broader ordinance they were right there for our discussions and they put a stop to our progress.

What did they do to oppose forward movement?

For one thing they put out greatly inflated cost estimates. For instance, the president of the Home Builders Association of Central Arizona said at one public meeting [in nearby Surprise, Arizona] that it would cost \$150,000 to modify each house plan to incorporate the visitability features. Then someone else at the meeting who had some experience in homebuilding said all you have to do is mark the existing plan, it costs little or nothing, and the president backed down from his statement.

Also they maintained that requiring access is a violation of private property rights, freedom of choice. And the other thing they did was pressure the city council and the mayor, behind the scenes, to stop our progress toward the wider ordinance—the one for 6 percent of all new homes in Phoenix. The builders have a huge amount of local power on who gets elected to office.

Do you have direct proof that they did this?

Not in the sense that I heard the conversations. It's obvious from their public opposition and from what happened next that they worked behind the scenes.

The city government set up a delay tactic where they paid \$100,000 to a neutral company to do a study supposedly on need for accessible houses. That took months. The results were inconclusive. The methodology was flawed. Both sides used the information to bolster their arguments.

The mayor and most of the council members backed off from their earlier support of visitability. Then the city Equal Opportunity Department, who oversees the Commission on Disability Issues, disbanded the two committees that were strong in recommending policy—the Housing and Transportation Committees. That left only the Membership and the Special Events Committees. At that point most of the visitability advocates resigned from the commission.

Is there anything you did along the way, in terms of the process, that you would do differently when you look back?

We should have allied much earlier with the advocacy groups connected to aging, like the local AARP. We've started to do that now.

Do you have any plans for next steps?

Well, what happened with the commission was pretty discouraging. What's being considered now is tying access requirements to some perk the city could give a

builder, like expediting plan review, or some financial perks some builders already get. This hasn't passed yet. It could be a creative alternative, but that depends on how a perk is defined. The existing housing commissioner is already trying to narrowly define what a perk is. How and whether this will work is uncertain. City council elections will be held soon, and the dynamics of the new council will determine the progress.

Phoenix is the fourth largest city in the country. Is it going to be stuck in some old ways of doing things that are not beneficial to its broad population, or is it going to be the city of the future? We're also going to make some new efforts, coordinating more on a statewide level.

Name: Edward Bannister

Location: Bolingbrook, Ill.

What type or types of advocacy have you been involved in?

My main advocacy work was to initiate and help carry out the visitability ordinance passed in Bolingbrook that covers every new house built. Since that success, I've given quite a few presentations about visitability around the state, and sometimes beyond. Recently I organized a letter campaign to support Alderman Rose Spears, who's working for an ordinance in Yorkville, Illinois.

How did you first hear about visitability?

At a state conference of the Illinois Coalition of Citizens with Disabilities, in Springfield, around 1997. I heard a speech about it given by Karen Tamley, a member of DRACH [Disability Rights Action Coalition for Housing, a national advocacy group]. Ms. Tamley is currently the commissioner of the Mayor's Office for People with Disabilities in Chicago.

What were some of the motivations that led you to take leadership on that issue?

At that time my wife and I were looking to relocate from a townhouse with the bedroom on the second floor. My mobility impairment was increasing from a condition that began about twenty years ago, and it just was not possible to continue climbing those stairs. We looked and looked and could not find a house in Bolingbrook that would meet our needs without extremely expensive modifications. Finally we had to find a builder and have our own house built.

What was the first step in your advocacy?

In 1998, I approached Dennis Kowalczyk, community development director for the City of Bolingbrook. I explained visitability. He liked the idea and began talking it up. Then I received a call from him and he told me he couldn't go any further with it. Someone on staff had told him that he should stop his activity.

After some thought, I set up appointment with the mayor [Roger Claar]. Again, I explained the concept. The staff person who was against pursuing visitability was also present at that meeting.

I showed them the video *Building Better Neighborhoods*. I shared with the mayor my personal story of being unable to find a house, and told him that people, when they were elderly or disabled, were moving out of Bolingbrook because they couldn't find housing. His response was, "I didn't know that."

I also shared the observation that when you're looking for a house, you can get in the sales office and you can pick your flooring and all the other options, but when you roll out the door, you can't get into the model homes. There are steps at every entrance.

The staff person told the mayor that the builders were saying they would stop building in Bolingbrook if visitability features were required. The mayor said, “Let ’em.”

That was nine years ago. Have any of the builders stopped building there?

No.

What happened after you first met with the mayor?

He sent out surveys to several of the major builders in town to get their cost estimates for each of the proposed features. They didn’t respond, so the mayor said there would not be another permit issued in the city of Bolingbrook until he got them back. Then they came pouring in. [Mayor Claar, as keynote speaker at a 2007 visitability conference in Winnipeg, Manitoba, distributed a chart showing the extremely varying cost figures the builders had turned in.]

These high estimates are way out of line. Just the other day, when I was getting information about Yorkville, I saw where a builder there was saying it would cost \$7,000 to put in the access basics. Well, their situation is not different from Bolingbrook, and we’re doing it here for \$500. I thought, “If you’re overcharging that much for this, what else are you overcharging for?”

After the surveys came back, what were the next steps?

We also set up a conference call with Eleanor Smith and she brought in a builder who was working with her in Georgia, I think from Habitat for Humanity. Several of the mayor’s staff were on the call, along with myself and the man who had built my house, and also Illinois State Representative Jim Meyer, who has been a big supporter of the issue. The two builders were positive about the practicality, and Eleanor spoke about the houses already built in Atlanta that had resulted from the Atlanta ordinance. They already had several hundred of these.

After that, we had a series of at least six meetings with builders who were protesting the idea, where Bill Maleris [a builder and advocate from Naperville, a neighboring city] and Dennis Kowalczyk and Dan Buonamici from the city staff would answer their questions. The builders were not happy, but one builder from the Pasquinelli firm said, “We can do this and we’re going to do this.” The other builders looked at him like he had the plague.

Builders claim they’ll do it if someone needs it. But they charge very high for what they call an upgrade. They want to make money. When we were in the process of building our house, I got my wife a sweatshirt that said “Upgrade University.” That term came up over and over again for the changes we needed, even the basic ones like the wider doors. I absolutely believe the basics should be required in every new house. Then if people need specialized things beyond that, they can be charged for those other upgrades.

What was the next step in the process after the meetings?

The mayor took the visitability ordinance to the Planning Commission. A vote was taken, and it passed unanimously. We felt great. Then the mayor did not sign the bill. But it turned out the mayor had a strategy. Since the builders hated the idea of a mandate, the mayor left it voluntary but he applied heavy pressure to have the ordinance followed voluntarily. He set up a process where if builders did not want to do the access on a certain project, in order to get building permits they had to meet with Dan and Don at city hall, who would try to sell them on the idea.

Hundreds of houses went up that had the access features, and builders saw they could do it if they had to. Pulte Homes wanted an alternative. They proposed that instead of building the zero-step entrance into the house design, they would provide a portable ramp for every house, at a cost they estimated at \$1,000. It would be hung in a special place on the garage wall, and if a visitor or a resident needed it, the homeowner could take it off the wall and put it in place. The mayor asked us what we thought of that and we answered that that kind of thing just does not work. A year later, nobody knows where the ramp went, and then the next year when it's needed it's not there.

But now the Bolingbrook ordinance is actual law, not just pending, correct?

Yes, the mayor signed it into law in 2003.

How have the citizens responded to the ordinance? Any objections or negative spin-offs?

No, I've heard no opposition from the residents. In fact, sometimes when I'm going around town people will stop me and give me praise. People like the open floor plan and the entrances.

Are you aware of any other positive spin-offs from or reactions to the houses?

The city won an award from the Illinois Municipal League [a statewide association of mayors and other municipal officials]. We entered the visitability project in their competition for the 2004 Innovations Award and Bolingbrook was awarded first place among ten entrants. The mayor said in his acceptance speech, "It's just commonsense building."

Is there anything else you might want to say on this general subject?

I don't understand why this isn't progressing faster across the country. People build entrances in their garages for their cars, and make entrances for their pets but do not make their house accommodating for human beings who they say they love.

We send tens of thousands of troops to other countries to fight for their independence, and some return without arms or legs and in wheelchairs. They don't have accessible homes to return to. Where is their independence now?

Name: Roger Borgenicht
Position: Executive Director
Organization: ASSIST
Location: Salt Lake City, Utah

Who is your main clientele at ASSIST?

