

Visitability in Florida: Results from a Pilot Study



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Executive Summary

Visitability is the ability for all individuals, regardless of physical ability, to visit other peoples' homes. The following three components are considered to be vital to building a visitable home: (1) at least one entrance without a step and with a firm, level path to that entrance, (2) doorways wide enough (32 inches) to accommodate a wheelchair, and (3) at least a half bathroom on the main floor of the house. One of the Healthy People 2020 objectives is to increase the proportion of homes that have visitable features (Disability and Health-11).

The Florida Office on Disability and Health (FODH) developed a set of 12 questions related to visitability for eventual inclusion on the Florida Behavioral Risk Factor Surveillance Survey. After incorporating feedback from subject-matter experts, the University of Florida Survey Research Center pilot-tested the questions between October 15 and November 30, 2010, during which time 775 adult Floridians responded to the pilot visitability questions.

Forty-one percent of respondents reported they had at least one zero-step entrance in their homes, 55% had a bathroom on the main floor of the home large enough to accommodate a wheelchair, and 83% had hallways wide enough to accommodate a wheelchair. When asked whether they were in favor of building new homes with these three visitability features, 72% of respondents said they were in favor. Given that these features would add an estimated \$100 to the price of building a new home in Florida, a similar proportion of respondents (73%) said they would be very willing or somewhat willing to pay this additional cost if they were building a new home. There were no statistically significant differences in the prevalence of visitability features or the support for visitability features in new homes when we stratified by respondent disability or household disability status. However, respondents with a disability or respondents who lived in a household with a person with a disability were significantly more likely to report that visitability features increased their quality of life compared to respondents with no disability in the household (35% compared to 20% reported increased quality of life).

Overall, respondents supported incorporating visitability features into new homes and would be willing to pay a moderate additional cost in order to build visitable homes in Florida. In addition, many existing homes have features that make them visitable, particularly wide hallways. These data provide a first insight into the presence of visitability features in Florida homes and the attitudes of Floridians toward visitability. The positive public opinion suggests housing development in Florida can accommodate visitability into all new construction.

Background

Visitability is the ability for all individuals, regardless of physical ability, to visit other peoples' homes. The concept was developed by Eleanor Smith in the 1980s and was used to create her organization, Concrete Change (www.visitability.org), which promotes building all new homes to be visitable. Concrete Change considers three components to be vital to building a visitable home:

1. At least one entrance without a step and with a firm, level path to that entrance.
2. Doorways wide enough to accommodate a wheelchair (32").
3. At least a half bathroom on the main floor of the house.

The topic of visitability relates to universal design, participation among people with disabilities, and aging in place (the ability of adults to remain in their homes as they lose functional ability). Visitability also relates to factors identified by individuals with disabilities as increasing quality of life in a 2008 National Council on Disability (NCD) report [1]. Specifically, knowing that others' homes are visitable makes it more likely that a person with a disability could choose to visit someone spontaneously and thereby become integrated into social networks. (Choice, spontaneity, and inclusion and integration were three concepts identified in the NCD report.) Healthy People 2020, the U.S. Department of Health and Human Services national planning document for achieving population health goals, addresses the relationship between an individual's environment and his or her social participation as follows:

"Full participation cannot be achieved without eliminating environmental barriers found within architectural structures, technology, organizational policies and practices, and social attitudes and without moving toward universal design and nondiscriminatory elements. Thus public health agencies need to measure not only the nature and extent of disability in the United States but also the extent to which environmental barriers and universal design elements impede or facilitate social participation [2]."

One of the Healthy People 2020 objectives relates directly to visitability and another relates to the concept since both aim to reduce barriers to participation. Both objectives are included within the Disability and Health (DH) chapter:

- DH-11: (Developmental) Increase the proportion of newly constructed and retrofitted U.S. homes and residential buildings that have visitable features.
- DH-9: Reduce the proportion of people with disabilities who encounter environmental barriers to participating in home, school, work, or community activities.

Visitability also has been identified as a key component in understanding issues around disability and health in the state of Florida by the members of the Florida Office on Disability and Health (FODH) advisory board, which represents a variety of state agencies and disability stakeholders (Goal 4 of the FODH Strategic Plan; see <http://fodh.phhp.ufl.edu/about/>). The FODH and its advisory board and partners were interested in understanding how many homes currently have visitability features in Florida, whether Floridians support building visitable homes, and whether visitability features impact Floridians' quality of life.

