Inclusion by Design: Accessible Housing and Mobility Impairment

Robin Paul Malloy
Articles

Inclusion by Design:
Accessible Housing and Mobility Impairment

ROBIN PAUL MALLOY*

INTRODUCTION (THREE VIGNETTES)

As a means of setting the stage for the discussion in this Article, the introduction opens with three vignettes. The short narratives on the lives of three different individuals help to quickly inform the reader about the difficulties confronting the people and families dealing with inaccessible housing and mobility impairment.

PAULI: AGE TWENTY-EIGHT

Pauli was a passenger in an automobile driven by his mother when they were hit by a drunk driver. The accident left Pauli unable to walk, paralyzed from the waist down. That was eleven years ago. Today, at age twenty-eight, Pauli has just been promoted to junior partner of a local management consulting firm.

While he finishes his work for the day, Pauli looks forward to attending a celebratory party for all the newly promoted people in the firm. The party is being held later this night at the home of the firm’s senior partner. Pauli organizes his desk, freshens up in the men’s room, and then rolls himself down the hallway to the elevator. He makes his
way out the front door of his building and rolls his wheelchair down the
sidewalk to the curb cut where he crosses the street to wait for the
kneeling bus that will take him to his home. As Pauli waits for the bus he
thinks about the way his life has changed since that accident eleven years
ago. In his wheelchair, life is so much different from the time when he
played football, ran track, and danced with his high school sweetheart at
the junior prom. While those memories are cherished, he has since
adjusted to a new life and reflects positively on the many changes that
have recently improved his quality of life, such as: curb cuts, kneeling
buses, roll-in entrances to buildings, bathrooms with lower sinks and light
switches, and new building designs with doorways and facilities that
provide adequate space for moving and manipulating his wheelchair. He
knows that such changes have come slowly but that they have also
become pervasive and are beneficial to many people with mobility
impairments, not just people in wheelchairs. Within a few minutes the
bus arrives and Pauli, aware of all the hard work that has gone into
becoming a junior partner, rolls on.

After arriving at home, Pauli changes for the party and together with
his wife they drive to the home of the senior partner. The senior partner
lives in a newly developed suburban neighborhood that Pauli has never
been to before. By the time they locate the partner’s home there are
already a number of cars parked along the street. From their car they can
hear the music of laughter and joyful conversation spilling out into the
neighborhood. They park the car and head toward the front of the house.
As they make their way past the wall of parked cars, Pauli’s sense of
excitement dissipates, and his gut wrenches as he looks out at a tiered
three level stone sidewalk terracing up the front lawn to a porch with a
two step entry to a relatively narrow front door. Disheartened, but with a
well-practiced smile on her face, Pauli’s wife goes to the front door to
inquire about another more suitable entrance to the house.

As she waits at the door, she cannot help but notice the way in which
the warm glow of the party inside contrasts with the sullen lines of
distress on Pauli’s face. The senior partner comes to the door and offers
her regrets for not thinking about the issue of Pauli’s access to her home.
She pauses and thinks for a minute about the entrance from the garage
but that, too, has steps; three steps up from the garage to the main living
room, and the doorway is too narrow. Finally, she suggests that Pauli roll
around the side of the house, past the line of garbage cans, and come in
through the rear mud room. “This,” she says, “is the door we use to let
the dogs in and out. I am sure that they won’t mind.” She goes on to
explain that there is only one step at this entrance and she will send
several guests back to help lift Pauli through the doorway; the only
doorway in her home wide enough to accommodate a wheelchair. Pauli
makes his way past the trash cans thinking of all the family gatherings,
and all the college and Super Bowl parties hosted at homes in which the same old issue arises. He wonders to himself if people anguish as much over “having” to invite him to their homes as he does over being invited.

Pauli’s experience highlights the very different way in which law addresses accessibility and inclusion with respect to perceived distinctions between categories of public and private space. Public space is being designed to accommodate mobility impairment while “private” space continues to include barriers to safe and easy access.

ANN: AGE FIFTEEN

Sally and Jim have a fifteen-year-old daughter, Ann, born with a mobility impairing condition necessitating the use of a wheelchair or scooter. Ann attends a public school which provides an inclusive and open environment. Ann is a good student, and with the aid of her motorized scooter is able to get around the school and participate in some school activities such as helping to manage the school track team, and playing an instrument in the band. Ann has many friends and is well liked by her classmates. All of this is good but there is a problem; Ann never gets invited to anyone’s home for a playdate or a sleepover, or for general socializing, not because of personal discrimination but because of exclusion by design in the homes of her classmates and friends. While her home is a model of accessibility, her school friends and extended family members do not have homes able to easily and safely accommodate her use of a wheelchair. Thus, Ann lives in a partitioned world of public inclusion at school and social exclusion after school. Ann lives in a space of truncated social relationships, and indirectly her parents’ relationships are also hindered as they find it increasingly difficult to visit others who occupy exclusionary housing units. The implications of these truncated relationship networks are isolating and stigmatizing for everyone, but perhaps more so for young school-age children and teenagers because reciprocal social networking is so important to a healthy self-image and proper social development.

CELIA: AGE SEVENTY-FOUR

Celia, a seventy-four-year-old woman, until recently has been living independently in her own home. Celia had lived in the same home for fifty years, ever since she was married to her now deceased husband. She had six children while living in that house, and has many cherished memories of the people and events that filled the home with love and laughter over the years. Now, at age seventy-four, Celia has difficulty living in her home. Celia suffers from arthritis in her joints and occasionally loses feeling in her right foot, causing minor interference with keeping her balance. With her arthritis and her foot problem she is no longer able to navigate the five concrete steps that lead into and out
of her home. Inside of her home she struggles with the layout of her house that includes having all three bedrooms and the only bathroom on the second floor. There is a twelve-step stairway between the main floor of the house and the second floor. On flat surfaces she is fine and does not need, or use, either a walker or a wheelchair. Doctors estimate that Celia has many years ahead of her and that she would be able to live independently in her home for several more years if it were not for the presence of so many stairs. Celia would prefer to age in place but she recently had to sell her home and move to a senior living facility. This facility is easier to navigate but it removes her from a neighborhood populated with families and people of all ages, and places her in an environment where everyone is her age or older. She misses looking out her window and watching the neighborhood children play, and seeing the new moms and dads proudly pushing carriages with newborn babies along the sidewalk. She misses the joy of participating in front yard neighborhood chatter, and of the children coming around on Halloween and singing carols at Christmas. The hardest thing to deal with is the realization that in addition to having to leave her own home after so many years, she is no longer able to visit the homes of her children, grandchildren, nephew, sister, and friends who all reside nearby, but occupy houses that are not readily accessible because of entry steps and internal stairways. Despite her lack of need for a wheelchair or even a walker, Celia finds that almost every home that she used to visit now represents a barrier to the normalcy of her prior pattern of social interaction. Celia misses the opportunity to visit the homes of the people she cares so much about and finds herself prematurely disconnected from many of the important social networks that she enjoyed over the years.

Unfortunately, the experiences of Pauli, Ann, and Celia are not unique. Similar experiences are shared by millions of people everyday—by people using wheelchairs, walkers, crutches, and canes, and by people with mobility impairment resulting from such conditions as old age, illness, cerebral palsy, muscular dystrophy, injury, and surgery (such as hip or knee replacements).1 Not all of these people use a wheelchair even

---

though policymakers oftentimes think in such limited terms. In the United States, approximately twenty-one million families have at least one member with a disability, and of these, twelve million families, or nearly 17% of all families, have at least one member with a physical disability. Collectively eight and one-half to nine million individuals, living outside of institutions, use assistive devices and technology for improved mobility. In addition, many other people with mobility impairment do not necessarily use assistive devices even though they have difficulty climbing stairs or performing other mobility functions. And yet, to date there is no national standard for inclusive design in private single-family residential housing, even though public places, places of public accommodation, and publicly funded design requirements.

This Article addresses the lack of inclusive design standards in single-family residential housing. It suggests that the most significant reason for the failure to adopt nationwide standards of inclusive design for residential housing, even while improved accessibility in public accommodations has become pervasive, is related to an erroneous understanding of the nature of “private” housing. For the most part, the legal system frames the discourse of accessibility to residential housing in terms of a false dichotomy between the private and public spheres, with the home understood as private space—a space of intimate relationships, a space easily hidden from public view, and a space carrying high expectations of privacy. The concern for protecting privacy in the home, however, is not the same as treating privately funded housing as devoid of a legitimate public interest. While the home may be understood as a “private space”; the housing unit itself, as a physical structure, is in some

2. Approximately 1.6 million Americans residing outside of institutions use a wheelchair. Kaye et al., Wheelchair Use, supra note 1. Wheelchair use varies by age; with use being about 88,000 people under age eighteen (or 0.1% of the population), 600,000 working-age people (or 0.4% of the population), and 900,000 people over age sixty-five or older (2.5% of the population). Id.


4. See Kaye et al., Mobility Device Use, supra note 1, at 3, 5. This, for example, does not include seniors living in nursing homes, as nursing homes count as institutions.

5. People such as Celia in the third vignette, above, and some people with cerebral palsy are examples of those who may have great difficulty in navigating a house while not being confined to a wheelchair.