Mainly people who have become mobility impaired and can no longer use their home. Over the past ten years, we've addressed over 2,000 homes in the Salt Lake area. People call us and say, "I can't get in and out of my house, I can't get through the bathroom door, I can't use the tub." We go out to the house and assess what can be done. We've done everything from drawing up construction plans to getting the work itself done. Once in a while the issue is using the kitchen or something as small as modifying a computer table, but 95 percent of the time the focus is the entrances, the door widths, and the bathroom.

From time to time we are also called on to consult with people who are building a new home. These are almost always people who already have disabilities.

Do you remember when and how you first heard the word "visitability"?

The first version of our guidebook, *The ASSIST Guidebook to the Accessible Home: Practical Designs for Home Modifications and New Construction*, was published in 1998 and it did not mention visitability, so it must have been after that. Our 2002 edition has a whole chapter on visitability.

Why did that concept resonate so much with you? Why did you "get bit by the bug" and become so active for visitability?

I got bit by the bug because it seemed like most of the home accessibility recommendations we were seeing were kind of an all-or-nothing concept, loading feature after feature on the list, and you were saying "go for the basics." That's way more important than trying to spread 100 features of a universal design approach. When our clients consulted with us, their concern was the basics. It seemed like focusing on the basics would solve 90 percent of the problems people were facing in their homes when they became disabled, and that tight focus would help the change in new construction habits across the country happen sooner rather than later. It would be easier to get the three features rather than ten or the hundred. The clock is ticking. New houses are going up by the millions every year.

I got some extra, personal insight from the experience of my in-laws. When my father-in-law turned 80, he was still in good health but he was looking to move because he had an old house with lots of upkeep. For his new house, he was telling the Realtor, "I want a house without steps." He's not afraid to admit that he's getting older, like some people are. When he comes to our house, where we have four steps down from the porch, I walk down the steps with him to accompany him. It seems to me that the visitability approach to go with a few features has more potential to change things rapidly.

Tell me about your recent campaign for “No More 28” Doors.”

It seems like with thirty-inch doors, when we modify them with swing-clear hinges, most people in wheelchairs can get through. But on new houses, in eight out of ten cases, the builders are still putting in bathroom doors at least two inches narrower than the bedroom doors, and those doors are not usable even when swing-clear hinges are put on later. The typical bathroom door, with most chairs being rim-to-rim twenty-seven inches wide, prevents you from even getting into the room. It’s an unneeded practice that’s continuing just because it has always been done. Using a wider bathroom door in new construction would be simple even in the typical small 5 × 8 bathroom, including fitting in the way cabinets are typically done. But retrofitting an existing door to widen it is often complex, expensive, having to tear out the door frame and so on.

The narrow bathroom door is the most harmful construction practice, other than the entry stairs, that we see. We have many situations where [before the retrofit is done] people are forced to do their personal bodily functions in their bedroom because they literally can’t get into their bathroom. That’s probably even true for temporary disabilities, although those people don’t call us.

You actually started a specific campaign to end the narrow bathroom door in new construction.

It’s not in full swing yet. But we have made a one-page handout focusing solely on that, and I have one paragraph on that in my information kit. I plan to get articles focusing on just that feature into building-related magazines.

What other visitability materials has ASSIST produced?

We made a full-color brochure titled *Essential Visitability Features*, a foldout that opens to 8½ × 33 inches, which shows with diagrams and photos the essence of the entrances, interior doors, and bathrooms.

Architects kept contacting us about their projects, asking, “What code applies? The ICC? The ADA? Fair Housing? There’s so much confusion about which regulations apply. I’m not going to do anything because someone is going to criticize me no matter what I do.” We always try for a graphic approach, not just verbal descriptions. A lot of our work is trying to simplify, and the brochure attempted to do that. My mentor, Roger Evans, who is a nationally known worker on ICC, always emphasizes simplicity and clarity. He says, “Don’t give me flowery language. Talk to me about how things can actually be done.”

Obviously architects are responsible for following the more complex codes, but still the brochure is helpful for the basics. We initially mailed out 4,000 with a cover letter to every builder, architect, mayor, planning department, and building official in every city and county in Utah.

Whenever I send out the guidebook—over 1,500 so far—we enclose the brochure, and we send them by request in bulk. I just sent out forty to a disability group in Colorado, fifty to Ohio.

We also have a new, one-page handout in process showing three methods of creating a zero-step entrance over a basement or crawl space. I realized recently that architects often don't design in three dimensions when it comes to how the building will sit in the ground. They get their elevation, but when it comes to how the foundation actually fits in the ground, they don't attend to that. And that's the critical piece to get zero-step entrances without ramps, what we called "sloped pathways," to an entry door of the house. I showed the handout to a guy who understands the mechanics of building techniques, and he was illuminated by having clear diagrams about how low-rise framing on new houses can allow easily achieved zero-step entries, at the front or back, without ramping.

You've been advocating for many months to the people involved in Daybreak, a New Urbanist development going up in Salt Lake on 4,100 acres. The chief designer is Peter Calthorpe, who's widely known as one of the nation's most influential urban designers and served on the board of the Congress for the New Urbanism. I understand you have been promoting visitability for Daybreak.

Yes. Daybreak is planned to comprise thirteen villages consisting of about a thousand homes each, so it's an enormous project. Village One is mostly complete, around 1,000 single-family houses. Village Two also has several hundred houses up. Village Three is projected to start in 2008, depending on sales in the first two villages. I'm one of several local advocates who have been urging visitability for Daybreak.

How have the advocacy efforts been going?

Village One had no access in any of the model homes.

Do you know if any of the nonmodel houses have access?

One house has a ramp that we saw because there's a child in the family who uses a wheelchair. I think a few others were built with access features because a current buyer has a disability. I know one nondisabled woman who bought those features for a more open plan.

Village Two has four of about a dozen model homes with visitability.

What accounted for the access in four of the model homes in Village Two?

I sent our guidebook and visitability brochure to the chief designer, and spoke with him; I know him personally. Also there was a fight here that Barbara Toomer and some other local advocates had with the Parade of Homes, which may have had some influence. The Parade of Homes did not have access even though they charged money for the public to tour, and local advocates contended that is illegal. The Parade put up temporary ramps in the garage which were taken away after the tour.

You mentioned the need for visitability at Daybreak to Peter Calthorpe. Do you know if he took any action to urge access?

Not to my knowledge. Years ago I had some communication with Peter about transportation, where we have the same goals and approaches, and I contacted him about six months ago about visitability at Daybreak.

I have been in contact often with the staff at Kennecott Land (the local development company in charge of the Daybreak project) and we feel like some progress is occurring. They have agreed to make visitability a “required option” in Village Three. This means that all the builders will be required to offer a package of Easy Living-type features to buyers, showing the basic access features plus perhaps additional options. I didn’t think there was any way we could force all the builders to make all the new homes in Daybreak visitable, so we came up with the idea that they could require in their business plan that all builders affirmatively offer access features in all their printed and web information so buyers could see that not only could they get granite countertops but also wider doors—all presented in the marketing materials as amenities. We felt that lots of people would choose them if presented positively, and that’s the agreement we have so far. I have sent the brochure and other materials to all the builders, and we will contact them later and keep nudging.

If Daybreak is going to make an access package a required option for Village Three, I’ll be going to those builders to show them “This is all it is. Now you can add whatever extra options you want, but these are the simple basics.”

Green features are already required throughout Daybreak, not just as an option, correct?

Yes, all the houses are required to meet Energy Star standards.

To promote visitability, I need to get with the marketers, not just the builders. The home they are showing on a recent brochure for a tour of homes features a house with six steps—a raised porch three or four feet high. So that’s the disconnect between the designers and the marketing people.

In Village One, there were so many missed opportunities. There were houses with one very low step at the rear, which could have been very easily graded for no step.

At the Congress for the New Urbanism conference in Philadelphia, during the Visitability Initiative lunch, I showed slides of some of the missed opportunities. It’s interesting that that got back to a marketing man at Daybreak; he mentioned it to me. I have no idea how he would have known that; there were less than a dozen people at the lunch presentation.

Do you have any immediate plans for continuing advocacy?

I take lots of opportunities to spread the visitability word. Tomorrow I’m going up to Missoula, Montana, where my son is considering going to college. I set up having a drink with the head of the city planning department. I had spoken with him last winter about the range of features you can put in a house, from visitable, to what I call usable, to Universal Design. After I spoke to him last winter, he put

our guidebook on his personal “interesting articles” listserv. He is interested in long-range community design, so he was interested in how house design might affect the aging Baby Boomers.

In New Orleans, where I’m doing some consulting, even on the lots where the house has to be up four feet because of floodplains, I’m saying put the basics on the inside and make the configuration of the house on the lot in a way that adding a ramp is as easy as possible—in terms of the driveway configuration, the location of meters on the side of the house, etc.