Methods

The FODH team created a series of 12 visitability questions to be used on telephone surveys. FODH collected feedback from the Visitability Initiative Project at the Center for Inclusive Design and Universal Access at SUNY Buffalo (<http://www.udeworld.com/visitability.html>) and Catherine Graham, rehabilitation engineer and accessibility assessment expert at the University of South Carolina, on the content and phrasing of these questions. We incorporated the recommendations of these experts where possible.

FODH worked with the University of Florida Survey Research Center to pilot test the visitability questions on the Florida Consumer Confidence Index (FCCI) survey. The FCCI is conducted monthly and is designed to assess Floridians' feelings about the economy. FCCI respondents were selected by random digit dialing, and were required to be Florida residents age 18 years or older with a home telephone and able to complete the survey in either English or Spanish. From October 15 through November 30, 2010 there were 775 Floridians who responded to the FCCI survey, including the pilot visitability questions.

The FCCI included questions about the respondent's health status and needs for assistance and also about the needs of other people living in their households. These questions were used to create a disability variable so that we could assess whether people's experiences and opinions related to visitable home features differed based on their own disability status or the disability status of someone else in the household. Specifically, if respondents said that because of a health condition that had lasted for 6 months or longer they had either trouble going outside the home alone (such as to shop or to go to a doctor's visit) or had difficulty taking care of personal needs inside the home (like eating, bathing, or dressing), we classified them as having a disability. If respondents reported either of these difficulties for someone else in their household, we classified them as having a household member with a disability.

For all categorical variables, we calculated the proportion of respondents who selected each answer option and reported these numbers along with their 95% confidence intervals (95% CI). For continuous variables, we calculated means and standard deviations (SD). When comparing differences in proportions across two groups, such as respondents with disability and respondents without disability, we used a Rao-Scott chi square test to compare the two proportions. We considered differences to be significantly different when the p-value was less than 0.05. All data were analyzed using SAS 9.2. The University of Florida’s Institutional Review Board reviewed and approved this study.

Results

All Respondents

The average age of respondents was 58.9 years. Sixty percent were married, 16% widowed, 16% were separated or divorced, and 12% were single. Ten percent of the sample reported Hispanic ethnicity. Eighty-two percent reported their race as white, 7.6% reported their race as black, and the remaining respondents reported another race. Seven percent of respondents had less than a high school education, 22% were high school graduates, 29% had completed some college, and 42% had a college degree or higher level of education. Forty percent of respondents were employed; 60% were unemployed or retired (the reason for unemployment was not collected). Eighty-one percent of respondents reported their health was excellent, very good, or good while 19% reported fair or poor health. Fifty-three percent of respondents reported their annual household income was below \$50,000, 28% had income between \$50,000 and \$100,000 per year, and 19% earned \$100,000 or more annually. Table 1 displays the type of homes in which respondents lived. Most respondents – 88.9% of the 734 who responded to the question – owned their homes. Also, most lived in a single family home (81.5%) or an apartment or condominium building (12.9%).

Table 1. Residence type among the Florida Consumer Confidence Index respondents, October 15-November 30, 2010 (n=753).

Home Type	Yes	N
Mobile home or trailer	9.0%	68
Single family detached	65.5%	493
Single family attached	7.0%	53
Building with 2-4 apartments or condos	2.9%	22
Building with 5+ apartments or condos	10.0%	75
Hotel or motel, van or RV, or boat	--	0
Other	3.5%	26
Don't know/Refused	1.2%	16

Table 2 includes information about the prevalence of visitability features in current Florida homes, including a zero-step entrance; a level, firm path from the street to the entrance; an accessible main-floor bathroom, including information about the door swing and under-sink cabinets; wide doorways; and the presence of sidewalks. Most respondents reported their homes had wide hallways on the main floor (82.7%), and a similar proportion reported their homes had a level, firm path from the street to the home's entrance (79.1%). Just over half of respondents said there was a bathroom on the home's main floor large enough to accommodate a wheelchair (54.7%); however, the usefulness of these bathrooms was limited by a large number of bathrooms that had cabinets under the sink (90.8%) – which would interfere with a wheelchair sliding underneath – or a bathroom door that swung into the room (76.2%) – which would make it difficult for someone using a wheelchair to enter, turn around, and close the door. About half of respondents (47.1%) said there were sidewalks on both sides of the street on which they lived.

