

**People and Places Series** 



an approach to Universal Design in housing



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Visit-ability is an affordable, sustainable and inclusive design approach for integrating basic accessibility features into all newly built homes and housing.

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# VISIT-ABILITY: AN APPROACH TO UNIVERSAL DESIGN IN HOUSING

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# Visit-Ability

# Introduction

Visit-ability is an affordable, sustainable and inclusive design approach for integrating basic accessibility features into **all** newly built homes and housing.

To be considered Visit-able, homes need:

- one zero-step entrance on an accessible path of travel
- doorways that are 32 inches clear throughout the floor plan
- basic access to at least a half bath on the main floor

The Visit-ability movement is based on the conviction that inclusion of basic architectural access features in all new homes is a civil and human right and improves livability for all. The purpose of this booklet is to promote and inform community action projects that support the development of Visit-able housing. Universal design on the community level permits full access to social participation in community affairs and interaction with neighbors. Visit-ability is an important step toward making universal access to community life a reality.

This booklet provides a basic understanding of the concept of Visit-ability, including good practice examples and cost estimates for Visit-able features. It describes advocacy strategies for developing Visit-ability projects in local communities. Contact information for organizations that can assist in promoting them is also provided. We wish to convince readers that whoever they are, they already share at least some of the needs and many of the goals of advocacy groups across the country-housing that is welcoming, convenient and usable by every community member.

# The Elements of Visit-ability

- An entrance without a step or threshold that is on an accessible path of travel from the street, sidewalk or driveway. An accessible path of travel has no steps, is at least 36 inches wide and is not steeper than 1:20 (5% grade) for walkways or 1:12 for ramps.
- Throughout the ground floor, doorways designed to provide 32 inches of clear space and hallways that have at least 36 inches of clear width.

 Basic access to a half bath or full bath on the ground floor.
 As defined here, basic access simply denotes sufficient depth within the bathroom for a person in a wheelchair to enter, and close the door.
 Basic access to a full bath is preferable to a half bath.

# **History and Philosophy**

Passing by a new Habitat for Humanity housing development in Atlanta in 1986, Eleanor Smith suddenly wondered whether anyone had thought to make the houses accessible. Her consciousness about universal access had been raised by working with the national advocacy group ADAPT on a program for getting lifts on all new buses. This work led to the new insight that the houses



Figure 1



Figure 2

being built were no different than what she had seen for years and had never questioned. Later that day she read a news story reporting that several of the Habitat homes she had passed had been specially designed for residents with disabilities. She realized that because the adaptations needed had to be specifically requested by the incoming resident, only a few of the homes being constructed would be accessible and the people with disabilities who lived in them would not be able to visit their neighbors.

Eleanor had a connection with a local group of eight community advocates with disabilities. She interested them in the problem she'd identified. The group (which later named their initiative "Concrete Change") approached Habitat for Humanity, as well as several other not-for-profits involved in building low income homes, and suggested the development of a set of standard accessibility features in every home produced. At first they called the set of features "basic home access" but later adopted the term "Visit-ability" after hearing about the term being used in England for a similar concept. Through the group's persistence and the Habitat board's willingness to listen, the first seven Visit-able Habitat homes in the Atlanta area were built in 1990.

Clearly, in terms of providing physical access to housing, Visit-ability advocates seek to take an important step forward beyond standard housing design and particularly for single-family detached houses and townhouses (row houses), which are not covered by the Fair Housing Act. It might seem to some who are new to the idea that Visit-ability advocates are settling for less than they should in not seeking full access. But, the majority of builders and homeowners alike see no need for any access to homes at all, except for those built for a specific occupant with a disability. When asked about the difference between pursuing Visit-ability as a design standard and pursuing a higher goal (i.e,. a fully accessible or universally designed home) Eleanor takes a pragmatic perspective:

> "What I'm after here is radically changing the way all new houses are built ... and if you're going to do that, you can't have a long list of demands."

And about not advocating for full access, here again, Eleanor is firm:

"What I'm passionate about is getting those basic changes made as quickly and broadly as possible, and in doing that, I'm looking at the reality of what (housing) is going up, not what (theoretically) should be ...there are a lot of grass roots efforts out there who've done really well ... and we're looking to build a bridge between those grass roots (efforts) and the limited number of professionals we've found who are excited about the concept of Visit-ability and about the prospect of seeing it move very quickly from being an idea to being 'applied Visit-ability' or, in other words, bricks and mortar."

#### **Contemporary Housing Design**

In advocating the use of Visit-ability in housing development, it is important to understand contemporary single-family housing design approaches. This section will briefly describe four: new urbanist, standard, accessible, and universally designed homes.

New Urbanism is an urban design concept gaining great popularity, which seeks to re-create the features of older urban neighborhoods by building pedestrian oriented communities with highdensity low-rise housing and mixed use planning. Single family housing in New Urbanist communities come in several forms; the most common are townhouses, attached double houses or single-family detached units with



Figure 3

small front yards and narrow alleys between them. The first floors are usually well above grade and a front porch and stairs are standard features. The raised main floor compensates for the privacy lost by reducing the depth of the front yard to a minimum. The increased density and mixed uses allows more money to be devoted to community amenities and reduces dependence on automobiles.

The key problem for accessibility in New Urbanism is the practice of building most houses with their first floors above grade. If built without access features, New Urbanist housing is less inviting, both in perception and in fact, for those with mobility impairments. The raised porches and prominent stairs on the front of this housing increase inaccessibility. New Urbanist design need not remain a true impediment to building a Visit-able home. Ramps and grade changes from front to back can be used as a means to provide zero step entrances while keeping the first floor of the home above grade. Moreover, there are other design approaches that can provide the privacy desired without increasing the size of the front yard.

New Urbanism has many positive attributes from an access perspective. New Urbanist design principles include the use of narrower roads and thoroughfares, both to create a "walkable" community and to heighten the sense of "neighborliness." These features can be very beneficial to people with disabilities as well as other residents. In fact, the New Urbanists have advanced the practice of planning new housing by emphasizing the importance of the public environment--of streets and pedestrian pathways in creating a humane neighborhood. They seek to increase the potential that true neighborhoods will develop. This community planning approach has been lacking in most accessible housing design, which focuses only on the home and private property.

**Standard single family housing** is built according to traditional specifications, without special attention given to access. Little attention is given to the development of neighborhoods and public walkways, other than what is required by authorities and considered the norm in the region. Unlike New Urbanism, there is no specific concern about raising the first floor of the home above grade level. That is done for reasons other than the social goals of New Urbanism. Often it is due to prevailing norms and in other cases, there is a belief (whether correct or not) that homes will flood if not raised high above grade. Most standard housing is built as detached units, not townhouses, and in single use developments without any commercial facilities.