I was just put in touch with the president of the Salt Lake Home Builders Association. We’ve exchanged e-mails, and we’re going to have lunch together. I intend to talk with her about the visitability features, how we might work together to promote that agenda.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis? Please say why.

I think that basic features such as those required in the Fair Housing Act should also be required in new single-family housing. Over the life cycle of the house, it is used by many families. I suppose if some individual person came along designing their own house, hiring their own architect and builder, that might be a different consideration. But I think it does make sense to have requirements. The form of the housing should not discriminate against disabled users.

Is there anything else you would like to say on the general subject?

I started architecture school wanting to be a designer; I emerged wanting to be a carpenter. I have always liked looking at the big picture, from housing to transportation and all the larger design issues of a whole community, but at the same time focusing on the nuts and bolts of how it all fits together. To me the nuts and bolts are fascinating and very important. That’s one reason I’m drawn to visitability.

Name: Sue Hart
Position: Housing Visitability Chairperson
Organization: Michigan Association of Centers for Independent Living
Location: Flint, Mich.

What type or types of advocacy have you tried?

We've done lots of educating throughout the state, and we worked for several years to successfully pass a state visitability law. This law passed in 2006 and it requires access features in 50 percent of the houses that use funds from the state housing development authority.

How did you first hear about visitability?

In 1999 I was hired as a housing advocacy staff person for the Disability Network in Flint. As part of my job orientation I looked at the Concrete Change video *Building Better Neighborhoods*. Then I went to the housing conference in Chicago and heard you [Eleanor Smith] speak. I got inspired and I thought, "Hey! Let's do it!" When I went back home from the conference I started working on it. I felt discouraged at first because there were only a few of us working on it, but my boss Jill Gerrie said, "Don't be discouraged; a lot of progress got made in Atlanta with a few people."

Jill and I started looking for funding, and we got a grant to organize the state to take action for visitability.

I had a lot of personal motivation too because I've had a mobility impairment since 1993. First I used crutches and now I use a scooter. We had to change a lot of stuff in our house and we didn't have enough money to do all that was needed.

What steps did you take when you started organizing?

We developed a presentation on visitability and started meeting with the staff of CILs [centers for independent living] around the state. Paul Ecklund and I worked together, along with others. We bought copies of *Building Better Neighborhoods* and showed it around. We invited Beto Barrera and Darrell Price, housing advocates employed at the CIL Access Living in Chicago, and they gave a training session on housing justice and action.

Then our group voted on what action to take and we decided on pushing for a state law. A few wanted to include more Universal Design features, but the majority wanted to start smaller.

We bought a training system called the Midwest Academy model for social change and used it to plan and carry out our strategy. That was very helpful in showing us what processes to use, how to identify the target, identify our allies, and so on.

The State Council on Independent Living paid for conference calls with leaders from around the state who were working on the bill.

We started meeting with state legislators to educate them. The primary sponsor was Rep. Lorence Wenke (R). He understood our issue. Just after he had built a new house, he fell and broke his leg, and then had trouble getting in and out of his own home.

What materials did you use?

We used stuff from the Concrete Change Web site, the IDEA Center, and the Center for Universal Design. We really loved the IDEA Center spreadsheet on ordinances.

We held a four-hour training session for builders at a community center, reaching out to builders statewide. Ed Bannister, an advocate from Bolingbrook, Illinois, came and spoke. Not many builders came, but it was worth the effort.

Who were some of your allies in this work?

The state AARP sent a letter of support, and so did the state MS Society, the Michigan Paralyzed Veterans Association (PVA), and the state Area Agencies on Aging. The PVA executive director helped a lot with the state housing authority because he knew a lot about codes and he knew the code guy personally. People at the Michigan State Housing Development Authority (MISHDA) were also allies. They are pretty powerful. My intuition says the governor was also in favor of the bill because she made statements in favor of disability inclusion, even though she didn't talk specifically about our bill.

Did anyone oppose your work? If so, what did they do?

Arguments came from the builders and from the Community Economic Development Association. They were not too bad.

They said the costs were high, and that snow would be a problem for the no-step entrances, and they also argued that houses with basements would present big difficulties. Paul Elkland is professionally involved with the ADA and code issues and he addressed their issues. Also a woman builder, Chris Sherburn, who has MS, was on our side. She attended meetings and addressed the builders' technical objections.

Eventually, when we got to the point where it looked like we were making progress on the issue, the Disability Network of Michigan hired a lobbyist specifically for our bill. We organized a campaign where 1,700 Michigan citizens e-mailed their legislators to get the bill out of committee. The State CIL purchased Get Active software that really worked well for that. The Midwest Academy model, the paid lobbyist, the conference calls, and the e-mail campaign were all a big help in our process.

What were some of the things that made the process hardest, if anything?

Advocates wanted 100 percent of the houses funded by MISHDA, but there was strong opposition so we had to compromise for 50 percent.

What were some of the things that made the process most satisfying or worked the best?

It all came together so much better than we ever dreamed. People from all around the state worked on it, and the unity was great.

I see the law was to take effect in January of 2007. How well has enforcement gone?

The biggest problem right now is the language. When the bill came back from the Legislative Service Bureau, the organization that writes the legislative language, there were more architectural access features involved than we had asked for; for example, they inserted language that referred to type B units requiring more features. Now it's a problem as lawyers are involved to examine language and just last week we got new interpretation of meaning.

Do you know if any actual houses have resulted from your work so far?

I think about five houses have been built from the state law. But, the authority builds only about sixty a year.

On a local level there have been some positive results from our education efforts that are not related to the bill. For instance, the Genesee County land bank voted to make all their houses visitable—about ten have come about through that. I went to the grand opening of one of those. They got federal funds through Community Development Block Grants, so a percentage of them would have been required to have access anyway. Bu, they went ahead and decided to do the rest visitable.

Tom Phillips of Kalamazoo Habitat for Humanity has become a visitability advocate and Habitat for Humanity in Kent County is managing to incorporate visitability even with basements. These two groups helped us give a presentation on visitability at a state conference on affordable housing.

Is there anything you did along the way, in terms of the process, that you would do differently when you look back?

I think maybe we should have said something about the added features the bill writers put in. That language might have slowed down progress. I'm not sure on that one.

Do you have any plans for next steps?

I think we have to address the language issue. Also, MISHDA said they would do four trainings but they have not started yet. Also they said they would put blueprints for visitable units on their Web site and they haven't done that yet. Some of that has not started yet. Overall, I think our work has been successful.

Name: Debbie Leasure
Position: Data Analyst and Planner
Organization: Ohio Housing Finance Agency
Location: Columbus, Ohio

Background Information:

In May 2007, the Ohio Housing Finance Agency (OHFA) announced that it had instituted mandatory visitability requirements for all newly constructed units in properties that receive federal tax credits, which the agency allots to builders who meet application requirements. These tax credits are awarded by every state, but there is no requirement that the credits trigger access requirements beyond the existing federal laws, such as Section 504 of the Rehabilitation Act and the Fair Housing Act Amendments (FHAA). Thus, the Ohio initiative cuts new ground. By 2009 the new policy is expected to yield 1,200 to 1,400 new visitable houses, which otherwise would not have been required to have zero-step entrances and wide interior doors.

Interview:

It's my impression you are the person at OHFA who initiated getting this policy change. Is that right?

Yes. And many more coworkers helped with the effort.

When and how did you first hear about visitability?

When OHFA first hired me about a year and a half ago, I started getting acquainted with the agency's Universal Design [UD] menu that developers could choose from to get extra optional points on their applications for tax credits. I noticed that the policy permitted building several interior access features while omitting a zero-step entrance. That seemed to me like a backwards way of doing things, so I started searching the web for alternatives and found the Concrete Change Web site. That's where I saw the concept of prioritizing a few key features, including the entry. Then several months later I went to the Universal Design and Visitability conference put on by Ohio State University, and I went to a visitability presentation by Eleanor Smith, and also spoke further with her and other people at the conference about that.

How did the new policy come about? What was the process?

I went to a meeting of our committee for the Qualified Allocation Plan. Every state puts together their own version of a plan to decide who gets the tax credits. I presented the idea of making the basic visitability features a requirement for the credit, and then with extra credits available if the developers did additional UD features. The head of the tax credit department, Kevin Clark, thought it was a good idea, and other colleagues got involved also. Most people agreed it was a good idea, while at first some thought it might not be doable.