6. See generally Lorna Fox, Conceptualising Home: Theories, Law and Policies (2007). In this book, Dr. Fox suggests that the idea of home has evolved in social meaning but that in many ways law has had difficulty in distinguishing the idea of “home” from the physical structure of the house. Id. Professor Ben Barron has also explored the distinction between home and house. See D. Ben Barron, Home as a Legal Concept, 46 Santa Clara L. Rev. 255, 255-60 (2006). Barron explains the special place of home in American law and provides ample references to demonstrate that the home gets special treatment in the law as a place of privacy. See generally id. The home enjoys special status, for example, in terms of tax treatment, search and seizure rules, and protection of autonomy. See generally id.
respects a "quasi-public place." It is important not to conflate the two ideas (house and home), because they are not one in the same, and failure to keep this in mind hinders one's ability to imagine the possibility of reframing the law to deal with changing circumstances and values.\footnote{In this Article the physical structure of the house (residential housing unit) is distinguished from the socially constructed meaning of the word "home." See generally Fox, supra note 6; Robin Paul Malloy, Law and Market Economy: Reinterpreting the Values of Law and Economics 62-63 (2001) (discussing the "confilation" problem in semiotic interpretation theory); Barros, supra note 6. While this Article presents a new way of thinking about a privately owned house as expressing quasi-public characteristics, the idea of the interrelationship between private and public in property law is well accepted. See Laura S. Underkuffler, The Idea of Property: Its Meaning and Power 2-3 (2005). "The idea that property rights... are presumptively free from collective claims has been decisively abandoned, if ever it was true." Id. at 2; see also Gregory S. Alexander, The Global Debate over Constitutional Property: Lessons for American Takedowns Jurisprudence 4 (2006) ("The Blackstonian conception of ownership underscores classical liberalism's mistaken notion that property serves as the basis for the categorical separation of the private world from the public world. The whole notion that the private and public spheres can be kept categorically separate is a pernicious illusion. The public and private are inevitably interdependent.").}\

In the current context, law seems to view privately funded single-family residential housing in terms that affirm the separation of the private from the public. It endorses the presumed voluntary and contractual design choices of numerous discrete and autonomous individuals; individuals presumed to be empowered by market forces to bargain for socially optimal housing outcomes.\footnote{Private housing markets are generally considered to be markets for durable consumer goods and thus subject to standard market forces. Private residential housing transactions are generally treated as private market exchanges. This is the case in courses such as real estate transactions. See generally Robin Paul Malloy & James Charles Smith, Real Estate Transactions (3d ed. 2007) [hereinafter Malloy & Smith 3d]; Robin Paul Malloy & James Charles Smith, Real Estate Transactions (2d ed. 2002) [hereinafter Malloy & Smith 2d]; Robin Paul Malloy & James Charles Smith, Real Estate Transactions (1st ed. 1998) [hereinafter Malloy & Smith 1st]. Most books on law and economics also treat property and housing related matters in standard market terms. See, e.g., Daniel H. Cole & Peter Z. Grossman, Principles of Law and Economics 90-153 (2005); Robert Cotter & Thomas Ulen, Law & Economics 16-34, 119-76 (3d ed. 2000); Malloy, supra note 7, at 51-59, 112-31; Robin Paul Malloy, Law in a Market Context: An Introduction to Market Concepts in Legal Reasoning 12-21, 27-30, 114-211 (2004) [hereinafter Malloy, Market Context].} It is not clear, however, that the actual outcome of such bargaining produces socially optimal results. The underlying assumption of this viewpoint is that private individuals bargaining in the marketplace can achieve results that simultaneously maximize both private and public benefits.\footnote{Malloy, Market Context, supra note 8, at 27-30.} This assumption traces its roots all the way back to Adam Smith and his famous metaphor of the invisible hand,\footnote{Id.} wherein Smith suggested that private individuals acting in their own self-interest promote the public good even though it is no part of their original intention.\footnote{Id.} This means that private and public benefits are invariant.\footnote{Id. Thus, it is assumed that marginal private costs equal marginal public costs and marginal}
from counterexamples such as the tragedy of the commons,13 the prisoner’s dilemma,14 and the problem of transactions costs more generally,15 variance between private and public interest is often observed. Consequently, it is important to identify the public interest in requiring inclusive design in all new single-family residential housing, and to explain the reasons for the failure of private bargaining to achieve socially desirable outcomes.

In addition, it is important to keep in mind that privately funded single-family residential housing markets are not simply matters of local concern. While residential construction is local, housing markets are not. Just because we see housing units constructed on local lots, the market supporting this construction is national and international in scope.16 The funding for construction and for residential home mortgages is funneled through fully integrated and global financial markets.17 America would be greatly underhoused but for the financial resources that are brought into local markets by complex secondary mortgage market and financial market operations.

Likewise, there would be far less private housing in the United States if the public did not subsidize and support it. Government and


13. E.g., COOKE & ULEN, supra note 8, at 161–62; MALLOY, MARKET CONTEXT, supra note 8, at 122–30.

14. E.g., COOKE & ULEN, supra note 8, at 34–38; NICHOLAS L. GEORGAKOPOULOS, PRINCIPLES AND METHODS OF LAW AND ECONOMICS: BASIC TOOLS FOR NORMATIVE REASONING 51–55 (2005); MALLOY, MARKET CONTEXT, supra note 8, at 130–32.

15. E.g., MALLOY, MARKET CONTEXT, supra note 8, at 172–77 (discussing transactional misbehavior, rent seeking, and opportunistic behavior); id. at 194–99 (discussing Arrow’s Impossibility Theorem); id. at 177–89 (discussing Coase Theorem and transaction costs); accord GEORGAKOPOULOS, supra note 14, at 95–128; MALLOY, supra note 7, at 90–105.


17. See supra note 16 and accompanying text. One of the key goals of government involvement in developing and facilitating the growth of secondary mortgage market operations is the idea of expanding the potential pool of investors in real estate related activities. This enhances liquidity for mortgage holders and increases the supply of money for home mortgages. As the supply of potential loan funds increases, the cost of funds (interest rate) decreases, making housing more affordable on the finance end. See generally Malloy, Secondary Mortgage Market, supra note 16; MALLOY & SMITH, supra note 8, at 379–83.
government-related entities support mortgage markets and the development of uniform mortgage documentation. The government also supports programming such as Veterans Affairs and Federal Housing Administration lending, and the government built the infrastructure needed for a strong and efficient primary and secondary mortgage market. In addition, homeowners are assisted in their efforts by subsidies extended via the mortgage interest rate deduction on their federal income tax returns. Private housing markets also benefit from government bailouts of lenders. The most recent example of this being the current subprime mortgage disaster, and another not so distant example includes the bailout of the savings and loan industry in the 1980s. All of this suggests a strong public element to so-called private housing in the United States.

It is also important when dealing with housing policy to recognize that people with mobility impairment do not live, and should not live, alone and isolated lives. And this is true even if their lives are lived in individual housing units specially equipped to meet their needs. People have relationships, visit other people, and have friends and families.

18. See Nelson & Whitman, supra note 16. For general support of mortgage markets there have been many recent news reports. These reports regard helping homeowners avoid foreclosure as a result of the subprime mortgage bailout, and supporting lending institutions suffering losses from subprime lending activities. See James R. Hagerty et al., Mortgage Giants Face Pressure over Capital, WALL ST. J., July 11, 2008, at A1; Damian Paletta & David Enrich, U.S. Shuts Big Bank as Crisis Intensifies, WALL ST. J., July 12, 2008, at A1; Senate Moves Ahead on Housing Relief Plan Seeks, Durbin and Bond Are Backers of Competing Measures, ST. LOUIS POST-DISPATCH, Apr. 2, 2008, at A1; Deborah Solomon et al., Talks on Mortgage Titans Continue, WALL ST. J., July 12, 2008, at A1 (trying to save Fannie Mae and Freddie Mac each with $3 trillion in loans and loan guarantees).

19. See generally Nelson & Whitman, supra note 16.


Further, people connect with others outside of the workplace and outside of places of public accommodation. Therefore, the proper way to think about accessible housing is not in terms of a discrete number of individuals using wheelchairs in their own homes, but rather in terms of all housing being inclusive enough to be safely and easily visited by any invited member of the community. As a result, housing policy must recognize that mobility impairment is a family and a community issue, and not simply an individual one—it is therefore a matter of public as well as private interest.

In advancing the argument for a national standard of inclusive design in single-family residential housing, this Article proceeds in several steps. First, it provides a brief introduction to the current law on physical accessibility to property. Second, it explains two competing standards of inclusion for residential housing design. Third, it provides information on the scope of the problem by exploring the demographics of mobility impairment. Fourth, it addresses the quasi-public character of private housing as part of our national housing stock. Fifth, it discusses local and national mechanisms that can be used to increase the national stock of housing with inclusive design features. And sixth, it addresses the tension between improving housing accessibility and maintaining its affordability.

I. OVERVIEW OF CURRENT INCLUSIVE DESIGN REQUIREMENTS

Currently we have national regulations addressing building accessibility for a number of types of property other than privately funded single-family housing, and it includes the following:

- Architectural Barriers Act of 1968. The Architectural Barriers Act ("ABA") requires that buildings and facilities designed, constructed, altered, or leased with certain federal funds after September 1969 must be accessible to and usable by handicapped persons. 23 Private market construction of single-family housing is not covered by the ABA.

- Section 504 of the Rehabilitation Act of 1973. Section 504 prohibits discrimination based on disability in any program or activity receiving federal financial assistance. 24 To the extent that section 504 applies to housing, it covers housing programs receiving federal funding and not to the accessibility of privately funded single-family residential housing.

---


• Title II of the Americans with Disabilities Act of 1990. Title II prohibits discrimination based on disability in programs, services, and activities provided or made available by public entities.\textsuperscript{25} The Department of Housing and Urban Development (HUD) enforces Title II when it relates to state and local public housing, housing assistance and housing referrals.\textsuperscript{26} Title II sets standards of accessibility for public facilities and programs, not for private residential housing.

• Title III of the Americans with Disabilities Act of 1990. Title III prohibits discrimination based on disability in the provision of goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation by any person owning, leasing, or operating a place of public accommodation.\textsuperscript{27} Title III defines public accommodation and provides a list of examples.\textsuperscript{28} A partial list for illustrative purposes includes, for example, hotels, restaurants, auditoriums, museums, and certain commercial facilities.\textsuperscript{29} The upshot being that single-family residential housing is not considered a place of public accommodation.

• Executive Order 13217. Executive Order 13217 requires federal agencies to evaluate their policies and programs to determine if any can be revised or modified to improve the availability of community-based living arrangements for persons with disabilities.\textsuperscript{30} Community-based living arrangements might include senior housing developments and group homes but not single-family residential housing.