Accessible Housing is standard housing, which uses adaptive technology and design, such as ramps, lowered cabinets, and roll-in showers. Generally, adaptations made under the heading "accessible housing" are intended for households that have family members who use wheelchairs. In addition, because the term "accessible" is often tied to the legal requirement/concept of access, the features of accessible housing are generally viewed as being part of a whole package, not based on what works best. The focus is on compliance with accessibility standards. In fact, some contractors hired to build accessible housing have been reticent to use creative alternatives to what they know will be compliant. This attitude can severely limit the choices available to persons with disabilities, and (as we hope the reader will come to realize) to the whole community.

Another major flaw within the concept of accessible housing design is that it often ignores aesthetic concerns in favor of purely functional design and equipment. Both, of course, are important, but because accessible features and equipment are in less demand, products are



Figure 4

often not available in the varied selection of non-accessible components. Nice looking accessible products are often hard to find, more expensive and take longer to obtain. The prices of such products tend to be inflated and poor availability results in construction delays.

Universally designed homes are designed to provide improved function for all possible residents, rather than providing specific adaptations that only help people with disabilities. Universally designed homes provide features that are equally advantageous to children, lefthanded fathers, extra large and extra small residents, young couples and seniors (both single and married). Universally designed houses ideally go beyond the minimum requirements of codes and standards. For example, a universally designed home may have more than one accessible bathroom and more than one accessible entrance. In addition to access for mobilityimpaired residents, it might also have flooring, acoustics and other features that facilitate use by people who are visually impaired.

Because universal design is intended for all citizens, aesthetics play an important role in the concept. To reach a mass market, universal design must be attractive. The mass marketing of universal design features, however, makes them theoretically more readily available and affordable. Thus universal design is quite different than simple code compliance. Some advocates argue that advocacy efforts would be better devoted to promoting universal design in housing, rather than Visitability. But our view is that universal design is a continuously evolving process, rather than a journey towards a single design "destination." The number of universally designed products currently available is still small.

Consensus standards as to what constitutes universal design in housing have not yet been developed and many argue that it would be unwise to do so because it could stifle this innovative spirit.

Visit-ability, although less than the ideal for a universally designed home, is actually universal design practiced through community and neighborhood planning. It ensures that a basic level of accessibility will be provided in all housing and it opens opportunities for participation in community life. Visit-ability is a universal design goal that can be achieved today on a widespread basis. Advocates should certainly promote a greater scope of universal design wherever possible, but they should certainly not settle for less than the basic features of Visit-ability.

## The Advantages of Visit-ability

Along the continuum of access opportunities presented by this list of contemporary housing strategies, Visit-ability lies at the midpoint. Visit-ability is clearly a much less comprehensive standard than either accessibility or universal design. That being said, however, the RERC on Universal Design at Buffalo views Visit-ability as a major first step toward universal design on the neighborhood level, since the ease of applying Visit-ability is so much greater. At least during the foreseeable future, far more Visit-able homes will be constructed in most neighborhoods than accessible or fully universally designed homes.

Visit-ability focuses on the three structural features most essential for a person with mobility impairments to visit or live in a home at least temporarily and possibly even permanently, depending on an individual's needs. If included during design and planning, these features are extremely cost-efficient and provide advantages (and often added value) to non-disabled consumers as well.



Figure 5



Figure 6

Like Concrete Change, we believe that much of the responsibility for seeing Visit-ability promoted in the community will rest squarely with housing advocates and consumers. Whether that consumer is an individual, a housing developer or a government agency, they must realize that Visit-ability is a viable option and actively work to see it instituted.

While in some municipalities, Visitability is enforced by ordinances that cover most housing built with public funds, it is important to stress that for the most part, Visit-ability is still a voluntary standard that can be used in any type of housing not yet covered by accessibility regulations. In many cases, a plan to include Visit-able units can also be an asset in finding and securing public funding for construction of a housing project.

Visit-ability does not represent a substitute for the legal mandate of full accessibility. Rather, Visit-ability expands the application of accessible design in a wider range of housing. It makes houses relatively easy to adapt in the future, allowing current residents to remain in their homes as they age, rather than being forced to move as more features become necessary to maintain functional independence.

Visit-ability also provides benefits to a wide range of users, including those with disabilities, their nuclear family, extended family, friends, and relatives who may, from time to time, need to use wheelchairs or other adaptive equipment. If we accept these arguments, the movement towards inclusion of Visit-able features in all new singlefamily housing seems to be a win/win proposition and it raises the question...

# "Why hasn't Visit-ability gained wider acceptance?"



Figure 7



Figure 8



Figure 9



# The Myths

Concrete Change has identified several myths, which, because they are accepted as "common knowledge," prevent Visit-ability from being more widely adopted.

# Full Access to Housing is Already Mandated by Existing Laws – The ADA and other laws mandate accessibility in all housing.

Not so. Under the Federal Fair Housing Act Accessibility Guidelines, all multi-family dwelling units in elevator equipped apartment buildings and ground floor units in walk-up apartment buildings have to be accessible. There are seven basic access requirements under the Act, but townhouses and single-family detached homes are not covered by its regulations. The Architectural Barriers Act, Section 504 of the Rehabilitation Act of 1973 as amended (29 USC sec 794) and Title II of the ADA as well as many state laws, require housing built with public funding to be accessible, but there is usually only a minimum requirement of 5% of the total units in a building or project. These laws are not applied to dwelling units financed by mortgages insured through Federal programs. Thus, although there are existing laws that mandate accessibility, most new housing constructed (singlefamily homes) is not covered.

# 2. The Percentage – Mentality

The percentage of homes with access should be roughly equal to the percentage of people who currently have disabilities. Those who believe that there should be accessible housing only for "those who need it" fail to realize that:

- visiting other people's homes is as important to people with functional limitations as it is to other people
- those homes already built on a Visit-able floor plan are easier to adapt to full accessibility when the need arises
- such homes allow residents to remain in a neighborhood and community despite the fact that their needs for additional access change as they age

Visit-able housing is also best suited to serve the whole community, since any member of the community can experience a disability and need accessible features whether that need is short term or permanent – at any time.

3. The Equal Importance Fallacy All the required features in typical access codes are of equal importance, from the height of the mirror(s) to the width of the doors.

No, they're not. Visit-ability in certain homes is meant to augment, not substitute for fully accessible housing elsewhere in neighborhoods.

For the short-term visitor, the two most important needs are getting in and out of the home independently and fitting through the interior doors comfortably. An especially important concern for those planning to stay for any more than a short visit is access to a ground floor bathroom. 4. Aesthetic Concerns Visit-ability features are unattractive.

To the contrary. In many cases, Visit-able homes are indistinguishable from conventional designs. Ideally, Visit-able features are integrated into the design and are not noticeable. In fact, many consumers view them as an attractive asset because of their increased usability.