Then I took the idea to a subcommittee of the board of directors. They asked questions that could come up from outside the agency if the idea were put in place. A major one was cost. Also there were concerns that units might look odd or unattractive. I used the Concrete Change PowerPoint *Intro to Visitability*, and that was helpful because it has lots of photographs of existing visitable entrances, and also shows why costs on new construction can be low. What helped sell the concept was the fact that it's very much like what is already being done under FHAA in multifamily housing, but expanding it to single-family detached houses and also townhouses.

So townhouses are included in the visitability requirements, even if they are garage-under townhouses?

Yes, the townhouse first floors must include the features. We figure if the 5 percent under Section 504 are already being done, so can the rest. We emphasized that this is for new construction, not rehabs.

What was the next step?

The five people on the subcommittee voted unanimously in favor of the recommendation, and then it went to the full board where it was accepted.

After the policy was put into the plan, we held four focus groups to get feedback. A total of around twenty developers participated, about half for-profit and half nonprofit. Representatives from some disability groups were there supporting the plan. There was not a lot of opposition from the developers when the plan was passed.

Two issues that arose were houses with basements and infill on narrow lots. We put that back on their architects to come up with creative designs. All of that will be part of the learning process. We also pointed out benefits from the apartment manager perspective; that is, the basics are in place so the managers don't have to move people as much if they become disabled.

I always emphasize universality, that these features are useful for nondisabled people too. I say that the visitability features are really basic features of UD.

What materials have you used or made to educate developers?

We send them to the Concrete Change Web site. Other than that, we answer questions by phone as they come up.

We may be working before long on provisions for exemption from zero-step entrances on difficult lots and also some guidelines for rehabs.

What are some of the additional UD features that are eligible for points?

For example, blocking in bathroom walls, more maneuvering space in kitchens and bathrooms, lowered kitchen cabinets. This is obviously not as stringent as 504 requirements, but still fairly extensive.

It seems like you're showing that agencies have quite a bit of influence to bring about requirements.

We've found that the Qualified Allocation Plan is a powerful tool to drive affordable and accessible housing policy in the state.

Is there anything else you might want to say on this subject?

One good thing that happened is that a lot of other agencies besides OHFA became involved, like the Ohio Department of Aging, the Ohio Job and Family Services, and the Developmental Disabilities Council. They all sent letters of support for the policy. Establishing interagency cooperation and alliances is a positive outcome of this. There was an existing Ohio Interagency Council on Homelessness and Housing already in place, and that helped make the alliances occur. Requiring the visitability features fit with the mission of the interagency group.

Name: Jay Ruggeri
Position: City councilman and firefighter
Location: Lafayette, Colo.

What factor or influences led you to begin working on getting basic access into more houses?

My main activism started when I spearheaded a Kids' Park in Lafayette in 2002, a playground accessible both to kids with disabilities and kids without. It was the county's first wheelchair-accessible playground. We had the whole community behind us. I have two daughters. On the old playground, one daughter could play, but my other daughter, who's in a wheelchair, could not even get on the playground. For the new playground, we raised \$187,000 and we had 500 people show up on build day. We built it in a single day. The speeches made, the community spirit, the comments, people tearful because they were so touched.... From that one day it was enough for me to pursue inclusion from that day on.

Martin Luther King would have been proud of us on that day. It's inclusion, it's the way life should be. Once I had that perspective, it's become a passion.

People don't exclude other people because they're mean. It's an act of omission. Unfortunately people don't usually change unless they have direct experience. Change has to start in childhood. On the new playground, kids now interact. Kids ask a disabled kid, "What's wrong with your legs?" "How do you go to the bathroom?" That's okay! You need to take the barriers down—the physical and psychological barriers. Those kids on the playground will grow up and become my daughter's bankers, her store clerks, her carpenters. The place to start is childhood.

While we were watching the kids play, I would talk to other parents. Then, through those discussions, some of them became advocates.

Going through that whole experience gave me the impetus to make a run for city council in 2005, and work for inclusion in the whole community.

When did you first hear about visitability?

In 2002 I remodeled my house for my daughter, and I took my building plans to have them reviewed at the Center for People with Disabilities [an independent living center in Boulder]. Dave Bolen, the director, said, "You're making the house pretty visitable." I had never heard that term. He gave me the Concrete Change Web address, and I started getting educated about what could be done. I showed the material in all my playground contacts and started meetings to share the concept.

What visitability action did you undertake in Lafayette?

I originally proposed legislation to require 100 percent of all new houses to have a zero-step entrance, thirty-two-inch-wide interior doors, a bathroom with at least a toilet and a sink, and a few other basic features. It provided exceptions and cash-

in-lieu waivers for difficult sites. After two years of raising community awareness, holding inclusive workshops, and having the required public hearings, it appeared we were going to achieve 85 percent of all new houses with access. That would have been great, and it even passed the first reading. But just before the second reading there was a heavy opposition push. One councilor flipped his vote, and we lost what we had pushed for by one vote. The bill passed in September 2007, but with a lowered percentage of 25. Nonetheless, it was a victory.

I'll get more information from you in a bit about how that occurred, but first I'd like to hear about what you did when you first started working on the bill, the processes you used.

I first formally dropped in the legislation to city council in 2006. But I did a lot of groundwork before that to set the stage. The National League of Cities has a major program encouraging cities to become part of its Inclusive Communities Partnership. It encompasses all kinds of diversity—race, ethnic, sexual orientation, age, financial disparity, everyone. I began giving workshops on inclusion around town. I proposed that Lafayette join the Partnership.

I enlisted the help of the seniors in the community for the Inclusive Communities push, and for the visitability push. I had already been appointed as city council liaison to Senior Services, so it's my job to attend every meeting and help them with their goals.

When I first gave a presentation on visitability to the Senior Services Advisory Board, they looked at me like I was from another planet. They had never heard anyone say that all new houses, or almost all, should have access. Fortunately they were receptive and I explained it with my PowerPoint presentation, starting with the general principle of inclusion, including seniors. I mixed in some pictures from Concrete Change, but I had my own material also. A few people resisted the idea of change. I first got them to vote to tell city council to join Inclusive Communities Partnerships. Then later they voted to support visitability also. Seniors and the agencies that support them gave me a lot of support. Colorado AARP did a regional update of Lafayette's visitability action in their March northern Colorado newsletter. They also wrote a nice letter to the city council. I joined AARP last week.

After the council voted to join the Inclusive Communities Partnership, Lafayette got a big sign, like all member cities do, to be erected on the edge of town that says "Welcome. We Are Building An Inclusive Community."

When Jim Hunt [recent president of the League of Cities, who developed the Inclusive Communities program] was in Colorado in May of 2006 to speak at the state conference of the Colorado Municipal League, all the city councilors had their picture taken with him by the sign. I talked with him at length about disability inclusion. He understood, because his brother has a mobility impairment and Jim remembered how hard it was to try to help in a bathroom that was inaccessible. He added Lafayette's visitability push as an example of inclusion on his Web site, and it has brought greater attention to the concept to all of the 30,000 cities in his national jurisdiction.

My next step was that I participated in the county's goal-setting sessions where a large group of seniors and others were giving input for a comprehensive strategic plan for Boulder County. The people at those meetings listed housing as one of their basic needs, so I quickly added the word visitability. I explained it, and they embraced it. And that word became part of the comprehensive plan as Goal 1.3. Visitability is defined in a footnote of the report, with direct wording from the Concrete Change Web site. The final comprehensive plan from the Boulder County Seniors Aging Division was titled "Creating Vibrant Communities in Which We All Age Well," and it later received an award from DRCOG [Denver Regional Council of Government]. Thirty or forty organizations participated in making that plan—plus their many partners. The report won an award from DRCOG because it was so well done and had a comprehensive list of action steps. When local newspapers published my efforts to highlight visitability, it got the attention of DRCOG. At that point, DRCOG invited me to participate in their work plan to create senior-healthy communities for the whole state. I'm currently giving input at those meetings.

I started to get city councilors on board for the legislation. After each election, the new council meets and develops goals for the new council, and I got the council to name visitability and accessibility as a goal. They went to the Planning Commission and asked them to evaluate the visitability concept. The Commission spent six months on that project and drafted the proposed ordinance and building code changes. They held public hearings, and I did presentations there and passed out education materials. Also, we had to get a legal opinion from the city attorney. He gave the opinion that the proposed legislation would hold up in court.

Who were some of the supporters for the bill?

On the city side, I had the support of the mayor, the city manager, and the planning director; they've been behind it 100 percent. Also two city councilors; they have all been great, and patient with my constant persistence.

There were a lot of agencies on board as well, who wrote letters to the council.

Who have been the opponents?

