# "Visit-ability": a way of thinking about aging and design

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As the population ages and faces a greater number of physical disabilities, housing and community development must be re-examined. Visitability is an affordable, sustainable and inclusive design approach for integrating basic accessibility features into all newly built homes and housing.

Inaccessible homes impede the daily lives of people who are mobility impaired due to illness, accident or age. Visiting an inaccessible home presents the danger of falling on the entry steps, the worry of not fitting into the bathroom and the embarrassment of being carried up stairs.

In 1988, The Fair Housing Amendments Act created accessible units in all new multi-family housing apartments and condos with four or more units. In 1990, the Americans with Disabilities Act greatly increased accessibility to all government and public buildings. But detached single-family houses and townhomes, where the majority of the population lives, are the last part of the built environment that is not covered by federal law—no accessibility codes exist. To date, private houses and townhomes continue to be built with the same basic accessibility barriers: steps at all entrances and narrow doors to bathrooms.

In an effort to pass legislation for accessibility in new single-home construction, Eleanor Smith, the founder of Concrete Change, started the Visitability Movement in the US. The movement asks that three basic accessibility needs be met:

- One zero-step entrance on an accessible route from a driveway or public sidewalk.
- Doorways with a 32" minimum clear passage space.
- A half bathroom on the main floor to accommodate a wheelchair.

If these three requirements are met in the construction of every new home, future adaptations for specialized needs can occur as needed. Visitability features make it easier for the mobility impaired to visit friends and family and to remain active in their community.

## **Visitable Single-Family Homes**

A visit-able home must have at least one zero-step entry and the location can vary per the site topography. The entry can be at the front of the home, the back, the side or through the garage. On new construction, the lot can be graded with a walkway tied directly into the porch.



**Non-Visitable Home:** Steps at this home prevents accessible entry. With steep terrain, a zero-step entry can be located at back of the home.

(photo courtesy of Concrete Change)



Visitable Home but unattractive: When Visitability is not incorporated into the original design of the home, problems can arise. Creating access to this home required a long, expensive and ungainly ramp which will deter future buyers and is an eyesore in the community.

(photo courtesy of Concrete Change)



**Visitable Home**: This home was designed with visitability features in place and problems were avoided. With new construction, the walkway can be tied directly into the porch by grading the lot.

(photo courtesy of Concrete Change)

# Visitable Townhomes

## Townhomes with Ground Level Entry

"Townhomes" or "row houses" are single-family, multi-storey attached houses — a style often used to achieve dense, walkable neighborhoods. But most townhomes are not accessible. Steps lead to the front door and townhomes are over garages or retail space with residences above. There are, however, alternatives to this style of design. (Maisel, Smith and Steinfeld, 2008, "Increasing Home Access: Designing for Visitability". Washington, DC: AARP Public Policy Institute)



Non-Visitable Townhomes: The ground floor of these townhomes requires steps to enter. They could have been visit-able by designing a zero-step entrance at the front or back.

(photo courtesy of Concrete Change)



Visitable Townhomes: These townhomes have a zero-step entrance. If designed with a full bath and sleeping space on the main floor, this style can serve as a permanent residence for people with mobility impairments, while their family members have bedrooms on the second floor.

(photo courtesy of Concrete Change)



Visitable Townhomes: These townhomes have a zero-step entrance while maintaining a traditional style of design. On new construction, the lot can be graded so the walkway ties directly to the porch.

(photo courtesy of Concrete Change)



Non-Visitable Townhomes: This is a typical townhome with steps leading to the front doors. A raised alley behind the building can facilitate zero-step entry from garages to homes.

(photo courtesy of Concrete Change)



**Visitable Townhomes**: Raised alley behind townhomes provides zero step entry from garages to homes.

(photo courtesy of the IDeA Center, Buffalo, NY))

### **Townhomes Above Retail Stores**

A mixed-use neighborhood with residences, stores, offices and restaurants is wonderful for an aging population who chooses to walk rather than drive. But if the townhomes are non-visit-able, the older population (and anyone with a mobility issue) may become segregated or confined to their homes.



Visitable: These residences above retail are visually identical to townhomes from the outside, but in fact they are not townhomes. They are served by an elevator, and therefore incorporate basic access in all units as stipulated by the Fair Housing Amendment Act.