**5. Expense** The expense of including Visit-able features is high.

Not true. Visit-ability is most easily achieved if it is incorporated into the housing design at the planning stage. When this occurs, the expense of producing Visit-able features as part of any reasonable plan is negligible. In addition, the



Figure 10

extra space necessary to include such features is insignificant. Of course, the expense of renovating to create Visit-able homes would be a lot higher than this. And once a home is Visit-able, making it fully accessible in the future would cost far less.

6. Siting Constraints A zero-step entrance is feasible only on a flat lot.

Once again, not true, as Figures 10 and 11 illustrate.

When using the lay of the land to advantage, a sloping lot is often even easier to work with than a flat lot.

In Figure 11, access to the rear of this building, at the high side, provides Visit-able dwelling units without changing the front side of the building at all. It also provides access to two levels on which to build those Visit-able units whereas only one level would have been feasible if access were provided only at the front of the building.

7. Design Constraints A zerostep entrance is only feasible when building on a concrete slab.

Building with a basement or crawl space does not make a zero-step entrance infeasible. The grade of the surrounding land can be adjusted to eliminate steps without requiring a ramp. Depending on the site conditions, this may require a deeper basement to bring the first floor level closer to grade. For example, instead of 24 inches between grade and the first floor,



Figure 11

the basement floor elevation can be lowered 12 inches more and the site graded up 12 inches around the entrance. This will eliminate the need for any steps or ramps. The grade around the other sides of the house can be 12 inches below or more from the grade at the entrance. The same approach can be used with a crawl space.

Another approach is to add a ramp at one entry. A good place for the ramp is at the rear of the building. The driveway can be sloped gradually up. From the rear of the driveway, the ramp can run up to a deck. This sloped driveway reduces the length of the ramp. A no-step entry can be provided from the deck.



Figure 12



Figure 13



# **Costs of Visit-Ability**

## **Research on Costs**

The cost of Visit-ability is not significant when compared to the cost of building an entire house and developing the home site, but for those who are not informed, there may be many misconceptions about how inexpensive it really is. In addition, each dialogue about the cost of Visit-ability is often based on assumptions about home design that are not necessarily absolute. In this section, we present information to help overcome misconceptions and show how those assumptions can affect the cost impact.

There are studies that have estimated the cost of accessibility but there is no recent published study on single-family homes. In fact, the published literature provides only one example of a modest three bedroom single-family house. That example came from the late 1970s and the total construction cost of the home was less than \$15,000, so it is not a very relevant example today (Schroeder and Steinfeld, 1979).

The most current study, called **The Cost of Accessible Housing**, by Steven Winter Associates (1993), was published by the US Department of Housing and Urban Development. This study focused on the cost impact of the Fair Housing Accessibility Guidelines (FHAG) on multi-family projects. Eight existing projects constructed by private developers were studied and redesigned to meet the Guidelines. The developers then estimated the cost of the redesigned projects. It was estimated that the cost of making multi-family housing comply with the Guidelines was .28% of total construction costs for the dwelling unit part (excluding site development and community facilities) and .33% for total project costs. This general conclusion of less than 1% is in line with other studies that have examined the impact of accessibility to public buildings.

Visit-ability does not require as many accessibility features as the FHAG, nevertheless, there is some general information that is useful in the HUD study. First, out of 38 unit plans studied, only 3 had to be increased in floor area and the average increase was 12 square feet. Second, the cost of accessibility varied significantly from project to project. The topography of the site and design of the buildings created real differences in cost impact. Third, where units were designed to a low standard (very small spaces), the cost impact of accessibility was higher. Thus, although accessibility requires rethinking the design of dwelling unit plans, it does not often lead to the need for increased area, a major factor in increased cost.

It is clear that other design goals interact with the goal of providing Visit-ability. These goals may include but are not limited to the type of house plan desired, the level of efficiency desired in space planning and the constraints of natural topography as well as building codes, planning guidelines and zoning ordinances which govern the design and use of the land. For these reasons, it is always easy to find a case where making an existing design Visit-able will lead to increased costs. But it does not make



Figure 14



Figure 15

sense to even average in "worst case scenarios." Rather, Visit-ability can and should be omitted in those few houses where it doesn't make economic sense.

Often, the cost impact of adding accessible features can be balanced by finding other ways to reduce costs. But, when there are other priorities that are also important, that approach may not be acceptable to the owner or builder.

Another difficulty in estimating cost impact is that changes to designs are not usually based on one design objective. The act of revising a floor plan could introduce other features that are not directly Visit-able features but are simply improvements to the circulation, appearance or livability of the home. In other words, when changes are made to a design in the real world, those changes usually will address issues beyond only Visit-ability.

#### Cost Impact

To thoroughly examine the cost impact of Visit-ability, it is necessary to study a wide range of projects and use a systematic approach to redesign and cost estimation, like the study that HUD commissioned on the FHAG. This was impossible for us to do within the scope of this booklet. However, we were able to identify typical components of Visit-ability and have a contractor estimate their cost.

We also were able to compare the cost of Visit-able Habitat homes built in Buffalo, NY and Rochester, NY against the cost of the previous designs that the two organizations were using. Because these homes are very efficient in the use of space, they serve as good case studies as they represent difficult situaions.

The table illustration of a case study house provides estimated costs for typical features of Visit-ability. We have assumed an "original design" that is a modest 1500 square foot ranch style model with two baths and three bedrooms, approximately 30 feet wide and 50 feet long, constructed of wood with siding and the floor level raised off the original elevation of the site by 18 inches. There is a wood deck and a back entrance at the rear with a front entrance with a wood porch with two stairs at the front, approximately centered in the length of the home. The porch has a one-step entry to the interior floor level but

	Design changes from Alternate A	Itemized costs	Comments
I. No step entry	<ul> <li>Grade site to provide driveway slope of 5% and elevation change of 1'-0"</li> </ul>	No cost	• This is the preferred option, according to the contractor we consulted. The fill from the basement excavation could be used to grade the site. The cost of the grading would be offset by eliminating the need to remove the excavated soil from the site.
	<ul> <li>Eliminate wood stairway and handrails at rear deck</li> </ul>	\$300 – \$500 Credit	
	<ul> <li>Provide 6 foot long wooden ramp with two handrails to the rear deck with railings on both sides, supported by the deck at the top end and a concrete pad at the bottom end</li> </ul>	Less than \$500	
	<ul> <li>Concrete front terrace level with interior floor with a slight pitch for drainage</li> </ul>	No difference in cost	
II. Accessible doors	• Widen 5 hinged doors to 32 in. clear min.	\$25	<ul> <li>Exterior doors are usually already wide enough</li> <li>5\$ each/door, material costs only labor is the same</li> </ul>
	<ul> <li>Increase width of bedroom hallway from 36 in. to 42 in.</li> </ul>	No cost – same wall length and total area	<ul> <li>Width of hallway would be sufficient at 36 in. if doors were all on sides of hallway</li> </ul>
	<ul> <li>Cut 3 in. off the width of all bedrooms and add 6 in. to hallway width.</li> </ul>	No cost	
III. Access to one bathroom	<ul> <li>Add approximately 10 Square feet in one bathroom to allow door to close when wheelchair is in the room</li> </ul>	No cost – compensated by slightly reduced area elsewhere	<ul> <li>Many bathroom designs will not need additional space, just reorganization of the fixtures.</li> </ul>
	<ul> <li>Reduce living room, dining area by 10 Square feet.</li> </ul>	No cost	<ul> <li>Most houses will have enough space to accomplish this trade-off without any impact on livability</li> </ul>