The homebuilders and some members of the Planning Commission took shots at it. The Planning Commissioner was great, but some members of the Commission were negative. I went to the meeting where they were making their final recommendation to city council on the legislation. There were six commissioners there—three were open to it 100 percent, and three were against it. The anti's were saying "We're going to lose diversity of housing stock, and what about the second and third floors?"

The perceived effect on housing affordability also weighed in big for the Commission. The Home Builders Association was still saying, like they had been saying along, that it would cost \$10,000 to \$20,000 extra per house. I had been in touch with a highly respected builder, a reasonable guy. His wife has multiple sclerosis. He had come up with building techniques like recessed floor joists which would create a zero-step entrance on a house with a basement for less than

\$500, which he had actually implemented in one of his multifamily developments. I showed the other builders and the commissioners the \$500 solution, but they ignored it and continued to say it couldn't be done economically.

So the Planning Commissioners were split three to three over what to recommend, and one guy picked a number out of the sky, 25 percent, and they went with that for their recommendation. After the meeting I went to them and told them they had really missed the mark. They looked at me like, "We just passed the greatest thing we've ever done and you're not grateful?!" They were angry at me, but I'm not too worried. I run into burning buildings for a living. And the city council still has the last say vote on the matter.

Early on, we tried to get builders to do something voluntary and they said no because they didn't want a change and they didn't trust city government. I think they were afraid that if it worked well voluntarily it would then become more evidence for a law, and they avoid regulation. They might have been worried that if an ordinance passed it would retroactively affect plans already in the works, which naturally would be a problem, but in reality that could easily be grandfathered in. Actually the Home Builders Association threatened to sue if legislation impacted plans already in the works. I think that scared some city councilors.

What happened when your bill came up for a vote in city council?

I decided to propose that 85 percent of new houses would have the access features. It passed first reading! Supporters were really feeling positive about passage.

The needed votes were pledged for the second, final reading. The votes were assured at three o'clock the date of the vote. But at the last minute, literally during the meeting at the time of the vote, one of my councilors flipped on me. He voted against the 85 percent, and the bill was then passed at only 25 percent. This is not the way things are normally, properly done. Even the mayor told him afterward that if he was going to change his vote he should have told us before the meeting. We might have been able to address his concerns and go for 75 percent, or 50 percent. That flip was a defining moment for me. We were so close.

The homebuilders were pressing the councilors heavily after the first reading. They were calling all the council members except me. The guy who flipped told me they were calling him almost every night.

I'm also critical of the two ex-planning commissioners on the council who voted against it. Here they are expressing their planning experience as an asset to the council, but when it came to crafting cutting-edge, senior-friendly housing design, they felt timid. This issue is separating the timid bureaucrats from the bold leaders.

Do you have plans for next steps?

Definitely. I'm not giving up. Inclusion is too important. After we didn't get the 85 percent, the mayor still congratulated me and said, "History is in the making." We have planted the seed. The newspaper wrote a positive article about the 25 percent, and they also had printed my editorial the week before; like they had covered the Kids' Park well, they are covering visitability well.

My council seat is coming up for reelection in just a few weeks, in the middle of November. If I win, I will work to raise the percentage. And I'm continuing my work with DRCOG on the state plan. Also I think I might be able to have influence nationally through the League of Cities. I'm going to send all my materials to League leaders.

If I don't get reelected, I'll still be the project chairperson for Kids' Park Lafayette. You'll find me and my family in the park, supporting all of those elementary kids in their basic belief that "we all belong."

Name: Larrie Del Martin
Position: Executive Director
Organization: Atlanta Habitat for Humanity
Location: Atlanta, Ga.

I understand that Habitat Atlanta builds nearly all its houses with a zero-step entrance and wide interior doors. Is that correct?

Yes.

What would be the philosophy or reasoning for that practice, as opposed to just building with access if a specific resident has a disability?

The board and the staff just have a very strong commitment to this. So many families have several generations living with them.

How does Atlanta Habitat present this practice to potential homeowners?

We say this is an opportunity, an advantage, and the homeowners are thrilled. I've never heard a single complaint from them.

Where I do hear complaints is from neighborhood groups from time to time when we visit or do the preparation for zoning to start building in the neighborhood. They say they don't like ramps, because they consider them unattractive. I explain to them that we incorporate the ramp at the side or back, and build it attractively with lots of millwork, and landscape it with shrubbery.

But actually the ramps that really are unattractive are the ones cropping up often nowadays in the neighborhoods where houses did not have access from the beginning, and then a ramp had to be added on when someone developed a disability. I saw a ramp like that recently; it winds all over the yard.

Does Habitat Atlanta build all the houses over crawl spaces, or are some on concrete slabs?

Some houses were built on slabs, but since 1998 we have avoided slabs. We believe houses above grade are more attractive. When the family who buys a house already has someone with a disability, we typically modify the house, adding more features beyond visitability—whatever the family might need, such as grab bars or lowered sinks. Different families need different things, so a house is customized.

Atlanta Habitat made its decision in early 1990 to switch from just incorporating access for prospective buyers who already had disabilities to the then-almost-unheard-of practice of putting basic access in all the new homes. Do you know approximately how many total houses have been built since then to the present?

815.

Do you know any other affiliates in Georgia or other states that build nearly every new house with access?

Not that I'm aware of, but there may be some. We're in the process of partnering with some other Habitat affiliates right now, and visitability is on the list of five criteria we will ask them to consider incorporating. Another one will be green building. We build all our homes to Earthcraft certification. [Earthcraft is a Southface Institute program that offers certification to buildings that incorporate a variety of green-friendly, environmentally sensitive features.]

Are all the houses you build single-family detached?

So far they have been, but recently we are planning to build townhouses. Our architect looked at a drawing someone had brought in, and she said, "That is not visitable." We began looking at how to modify it for visitability. We're planning to go for at least one bedroom on the main floor, along with a full bathroom. Then even though a person with a disability can't get up to the second floor, the house is still visitable and usable. We look for ways to be true to what we believe, even when we change our product.

Do you have opportunities to spread the word outside Atlanta?

Yes, when we go to conferences we often talk about visitability, and green building also.

One of our residents came to our office recently and told me how grateful she is to have the access in her home. Her 19-year-old son was now paralyzed. Their house already had the entrance and wide doors. She told me she doesn't know what they would have done if they had needed major modifications. They just didn't have the money for that.

Name: Rocky Marcoux
Current Position: Commissioner for the Department of City Development, City of Milwaukee, Wisconsin
Previous Position: Managing Director of Development, Milwaukee Housing Authority
Location: Milwaukee, Wisconsin

You worked for quite a few years at the Milwaukee Housing Authority, right?

Yes, I started in 1986 as a manager of one public housing development, and later I became the development manager for the authority. Then I was selected as commissioner of development under Mayor Tom Barrett.

At the housing authority, I understand that you were instrumental in bringing about visitable houses beyond what was required by law, correct?

Yes.

I'll ask you for details about that in a bit, but first I'm interested to hear how your commitment to this came about.

I consider universal disability access to housing to be one of the most important issues facing the country. With so many older people, yet housing still being designed in the same unthinking way—this is where we are missing out on a huge demographic of wisdom and experience. When people have to leave the neighborhood because their house no longer meets their need, it's unnecessary. It's a forced migration in a sense.

Did you have some personal experiences that led you to start thinking this way?

I always cared about how housing impacts people, but I was completely ignorant of the level of disability impact until I was educated by a local advocacy group, Independence First [a center for independent living in Milwaukee], especially Judith Pipher and Diana Sullivan. They came to me with a challenge: "Why are you building housing that is not as accessible as it could be?" I suffered from many of the same notions that many others hold, that a percentage was enough, and the group really opened my eyes. They didn't come to me in an aggressive, blaming way; they said, "Can we sit down and talk?" They explained to me about the difficulties they faced, with single-family housing especially. Judith and Diana went over our house plans showing how to make simple changes like thirty-six-inch doors and adding side transfer space next to the toilet in addition to the five-foot turning circle. This really enhances usability of the bathroom, and that adds to the dignity of their lives. I mean, if you can't use the bathroom it's a very short visit, right?

We really reached an incredible, ongoing working relationship. I brought in our architects and we modified the plans even though they were already drawn.

Tell me about some of the developments you've overseen that have access beyond what the law requires.

I oversaw five Hope VI developments. I also want to say that when we built our multifamily housing we went considerably beyond the access requirements of the Fair Housing Act Amendments [FHAA] with regard to bathroom space and several other features. We completed our third 100-unit building that met FHAA and went beyond the requirements in all of them.