• Fair Housing Amendments Act of 1988. The Fair Housing Amendments Act applies to access to multifamily housing and it outlaws discrimination against people with disabilities.\textsuperscript{31} It also

\begin{footnotes}
\item[26] Id.
\item[28] Id. § 12181(7) (defining public accommodations).
\item[29] Id. § 12181(7)(d)(b), (d)(e).
\end{footnotes}
provides mandates for all new multifamily housing to meet specific inclusive design standards, including guidelines for entranceways, hallways, light switches, grab bars, spacing to accommodate use of a wheelchair, and other design elements. The antidiscrimination and inclusive design criteria do not apply to single-family residential housing.

A common thread running through each of the above identified regulations is one of predating inclusive design requirements on the public character of the property in question. The failure to appreciate the public character of privately funded single-family housing has thus hindered the extension of inclusive design standards to this category of property. For example, under regulations related to the HUD, only 5% of qualifying public housing units must be accessible. This means that the HUD accessibility standard only applies to a small percentage of the overall housing market because it completely misses all privately owned single-family residential housing that does not otherwise function as offering public accommodation.

The policy underlying the HUD approach seems to be based on two criteria. First, that HUD, as a government agency, should only regulate public housing, and second that the mobility impaired are discrete and disconnected individuals. As such, HUD regulations attempts to match, in a rough sense, the number of accessible public housing units to the number of low-income and mobility impaired people in the general population. This approach ignores neighborhood effects by failing to address the inability of mobility impaired people to safely and easily socialize outside of their own housing units. Their own housing units need to be accessible, but so, too, the housing units of family, friends, and colleagues. This approach also misses the larger social fact that a number of people with mobility impairment do not reside in public housing, and even among those that do, relationship networks often extend beyond

Simon).

32. Schwemm, supra note 31 (explaining the provision and how the accessibility standards have not been met).

33. There is a standard of 5% or a minimum of at least one dwelling unit that must meet mobility impairment regulations for all projects receiving federal financial assistance, including: section 202/811 capital advances, section 8 project-based assistance, newly constructed public housing projects, or public housing projects undergoing rehabilitation financed by Comprehensive Improvement Assistance Program (CIAP) funds. See U.S. Dep’t of Housing & Urban Dev., Mark-to-Market Program Operating Procedures Guide, app. I (2004), available at http://www.hud.gov/offices/hsg/omha/readingrm/appendix/appiiahth.pdf. This appendix also references, for further definitions, “New Construction (24 C.F.R. § 8.22(b)),” “Substantial Alteration (24 C.F.R. § 8.32(a)),” and “Other Alterations / Clarifications (25 C.F.R. § 8.23(b)).” Id. at B-2. Guidelines for meeting mobility impaired regulations are also outlined and are similar to what one might expect from a form of universal design. Id. at B-3. See generally Accessibility Requirements for Buildings—HUD, http://www.hud.gov/offices/fheo/disabilities/accessibilityR.htm (last visited Mar. 23, 2005).

34. See U.S. Dep’t of Housing & Urban Dev., supra note 33.
the boundaries of their own public housing environment. Thus, we need to think in broader terms concerning the need for inclusive design housing, and we must recognize the public interest in both publicly and privately funded units.

II. Competing Standards of Inclusive Design

A key operating assumption of this Article is that in order to be a full participant in one's community, one must be able to enjoy reasonable access to the spaces and places that make up civic life. This means that public buildings, commercial venues, streets, transportation systems, and communication networks need to be navigable by people with disabilities. It also means that neighborhoods should be open and accessible so that people may enjoy the full benefits of community life.

There are many types of disability one might address, but this Article addresses only mobility impairment and access to single-family residential housing. While most public spaces, shopping areas, places of employment, and educational and government institutions have been made reasonably accessible, our neighborhoods have generally avoided close scrutiny. Many neighborhoods consist of homes that cannot be easily visited by a person with mobility impairment. This should be unacceptable. We have millions of people who cannot easily and safely visit family, enjoy socializing with neighbors, or engage in the requisite home party networking that is crucial to success in many work environments.

Being a member of a neighborhood—of a community—means being fully able to participate in the normal and everyday rhythms of community life. Being tucked away in one's own house, even if it has been personally modified for accessibility, is a lonely thing when all of one's neighbors, friends, colleagues, and extended family live in homes that cannot easily be visited. In such a situation, one cannot just drop by the home of a family member, friend, or colleague for a visit, and invitations to home-based events become scarce. People on all sides of the relationship begin to view the entire process as a chore. Under such circumstances it is difficult for people with mobility impairment to fully participate in community life and to feel like an equally dignified citizen in the important networks of one's own neighborhood.

As a result of a failure to require inclusive design, our residential housing structures reinforce a negative image of the mobility impaired. Our housing design policy treats the mobility impaired as isolated and detached from normal family relationships. It imprisons the mobility

35. Disability law covers many areas of social life beyond the specific area addressed in this Article. See generally, e.g., Fefer Blanck et al., Disability Civil Rights Law and Policy (2004); Laura Rothstein, Disability Law: Cases, Materials, Problems (3d ed. 2002).
impaired in housing situations that take them out of normal friendship and community networks while "signaling" that each mobility impaired individual presents the broader community with a discrete housing "problem" to be dealt with as an exception to the norm.

In getting at the accessibility problem in residential housing, this Part of the Article discusses two generally referenced standards of inclusive design; "universal design" and "visitability." It also suggests goals for a new inclusive design policy; requiring that 5% of all new single-family residential housing meet a universal design standard. The 5% requirement would extend to all new housing (including privately funded single-family residential units) the same standards as currently applied to publicly funded housing units. As to all other new housing units (the remaining 95%) it is suggested that they should be built to a visitability standard of inclusive design—thus, making visitability a universal standard of reasonable accommodation in our national housing stock. Housing units existing prior to the adoption of a national inclusive design standard should be improved and upgraded over time, providing for greater inclusive design when and where it is reasonably feasible.

Universal design standards are generally quite pervasive and applied throughout an entire structure. One way to quickly grasp the basic idea of universal design is that everything within a structure is designed to be readily accessible to a person in a wheelchair. Thus, doorways and hallways are wider (thirty-two inch minimum, and up to a thirty-six inch width recommendation), and have entrances that are barrier free.

26. MASEL, supra note 1, at 9 ("The primary objective of accessible design is to provide the same opportunities for people with disabilities as are available to every citizen. Accessible design helps shift the 'blame' for limitations in function from the person to the environment and allows the creation of responsive environments'...in which disabled people can display competence and, by extension, overcome much of the dependency and stigma that stems from being environmentally incompetent." (alteration in original) (citation omitted)).

37. See MASEL, supra note 1, at 10-13; SELWYN GOLDSMITH, UNIVERSAL DESIGN 1 (2001) ("Broadly, universal design means that the products which designers design are universally accommodating, that they cater conveniently for all their users. On the route toward this goal a product that was initially designed primarily for the mass market of normal able-bodied people could have been subsequently...modified—the effect...being that it would suit all its other potential users as well, including people with disabilities."). See also WENDY A. JORDAN, UNIVERSAL DESIGN FOR THE HOME: GREAT LOOKING, GREAT LIVING DESIGN FOR ALL AGES, ABILITIES, AND CIRCUMSTANCES i (2008); Universal Design Alliance (UDA) Home Page, http://www.universaldesign.org/ (last visited Mar. 23, 2009); Universal Home Design, Aging in Place, Housing for Adults over 50—AARP, http://www.aarp.org/families/home_design/ (last visited Mar. 23, 2009) [hereinafter AARP, Universal Home Design].

38. See sources cited supra note 37; see also sources cited infra note 39. These sources provide guidelines and standards which are briefly stated in a simplified form in this paragraph of the text.

Bathrooms must include appropriate grab bars, be bigger in size to accommodate the turning radius of a wheelchair, and include showers designed for easy roll in and out with a wheelchair. Throughout the home light switches are placed lower, and traditional round doorknobs give way to lower positioned levers. Storage shelves and cabinets are lower, and counter tops are lower with “cut outs” so that a wheelchair user can push close enough to have the chair frame fit under the counter, thus permitting the user to be positioned to make full use of the counter space. In addition, the residential living unit is generally designed on a single level layout, and provides appropriate means for ready access to the entire unit and to any common property. These universal design criteria are applied to every room and every element throughout the home.

The visitability standard is much less pervasive. The general idea behind this standard, as applied to residential housing, is one of making it possible for every home to be easily and safely visited by anyone in the community. In other words, if I am hosting a neighborhood party at my house it should be possible for all of my neighbors to be included and to feel that they are full participants in the social life of the neighborhood, without regard to mobility impairment. In order for this to readily happen my home would have to meet some minimal inclusive design standards. The entrance to my home would have to have a zero-step elevation through the doorway and appropriate grade of incline from the street level to the entrance. My entrance doorway, hallway, and first floor doors would have to have at least thirty-two inches of clearance (thirty-two to thirty-six inches in width to be consistent with that of universal design). And, the main portions of my entertainment area would need to be on one level floor, no drop living rooms or raised dining rooms for instance. In addition, for all of my guests to feel equally comfortable I would need at least a half bathroom on the main floor of the home and it would need to be sized to permit entrance and appropriate turning radius for a wheelchair. Ideally, the bathroom would also have to have light switches and a sink at appropriate levels (slightly

available at http://www.design.ncsu.edu/cud/pubs_p/docs/UDinHousing.pdf. The entranceway to a home should also have a minimum five foot square clear space inside and outside of the entry door. Id. at 4.

40. See MAEBEL, supra note 1, at 10–14, 16–18; see also Visitability, http://www.visitability.org (last visited Mar. 23, 2009). There are three minimal standards for visitability: (1) a zero-step entrance; (2) wider doorways on the main floor (thirty-two inch minimum clearance); and (3) a half bath on the main floor with space enough to handle a wheelchair. These three minimum guidelines ensure that everyone, without regard to mobility impairment, will at least be able to visit someone else’s home, be able to use the bathroom, and safely enter and exit the property. See Housing: Visitability, http://www.accessiblesociety.org/topics/housing (last visited Mar. 23, 2009); Visitability Canada, http://www.visitablehousingcanada.com/ (last visited Mar. 23, 2009).

41. See supra note 40.
lower than the traditional nonaccessible levels). Round doorknobs would be replaced with lever style door openers placed at the appropriate height (these are easier to open for people with arthritis). This would be a minimal visitability standard imposing very little cost on the design requirements of a housing unit. I refer to this standard as a “Level I Visitability Standard.”