the deck is at the same level as the interior. Ventilation to the basement is provided through four basement windows with window wells to keep water from entering. The house has a full storm drainage system around the foundation. The lot is 125 feet deep and 80 feet wide.

The case study demonstrates that the cost of Visit-ability, for a modest home of typical design, is clearly affordable within the scope of most homebuilding projects. In addition, the advantages of the Visit-ability features definitely balance out the costs. The design changes that are necessary would only have a positive influence on marketability.

Visit-ability would make the home more desirable for families with small children, families that had

grandparents who might visit and older households in general. Given the cost of a house like the hypothetical model, the increased costs would not be noticeable in the monthly mortgage payment. In our analysis of the Habitat experience, we discovered that revising a design that already exists could result in very different outcomes, depending on how many changes from the original are considered desirable. In part this depends on how satisfied the designers are with the original model and how many changes they are willing to introduce. In both Buffalo and Rochester, the Habitat Chapters redesigned their basic model. In both cases, the redesign improved general livability considerably. It then became impossible to separate out the actual cost of

Visit-ability features. One thing is clear however: the cost difference resulted in increased value; the result was an improved home design, and, the new owners are quite satisfied.

#### **Buffalo Case Study**

Figures 16 and 17 show before and after designs for the Habitat model used in Buffalo. Figure 16 shows the original design and Figure 17 shows the Visit-able design. The new home design is about 1150 square feet, about 50 square feet larger in area than the original. The original plan is about 50 square feet larger than Habitat International's guideline of 1050 square feet. It cost approximately \$1500 more for the Chapter to build the Visit-able model.

The Visit-able house plan has three main differences from the original that led to the increased cost: It is 47 square feet larger; there is a second exterior door at the vestibule at the side entry; there is a ramp to that doorway. However, are these three items all attributable to meeting the goal of Visit-ability? We think not. We think they are also attributable to improved livability and design for an adverse climate.

First, the extra area is simply a decision to add a bit more room to the dwelling. The 47 square feet could have been trimmed off the plan by reducing the length of the home by two feet. The Visit-able plan actually has a lot more space in the kitchen and dining area than the original plan, but the bedrooms and bathroom are almost exactly the same size.

Second, the side entrance is a popular feature among Habitat clients. More often than not it is the preferred means of entering the house because it provides direct access to the kitchen and basement. It also provides a transitional space between the exterior and interior for bringing in groceries, taking off



Figure 16



Figure 17







First Level Plan - After Modifications

Figure 18 (left) and 19 (right)

coats and boots in the winter, etc. In the original version, the side door brought clients to an intermediate landing between the kitchen and basement, which meant that entry to the ground floor level was possible only by climbing 3 steps. The addition of a ramp and relocation of the basement stairs made the side entry more usable for everyone.

Third, the ramp was used to overcome the difference in height from grade to the first floor level. There is no rule that requires the house to be so high above grade. There are other less costly approaches that could have been used to provide a no-step entry. The lots in Buffalo are deep. A driveway about 35 feet long with a slope from 3-5% would have been enough to bring the grade to the level of the first floor. The land could have been graded to accomplish this. But the Habitat designers wanted to keep all four sides of the house 18 inches above grade to insure that snow would not leak into the basement through the basement windows. This meant keeping the site relatively level. They also preferred not to build window wells, which would be required if the house was sunk still further into the ground. This decision was made as a construction decision based on climate, not because of Visit-ability.

Another construction consideration was the use of concrete footings to support the railing. In Buffalo, footings must be 4-feet deep. Building all of the footings adds a lot more in material costs. There are other ways to construct the railing that could eliminate most of the footings. By using footings, however, the longterm durability of the ramp is better, which benefits the lowincome owners significantly. If we subtract the cost of the additional space in living and dining areas, the cost of the second entrance and the difference in the cost of concrete footings versus a less costly ramp design, the difference in cost between the two designs would be reduced to a negligible amount as in our hypothetical example above. Therefore, the additional cost for the new design cannot be interpreted simply as the cost of adding Visit-ability. In the process of redesign, the Buffalo Chapter included features that made the home nicer to live in, reduced maintenance costs over the long term and served as a better response to the heavy snows in the region. Owners prefer the second entry and the ramp because it makes it easier to carry packages, bicycles and other things into the house and also to

access the basement. They certainly prefer having more living space inside. Consequently, the value of the home was increased by making it more livable and maintenance free at the same time that it was made Visit-able.

#### **Rochester Case Study**

Figures 20 and 21 show before and after photos from the Flower City Habitat Chapter in Rochester. Unlike the one-story design used in Buffalo, the Rochester Chapter uses a two-story wood frame design because it fits better with the existing housing stock in the city. Rochester has stricter planning guidelines than Buffalo with a strong emphasis on preserving the visual character of neighborhoods.

The new Visit-able design has a driveway that slopes up gradually to



Figure 20



Figure 21

the rear of the lot where there is a short wooden ramp to the back porch. The ramp is supported by the back porch structure, one piling in the center of the ramp and a concrete pad at the bottom. The Rochester Chapter was not as concerned as the Buffalo Chapter about lowering the basement. They typically construct window wells for the basement windows. To achieve Visit-ability, a half bath was added at the entry area. The overall size of the house is identical to the original.

From a livability perspective, the new design has three major advantages to the original model. First, it is has a second bathroom, which increases privacy for the family because guests do not have to go upstairs. This also makes scheduling access to the bathrooms easier for a family with children. In the old design, there was a lot of extra space at the entry. In the new model, this space was used to add the half bathroom, an important upgrade in quality. As in the Buffalo example, the ramp adds significant convenience for bringing things in and out of the home.

The new model cost about \$1200 more than the old. The Flower City Chapter attributes most of the cost to the additional half bath in the home and they believe it was money well spent. They reported that there was no additional cost for grading the site differently. They also reported no additional cost to dig the basement deeper. As in the first case study, only a negligible amount can be attributed to Visit-ability in this example and the result of the redesign, sparked by the goal of achieving Visit-ability, resulted in a more livable home.