(photo courtesy of Concrete Change)

## **Townhomes Above Parking Garages**

There are major accessibility problems that arise with a personal garage built on the ground level of a townhome. The multiple steps required to enter the living area is an unwise design for today's aging population. If this style is built, two rooms should be provided on the same level as the garage: a half-bathroom with a sink and toilet and a habitable room with a minimum of 70 square feet. A zero-step entrance would access these rooms from the garage or exterior door, and the bathroom would have a 32" clear doorway passage.

By code, a habitable room is intended for sleeping, living, cooking and eating. This excludes bathrooms, closets, utility rooms, storage rooms, foyers, halls and other rooms not intended for living. There must be adequate ventilation, a heating system, a window and electric outlets. The space must measure 7' x 10'.

The half-bath and habitable room on the ground floor will allow the homeowner a place to live in case of temporary or permanent injury, while the rest of the family remains in the upper part of the townhome. (Maisel, Smith and Steinfeld, 2008, "Increasing Home Access: Designing for Visitability". Washington, DC: AARP Public Policy Institute)



Non-Visitable townhomes: The only alternative for access in these townhomes is the installation of an elevator or lift in the garage to the first floor. Not all homes are candidates for visitability.



Visitable Townhomes: These townhomes have a personal garage plus a zero-step entry on the ground floor leading to a half-bath and habitable space.

## Townhomes: Segregated vs. Integrated

Disability-designated units, with ramps and wheelchair signs, segregate and isolate homeowners who may be older with mobility issues. Stigmas may come with labeling.



The resident living in the disability-designated unit (with the ramp and wheelchair sign) cannot visit neighbors who live in this row of townhomes built with a step to each entry. Nor can residents in the neighboring units enter or exit their homes independently if they experience a temporary or permanent disability.

(photo courtesy of Concrete Change)



Visitable Townhomes: every home in this 87-unit development offers a zero-step entrance and ample interior door widths. No one is segregated, stigmatized or denied admittance into any home.

(photo courtesy of Concrete Change)

# Cost of Visitability

Over the lifetime of a home, 25-60% of all new homes will have a resident who becomes mobility impaired. This may be muscle weakness, lack of balance, arthritic stiffness or wheelchair confinement. 95% of all new homes are constructed with steps at every entry and narrow doorways to the bathroom. Because of architectural barriers, the risk of falling for the homeowner is greatly increased and the success rate of first responders may be compromised during medical emergencies.

In 2005, 1.8 million Americans age 65 and over were treated in emergency rooms for injuries from falls, and 460,000 were hospitalized. 60% of all nursing home residents enter these facilities directly from hospitals after a fall, a stroke or heart attack. With the majority of homes having steps at all entries and narrow doors to bathrooms, one can only surmise that large numbers of people are not returning to their homes after accidents because of no accessibility.

Below is a cost comparison of Visitability built into a new home versus Visitability retrofitted into an existing home. The nursing home cost reflects the extreme expense of "doing nothing". (Maisel, Smith and Steinfeld, 2008, "Increasing Home Access: Designing for Visitability". Washington, DC: AARP Public Policy Institute)

#### **New Home Visitability Construction**

- Zero-step entrance on concrete slab—add \$100
- Entrance over crawl space or basement –add \$300-\$600
- 34" door—add \$2 to the cost of a 32" door
- Average cost for visitability features, depending on region—add \$98 to \$573
- Average cost for Universal Design features—add 1% to total project cost

#### **Existing Home Visitability Retrofit**

- Zero-step entrance –add \$3,300
- Widen interior doorway—add \$700 per doorway (\$22 for a swing-away hinge)
- Home elevator—add \$15,000-\$25,000

### **Nursing Home Costs**

- Nursing home for individual—\$77,000 per year
- Nursing home for US—\$122 Billion in 2005 (60% of cost borne by public thru Medicare & Medicaid)
- Cost of falls among older people for US—\$19 billion in direct medical costs (Maisel, Smith and Steinfeld, 2008)

# Legislation

Cities and towns across the country are preparing to assist their ever-growing senior populations. With a short supply of affordable senior housing and the desire of most seniors to remain in their homes, home-based programs are in the forefront—meals-on-wheels, home healthcare, hospice-at-home, physical therapy, senior transportation. But for home-based programs to succeed, basic accessibility must be provided. Visitability in private homes is crucial for the safety and social sustainability of older adults who are mobility impaired. Without the independence to enter or leave their home or to use the bathroom alone, older adults can become isolated, depressed and sick. Visit-able homes are needed for the safety and independence of everyone— older adults, visitors, caregivers and first responders.