As to our other developments, in The Townhomes at Carver Park we created fourteen units with full access exceeding Section 504 requirements, and then we went beyond that by making all but one of the rest of the 102 units visitable. Even though they have basements, like almost all housing in Wisconsin, we achieved at-grade entrances with no ramps. We bermed up to the back for the zero-step entrances because that is where the parking is. Only one unit was unfeasible, with too much grade and too short a setback to make the slope gradual enough. In each visitable unit we put an accessible half-bath on the main floor, with plywood sheathing the walls for universal blocking so that a grab bar could be installed anywhere it might be needed in the future.

What types of single-family homes with basic access have you brought about that exceeded legal requirements?

We have 120 single-family detached and duplexes so far, all with basements. Some are rental and stay within the housing authority, and some are ownership, for sale on the open market. The housing authority is its own developer for the ownership houses. For all the single-family and duplexes, we put a zero-step entrance at the back or side, and then we made the front, where the large porches are "adaptable." Adaptable means the construction is done deliberately so that certain access features can be added easily. So, we omitted the step from the front porch into the house, and put a minimal number of steps up to the porch, so if someone wanted to ramp the front porch and get a second zero-step entrance, they could do so with a fairly short ramp.

What about the interiors?

Almost all the houses are two-story. We lay the stairway out so that a stair-climber chair can be added, and the stair wall is reinforced to accept that. If a particular design doesn't allow laying out the stairs that way, we put in two walk-in closets that are built one above the other so that an elevator could be added later.

We have a full bathroom on the main floor, and like I mentioned, our bathrooms are big enough for a side transfer to the toilet from a wheelchair. Some designers thought we were overdesigning the bathroom, but I believe it is a critical room to design around. You can never get back the square footage once you make a small bathroom; it's incredibly expensive to move a load-bearing wall. People who don't need the maneuvering space can put extra cabinets there. Buyers like the large bathroom. They're not saying, "Wow, what space did you lose from the other rooms?"

We have laundry hookups on the main floor, not just the basement, to offer that option, and also our circuit breakers are on the main floor instead of the basements, and at wheelchair-accessible heights.

Also, we have a bedroom on the main. If it isn't needed right away for a bedroom, it can serve as a den or a dining room.

How have sales gone for the visitable houses? Easier to sell? Harder? Neither?

We didn't go about trying to convince the market; we believed the market was there. We were proven right. These homes are selling because they don't look different. They are beautiful houses. Some have ramps up to the front porch besides the at-grade entrances at the side or back. The nondisabled people like them too. We consider the access features value-added, and so do the buyers.

The housing authority certainly has gone way beyond just visitability, much more toward universal design. What was the source of your power to bring it about? Could you make a unilateral decision, or did you have to take it through a board or other agency employees?

I had to get buy-in from the folks I reported to and from the housing authority board of commissioners. I presented it to them as an innovation and they embraced it. For one thing, when it came to the housing authority-owned units, they recognized that low income and poverty take such a toll on people's health, so a lot of our folks already had disabling conditions.

What would you say the added costs were, feature by feature?

The wider doors cost nothing. The zero-step entrances were achieved without a ramp. We used the incline to keep the water away; the sidewalk itself is your high point and you create flow away from both sides of the sidewalk and from the foundation. That is not expensive. We used poured concrete foundations and extended the waterproofing up. We've had no problems with water.

You do have to pay more attention to the finished grading, which costs a little bit more time with the machine operator. Also you use more dirt, but we were almost always able to just use the dirt on-site. If you couldn't save enough fill, you would have to truck some in, but perhaps at the same time you're shipping less out on other lots. Overall I would call it revenue-neutral. You could argue the fine points of grading time, dirt use, and so on, but if someone says it costs measurably more to do it, I would argue with them.

Didn't the bathroom size and the bedroom on the main add square footage and therefore add cost?

We didn't make the footprint of the house bigger; we simply redistributed the square footage. We made other rooms somewhat smaller, but nobody seemed to mind that.

In your current position as commissioner have you had any opportunities to create or promote visitable housing?

I do a lot of speaking engagements and I include this subject. I've taken it to the state chapter of the APA [American Planning Association] and the state chapter of the AIA [American Institute of Architects]. I've presented to maybe a dozen housing authorities in and out of state. Also, I presented along with the people from Independence First at the NCIL [National Council for Independent Living] conference in D.C.

I'm not tracking the results yet in terms of who is putting it into practice. But more people are talking about accessibility issues, just as they are about green. The mayor feels access and sustainability are closely tied. For instance, when a house doesn't have access and then has to tack on a big ramp, many of the add-ons don't look good, so the next owner tears it off. It ends up as pressure-treated wood in a landfill.

Our greatest resource is our humanity, and for every person held captive by their house because the steps keep them from getting in or out, or forced to move away from their home into an institution, we bear responsibility.

The healthiest communities are mixed income, mixed in every way. People with disabilities and the elderly have to be part of that mix. If at some point in my life I become challenged by mobility impairment or some other disability, I would like to think that I could benefit from someone having had the vision to have built a house I could continue to live in.

I try to push the visitability angle in all the interviews I give because it's important in the public realm to recognize the importance of the issue. The September-October issue of the *AARP Magazine* highlighted Milwaukee as one of the most livable cities for seniors, and I had the opportunity to say that accessibility and sustainability are linked; it's what makes it possible for future generations to age in place.

What advice would you have for public officials planning to bring about visitability-type initiatives in their locale?

Listen and learn from the advocacy community, the people who have been living with disabilities. The designers are not the experts. The experts are the people who live it. And they are a wealth of information. We've listened for centuries on what makes a good house—how to do lighting, what materials to use, on and on. But we have not spent any significant amount of time listening to folks who don't fit the norm, who are so heavily impacted by what we build.

When the people from Independence First approached me, it was almost an epiphany for me. Everyone wants to do the right thing at the end of the day.

It should not be left to the advocacy community to push the issue alone. Government has a responsibility to represent all of its citizens.

Name: John Hiscox
Position: Executive Director
Organization: Macon Housing Authority
Location: Macon, Ga.

If I remember right, many years ago, before we had met, you directed your housing authority to build about a hundred new, small, single-family houses with access features, even though by law only a small percentage required access. Is that correct?

Yes, we built 134 of those houses in several stages from early 1994 on through 1999.

What factors or influences led you to decide to construct this 100 percent visitability?

We were required by law to do 5 percent with full wheelchair access, and for that particular land, that requirement dictated using slab-on-grade construction. The architect liked the turn-down slab method, since it's so strong and durable. So it didn't make sense to have some of the houses up above grade and the other ones at grade. All we needed in the units that didn't legally require full access was a stepless entrance, 3'0" doors, and adequate turning radius. We just sort of did it by accident.

Through the process, the architect, David Richardson, became aware of the possibilities, and he became a fan of visitability, though we weren't using the word at that time and we weren't aware of anyone else promoting the idea. Then folks started noticing, such as you (Eleanor Smith). I remember when we first met, you were talking at a meeting in Atlanta about the goals of Concrete Change, and I spoke up and said, "We're already doing that."

Since that first project, you have also incorporated visitability features in other projects, correct?

Yes, quite a few. Both public and public-private partnerships, single-family and multifamily projects, traditional public housing, and other arrangements.

Our first multifamily development was Baltic Park, in 2001—eighty units for people age 55 and up. It was a joint project with a for-profit, with David Richardson as senior developer, funded by low-income tax credits from DCA [the Georgia Department of Community Affairs]. We achieved 100 percent visitability even though the site is steep, almost hung on the side of a hill. We couldn't put elevators in every building, and having all one-story units was not practical for the whole site. The architect came up with a unique approach: on the downhill side, you see what appear to be two-story walkups with an accessible entrance only to the ground floor, but in reality it's two levels of flats. Then from the high side, the buildings appear to be a row of one-story flats. So in fact every unit is one story and every unit has a no-step entrance. This design added virtually nothing to the construction budget.

When you're building a community where you're bound to be having some people with disabilities, visitability just makes an awful lot of sense.

Doing this has not been a burden. I do hold back the reservation that someday we are going to encounter a hard site, or rehab of a particular building we can't do. I'd be the first one to argue that builders who encounter unusually difficult site conditions should be able to get waivers from the zero-step requirement if needed. Waivers are important. Sometimes advocates don't want to allow any exceptions, and then they lose supporters. [Note: All the known visitability ordinances that require zero-step entrances provide a waiver process for difficult site conditions, as does the proposed national Inclusive Home Design Act.]

But if we start with the premise, the intention, to do access if at all possible, it will drop into place way more than 90 percent of the time.