#### **Cost Versus Value**

Clearly it is not always easy to separate out the costs of Visit-ability from the costs of achieving other design goals in real construction projects. Other than in hypothetical examples, there are likely to be other differences between an original design without Visit-ability and the Visit-able model, and designers and builders will all have their own preferred ways of doing things that determines what decisions about materials and construction quality will be made in the end. If, for example, the Buffalo Chapter had adopted the same features that Rochester did--lowering the basement, grading the driveway and eliminating footings – it is likely that there would have been no increased cost at all for their Visit-able home.

When comparing costs between non-Visit-able and Visit-able designs, then, it is important that the essential features of Visit-ability are not confused with other design improvements. One must understand the choices designers make about layout, construction quality, construction methods, aesthetics and other issues and how those choices add to the cost of the home. Although other improvements may well be desirable and advisable to include in Visitable homes, one cannot use them as an argument against Visit-ability. There can be significant increases in value due to design changes from the perspective of safety, aesthetics, livability, long-term maintenance and other factors. Where improvements are made during the process of creating Visit-ability, as in the Flower City example, one has to

weigh the additional benefits of those improvements against the costs. For example, in market rate housing, the addition of a half bath could easily be recouped by a slightly higher selling price. Although the ramp at the rear has an associated cost, it also has a value to the owners. Amortizing \$1200 over the course of a 30-year mortgage would not significantly affect the purchasing decision. The two case studies demonstrate that although there may be cost differences associated with the new designs, the value of the improvements more than compensates for their cost. Ultimately, it is the value of the house and what people are willing to pay for it that is the most important concern from a cost point of view, not just the bottom line cost increases.



# **Case Studies**

#### Case Study 1 — Infill Housing

The Summerhill neighborhood is where some of the first Visit-able homes were built under Atlanta's 1992 Visit-ability ordinance. (see figures 4, 10, and 13) These are single-family homes selling for approximately \$150,000 to \$225,000. Waivers of utility impact fees were granted to many of the households based on income guidelines. This public subsidy required the owners to build Visit-able homes. Approximately 25 houses in the area incorporated the Visitability requirements.

Because the homes are in a preservation district, building the first floors well above grade was required to fit with the existing neighborhood context. All of the homes have a high front porch with several steps, and access was achieved via a wooden ramp leading to a back or side deck. Residents who had Visit-able homes and were not currently disabled in any way reported that ramped access and other Visit-able features were an asset to them in their daily lives and would have been desirable as design options regardless of the ordinance. The ramp made it easier for them to carry groceries, bicycles and other heavy burdens in and out. There are, however, many new houses in the neighborhood that do not have accessible entrances. This occurred because the city either allowed some builders to slip past the ordinance, or because they are applying the ordinance only to the homes whose households qualify for a waiver of "impact fees" (for utilities) based on income.

# Case Study 2 — Centennial Village

Centennial Village is an inner city, Hope VI Public Housing Authority project located near Georgia Tech. in Atlanta. Many townhouses were built at three levels of rents: public assistance, income – based sliding scale, and market rate.

Although the initial set of townhouses was not Visit-able (Figure 22), Concrete Change succeeded in convincing the Atlanta Housing Authority to modify their design, which originally included only the required 5% accessible units.

Ground floor units in the latter phases of the project all have zero step entries and wide bathroom doors. A design with two-story townhouses stacked over single story units was adopted to accomplish this goal (Figure 23).

It is important to note that these zero step entrances were achieved on sloping terrain by using creative planning and grading of the site.

Parking in the back has direct access to the units on grade. The entries are nicely designed to define a personal territory for each unit without raised porches. Street access to some ground floor units requires the use of stairs, but an accessible path is provided by a sidewalk behind a retaining wall (Figure 24). The path and wall created more private open space in front of the ground floor units.

This example demonstrates that Visit-ability requires a new thought



Figure 22



Figure 23



Figure 24



Figure 25

process. One should not ask, "How can I put a compliant ramp on this house?" but rather, "How can I arrive at the outcome I desire, while dealing successfully with the constraints of the project?"

## Case Study 3 — Villages at East Lake

This is another Hope VI development on the outskirts of Atlanta. A very large project built in two phases, it provides a good contrast between an unfortunate lack of access and an excellent provision of access. Phase I consisted of two-story town houses. It initially contained only the required 5% accessible units, leaving the remaining 60+ town houses with two steps up into each home (Figure 25).

It was discouraging to Concrete Change members that these town homes went up after Visit-ability was achieved at Centennial Homes, so advocates organized complaints about this oversight and Visit-ability was provided in the second part of Phase I. Over 60 town houses, all having zero step entrances and around-floor half baths with wide doors were constructed. Phase II offers even more commendable access, including both the 5% full access required by law and widespread Visit-ability. The building types are a combination of stacked flats designed to appear from the outside as multi-storied town homes as well as numerous single story duplexes.

# Case Study 4 — Habitat for Humanity

Concrete Change also worked with the Atlanta Habitat for Humanity chapter to build single-family Visit-able units. Visit-able features were designed to "blend in" with the neighborhood so that access was provided without visual impact. If properly achieved, Visit-ability is right in line with one of the goals of universal design – social integration. Visit-ability creates housing that blurs the line between who has accessible housing and who has housing that is designed simply for improved livability.

The Candler Park Neighborhood contains over 20 of the more than 300 Visit-able homes the Atlanta affiliate of Habitat for Humanity has constructed to date since first being persuaded by Concrete Change to build all new homes with Visit-able features (1989). These very affordable homes, built partially with volunteer labor, cost approximately \$35,000 – \$50,000. They all have zero-step entrances achieved either by grading/berming a sidewalk up to a porch or by constructing a short wooden deck-like ramp. All have crawl spaces. Access was achieved on a wide variety of terrains, from level to steeply inclined.

As described previously, the RERC on Universal Design at Buffalo has worked successfully with two local Western New York chapters of Habitat for Humanity.

The Habitat chapter in Buffalo was generally enthusiastic about the idea of building accessible homes, but planned on doing so only if a client currently needed it. The RERC convinced them to try building Visit-



Figure 26



Figure 27

able homes as an option for all clients. We helped the chapter redesign their basic model to be Visit-able. Although they initially planned to build only one Visit-able home as an experiment during the summer of 2000, all their clients chose the new plan over the original. What started out as a demonstration of the benefits of Visit-able features became three Visit-able units – built with the enthusiastic support of the homeowners. Three more were built in 2001.