Table 2. Prevalence of various visitability features among the Florida Consumer Confidence Index respondents, October 15-November 30, 2010 (n=775).

Home Features	Yes	No	Don't know/ Refused	N
Zero-step entrance	41.2%	55.7%	3.1%	775
Level, firm path from street to entrance	79.1%	17.3%	3.5%	775
Wheelchair-accessible bathroom on main floor	54.7%	40.9%	4.4%	775
<i>Bathroom door swings into room</i>	76.2%	21.9%	1.9%	424
<i>Cabinet under bathroom sink</i>	90.8%	9.2%	--	424
Doorways on main floor are wheelchair-accessible (≥ 32 inches wide)	82.7%	13.4%	3.9%	775
Sidewalk on one or both sides of street	47.1%	52.5%	0.4%	775

Table 3 shows Floridians' opinions about building visitable homes and the impact of visitable features on their quality of life. Seven in ten respondents were in favor of new homes being built with the three visitability features described to them (a zero-step entrance, an accessible bathroom on the main floor, and wide hallways; 71.9%). A similar number of respondents reported they would be very or somewhat willing to pay an additional \$100 if building a new home in order to make it visitable (73.3%). In general, as income increased, respondents were more likely to say they would be willing to pay the additional cost to make a new home visitable. Among respondents who lived in a home with visitable features, three in four (75.3%) said those features did not change their quality of life; however, 21.3% said it improved their quality of life.

Table 3. Opinions about visitability* features among the Florida Consumer Confidence Index respondents, October 15-November 30, 2010 (n=775).

Visitability* Question	Yes	No	Don't know/Refused	N
In favor of building new homes to be visitable*	71.9%	23.7%	4.3%	775
Very or somewhat willing to pay an extra \$100 to make home visitable*	73.3%	19.5%	7.2%	775
Among respondents with at least one visitable* feature in their homes, those who say it increases their quality of life (Note: 75.3% said it does not change their quality of life)	21.3%	1.0%	2.4%	705

* In this table, visitability is defined as having at least one of the following features: one zero-step entrance, a wheelchair-accessible bathroom on main floor, or wheelchair-accessible hallways on main floor.

Finally, Table 4 contains information about the additional amount Floridians would be willing to spend to make a new home visitable. In addition to the \$100 additional cost question shown in Table 3, respondents were asked the specific range in which they would be willing to pay for a visitable home. More than one in three respondents (35.3%) said they would not be willing to pay any additional cost. Five percent said less than \$100, 10% said \$100-499, 14% said \$500-999, and 24.1% said \$1,000 or more.

Table 4. Additional amount respondents would be willing to pay if buying a new home to make the new home visitable, the Florida Consumer Confidence Index October 15-November 30, 2010 (n=775).

Additional Amount	Yes	N
None (\$0)	35.3%	274
Up to \$100	5.2%	40
\$100-499	10.1%	78
\$500-999	14.1%	109
\$1,000 or more	24.1%	187
Don't know/Refused	11.2%	87

Respondents by Disability Status

Sixty respondents (7.8%) were classified as having a disability and 108 (18.2%) lived in a household in which someone (the respondent or someone else) had a disability. (Note that 25% of the sample did not respond to the household member disability questions, possibly because they lived alone.) Respondents with a disability or respondents living

in a household in which someone had a disability were no more likely than respondents without disability to have any of the visitability features or to report that they supported building new homes with visitability features. The willingness to pay an additional \$100 for visitable new homes likewise was similar regardless of individual or household level disability status. However, respondents with a disability were more likely to report that visitability features improved their quality of life compared to respondents without disability (34.6% of respondents with a disability reported an increase in quality of life compared to 20.6% of respondents with no disability). This difference was statistically significant ($P=0.03$) based on a sample of 52 respondents with disability. Within the broader group of respondents with a household member with disability, there was also a statistically significant increase in the proportion who reported that visitability features improved their quality of life (34.7% of respondents with a household member with disability reported an increase in quality of life compared to 20.1% of respondents with no disability in the household; $P=0.01$; $n=95$ respondents in a household with disability).