On the other hand, if you start from the preconception that it will be hard, costly, unduly complicated, you will not find the possibilities. We start with visitability as the default, the presumption, and then deal with the exceptions as they come up.

What was the source of your power to bring this about? Were you able to make a unilateral decision, or did you have to take it through a board or entities?

I work for a board, but I didn't have to take the access aspects to the board. I just had the plans drawn and the plans went on up through the planning and zoning authorities and others who authorize projects. There was no objection. Nothing in the codes required the access, but nothing prohibited it. Nobody in the authorizing groups even noticed.

Have you done other projects since Baltic Place?

One of our premier projects is Tattnall Place, a Hope VI development. There are ninety-seven single-family rental units, all attached. About one-third are rented at market rate, one-third at income-eligible tax credit, and one-third at tax credit plus public housing.

It is 100 percent visitable. The terrain was steep—thirty-eight feet of vertical fall. The architect, Bob Brown, used devices similar to Baltic Place; he put the terrain to our advantage. Where the required fully accessible one-story units are located, from the back that building appears to be three-story townhouses. In reality it is flats with two-story townhouses built above them, and when you go around to the high side, the street side, you see the two-story townhouse and have at-grade access onto the main floor.

Throughout the development, you see no ramps or anything that looks out of the ordinary. Some of the townhouses have steps on the higher side and an at-grade entrance on another side. It's simply a beautiful development. All the units, including market rate, rented right away.

Tattnall Place is in a designated historic district. How did you achieve the required historic look without having all the porches elevated above grade on all sides?

We had a good architect, Bob Brown, who achieved visitability without getting the house up above grade on all sides, but got a traditional look by having proper scale, plenty of vertical height in the house itself. If we had built little, low cottages it would not have been fitting in the neighborhood. We used Hardiplank, which looks like wood siding, and incorporated other design details that are authentic.

I might add that I'm not good on aesthetic judgments, but it seems to me as an aesthetics layman when you take advantage of the site there is a way to site the house in a pleasing manner, so that it sits beautifully and naturally on a piece of land. Some people insist that you have to butcher the buildings to get the access, but that is not true if you think through your site.

For Tattnall Place, you applied for the extra point that HUD offers for visitability on its applications for funding. Do you think the Hope VI visitability point is being applied for and followed by most other Hope VI projects across the country?

I have no idea how many have taken the point. But applicants can lose tens of millions of dollars by losing out on the funding by just one point. No one has the points to give away on this. For instance, one year we lost one application by one point. But we were able to get funded the following year. So I would surely think people would be including visitability.

There are only about 175 Hope VI projects in the whole country, and that is not a lot. But the influence has gone beyond the numbers. Thanks to Elinor Bacon, who served as deputy assistant secretary of HUD, Hope VI was not just providing housing, it was also becoming a proving ground for some of the best and most advanced urban planning in the country. The whole world of design was focusing on what was happening in Hope VI, and visitability being a part of that helped put visitability on the map. It became a national issue in good, progressive design and as such had an influence way beyond the couple of hundred developments immediately affected. Concrete Change can take a whole lot of credit for that. [As part of the national advocacy group Disability Rights Action Coalition for Housing, in 1998 Concrete Change initiated including a visitability point in Hope VI applications.]

Tattnall Place has a wide variety of ages, from children on up. How receptive to the access features have the prospective occupants been, or current residents? Has anyone complained, to your knowledge? Has anyone reacted positively?

The best thing about it is that most people do not notice except for the people who need them. That's the key to it. We have to succeed in the marketplace. Hertz Rent-A-Car once had a special car manufactured to stand out by its design and it was a spectacular failure because the people who rented a car wanted a car that looked like other cars.

I think it's a sign of our success that people aren't noticing. I take many, many groups through Tattnall on tours, and until I point out the access they don't notice.

When we talk about just the basics—one zero-step entrance and 2'10" or 3'0" doors on the main floor, about how much cost, if any, do these features add to a new house?

In many cases, the cost of visitability in new construction is negligible. First off, visitability is a modest concept in itself. Not every aspect of the building is handicapped-adaptable; we're trying to make it visitable by including just the few most important features.

Even on renovations it's not necessarily impossible; it depends on what you're doing. If you start with the premise that visitability is an intention, you often can find a way. Sometimes it's flat-out impossible. For instance, we have a 1940s public housing development we're rehabbing that is just impossible. But in another development we are rehabbing, we have more opportunity to do visitability, and we are going to take some creative approaches. By the time we are done, we will be able to generate some handicapped-adaptable units and then a lot more units that are visitable. Not all are possible, but we're going way beyond what's required.

When it comes to construction tips, what have you learned that might be useful to a person or an agency just starting to implement visitability?

If I've learned one thing from architects, it's "Use the dirt you've got." An ordinary architect is trying to force the house onto the lot no matter how much violence it does to the lot. An intelligent approach is to adapt your thinking and planning to the site and turn the features of the site to your advantage.

What were some of the things during your various construction projects that have made the process challenging or difficult, if anything?

The most complicated problem encountered so far is infill of one or two houses on very small lots within an existing neighborhood, and every house in the neighborhood has a porch four feet off the ground. There you have a problem. We have solved it by putting a deck on the back and semi-concealing a ramp. I don't prefer ramps, but sometimes they are needed. We try to design around them. Most people don't want a ramp right now. They think, "I'm not old, I'm not disabled, I don't need it." I think what people generally recoil against is the huge add-on ramp stuck on a house in a nice neighborhood, cobbled together out of plywood and whatever, and neighbors say "Oh, Mildred must not be doing too well; she must be on her last legs."

But in some cases the ramp is needed on a new house to achieve visitability. And it can be concealed at the side or back, and planted with shrubbery, making sure it doesn't look like an add-on, using the existing terrain to minimize the length of the ramp. I don't hate ramps; I mean my wife is in a wheelchair for goodness' sake! But when you can avoid them, it's best.

Do you think laws should require new houses to have access features or do you think access features should be incorporated on a voluntary basis?

I don't know. My philosophy on that unfortunately has to evolve. I have enough experience with big government to be suspicious. I am a good example of what can be accomplished through a voluntary approach. The point is, here in Macon we had the freedom to do it and we also had the freedom to not do it. The problem with saying "You have to do this" is, you will not only be told you have to do it, but also how to do it. As we go further and further into this sort of thing to become standard and required, there is a danger for it to get tangled and frustrating. Government in general has a bad tendency to tell you exactly how they want you to accomplish a goal, get too detailed about requirements, and then it doesn't work. Sometimes it's better to have a required goal and then let the people show you how they are going to do it.

Some features are dead easy, like the width of doors and the downstairs bathroom. But if what we're trying to do is figure out how to make a stepless entry, there might be lots of ways to skin the cat.

Unfortunately, on the visitable construction issue, we're just not getting the amount of voluntary cooperation from developers that we would want or expect. My thinking on mandates is evolving. I'm not all the way in either camp. I'm kind of leaning toward requirements.

During the overall visitability process, was there anything that worked particularly well?

One of the things I love about working with architects like Bob Brown and David Richardson is that, like most architects, they went to architecture school because they were creative people. They are problem solvers. When presented with the visitability problems, they can come up with some really neat ways to solve them.

Have your visitable developments gotten any publicity along the way, such as news articles, TV, etc?

Tattnall Place has generated a lot of notice, and has already won a stack of design awards. We've won awards from historic preservation organizations, which we're very proud of, and a Magnolia award from DCA for overall design.

What advice would you have for public officials planning to bring about visitability-type initiatives in their locale?

Ultimately we're trying to convince the building community and the public that there really is an awful lot of common sense here. Like the Nike commercial says: Just do it!

Name: **Stuart Hersh**
Position: **Coordinator**
Organization: **S.M.A.R.T. Housing Program**
Location: **Austin, Texas**

What is the S.M.A.R.T. program?

The program provides incentives to builders to build housing inside the Austin city limits that meets a variety of civic goals. The initials stand for safe, mixed income, accessible, reasonably priced, and transit oriented. Both single-family and multifamily construction is included. Incentives to participate in the program include fee waivers, fast-track review and processing of permits, advocacy on behalf of builders with city agencies and others, a density bonus that allows the builders to build on small lots without zoning changes, more multifamily units than would otherwise be allowed on a site, or higher buildings than would be allowed.

The builders put high value on the fast-track processing. They really appreciate the ability to stay out of hearings.

How many houses have been constructed in the S.M.A.R.T. program?

More than 2,700 since it started in April 2000. About 25 percent of new starts utilize this program. The interest in the program increases and decreases in relationship to other opportunities available to builders. If there is a strong market for expensive homes, interest declines. But, when there is a weak market, it increases.