Going a step further than the Level I standard, one might require that a kitchen and at least one bedroom be located on the main floor of the home. Likewise, there should be a full bathroom rather than a half bathroom on the main floor, and it should have a roll-in shower and grab bars. These additional features would make the home visitable by anyone, such as a close friend or family member with mobility impairment, who is staying for a day or more as a house guest. I refer to this standard as a “Level II Visitability Standard.”

From an aesthetic perspective, issues sometimes arise concerning the “look” of inclusive housing. Young people sometimes feel that a home with grab bars in the bathroom, for instance, signifies that they are living in an “old person’s home.” Consequently, they often react by removing such devices in an effort to make the premises signify that younger residents have moved in to the space. There are two logical responses to this concern. First, as more and more homes incorporate these accessibility features, we can expect them to be manufactured in styles and colors that go beyond the typical cold steel ones often found in today’s housing structures. Second, as the presence of these features becomes pervasive they will lose their signification of old age and will disappear into the realm of the “ordinary.” For example, in years gone by it was odd or unusual to have a toilet inside one’s home rather than out; but now the toilet, like the soap dish and toothbrush holder, have all become ordinary fixtures in the current customary bathroom. No one even notices or thinks twice about their presence, and in fact it is their absence that is likely to be of note today. Moreover, the accessibility standard might be met by simply building the home with the necessary reinforced bathroom walls needed as a prerequisite to affixing grab bars. With the walls properly reinforced to bear the weight, grab bars

42. Level II Visitability is a standard that I suggest in this Article as a design standard going beyond minimal visitability goals and being short of universal design. I use this category as a way of identifying a desirable middle standard of Inclusive design—a standard that should serve as a universal minimum for reasonable accommodation in all new single-family residential housing (recognizing that I also believe we need at least 5% of all such housing to meet the standard of universal design).

43. Grab bars are part of the requirements of Universal Design and make getting in and out of the tub or shower easier and safer for all users. See CTR. FOR UNIVERSAL DESIGN, supra note 30, at 5–6; Masiel, supra note 1, at 19. Since grab bars are meant to carry weight as a person grasps on to them they must be fastened to a wall structure capable of bearing the anticipated weight. Even if one has never seen grab bars in a private residence, they can be seen in hotel and motel rooms across the country.
might be installed at a later date or made removable so that they can be put on and taken off as desired.

A second set of aesthetic concerns relate to the front view of the home—the “curb appeal” of the property, as some real estate sales people might say. The inclusive design standard that requires a zero elevation entranceway to permit an easy roll in on a wheelchair constrains some designs for front porches and patios. Again, these design features are in large part influenced by expectations of what is perceived as a norm in the housing market. Design norms can be changed and inclusive housing design can be made pleasing to the eye. Acceptability depends not so much on the entranceway itself, but on the planning that goes into integrating other home design features and landscaping with the view of the accessible point of entry. In new construction this issue can be readily addressed with good inclusive design work done up front.

Design alternatives for remodeling of existing structures and dealing with housing properties designated with historic significance may raise special problems. Retrofitting an entranceway may be difficult because of the way in which the entrance needs to fit with all of the other design elements of the house and the landscaping. In situations in which remodeling and rehab work is impracticable or costs prohibitive, it is often possible to construct a reasonably equal alternative point of access to the premises. Generally these alternatives are less desirable because they are secondary in terms of location and in terms of the message associated with using an inferior entranceway to the premises. Nonetheless, using an alternative entranceway for accessibility might be a reasonable accommodation in cases where it can be demonstrated that historic preservation needs or remodeling costs make it prohibitive to properly rebuild a particular front entrance.

The calculus involved in determining the reasonable standard of inclusive design in remodeling an existing house can take several forms. Under Title II of the Americans with Disabilities Act of 1990 (“ADA”), public facilities must be made accessible to the extent that compliance does not impose an “undue financial and administrative burden.” Under Title III of the ADA, places of public accommodation must be brought into compliance “to the maximum extent feasible.”

44. Historic district and landmark zoning to protect buildings and areas is constitutional and has been upheld under the power to zone for aesthetic purposes. Julian Conrad Juergensmeyer & Thomas E. Roberts, Land Use Planning and Development Regulation Law 787–814 (2d ed., Practitioner’s Treatise Series 2007); Daniel R. Mandelker, Land Use Law § 1:05 (5th ed. 2003 & Supp. 2008). Historic district and landmark zoning typically prohibit any changes in the exterior of such a property. Juergensmeyer & Roberts, supra; Mandelker, supra.

45. For a general discussion on variances in zoning see Mandelker, supra note 44, §§ 6.39–52; Juergensmeyer & Roberts, supra note 44, at 600–80.


47. 28 C.F.R. § 36.402(c).
standard law and economics perspective, Judge Richard Posner has offered a two-part test for assessing a “reasonable accommodation” under the ADA.\footnote{48} Posner’s law and economics test is one that approves the accommodation as reasonable when the benefits exceed the costs, and so long as the costs do not financially cripple the provider.\footnote{49} As another alternative, one might also make reference to a much higher standard, similar to one used in zoning law when granting a use variance. With a variance the general rule is one that requires compliance with the stated standard unless the imposition of the standard rises to the level of a “taking.”\footnote{50} If compliance creates a hardship rising to the level of a taking, an alternative or variance from the standard may be granted, but not otherwise. This is seemingly a higher threshold than that of Title II or III, and it is also higher than the test for reasonable accommodation under Posner’s law and economics approach. It can, of course, make sense to apply a different and higher standard of compliance to newly constructed housing than the one applied to preexisting housing and its modification. For example, in constructing a new building for public accommodation one must comply with the inclusive design criteria unless doing so is “structurally impracticable” given the “unique characteristics” of the property.\footnote{51} Nonetheless, even excused properties must comply with the inclusive design criteria to the extent that it is not structurally impracticable to do so. Thus, standards for compliance need to be established, but they can take one of several forms.

A key point with respect to both new housing and remodeling of existing housing is that building to an inclusive design standard is cheaper and more cost effective when done in the first instance rather than having to rehab a house at a later date. Likewise, thoughtful planning and up-front design can make most any design feature attractive, just as poor design and lack of planning can make most any construction feature look out of place and distracting.

As to Level I and Level II Visitability standards, the cost of meeting these design features in new housing is estimated to be as low as $0 to $1500 in most cases of new construction for single-family residential

\footnote{48} See Vande Zande v. Wis. Dist. of Admin., 44 F.3d 538, 543 (7th Cir. 1995); see also Malloy, Market Context, supra note 8, at 159 (discussing Vande Zande).

\footnote{49} See Malloy, Market Context, supra note 8, at 159.

\footnote{50} Juegensmeyer & Roberts, supra note 44, at 273 (“[T]he question is not whether an owner will have property that is more valuable if the variance is granted, but whether the land can earn a reasonable return as zoned. As courts have starkly put it, the question is whether the land has been ‘zoned into inutility’ or whether it would be an ‘economic disaster’ if used as currently zoned. As such the test is essentially the Fifth Amendment takings test. Only if the effect of the zoning is so oppressive that it leaves the owner with no economically viable use is a variance to be granted.” (footnotes omitted)).

housing. The expense is much higher when doing rehab work to an existing unit. Cost saving is mostly a matter of up-front planning and design. In addition, costs should decline as inclusive standards become the norm rather than the exception in building design. Normalizing certain design features permits mass production and economies of scale. This can apply, for example, to a change in the "standard size" door, or

52. See Maisel, supra note 1, at 14. Another study reports that the typical cost of making a home visitable is $100 for homes on concrete slabs, and $300 to $600 for homes with crawl spaces or basements. See Builder Executive Affirms Low Cost of Visitability (Feb. 22, 2004), http://concretechange.org/construction affirmed.aspx. These numbers are based on experience with building thirty three homes in Atlanta with crawl spaces and 900 homes in Georgia on sites varying from flat and sandy, to hard clay on steep slopes for houses ranging in price from $80,000 to over $500,000. Id. A recent study in Canada indicates a potentially higher cost. Manitoba Hous. & Renewal Corp., Visitable Housing: Cost Estimate Summary June 2007, at 9-11 (2007), available at http://www.visitablehousingcanada.com/documents/cost%20analysis%20report/VisitableCosts_Report_MHRC_June%202007.pdf. The study took several actual housing designs and worked up the cost to make them visitable. Id. at 2. The cost analysis included charges for design, labor, and 25% markup on all items. Id. at 9-11. The home designs included special grading work to eliminate the need for steps into the home sitting on a lot positioned with a three-foot rise in grade from the road. Id. at 5-7. This was basically a retrofit to a pre-designed house. Based on the house designs studied, the cost was $300 to $500 Canadian. Id. Based on the 2007 exchange rates when this report came out, the Canadian dollar was worth 15% less than the U.S. dollar in the first quarter of 2007. U.S. Consulate Gen., Toronto, Exchange Rates for 2007, http://toronto.usembassy.gov/content/uscitizens/pdfs/exchange Rates2007.pdf (last visited Mar. 23, 2009). The cost estimate report found that interior adjustments were negligible in cost, and that cost would be lower if visitable housing units could be built in groups rather than as isolated units (such that community wide standards would lower the cost compared to doing isolated units in a scattered or random order of placement). Manitoba Hous. & Renewal Corp., supra, at 11. Most of the cost involved design and work at addressing elevation and landscaping to produce the zero-step entry on the size of the case study lots. Id. In particular, the design work addressed an approximate three foot elevation rise up to the level of the main entrance door and a great deal of the cost was related to the concrete sidewalk to be installed at a 2% grade to get to a zero-step entry (approximately one-third or more of the cost). Id. at 9-11. Assuming a template design of a visitable house to begin with, we should be able to assume lower costs over a large volume of production. Likewise, we have to carefully consider the lot and drainage issues. Some lots will need less work than this, others perhaps more. Also, costs could be shaved down if ramping was used rather than addressing the zero-step entry simply by land elevation adjustments. Even using cost numbers from 1999, a $3000 increase in cost amounts to a 1.5% addition to the average cost of a home in the United States (average cost in 1999 was $220,000, Malloy & Smith 2d, supra note 8, at 567), or a 1.2% increase to the average price of a home based on 2004 prices (average cost of a home reported as $244,000 in 2004, Subdivision Requirements Excessive?, Research Works, Apr. 2008, at 1-2, available at http://www.huduser.org/publications/ResearchWorks/april_08/RW_vol6num4tt.html). And note that this amount is financed over thirty years in a typical mortgage so its actual impact on affordability amounts to only a few dollars per month. It is also important to note that money can be saved by making housing units slightly smaller, a move that makes sense in light of the smaller size of families in the twenty-first century as opposed to the size in the 1950 and 60s. For example, the typical new single-family home in 1950 had about 1200 square feet of living room and a one car garage, and by 1990 the typical new home had 1700 square feet and a two car garage. See Malloy & Smith 1st, supra note 8, at 601 (citing U.S. Census Bureau, U.S. Dep't of Commerce, Brief No. SB05-18, Home Sweet Home—America's Housing, 1973 to 1993 (1995)); cf. U.S. Dep't of Hous. & Urban Dev. & U.S. Dep't of Commerce, No. H15005, American Housing Survey for the United States: 2005, at 166-67 tbl.3-18 (2006), available at http://www.census.gov/prod/2006pubs/h150-05.pdf (indicating that the median square footage of an owner-occupied single-family home was 1538 square feet (for two person occupancy, the median is 1862 square feet)).
in moving from round doorknobs to lever style door openers. As inclusive features are made the norm, the new design elements become cheaper because of the economies of scale associated with being an "off the shelf" product, as opposed to being a special order item. Thus, special order cost considerations for many accessible design features disappear once the accessibility feature is implemented as the new norm.