Conclusions

Overall, respondents supported incorporating visitability features into new homes and would be willing to pay a moderate additional cost in order to build visitable homes in Florida. In addition, many existing homes have features that make them visitable, particularly wide hallways. These data provide a first insight into the presence of visitability features in Florida homes and the attitudes of Floridians toward visitability. In addition, the positive response of Floridians to visitability and to increased cost of such housing suggests a future market and rationale for new construction being built accordingly.

There were few differences in the prevalence of visitability features or the attitudes of respondents toward building visitable homes by disability status. This report is based on a relatively small group of individuals with disability or disability in their households. Nonetheless, we did find that visitability features may increase quality of life among people with a disability or people who live in a household with a person with a disability.

During calendar year 2011, the FODH is supporting the inclusion of six of these questions (1-4, 7, and 9 in Appendix) on the Florida Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a random digit dialed telephone survey of adult Floridians that is supported partly by the CDC. By including these questions on the BRFSS, we will have a larger sample and will be able to more fully explore the

prevalence of visitable homes in the state; to assess Floridians' opinions about building new homes that are visitable, including their willingness to pay for these features; and identify differences in experiences and impacts of visitability features among people with and without disability in the state.

References

(1) National Council on Disability. Keeping Track: National Disability Status and Program Performance Indicators. April 21, 2008. Available at:

<http://www.ncd.gov/newsroom/2008/04082008>.

(2) Healthy People, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services, DC., www.healthypeople.gov.

Appendix: Visitability Pilot Questions

1. How would you describe the building where you are living? Is it a mobile home or trailer, a one family house detached from any other house, a one family house attached to one or more houses on one or more sides, an apartment building, or other.

- 1 Mobile home or trailer
- 2 One family detached
- 3 One family attached
- 4 Building with 2-4 apartments or condos
- 5 Building with 5 or more apartments or condos
- 6 Hotel/motel
- 7 Van/RV
- 8 Boat
- 9 Other
- 8 Don't know
- 9 Refused

2. Is there at least one entrance to your home that does not have a step or ledge?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

3. Is there a level, firm path from the road to your home's entrance?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

4. Is there at least one bathroom on the main floor of your home that someone using a wheelchair could enter and turn around?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

Ask 5 only if respondent said "Yes" to 4

5. Does the door on that bathroom swing into the bathroom?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

Ask 6 only if respondent said "Yes" to 4

6. Is there a cabinet under the sink in that bathroom?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

7. Are doorways on the main floor of your home wide enough for a wheelchair to fit through? This would be 32 inches wide or enough space for an average refrigerator to go through.

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

Ask 8 only if respondent said "Yes" to 2, 4, or 7.

8. How would you say the features of your home – the no-step entrance, bathroom on the main floor, or wide doorways – affect your quality of life? Do they...

- 1 Increase your quality of life
- 2 Decrease your quality of life
- 3 Make no change in your quality of life
- 8 Don't know
- 9 Not sure

9. The preceding questions have asked about a concept called "visitability" or the ability for people of all ages and physical abilities to visit other people's homes. Would you be in favor of building new homes with at least one entry without steps, an accessible bathroom on the main floor, and wide hallways?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused

10. If you were purchasing a new home, how much additional money would you be willing to pay to make the home visitable?

- 1 No extra money (\$0)
- 2 Up to \$100 extra
- 3 \$100-499 extra
- 4 \$500-999 extra
- 5 \$1,000 or more extra
- 8 Don't know
- 9 Not sure

11. In Florida, building a new home that is "visitabile" would add an estimated \$100 to the cost of the home. How willing would you be to pay an extra \$100 for a new home that was visitabile?

- 1 Very willing to pay
- 2 Somewhat willing to pay
- 3 Somewhat unwilling to pay
- 4 Very unwilling to pay
- 8 Don't know
- 9 Not sure

12. Is there a sidewalk in front of your home on one or both sides of the street?

- 1 Yes
- 2 No
- 8 Don't Know
- 9 Refused