In the spring of 2000, the executive director of the Flower City Chapter of Habitat for Humanity in Rochester, New York attended a housing conference at which Edward Steinfeld made a presentation on Visit-ability. Prior to the conference, the Flower City Chapter had been working with advocates at the Center for Disability Rights in Rochester to design and build accessible homes for specific clients. This contact with the RERC built upon the previous advocacy efforts and extended the application of accessibility, in the form of Visit-ability, to all new homes built by the Chapter. After the board decided to adopt Visit-ability, the director of the Flower City Habitat Chapter visited the RERC on Universal Design at Buffalo, where he learned more about the concept of Visit-ability. Over a period of a few weeks, a new plan for a Visitable house was developed and reviewed by Center staff. After a few iterations and reviews, the Flower City Chapter adopted the design for all its new homes.

## Case Study 5 - Co-Housing Community, Decatur, GA

This project represents perhaps the

best example of universal design because it includes neighborhood planning as well as home design.

East Lake Commons is a privately developed co-housing community in Decatur, where Eleanor Smith and one other wheelchair user live, along with non-disabled neighbors ranging in age from a few months to 85 years old. The 64 attached town-homes and 3 single-level homes all have zero step front entrances and 60 are equipped with wide bathroom doors. Visitability was adopted by the original members of the group and it has become a universal feature of all houses built in the community.

No one has problems accessing either public or private spaces within the development. The advantages and experience of full access are shared by all rather than causing the social segregation that results from partial accessibility.

Figures 28 through 31 illustrate the flexibility of Visit-ability as a housing design strategy. The owners of the house in Figure 29 wanted it raised high off the ground. One of the owners of the house in Figure 30 uses a wheelchair, so they had it built on grade. The townhouses in Figure 31 are Visit-able with access from the pedestrian path side and have rental apartments that are accessible from the rear. These apartments are designed to provide either rental income or serve as granny flats for aging parents. The central community dining hall and recreation building is also fully accessible.



Figure 28



Figure 29



Figure 30



Figure 31

31 I visitability



# **Advocacy Strategies**

This section contains a set of strategies for implementing Visitability. These strategies are only ideas for action, not prescriptions. Each one of them requires creative application and should not be viewed as fixed in concrete.

If advocating Visit-ability is something of interest, the first step is to get in touch with the "movement," and find out what's going on currently. Do this by contacting Eleanor Smith, Steven Truesdale, or one of the organizations listed on the contact list in the Appendix. If there is a local project in mind, it is best to tap into the network of people who have experience. This will reduce the learning curve and help make the project more effective.

# Sec. 504, Rehabilitation Act of 1973 (Amended & Re-certified, 1992)

Originally touted as the "disabled person's Bill of Rights," Section 504 guarantees the accessibility of any program receiving federal funds. Section 504 requires that only 5% of all units in a project have full accessibility. That percentage can be supplemented by providing Visitability in all of the remaining units. Visit-ability can also be promoted as a proactive method to reduce the eventual cost and disruption of making accommodations for a person with a disability, should they become necessary later.

# Home of Your Own (HOYO)

HOYO is a federal program that assists persons with disabilities in



Figure 32

purchasing and financing private homes. Because federal monies are used to make down payments, and to guarantee mortgage payments in this program, incentives built into the program to include Visit-able design can be activated (dependent on the project).

## Hope VI

The Hope VI program is a public housing modernization program administered by the US Department of Housing and Urban Development (HUD) with an emphasis on reducing density and creating mixed income developments. Since the inception of the program, funds have been awarded to a total of 130 Housing Authorities in 34 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The awards for fiscal year 1999-2000 funded demolition of almost 97,000 public housing units and will produce over 61,000 revitalized dwellings.

The program concentrates on replacing or completely renovating "severely distressed" housing units in large public housing projects, while at the same time creating mixed income communities.

Competitive proposals are made by private developers to build projects on sites of old public housing projects. The program provides incentives for developers to include Visit-ability for townhouses and single-family homes.

# Consolidated Housing Affordability Strategy Plan

The CHAS requirements support the development (by counties,



Figure 33

municipalities or consortiums of municipalities) of annual housing affordability plans, tying receipt of certain federal funds to approval of the yearly plan. This process, which includes public comment, provides an opportunity for Visitability advocates to have input and make real changes that have a lasting effect.

Areas not served by municipal public housing authorities are covered in a statewide plan. By working for the inclusion of Visit-ability incentives within each community or state's annual CHAS Plan, advocates can help change housing policy.

In each jurisdiction seeking to qualify for federal housing funds from HUD a CHAS consolidated plan for federal compliance must be filed. HUD is required by law to solicit public testimony on its performance and its plans for future programs. By providing oversight to ensure that full compliance with the federal law is maintained, advocates can help ensure that newly developed housing projects include both fully accessible and Visit-able units.

In cases where Visit-able and accessible units have not been included in projects, it is essential for advocates to provide written and publicly spoken testimony on achieving equity in housing opportunities.

You can view your local community's CHAS Plan on the Web through the HUD website. HUD also produces a CD-ROM with all CHAS plans across the nation.



Figure 34



Figure 35



Figure 36

#### Sympathetic Developers

One of the best ways to encourage Visit-ability is to provide recognition and economic support for both non-profit and profit making developers and builders who are currently knowledgeable about Visit-ability as well as those willing to learn about Visit-ability and its requirements in response to customers requests. This means helping them to get projects, recommending them to homebuyers and buying their homes or renting their apartments. Local advocacy groups can also provide public recognition for developers who adopt Visit-ability and help promote such projects as examples of convenient and safe housing.

# Parade of Homes and Home Shows

"Parades of homes" and model homes constructed for home shows are collaborations between builders, developers and realtors. In a parade of homes, a group of builders are organized by real estate developers to build several homes in one sub-development. These homes are then open to the public for tours. Home shows are expositions organized by regional homebuilders organizations to exhibit building products and publicize home builder services. Fees are often charged for public tours of model homes or to enter home shows. Often the parade of homes and home show models feature innovative ideas.

The Americans with Disabilities Act does not cover housing. But parades of homes and home show models may be considered public accommodations, where the general public is "invited or expected to attend for reasons of commerce, recreation, or assembly..." Title III of the ADA mandates access, at least in part, to all public accommodations. This fact may open the door for Visit-ability advocates for collaborations with sponsors to assure the inclusion of at least Visit-able designs.

Demonstrations serve as educational tools for both the building industry and the public. Seminars and workshops can be conducted in conjunction with these demonstrations.

## **City-to-City Training**

There are many ways to educate people about the advantages of

Visit-ability. Target audiences are groups of consumers and advocates who themselves have disabilities (or would find Visit-ability advantageous for another reason), housing networks and professionals they interact with (i.e., Section 8 and Section 202 housing coordinators locally and statewide), local developers, landlords, and realtors. As more and more Visit-able housing becomes realized within the community, training that promotes general awareness within neighborhoods might also be included.