Some people express concern about statutes or regulations requiring homes to include particular inclusive design features, even though inclusive design is already required in public places and in places of public accommodation under federal law. Aesthetic regulation of housing design has for a long time been permitted under local zoning law. Local government zoning codes, for example, have long since covered aesthetic matters and have been regularly upheld by the courts. A rationale for this is that the exterior of the home and its landscaping are "quasi-public" rather than private, and aesthetic values are, in themselves, important to the health, safety, and welfare of the community. Therefore, it should be permissible to establish exterior design requirements aimed at achieving an inclusive (zero-step) entry to all new housing units.

Exterior design and the space surrounding buildings are public in the sense of having a significant impact on others. The structural design, colors, and placement of landscaping address themselves to others beyond the owners. Thus, the exterior of a housing unit presents a classic example of an externality, with spillover effects that go beyond the immediate parties—beyond the current occupant of the house. Good design and landscaping may provide a positive externality to neighbors and the community. In contrast, poor design and landscaping may impose a negative externality. Since, as is often said, "beauty is in the eye of the beholder," regulation has been permitted as one means of mediating the tension between private and public evaluations of such aesthetic matters.

The idea of considering the exterior surface and space of a structure as "public" is one found in architecture and in law. It is also consistent

53. See Juergensmeyer & Roberts, supra note 44, at 789-98; see also Mandelker, supra note 44.
54. See supra note 53.
55. For externalties and spillover effects, see Malloy, Market Contexts, supra note 8, at 117-18, Cole & Grossman, supra note 8, at 14-16, and Cooter & Ulen, supra note 8, at 40-42.
56. See supra note 53. Basically, the built environment generates public meanings. See generally
with the enforceable regulations of many planned communities and subdivisions. Architectural design controls, particularly as applied to things visible from off the property, are regularly upheld as valid and enforceable.\footnote{Mathew Carmona et al., Public Places—Urban Spaces (2003); Larry R. Ford, The Spaces Between Buildings (2000); Spiro Kostof, The City Shaped: Urban Patterns and Meanings Through History (1993).}

As to interior design regulations, it is more difficult to maintain a public claim to regulate on the basis of aesthetics since the interior of the unit is not visible to the outside. On the other hand, interior design of the housing unit may be regulated in order to protect the public health, safety, and welfare. This has been accomplished through zoning and building codes that address such things as ceiling heights, railings on stairways, location of air vents, design and placement of plumbing and electrical equipment, and other matters that impact the design and construction of a housing unit.\footnote{See generally Malloy & Smith 3d, supra note 8, at 313–49; Malloy & Smith 2d, supra note 8, at 505–64; Malloy & Smith 1st, supra note 8, at 507–668; Joseph William Singer, Introduction to Property 384 (2d ed. 2005).} Much like other code requirements, inclusive design features protect potential occupants and visitors to a home.

Interior design features are also subject to regulation because they can impose negative externalities. Faulty wiring, for example, may create a fire risk in the given unit while also putting neighboring homes at risk. In the case of housing, it must also be understood that individual residential units remain in the national housing stock for many years beyond the tenure of current occupants. A housing unit may remain in service for upwards of one hundred years, even if the first occupant resides in the house for only one or two years. As a consequence, the design choices of the first occupant may impose long-term negative externalities by restricting accessibility for generations. A current occupant may have no trouble navigating a home with exclusionary design features, for instance, but these features will affect the accessibility of the structure for many years to come. Thus, the design choices of a builder and an original property owner do not fully account

for the long-term costs of failing to use inclusive design features. The implication being that potentially high externality costs are imposed on society as a result of poor consumer choices in the original design of new residential housing units.

Before elaborating on the market dynamics that result in design choices that impose long-term externalities on a community, however, we must first consider another aspect of design choice. In addition to addressing accessibility in terms of ease of entry to a housing unit, we must also address the place of entry.59

We need to ask ourselves several questions concerning place of entry: Does accessibility simply apply to the front doorway and a small portion of the first level of the house, or does it require full accessibility throughout an entire housing unit? Should it include the garage, patio, shed, and any lawn area? Are the garage, patio, shed, and lawn part of the house, or merely ancillary to the house? Do all entranceways, exits, and passageways of the defined residence have to be fully accessible to a person in a wheelchair? If the answer is no, does it matter what points of entry are accessible and which are not?60 For instance, if the visual front door is in practice not the primary entrance to the home (in practice everyone goes in and out through the garage), does the actual primary entrance to the residence have to be fully accessible, or only the visible front doorway to the home? In the alternative, can the front or primary entranceway contain structural barriers as long as there is a back or side entrance capable of accommodating mobility impaired individuals?

59. The difficulty here involves determining what we mean by “place,” and in defining the acceptable and appropriate points of access to a given place. We do not want to create a sense of second class citizenship for the mobility impaired, so we have to be careful in locating the places of entry so that they signal equal status for all that enter. In one case the court was confronted with the issue of accessibility to an apartment via a front door which was inaccessible and a side door that was accessible to persons with disabilities. See United States v. Edward Rose & Sons, 384 F.3d 258, 260 (6th Cir. 2004). The court ended up resolving the matter under the Fair Housing Act without having to decide if a side entrance would violate the law. Id. at 265. “Place” can be a complex issue. For example, consider the legal requirement that commercial enterprises serving the general public must be accessible and a case involving Target department stores. See Nat’l Fed’n of the Blind v. Target Corp., 452 F. Supp. 2d 946, 946 (N.D. Cal. 2006). Target department stores operate in numerous states and locations. These stores are open to the consuming public, and as places of public accommodation are required to be accessible to persons with disabilities. Id. at 949, 952–53. An individual with vision impairment filed a complaint against Target alleging that the Target store’s web pages were inaccessible for lack of using appropriate technology, and the question became one of determining where the “place” of accommodation was located. Id. at 949–50. Was the place that is required to be accessible the actual physical location of the store, or is the legal essence of place more prophylactically? If Target generates more than an insignificant amount of revenue from its web operations, isn’t the web a place of business as well as the physical store? The court held that to the extent that inaccessibility of the web pages impeded the full and equal enjoyment of goods and services offered in the retail stores, it could be a violation of the requirement of making the “place” accessible. Id. at 956–57.

60. See Edward Rose & Sons, 384 F.3d at 260 (addressing this question without answering it).
There are, of course, very clear messages signaled by the physical design of our built environment.\(^61\) Some points of entry signify honor, dominion, and respect while others signify servitude, submission, familiarity, and lowness of rank.\(^62\) The back door entrance, for instance, typically signifies that one is in the role of the “hired help,” or otherwise has low status when compared to those using more prominent and ornate points of entry to the home.\(^63\) At the same time, if the visual front door is not the one most frequently used by the occupants another message may be sent. Using the most highly passed-through entranceway signals familiarity and closeness of relationship, even if it is not the visual front door. This situation can arise in single-family housing where many people tend to enter the home through the garage rather than through the visual front door. Therefore, we must be mindful of the messages we send as we seek to make residential housing more accessible. To the greatest extent possible, our design standards should be open, inclusive, and signify equality with respect to all users without regard to mobility impairment. This means that inclusive design features should be at primary points of entry to the home, be they the visual front door or the most frequently used entranceway, and they should not be relegated to places of lower status.

Moreover, we should be mindful of the fact that accessibility is not just a question with respect to current occupants. Current occupants may not have any mobility impairments, but they may have friends, relatives, grandparents, or neighbors who do. And, at some point in the future a current occupant, or the friend or family member of an occupant, may develop a temporary or permanent impairment as the result of old age, illness, surgery, disease, or an accident that puts her in a wheelchair, or otherwise hinders her mobility. Our housing stock must, therefore, be designed and built for a dynamic population over time. It must respect the individuals currently occupying the home while also facilitating inclusive designs that permit safe and easy access to people in the future.

III. DEMOGRAPHIC INFORMATION ON MOBILITY IMPAIRMENT

To better appreciate the need for inclusive design standards in single-family residential housing one should consider some demographic information concerning mobility impairment. According to the 2000 census, the total number of families in the United States was 72.3 million.\(^64\) Of this number, approximately 20.9 million families had at least

---

\(^{61}\) See Kostof, supra note 56; Yi-Fu Tuan, Space and Place: The Perspective of Experience 41 (1977).

\(^{62}\) See Tuan, supra note 61.

\(^{63}\) Id.