In the late 1980s, Eleanor Smith of Concrete Change began pushing Atlanta homebuilders to incorporate Visit-able features into their new homes, but was met with great opposition. Habitat for Humanity listened and today have more than 800 Visit-able Habitat homes in the Atlanta area.

#### 1992 — Atlanta Visitability Ordinance

Atlanta became the first city to adopt a Visit-ability ordinance that mandates all builders of new single-family dwellings, duplexes or triplexes, who receive any financial benefit from or through the city, must meet several basic access requirements, including at least one zero-step entrance and adequate interior door widths.

#### 2002 — Pima County Inclusive Home Design Ordinance, Tucson, AZ

Pima County adopted the first ordinance in the nation to require a zero-step entry into single-family homes with door openings at least 34"wide, lever door handles, reinforced walls in ground-floor bathrooms for grab bars, switches no higher than 48 inches and hallways 36" wide throughout the main floor.

In 2003, the Southern Arizona Home Builders Association sued Pima County over the legality of the Visitability Ordinance. In a unanimous decision, the Arizona Court put to rest efforts by Tucson builders to void Pima County's law requiring minimal access in newly constructed single-family homes. By 2008, Tucson, AZ had built 15,000 Visit-able homes.

#### 2004 — Visitability Code, Bolingbrook, IL

Bolingbrook initially approved a voluntary Visitability ordinance that was unsuccessful among homebuilders. In order to make homebuilders comply, Bolingbrook enforced the ordinance requiring that all new homes be built with Visitability standards:

- A minimum of one zero-step entrance
- Doorways with 32" clear passage space
- One bathroom on the main floor that will accommodate a wheelchair

Today Bolingbrook has 3,600 single-family Visit-able homes.

#### 2009—Inclusive Home Design Act

US Representative Jan Schakowsky (D-ILL) introduced legislation that would apply Visitability standards to all new single-family homes and townhouses receiving federal funds. Currently, 95 % of new single-family homes and townhouses built with federal assistance fail to incorporate accessibility features, making it impossible for many people with disabilities to live in or visit homes. Representative Schakowsky reintroduced the bill in 2010.

Since the induction of the Atlanta City Ordinance of 1992, more than 50 ordinances of varying quality have been passed nationwide. Legislation has resulted in more than 30,000 Visit-able homes built for the open market, regardless of whether the first occupant has a disability or not. States whose cities are adopting visitability ordinances or voluntary programs are: GA, FLA, TX, VA, VT, MN, NM, KN, IL, OR, KY, NJ, MI, PA, OH.

ICC/ANSI A117.1, the standard for accessibility referenced by most building codes in the US, is currently developing a Type C section that includes technical design criteria for visitability. This will provide an accessibility model that can be adopted to new single-family homes and clarify the design of a zero-step entry, an accessible bathroom and accessible doorways. The standard can be referenced by visitability laws and programs, thus promoting uniformity in applications and aiding in their interpretation. Please note, the IBC will not require Type C dwelling units. If a jurisdiction or state chooses to require visitability in single family homes, the Type C unit criteria will be available for adoption as a baseline. The 2010 edition of ANSI A117.1 will contain the Type C (visit-able) dwelling unit specifications. (Maisel, Smith and Steinfeld, 2008, "Increasing Home Access: Designing for Visitability". Washington, DC: AARP Public Policy Institute)

#### References

Jordana Maisel & Edward Steinfeld, Buffalo, NY, IDEA Center and Eleanor Smith, Concrete Change, Atlanta, GA, "Increasing Home Access: Designing for Visitability", Washington DC: AARP Public Policy Institute

#### **Related Links**

IDeA Center: <a href="www.ap.buffalo.edu/idea">www.ap.buffalo.edu/idea</a>
Concrete Change: <a href="www.concretechange.org">www.concretechange.org</a>