#### **Plan Books**

These reference books are prepared by private companies for sale and distribution to housing builders and developers. Visit-ability advocates can make a significant impact in the single-family market by convincing and helping providers of plan books



Figure 37



Figure 38

to incorporate Visit-able models. The plan books describe the designs and provide some illustrations. Builders select the designs they want from the book and then order the plans for the ones they want to build. Consumers also use these books to find plans they like and bring them to attention of the builders they hire.

It is surprising how few companies provide most of the home plans used in the home building industry, particularly to small builders who don't have the resources to develop their own designs. If these companies can be persuaded to include Visitable models in their books, the demand for and supply of Visit-able homes will grow.

If all home plans in these books were Visit-able designs, some argue, the battle for making Visit-ability the norm would almost be won. There has been some investigation of this possibility. It turns out, however, that changing all the plans in the current books is an extremely time consuming and costly proposition. It is more realistic to target only the most popular plans for modification and to introduce enough new Visit-able plans so that, over time, demand will increase the proportion of plans that will be Visit-able.

#### **Manufactured Housing**

Mobile and modular homes currently account for more than one-third of all housing in the United States. In many rural areas, manufactured housing is the most common form of construction. Advocates can work with manufacturers, either individually or as an industry, to introduce Visit-ability in product lines. Suggestions for specific actions in this market include:

- Running training programs for companies producing manufactured housing
- Organizing presentations and discussion on Visit-ability features through manufacturer/consumer forums
- Developing sessions at national conventions of manufactured housing organizations.

# Enforcing Existing Codes and Ordinances

Ensuring required accessibility and Visit-ability is a continuous battle. Developers interested in circumventing accessibility regulations (for specific purposes) often seek variances for each phase of a project not in compliance with current laws. Often officials reviewing proposed projects are not knowledgeable enough to identify lack of compliance with accessibility codes and are pressured by politicians to allow variances where there is no need for them.

Advocates can play a major role in educating officials and supporting their efforts to implement existing regulations. Through continuous contact and attendance at code review meetings where variances are granted, advocates can become an important force in the process of project review. Variance hearings are public and occur on a regular schedule (and usually within local communities or on a regional basis). The public can submit testimony and argue against granting variances.

In this work, organizing the involvement and assistance of disability advocacy groups is very effective because these groups can bring many people to public meetings. This show of force gets the message across that there is someone watching and will reduce the number of unnecessary variances granted. After officials realize that advocates are helping them to do their job better, they often will develop a cooperative relationship with the advocacy groups, keeping them informed of developments and asking for their assistance in making decisions. This will only happen if the advocates are well informed and constructive in their approach.

#### **Financial Incentives**

From an advocate's perspective, using tax credits and other financial

incentives to reward contractors, developers, and builders for the inclusion of Visit-able design features may not seem like good sense. Not only does Visit-able design already provide its own rewards by making homes more marketable, more sustainable and more desirable, but the argument can also be made that providing more than these rewards is actually counterproductive. Such basic access to society is not seen by advocates as a favor but as a right. If incentives are provided, builders may demand them before incorporating Visit-able features, essentially getting paid to do it.

The goal of Visit-ability advocates is not merely the re-education of builders, developers and contractors. Rather, as Eleanor Smith would say, the goal is "bricks and mortar,"

seeing Visit-able features and housing materialize in the marketplace. Therefore, the inclusion of tax and other incentives for builders and developers who include Visitable housing within their projects should not be discounted as a resource and a tool, especially if it works on the long term by helping to demonstrate Visit-ability to communities which would otherwise not experience it. Sunset provisions linked to adoption of Visit-ability ordinances are one good approach to using incentives because they stimulate adoption of the concept but do not have a long-term negative impact.

#### Legal Action

Despite the fact that hard and fast rights to Visit-ability features in housing are yet in their infancy, lawsuits can be an effective tool for demonstrating the inequities in the current housing market. When the goal is cooperation and participation in changing housing policy, lawsuits can also be counterproductive for three reasons:

- They are by nature adversarial and detract from one of the primary philosophical goals of Visit-ability, which is to build a community and overcome the "us versus them" mentality.
- Litigation takes time, and while court cases go on, non-Visitable homes continue to be built.
- Whereas negotiation and advocacy are an ongoing processes, a court ruling can be construed as final.

Where lawsuits are pursued, however, the effectiveness of the contemplated actions must be evaluated, so that each litigation attempted has the maximum chance of succeeding. It should be noted that there has to be a legal basis for a lawsuit. Where there are no Visit-ability ordinances, there is no violation of a law due to the lack of Visit-ability. Visit-ability might come into play as a remedy for a Fair Housing, Section 504 or ADA violation.

Developers can be offered the option of providing Visit-ability to new projects as partial compensation for violating accessibility codes in previous projects, where an extensive renovation of those projects may not be feasible (e.g. condominiums owned by their occupants).

# Regulatory and Legislative Advocacy

A primary method of advocacy for Visit-ability is legislative advocacy, that is, amending current housing law or writing new laws to require the construction of Visit-able units.

One of the most direct approaches is to promote specific changes to building codes and zoning ordinances.

Efforts are underway to revise the International Code Council model code for single-family homes to include a no-step entry requirement. Changing model codes is a lengthy and time-consuming process. In this case, the International Code Council holds public hearings around the country where advocates can support or oppose provisions on the agendas. This process requires careful preparation and submissions prior to announced deadlines. Often, attempts to change model code requirements are less successful than efforts to change legislation because the model codes are developed by professional bodies who are not dependent on votes to maintain their positions.

In the legislature, support can be obtained from members who share perspectives on the issue and want to help their constituents. The process of legislative advocacy, however, is also an especially difficult one. Most elected representatives have their own beliefs about housing and/or about disability, which may or may not be well informed. It is therefore important, during any advocacy effort, to stress the universal design aspects of Visit-ability. Advocates who can show that Visit-ability provides generalized design advantages to the entire community will be more likely to convert supporters for the legislation among citizens who can then help convince local representatives.

Another strategy for winning approval of legislative initiatives is the development of two bills at local or state levels, rather than one. The first would cover projects funded by public funds and the second would cover privately funded projects. There are two reasons for this strategy. The first is to bring the issue to a wider audience. Focusing on publicly funded projects does not raise awareness in the wider community but the argument for Visit-ability is easier to make in the public sector. Having a companion bill for the private sector extends the debate to all citizens and builders even though it may be a much harder bill to get passed. Second, developing two proposals provides the flexibility for advocates to negotiate a compromise by withdrawing the private sector bill if there is a lot of opposition to the public sector proposal. The private sector bill can always be brought back in the future.

Representatives in alliance with the housing industry, which generally opposes all attempts to regulate housing, vigorously contested a recently proposed Texas state ordinance. Advocates in favor of Visit-ability had to come to the Visitability debate in Texas armed with specific facts to refute, point by point, the arguments raised on both the cost and the space needed to provide Visit-ability.