\(^{64}\) Wang, supra note 3, at 3 tbl.1.
one member with a disability, and of this group over twelve million had at least one member with a physical disability. For these purposes, a physical disability was defined as "a condition that substantially limited one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying." Thus, when we stop thinking in terms of atomistic individuals with discrete mobility impairment problems, we see that 16.6% of families in the United States include a person with some form of mobility impairment, and are potentially affected by exclusionary design in residential housing. When we think in broader terms, including social networks of friends and colleagues, as well as family, we begin to appreciate that perhaps 20% of American families are potentially touched by issues of concern to people with mobility impairment. Therefore, the appropriate way of understanding the impact of exclusionary design in residential housing is not by simply trying to count the number of discrete individuals with a particular mobility impairment. For every individual with mobility impairment several people and multiple social networks are affected.

In considering the nature of mobility impairment, we find that almost seven million Americans living outside of institutions use mobility assistive devices. This amounts to 2.6% of the noninstitutional U.S. population, with the rate of use for the specific group of people age sixty-five and over being 14%. In addition to age, use of mobility devices varies by gender (females using them at a higher rate than males), income (less use as income rises), education (less use as years of formal education increases), and by race and ethnicity (within each population, use among African Americans at 3.1%, Whites at 2.6%, Native Americans at 3.4%, and Asians and Pacific Islanders at 1%). The percentage of disability within the population also varies slightly by regions of the country, with the lowest percentage rate in the Midwest and the highest rate in the South.

Mobility impairment results in a person having difficulty navigating the built environment, and while this may not require use of assistive

65. Id.
66. Id.
67. Id. at 4. This definition referred to "substantial" limitations, and did not include lesser physical limitations, so the number could be higher.
68. KAYE ET AL., MOBILITY DEVICE USE, supra note 1, at 7–8. The study expressly excludes people living in institutions (nursing homes, prisons, etc.), thus it underreports the total number of seniors actually using such devices. Id. at 5.
69. Id. at 7–8.
70. Id. at 7–12.
71. WANG, supra note 3, at 5. The percentage of people with disabilities does vary slightly by region, although not significantly. The lowest percentage of disability was in the Midwest where 26.5% of people had a disability. Id. The highest percentage of disability was in the South, where 30.8% of people had a disability. Id. The Northeast and West fell in between the percentages of the Midwest, and the South. Id.
technology, it can frequently lead to the need for a variety of support
devices including canes, crutches, walkers, wheelchairs, and scooters. 

Birth defects, accidents, disease, combat injuries, obesity, surgery, and
aging all contribute to the potential for any person, and any family to
experience a need to address mobility impairment issues. And, tens of
thousands of Americans experience temporary periods of mobility
impairment during their lifetime. Developing mobility impairment can
transform a current residence into a virtual prison by making
participation in neighborhood and community events difficult or
impossible. Mobility impairment also severely restricts housing options
for those seeking to relocate, because so few single-family homes are
built with inclusive design features.

The network implications of mobility impairment multiply quickly.
Many of the elderly have mobility impairment, and thus become
increasingly isolated because many of their family and friends occupy
inaccessible housing. As our population ages we will confront increasing
demands for what I term, “open neighborhood housing”: housing that
facilitates aging in place and universal visitability. As of the year 2000,
the total number of people in the United States age sixty-five and over
was thirty-five million. This is a 12% increase over the year 1990 when
the number of people sixty-five and over totaled 31.2 million. The
thirty-five million people over age sixty-five represented 12.4% of the
population in 2000. Furthermore, in 2000 there were 18.4 million people

72. It should be noted that use of mobility devices has grown, with the use of wheelchairs and
During this time period the use of crutches increased by 14% and canes by 53%. Id. It is likely that
some of this growth is due to the improved survival rate of trauma patients as well as to the improved
design, function, and image of such devices. Id.

73. For example, about 1.7 million Americans are living with limb loss, and the Amputee
Coalition of America warns that the number could rise due to the nation’s skyrocketing obesity rate
and the link to diabetes-related amputations, which are estimated to cost three billion dollars annually.
Info. Ctr. (NLLIC), Amputee Coalition of America, Fact Sheet: Diabetes and Lower Extremity
Moreover, obesity can cause mobility impairment directly (it is difficult to move when extremely
overweight), as well as indirectly, as in the case of increased risk of diabetes. And, latest information
indicates that 25.6% of adult Americans (over age eighteen) are obese, with the states of Alabama,
Mississippi, and Tennessee having rates that exceed 30%. See Centers for Disease Control &
features/obesity/.

74. See supra notes 71–73 and accompanying text.


76. Id.

77. See Jon Pyraas et al., Aging in Place, Housing, and the Law, 16 Elder L.J. 77, 78 (2008).
ages sixty-five to seventy-four,\textsuperscript{79} and people age seventy-five to eighty-four numbered 12.4 million.\textsuperscript{79} Many of these Americans aged sixty-five and over must deal with disability. In fact, according to an American Community Survey performed by the Census Bureau, 40.5\% of Americans sixty-five and older have a disability.\textsuperscript{80} The elderly are one of the fastest growing segments of our population, and we are just now starting to deal with the fact that there are seventy-five to seventy-six million "baby boomers" adding to their ranks.\textsuperscript{81} The result being that people over age sixty-five are expected to account for 20\% of the U.S. population by 2030.\textsuperscript{82} This demographic trend places an increasing urgency on the need to develop more housing units with inclusive design features.

An important consideration in terms of dealing with an aging population is that the majority (64\%) of people age fifty and older wish to remain in single-family homes.\textsuperscript{83} At the same time, 21\% of these people anticipate a move during the next five years.\textsuperscript{84} Thus, even as people age they think in terms of mobility—mobility to live independently in a single-family home, and mobility to freely relocate to a new house. Providing suitable housing and a wide set of housing options for our aging population dictates a need to fully standardize inclusive housing design across the entire housing stock.\textsuperscript{85}

\textbf{IV. Private homes and our national housing stock}

The housing market in the United States consists of a very large private sector and a much smaller but significant public sector. Both sectors must be responsive to regulation related to accessibility for the mobility impaired. As in other areas of American life, however, the government expresses a greater degree of comfort in its ability to

\begin{itemize}
  \item \textsuperscript{78} Hetzel & Smith, supra note 75.
  \item \textsuperscript{79} Id.
  \item \textsuperscript{80} United States and States—R1803. Percent of People 65 Years and Over with a Disability (2005), http://factfinder.census.gov/servlet/GRTSelectServlet?ds_name=ACS_2005_EST_G00 & _lang =en&_ts=254772391968 (follow the link to the right of “R1803” under “Aging”).
  \item \textsuperscript{81} See Pynoos et al., supra note 77, at 79 (using the number seventy-five million rather than seventy-six million and defining boomers as those born between 1946 and 1964); Judy Stark, \textit{And Access for All. St. Petersburg Times} (Fla.), June 8, 2002, available at http://www.sptimes.com/2002/06/08/Homes/And_access_for_all.shtml.
  \item \textsuperscript{82} See Pynoos et al., supra note 77, at 79.
  \item \textsuperscript{83} The demographics of the United States have an interesting relationship with housing. ERA Real Estate recently performed a survey of more than 1000 people ages fifty and older and obtained these results. See Press Release, ERA Franchise Systems LLC, Single-Family Homes Have Greater Appeal for Today's Mature Consumer (Mar. 27, 2006), available at http://www.era.com/eraresources/aboutera/article.jsp?id=32.
  \item \textsuperscript{84} Id.
  \item \textsuperscript{85} It is important for older people to have safe homes with supportive features. See Pynoos et al., supra note 77, at 81–82. Some one million older people have unmet needs in their current housing, and the three greatest needs include handrails / grab bars, ramps, and easy-access bathrooms. Id.
\end{itemize}
regulate housing in which public funding and resources are used for construction and operations than it does with respect to housing in the private market sector. This is particularly true with respect to the market for so-called private residential home ownership.

Home ownership has long been a public policy goal in the United States. Adequate and affordable housing is important. At present approximately 70% of Americans own their own homes. This means, of course, that 30% do not. For those that do not currently own a home there may be multiple reasons. These reasons may include the voluntary choice to be a renter or it may be that private housing is too expensive. Many people find that they are involuntary renters. They are in rental housing because they lack the income, employment history, savings, and access to credit necessary to become an owner. Even with an adequate monthly income it is difficult for some people to save enough for the down payment and closing costs. In fact, many home buyers are people that already own a home and who are simply moving on to buy a different one. The most difficult hurdle to home ownership, therefore, is the ability to move from renting (or residing with a friend or family member) to owning a first home.

In spite of this hurdle, the average rate of home ownership in the United States is around 70%, but home ownership rates differ by race with a significant disparity between white and Asian people on the high end, and black and Latino people on the low end. Correspondingly, mortgage application approval and denial rates also reveal similar disparities, although gains in each area have been made by people of color over the past few years.

87. Id.
88. American Housing Survey—2005 AHS N Data Chart Table 2-1, http://www.census.gov/hhes/ www/housing/ahs/05datchart/05datchart/tab2-1.html (last visited Mar. 23, 2006) (indicating that 68.8% of housing units are owner occupied, per this 2005 report; the rest are renter occupied); see also MALLOW & SMITH 30, supra note 8, at 313-14 (indicating variance in ownerships by race with whites having a much higher rate of ownership than other identified racial groups).
89. “First-time buyers normally represent 35% to 40% of home sales activity,” said Michael Bearden, president and CEO of Housing Hints, Inc. First-Time Buyers Dominate Second Quarter Sales Activity in Many Markets, RISMedia, July 9, 2008, http://rismedia.com/2008-07-08/first-time-buyers-dominated-second-quarter-sales-activity-in-many-markets/ (indicating that 60% to 65% of home buyers are repeat buyers. The number of first-time buyers rose to 41% from 3% of transactions in the last year’s survey and 36% of transactions in 2006. NAR Home Buyer and Seller Survey Shows Rise in First-Time Buyers, Long-Term Plans, REALTOR.ORG, Nov. 8, 2008, http://www.realtor.org/press_room/news_releases/2008/11/home_buyer_and_seller_survey_shows. This still means that approximately 60% of sales are to current homeowners.
90. MALLOW & SMITH 30, supra note 8, at 313-14.
91. See id. Note that some of these gains may be wiped out after accounting for the subprime mortgage foreclosure problems that are currently taking place. The point is that affordable inclusive
In many instances, people may be homeowners and yet find themselves underhoused, in housing of poor quality, or located in undesirable areas (areas of urban decay or rural poverty). The overwhelming majority of housing in both the rental and ownership markets is private. In addition to the private sector, we also have a much smaller, yet significant number of people living in public and publicly subsidized housing. Public housing is directly owned or funded by the government or a government-related entity. Publicly funded and operated housing is already covered by requirements for inclusive design, as explained in Part III of this Article. Thus, the primary focus of this Article is on inclusive design with respect to private, single-family housing units.