What factors or influences led you to decide to mandate visitability for this program?

The city of Austin has a visitability ordinance for publicly funded construction. Since, in this program, we provide public assistance through the incentives and often make city-owned land available as well, it kicks in the visitability ordinance.

What was the source of your power to bring this about? Were you able to make a unilateral decision, or did you have to take it through a board or entities?

The requirement for affordability impact statements changed the regulatory environment the city needed to develop a means to increase the number of affordable housing units and developed this program. The program was the result of a city council action. By providing incentives that do not reduce the tax base, it was easier to get approval.

The visitability ordinance resulted from a Fair Housing case against the city. As part of a settlement, the city was required to consider a similar ordinance as they had in Atlanta.

Are there some noteworthy projects built under this program?

The Mueller project is perhaps the most interesting. Twenty-five percent of the houses at Mueller will be in the S.M.A.R.T. program. The entire community will

be visitable since it is built on city-owned land. Single-family houses are on narrow lots with alleys. No-step entries were achieved by grading the flat site so that alleys are higher than the streets. This allowed the use of traditional raised porches with stairs and also facilitated storm drainage from the rear of the lots.

There is a lot of university-based housing being constructed in mixed-use projects with commercial uses on the first floor. Developers report that it is not economically possible to build only one or two stories of housing above commercial. They take advantage of the density increases in the S.M.A.R.T. program and build four or five stories of housing. Of course, they all are Fair Housing compliant and have elevators.

We are also doing a lot of small projects in older neighborhoods. One of these projects was on a site with steep topography with retaining walls along the sidewalk. To provide no-step entries, we built a cul-de-sac alley in the interior of the block that has parking and rear entrances with no steps. The houses were built on existing sites around the perimeter of the block so we maintained the traditional block pattern of houses accessed from the street side but added the cul-de-sac to provide vehicle access—a good accommodation of the automobile.

When we talk about just the basics—one zero-step entrance and 2'10" or 3'0" doors on the main floor, about how much cost, if any, do these features add to a new house?

We have been tracking the costs. In our experience, the cost of visitability is only about \$200 per house. In some cases, there have been isolated lots in subdivisions with steep slopes that make it difficult to provide the no-step entrance economically. In those cases, we take that specific house out of the S.M.A.R.T. program.

What have you learned that might be useful to a person or an agency just starting to implement visitability?

It is important to start designing accessibility right from the beginning, with the planning of the subdivision or lot and the grading. All of the houses in our area are slab on grade. To provide no-step entries, the lot is graded so that the slab is higher than the perimeter of the lot. Then the lot is graded to provide a gradually sloping walk to the no-step entry.

We also learned that there are unexpected benefits. This careful grading of the lots helps in planning stormwater runoff, which is a major concern for us. The developments with visitable houses all have swales between houses that control the runoff.

Have there been any complaints about the requirement for visitability?

On the contrary, we have received a lot of unsolicited positive comments:

- People with aging parents can now have them visit more easily.
- People with disabilities are thankful that they have some affordable housing choices.
- Homeowners note that it is easier to move furniture in and out.

- Parents notice that strollers can be wheeled in and out with the children in them.
- Groceries are easier to carry in.

Do you have any recommendations for development of visitability initiatives?

Requirements have to be clear and there need to be alternative methods of compliance. Flexibility makes it easier to get support from the building community.

Name: Roger Claar
Position: Mayor
Location: Bolingbrook, Ill.

What factor or influences led to your beginning to work on getting basic access into more houses?

I was approached by Ed Bannister, who lives in Bolingbrook. He told me about problems people with disabilities and older people were having finding housing. He presented the visitability idea, and it made sense to me. Also, my mother had developed some mobility problems and I had seen some of the struggles she had in her house.

What legislation did you sponsor?

We decided to go the whole route and propose that every new house require access features, except when the zero-step entrance is impractical because of the site.

Your bill was passed unanimously by the county commissioners in 2000, but you didn't sign it immediately. You urged the builders to comply voluntarily, and they did. What caused you to sign the bill in 2003?

I wanted to make sure it remains in place after I leave office.

Did the city produce any visitability materials?

The city made drawings of how to accomplish the zero-step entrance. Also we made a PowerPoint and display that we showed at a meeting of mayors and other municipal employees at the state conference. We were awarded first prize in that competition.

What do the citizens of the town say about the practice of building every house with access? What feedback do you get?

I can't think of more than a handful of times it's been discussed. Those that are interested in improving things for disabled people take it as a positive step, but people don't care about these things until they become directly involved. This is not a slam at them, it is human nature. But if you have a family member who has a problem, you get interested quicker.

Who were some of your early allies in working for the bill?

There weren't any, other than Ed Bannister, and some nonresidents who were visitability advocates who were helpful for information. I had buy-in from my own staff, and I'm not sure they signed on willingly—they worked for me.

Please describe the processes or steps you took to put this legislation in place or to respond to opposition.

Well, the approach I used was to sit down with a couple of the long-term homebuilders in town, who I had personal relationships with, to talk it over. They had a lot of resistance at first; one, out of ignorance, two, considerations of cost, and three, "Leave me alone; what we are doing is fine the way it is." In their defense, nobody likes change. Even on something like changing a speed limit, people usually don't like it, they resist it.

The builders didn't know why I was pushing visitability. "What's the big idea? Why do you care?"

What did you say to that?

I said what we're talking about doing would prove to be minimally expensive, not a hardship on builders, and would not be a detriment in terms of appearance. In general, it just seemed like the right thing to do.

I held a series of meetings with the builders, and they kept coming to these meetings out of respect for our relationship and respect for my position. Together we noodled through all the objections and problems and found solutions.

Do you favor financial incentives to get builders to build access features into new houses?

No. It's just the right thing to do. It should be part of code.

You mentioned in a speech in Winnipeg at a visitability think tank that builders don't raise a hue and cry against other requirements that are more costly, but then raise a cry against access features. What are some examples from Bolingbrook?

We've required builders to have the garages be five feet deeper, to get rid of those little storage sheds people were putting in their yards. We required builders to stub in the basements so a bathroom could be added later if wanted. We required them to finish out and paint the interior of the garage. All of these we put into code, and there was not the push-back from builders there was from the visitability requirements, even though all of those other things cost as much.

What do you estimate as cost per house of the zero-step entrance, the wider doors, and the other requirements in the Bolingbrook ordinance?

Five to eight hundred dollars. That is practically nothing, in an expensive home.

All the houses are built with basements?

Yes.

Advocates around the country say they keep getting objections like it can't be done in snow country, it's extremely expensive, the houses will look strange and won't sell, our town is different, and we can't do it for XYZ reason. What do you say?

As I get older I get impatient. When I get a really stupid objection I think, "If you're so stupid you are saying this, there's nothing I can say to change your mind. You won't let yourself be confused by the facts."

Is there anything in the text of the Bolingbrook ordinance that you would do differently if you had it to do over again?

No, and I give [City Building Commissioner] Dan Buonamici credit for that. I told him, I want this to be as simple as possible. Dan kept it to two simple pages, including drawings, so that anyone—builder or otherwise—could understand what is included. The reality is it has worked very well.

I understand from your administrative assistant that you've been interviewed by about six magazines this summer, and have had at least twenty calls from other locations on this topic. Is that getting to be a little much?

Not really. It's been in place here so long it's just second nature, and all the differences here were resolved smoothly. It's just fascinating, and borderline irritating that people are still putting up a fight against it.

Who are these calls from? What do they want?

Planners, city council members, and so on. A lot want me to come out to their location and tell them how we did it. I don't have unlimited resources to fly around the country. And like I said, it's such a simple, limited concept, I'm thinking, "What is it you don't understand?"

Why do you think this is not taking off faster across the U.S.?

You don't have anybody to carry the message. The disabled community in some people's eyes has a never ending list of things they want, the young man who cried wolf. Builders and cities wonder, "Will we ever get done? What do you want now?" Now new codes are throwing in various additional requirements, some requiring us to redo what we've already done. It's costing us a lot of money.

I'm just saying, sometimes you can do certain things, so tell me what's most important.

Is there anything else you might want to say on this general subject?

I say it all the time: Visitability is an idea whose time has come. The average person can't tell the difference aesthetically between visitable homes and regular homes. More expensive, higher-end homes have wider doors anyway, and people will say, "Wow, this is spacious. And look how easy it is to carry groceries in and out of the house."

Do you live in one of the visitable houses in Bolingbrook?

No, my house is about thirty-five years old. It has steps and narrow doors. I have to turn sideways to get through the door from the garage to the house. Maybe it's me.