It is important that advocates organize and prepare well for such debates. Establishing coalitions with other interest groups, like tenant associations or neighborhood redevelopment associations, New Urbanists and sustainable development groups, can help to gain widespread support. It is critical to plan testimony by many groups of people to demonstrate that there is widespread interest. Lining up members of the legislature who have members of their families who are disabled is a valuable tactic as well, because they are more likely to understand the value of such legislation.

If you are interested in pursuing legislative housing advocacy, there are many groups that can be of assistance. Chief among these are Concrete Change, local and regional Independent Living Centers (more than 400 nationwide) and the Disability Rights Action Coalition for Housing chapters.

If you are new to advocacy for legislation, we highly recommend that you coordinate your efforts with one of these organizations, which have substantial experience in this area. Most of them organize legislative initiatives each year. Associations of Independent Living Centers, for example, generally develop an annual Legislative Agenda to inform representatives of the needs and priorities that are current with disabled constituencies.



Figure 39



Figure 40



# Conclusion

Visit-ability is more than a good idea, more than a nice extra, more than a marketing ploy. The ability to age in place in one's own home, as well as the ability to visit one's neighbors and become part of the community, should be seen as a civil and a human right.

In writing this booklet, it is not our intention to suggest (or attempt to mandate) that all people should live in homes that conform to a specific standard. Instead, Visitability advocates believe that by revising our model of housing to address the needs of a wider population, doors can be opened, both literally and figuratively, to people who have had very restricted housing options. The vast majority of existing housing will never be made Visit-able or accessible. By focusing on the construction of new Visit-able housing, we can increase the choices available in our neighborhoods.

We hope that the information in this book has informed you of the benefits of accessible housing, whether you are a person with a disability or not. If you have a disability, accessibility is sometimes absolutely necessary for physical safety and usability, for convenience, and for security. If you do not have a disability, we urge you to realize that the word "Visit-ability" is not another change in politically correct language. Visit-ability is a design standard that can serve the needs, preferences and abilities of a broad cross-section of society that is currently not served by "standard" housing designs. Chances are this expanded cross-section contains you, or someone within your family and your broader social network.

We believe that Visit-ability makes sense for everyone-and that is why it is consistent with the goal of universal design. As a housing strategy, Visit-ability allows more choice, flexibility, and options for more people and makes it possible to become good friends and neighbors with other people seen and interacted with during the course of each day. After reading this booklet, we hope that you join us in viewing this as an important step toward making our world accessible and usable for all.

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# Α

# Appendix

Below is a list of organizations that can help readers to obtain more information and find local resources on Visit-ability.

#### **Christmas in April**

1536 Sixteenth St. NW Washington, DC 20036-1402 Tel: 202-483-9083 www.rebuildingtogether.org

A national volunteer organization whose mission is to preserve and revitalize low-income housing and communities.

#### **Concrete Change**

Eleanor Smith Executive Director 600 Dancing Fox Road Decatur, GA 30032 Tel: 404-378-7455 E-mail: eleanors@mindspring.com www.concretechange.home.mindspring.com A grass roots advocacy organization providing leadership in the development and dissemination of Visit-ability. Their Web site provides information on all aspects of Visit-ability including the actual text of enacted and proposed local and state ordinances.

# Disability Rights Action Coalition for Housing (DRACH)

501 SW Jackson, Suite 100-B Topeka, KS 66803 Tel: 913-233-4572 E-mail: drachqb@tilrc.org

An organization of housing advocates who have an interest in improving policy on housing for people with disabilities. The group works with government agencies and legislative bodies to improve access to housing and increase funding.

# Habitat for Humanity, International 121 Habitat St. Americus, GA 31709 Tel: 229-924-6935, ext. 2551 or 2552 E-mail: publicinfo@hfhi.org www.habitat.org

A leading developer of low cost homes using volunteer labor. The board of directors has endorsed the concept that all Habitat houses should incorporate basic features of Visit-ability and the organization provides technical assistance to local chapters in accessible design.

#### National Council on Independent Living

1916 Wilson Boulevard, Suite 209 Arlington, VA 22201 Tel: 703 525 3406 TTY: 703 525 4153 E-mail: ncil@ncil.org www.ncil.org An excellent source of information on independent living and independent living centers. Their Web site has links to most of the major organizations concerned with disability issues.

#### National Home of Your Own Alliance

Institute on Disability/UAP University of New Hampshire 7 Leavitt Lane, Suite 101 Durham, NH 03824-3522 Toll free number: 800-220-8770 TTY: 603-862-4320 www.alliance.unh.edu

This organization provides technical assistance and information to help people with disabilities obtain a home of their own. They are currently working in 23 states.

### Rehabilitation Engineering Research Center (RERC) on Universal Design at Buffalo

School of Architecture and Planning State University of New York at Buffalo Buffalo, NY 14214-3087 Tel: 716-829-3485, ext. 329 Toll free number: 877-237-4219 x 329 E-mail: rercud@ap.buffalo.edu www.ap.buffalo.edu/~rercud

Funded by the National Institute of Disability and Rehabilitation Research (NIDRR), the Center promotes universal design through research, product development, education and information dissemination. The Visit-ability Initiative is a project of the Center in cooperation with Concrete Change. The RERC administers the Visit-ability-list, a computer discussion list devoted to Visit-ability issues. Instructions for joining are available on the center's web site under "FAQ."

## Rehabilitation Engineering Research Center (RERC) on Universal Design at Raleigh

NC State University School of Design Box 8613 219 Oberlin Road Raleigh, NC 27695-8613 Tel/TTY: 919-515-3082 Info Line: 800-647-6777 E-mail: cud@ncsu.edu www.design@ncsu.edu/cud

Also funded by NIDRR, the Center promotes universal design through research, product development, education and information and provides technical assistance to local organizations on Visit-ability and accessibility in general.

#### RESNA

1700 North Moore Street Arlington, VA 22209 Tel: 703-524-6686 E-mail: cboyer@resna.org www.resna.org

RESNA, the Rehabilitation Engineering and Assistive Technology Society of North America, provides assistance to Tech Act programs across the country. RESNA has an extensive Web site with information on housing policy related to disability rights. U.S. Department of Housing and Urban Development Programs 451 7th Street S.W., Washington, DC 20410 Tel: (202) 708-1112 TTY: (202) 708-1455 www.hud.gov

HUD distributes an excellent booklet called Strategies for Providing Accessibility and Visit-ability for HOPE VI and Mixed Finance Homeownership. The Department also administers the Comprehensive Housing Assistance Plan process and the HOPE VI Program. Regional HUD offices provide information and technical assistance. All public housing authorities receive funding from HUD.

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