In the private home ownership market, developers often build products assumed to meet the personal preferences of their buyers, and the assertion is made that to the greatest extent possible, private homes should reflect individual preferences rather than government dictates. For the most part, however, these private preferences are expressed in the context of prefabricated housing units or preconstruction design templates. In other words, home buyers are not going into the process asking to have inaccessible doorways and homes. They are being shown exclusionary designs and housing products, and are selecting based on preferences for other elements such as layout, colors, and construction materials. Inclusive design features are generally not a topic of discussion unless a person to the transaction has a mobility impairment and makes it a specific negotiating point, and then it is likely to be addressed as a special order request adding significantly to the cost of the unit. Thus, core accessibility issues are driven not so much by intentional consumer preferences as by a developer’s prepackaged and prefabricated housing designs.

The argument in favor of protecting private preferences is also problematic in as much as private housing markets have a significant public dimension. First, each new housing unit becomes a part of our national housing stock, and as will be explained in this part of the Article, the housing stock lasts much longer than the time in which any

design housing not only turns on the cost of the property itself, but also on the accessibility of mortgage financing. In understanding the dynamics of privately funded residential housing one should not ignore racial disparities in access to mortgage financing, as this is a factor in identifying an ability to clear the hurdle between renting and owning.

92. See sources cited supra note 88.


94. In other words, the housing choices being offered are exclusionary, and consumers are asked to pick from an inventory of this kind of housing. In this environment, any request for a more inclusive design is treated as a special order and presented as a costly adjustment to the standard models.
particular unit is occupied by a given owner. Second, private home ownership is publicly incentivized through the tax system, through the mortgage markets, and to some extent through the insurance markets. Thus, "private" home ownership is infused with a public interest at both the local and national levels.

For the reasons outlined above, there is a legitimate public interest in the type of housing being built, and in the implications of such housing on the long-term national housing stock. In this context, therefore, it is important to note that the age of the housing stock in the United States varies considerably. Over 25% of the housing stock was built prior to 1950, and 8.3% of all American housing was built before 1920. Approximately 25% of the housing stock has been built since 1980. A significant number of homes, nearly 50%, were built between 1950 and 1980. And, the median age of housing units in the United States, as of 2000, was thirty years. Thus, we see that housing units enter the market and stay in service for a long number of years. Each of these units becomes part of our national public housing stock. Significantly, while individual housing units remain in the public housing stock for twenty, forty, seventy, or even one hundred years, the typical American moves once every five to ten years. And, younger homeowners move at a

95. See sources cited supra note 20 and accompanying text.
96. See MALLOY & SMITH 3d, supra note 8, at 369-406 (discussing government support for housing, mortgage markets, and insurance through such things as VA and FHA loans); NELSON & WHITMAN, supra note 16.
97. See sources cited supra note 96 and accompanying text.
100. How We Are Housed: Results from the 1999 American Housing Survey, supra note 98.
101. Id.
102. Id.
more frequent rate. In this respect we have a situation in which private parties are building and buying housing units based on short-term private individual design preferences which create potentially negative long-term path-dependent implications for future users of our long-term national housing stock.

In a market where a given individual's private home ownership represents a short time period in the life of a unit that will be in the national housing stock for years to come, it is unclear that private preferences should be given controlling weight in the balancing of public policy respecting inclusive design for the mobility impaired. The design implication of a national commitment to inclusion and open neighborhoods imposes a nominal cost on construction while delivering significant benefits to individuals, families, and communities. And, even with inclusive design requirements, homes can be built with numerous decorating and design features capable of expressing the personal tastes and preferences of the occupant. This is no different than designing houses that otherwise incorporate particular building code and land use requirements. Thus, inclusive design requirements do not eliminate the opportunity for numerous expressions of personal design preferences in housing construction.

When thinking about inclusive design in single-family residential housing we know that the cost of reasonable accessibility will vary by the type of structure. In looking at housing construction projects, the number of stories in a building affects the cost of accessibility. As of 2005, there were a total of 124,377,000 housing units in the United States. Of these units, nearly 40,000,000 of them were single-story structures, leaving well over 75,000,000 units as multistory structures. It should be noted that a housing unit is not accessible simply because it is a single story. In fact, most single-story structures are inaccessible as well because they have step entrances, narrow doorways, inaccessible bathrooms, and other external and internal design barriers.

The trend in housing construction indicates a continuing move toward an increasing number of multistory units. This allows one to get more square feet of housing on a given size lot and lowers the land cost per unit. In 1973, 23% of homes being built had two stories or more, 67% of homes being built had one story, and an additional 10% were split-

104. See generally Franklin, supra note 103.
105. U.S. DEP'T OF HOUS. & URBAN DEV. & U.S. DEP'T OF COMMERCE, supra note 52, at 19 tbl.1A-2 (Height and Condition of Building—All Housing Units).
106. Id.
107. Id.
level.\textsuperscript{109} By 1987, more than half of the homes being built were multistory homes.\textsuperscript{110} The trend has continued to the present. As of 2005, the number of multistory homes was 56%, while single-story homes were down to 44%.\textsuperscript{111} Thus, there is a need to make all new multilevel units fully inclusive on the first floor in addition to making all single-level units fully accessible. This includes having a fully accessible bathroom and bedroom on the first floor of every multilevel unit—a Level II Visitability standard. In this way a mobility impaired person could easily visit and reside in the unit.

In response to the clear need for more inclusive housing, and the lack of federal leadership, some individual counties have created ordinances aimed at forcing homebuilders to build housing that is more accessible.\textsuperscript{112} Pima County, Arizona, for instance, passed the first ordinance in the country to require a zero-step entrance.\textsuperscript{113} It also required doors to be at least thirty-two inches wide, lever style door handles, reinforced walls in ground floor bathrooms so grab bars could be easily installed, switches no higher than forty-eight inches, and hallways thirty-six inches wide throughout the main floor.\textsuperscript{114}

In Washburn v. Pima County, the ordinance was challenged on several grounds by homebuilders and a homebuilder’s association.\textsuperscript{115} First, the plaintiffs claimed that the county lacked statutory authority to adopt the ordinance.\textsuperscript{116} The plaintiffs also claimed the ordinance violated their right to privacy and their equal protection rights.\textsuperscript{117} The court did not accept the plaintiff’s arguments. Instead, the court held that the county was authorized, pursuant to an Arizona statute, to adopt individual building design criterion for the purpose of developing codes in enacting its ordinance.\textsuperscript{118} The court also held that the county’s ordinance did not unconstitutionally infringe on the homebuilders’ right to privacy because the ordinance was a proper exercise of the county’s police power.\textsuperscript{119} Finally, the court held that the ordinance did not violate

\textsuperscript{109} Id.
\textsuperscript{110} Id. In 1987, the number of single-story homes being built slipped to 49%. Id.
\textsuperscript{111} Id.
\textsuperscript{112} The problem with a county-by-county approach is that we have 3141 counties in the United States. U.S. Census Bureau, USA Counties, http://censtats.census.gov/usa/usainfo.shtml (last visited Mar. 23, 2009). A national standard could address accessibility issues in a more uniform and comprehensive way, and with fewer coordination problems.
\textsuperscript{114} See sources cited supra note 113.
\textsuperscript{116} Id. at 1033.
\textsuperscript{117} Id. at 1038-39.
\textsuperscript{118} Id. at 1038.
\textsuperscript{119} Id.
the homebuilder’s equal protection rights because the county advanced the legitimate government interest of increasing the number of accessible homes.120

Significantly, Judge Eckerstrom stated in the majority opinion:

The uncontested evidence established that approximately one percent of the population is confined to wheelchairs, but the county points out that a much larger percentage will suffer a disability at some point in their lives. Although all age groups are affected by disability, the county introduced evidence that approximately forty-one percent of people over the age of sixty-five have some form of disability. Disability is a growing problem both nationally and locally, and the county also introduced evidence that Arizona’s population of people over the age of sixty is expected to triple by 2025. Although many of these disabled people will not be confined to wheelchairs, the county concluded from these figures that the number of people confined to wheelchairs is rising. For these reasons, the county addressed a legitimate governmental interest when it adopted a building code designed to increase the number of homes accessible to those in wheelchairs.121

The judge observed that wheelchairs are not the only reason for requiring the construction of a greater number of inclusive design housing units. He pointed out that much more than 1% of the population will suffer a disability at some point in their lives, and also noted that the aging population suffers from a much higher prevalence of disability.122

Following up on the judge’s point, it is important to keep in mind that the proper frame of reference is not just the individual with mobility impairment but the web of relationships of each such person. The accessibility issue in residential housing is really about families and communities. Looking only at meeting housing needs of a small fraction of our population misses the point; people do not live in isolated shelters, they live in communities and share their homes with family and friends. When one person becomes mobility impaired, it affects not only her ability to navigate her own home, but also the homes of everyone in her social network.

Other communities, in addition to Pima, have also enacted laws regarding visitability.123 The City of Atlanta passed a visitability ordinance back in 1992.124 The Atlanta ordinance applied to single-family dwellings, duplexes, and triplexes, but only if they received “city

120. Id. at 1039-40.
121. Id. at 1039 (citation omitted).
122. Id.
124. See sources cited supra note 123.
assistance." Other communities passing visitability programs include: Austin, Texas; Urbana, Illinois; San Antonio, Texas; St. Petersburg, Florida; Naperville, Illinois; and the State of Vermont.\textsuperscript{128}

As advocates for people with disabilities continue to assert the need for a greater supply of housing with inclusive design features, some people are responding with limited and voluntary programs. In part, the hope may be to forestall a mandatory requirement. One such voluntary program has developed in Georgia. In 2003, the directors of the National Association of Home Builders passed a policy resolution in favor of voluntary visitability programs and opposing mandatory programs.\textsuperscript{127} The Home Builders Association of Georgia took this guidance and created a voluntary program called "Easy Living."\textsuperscript{128} The Georgia program has met with limited general acceptance by builders in the state.\textsuperscript{129} An Easy Living home offers the following characteristics: at least one stepless entrance, ample interior door widths, some entertainment space on the main floor, a kitchen on the main floor, a bedroom on the main floor, and at least one full bathroom on the main floor.\textsuperscript{130} In reference to the standards set out in Part II of this Article, the Easy Living program is designed to promote Level II Visitability.\textsuperscript{131}

While the Easy Living program is a good first step, the problem with such voluntary efforts is that they leave too many housing units out of the system, and they fail to account for market imperfections that result in the underproduction of fully accessible units. There are several reasons for this underproduction. First, each housing unit is a part of our national housing stock. As such, each housing unit has a quasi-public dimension to it even if the home is otherwise treated as private space. And this quasi-public dimension means that private marginal costs and benefits do not equal public marginal costs and benefits. Thus, we will continue to observe the underproduction of inclusive units because the parties to the transaction do not capture or internalize all of the public costs and benefits of their activities.\textsuperscript{132} The benefit of inclusive design in a single-family residential unit is only partially captured by a given individual. Many of the benefits from inclusive design are captured by third parties and the public over the life of the housing unit. Likewise, many of the costs are born by the public rather than the individuals.

\textsuperscript{125} See sources cited supra note 123.

\textsuperscript{126} See sources cited supra note 123.


\textsuperscript{128} Id.

\textsuperscript{129} Id.


\textsuperscript{131} See infra Part II.

\textsuperscript{132} See MALLOY, MARKET CONTEXT, supra note 8, at 126.
Thus, the individual homebuyer makes a less than socially optimal consumer choice that results in underproduction of the socially desirable good. Another way to look at this involves the problem of having the parties internalize the true cost of their design choices. The individuals involved in a given purchase and sale transaction do not take into account the full social costs of adding exclusionary housing units to the long-term housing stock because they only use and occupy a unit for a fraction of its useful life. Thus, we end up producing the wrong mix of housing, resulting in a suboptimal production of inclusive design units.

In addition to the above-stated reason for underproduction of inclusive design housing, some housing developers just do not want to update their building design work because they are resistant to change and prefer to follow already established and path-dependent designs of the past. Their workers, suppliers, and marketing people already know the path-dependent building plans, and have developed efficiency in production by using them over and over again. Inertia is a powerful defender of the status quo. Inertia, however, is not the only explanation. Competitive market pressure will also drive builders to continue using outdated and exclusionary designs as long as they believe that there is a cost advantage to keeping up the same path-dependent practices. In the absence of new and uniform design standards imposed on all builders, some builders will continue to see inclusive design features as special order requirements that deprive them of using “off the shelf” items with large economies of scale. This will be internalized as a cost disadvantage in competing for sales against builders who do not include “special order” design features in their mass-produced housing development projects. By setting national standards for inclusive design applicable to all new housing, however, there will be no concern with respect to losing a competitive advantage because no one will be able to offer lower design standards—everyone will be required to offer the same level of inclusive design in all new housing units. A national standard would simply change the norm and shift the baseline as to which inclusive design features are considered standard and mass-produced.

Level II visitability standards do not lower the quality of a home or change its usefulness to people without mobility impairment. Inclusive design benefits everyone. Developers, however, continue to think in terms of the cost of remaking old designs to accommodate what they view as a small percentage of the population using wheelchairs. What they fail to understand is that mobility impairment goes well beyond the needs of those using wheelchairs, and affects nearly 17% of American families.\footnote{Wang, supra note 3, at 3 tbl.1.} They also do not seem to understand that our population is
aging at a rapid pace, and that inclusive design can save social resources by permitting people to age in place.

Another likely reason for resisting inclusive design in residential housing has to do with what I call “amenity pricing.” Because developers may believe that price and profit can be enhanced by allocating scarce square footage inside the housing unit to features other than enhanced accessibility, they are reluctant to sign on to a national standard for inclusive design. Many developers might rather offer a unit with an exclusionary design having one and one-half bathrooms than an inclusive unit with only one bathroom. More bathrooms add market value, whereas wider hallways and bigger bathrooms simply allocate more precious square feet to what is already there. When hallways and bathrooms are kept small and exclusionary, some square footage can be reallocated to other defined amenities with higher consumer appeal (another bathroom, a bigger kitchen with a breakfast nook, an additional closet, etc.). After all, builders and realtors generally sell houses by advertising amenities such as one and one-half baths, and not by advertising thirty-six inch wide hallways. The problem with this, of course, is that self-interested consumers are drawn to these other amenity options because they do not absorb the full cost of adding to our exclusionary housing stock, and they do not account for the externality of generating truncated social networks for the mobility impaired.

Many builders and developers have opposed inclusive design standards because they think it will drive up their costs.\textsuperscript{134} Of course, many building code features can be opposed for similar reasons. While containing cost is important to keeping housing affordable, cost alone is not the only value factor to consider when building safe and socially desirable housing. There is no reason to treat minimizing developer cost as the primary social goal in housing construction.\textsuperscript{135} Current construction costs simply reflect the requirements of prior housing policy, and policy changes over time to incorporate new and emerging values.\textsuperscript{136}


\textsuperscript{135} Efficiency is not an end in itself. Markets are about exchange and about coordinating movement toward socially desirable outcomes. See generally Malloy, Market Context, supra note 8. Economics is simply one tool in assessing the various means available for getting to our goals. \textit{Id}. And, given that any distribution can be deemed efficient, the real goal is to establish the right approach to housing and adjusting to the new distributive implications. See Daniel W. Bromley, Sufficient Reason: Volitional Pragmatism and the Meaning of Economic Institutions 3–42 (2000); Malloy, supra note 7, at 127 & n.44, 141 & n.6.

\textsuperscript{136} For example, adding seatbelts to cars raised the cost of car production, but that fact in itself did not prevent us from legislating a new approach. Likewise, when we passed legislation requiring children to be in car safety seats, we raised the cost and we also reduced the number of people able to sit in the back seat. When I was a child, for instance, my parents regularly placed five children in the back seat and at least one in the front seat with them. This was normal for a lot of large families. Now, with seatbelt laws and car seats that take up a lot of space, many cars only fit two or at most three children in the back seat. This has caused people with larger families to buy bigger, and more costly,
simply want cheaper housing we could reduce the number of safety requirements in current building codes. In practice, however, we do not simply strive for the cheapest cost shelter; we strive for cost effective ways of providing safe and affordable housing.

As to the cost of achieving an inclusive standard of housing design, some of the debate likely stems from the fact that houses can be built in a variety of ways and in a number of differently situated locations. These factors can affect the cost of construction and challenge designers to think creatively about the means to achieve the desired outcome in the most affordable way. Developers may well need to rethink a number of basic approaches to construction design rather than simply costing out inclusive features based on assuming prior construction practices. And, housing affordability may vary from one region to the next based on the local landscape, but housing costs already vary among regions based on a variety of factors, including geography. Therefore, with a caveat on the potential for cost variation, we do have some information concerning inclusive design. For example, a paper by the Center for Inclusive Design and Environmental Access stated that the cost of a zero-step entrance would only add $150 to the cost of a new construction. Additionally, the cost of having wider interior doors could be as little as $50 if they are put in during construction. Adding these features later on is significantly more costly. For example, the cost of having a no-step entrance added later would be around $1000. Also, the cost of widening the doors later on could be as much as $700. Another report, based on actual construction of over 800 houses in Georgia, determined that the costs were approximately $100 for homes built on concrete slabs and between $300 to $600 for homes with crawl spaces or basements. The cost of inclusive design is not high when builders develop and use appropriate plans at the outset. There is no reason to believe that wider hallways and larger bathrooms would add any costs. Rather, they would simply reallocate space within the structure.

Pima County, Arizona, before implementing its visitability ordinance, did a study on the cost of visitability. The court noted the study in its opinion. The results of the study corroborated the numbers stated above. The study found that implementing the visitability

cars and SUVs. The point is, as views about public policy change we adjust our institutions to express new values over time. We pass laws based on changing beliefs about safety and other values. All of these changes have implications for costs and benefits, but we do not let economics dictate policy; we adjust. For some good examples and discussion on these types of issues, see Bromley, supra note 135.

137. See Maisel, supra note 1, at 14.
138. Id.
139. Id.
140. Id.
141. World Visitability Legislation, Sample U.S. State and Local Ordinances, supra note 113.
standards in the Pima County ordinance would only cost about $100.143 Specifically, the court stated, "the Board of Supervisors could have rationally concluded that the benefit to the community in providing for the disabled justified the comparatively minimal cost of implementing the required design features."144

The key here is to build visitability and inclusive design standards into the construction process to avoid the added costs of doing rehab work at a later date. With a national standard, all developers will face the same design constraints and thus would have incentives to develop attractive ways of integrating inclusive design features into the homes they build.

In terms of new construction housing in the United States, we need to acknowledge the impact of changing demographics and a need to catch up on the supply of inclusive units in our national housing stock. Therefore, we should set proactive goals adding inclusive design units to our national housing stock. At the foundation there should be a goal of requiring compliance with universal design for at least 5% of all new housing to meet the needs of families with a mobility impaired member requiring the use of a wheelchair. This simply extends to private market housing the same percentage as set out by HUD for publicly funded housing.145 A Level II Visitability standard should be applied to all remaining new housing units. This would make all new housing units visitable on the first floor even if there is an upper floor, and there would be no requirement for an elevator or lift system to reach the upper level of the unit.146 This design standard should be implemented unless a given housing unit is situated such that compliance with the standard would rise to the level needed for granting an owner a use variance in a zoning context.147 This makes sense in as much as a noninclusive housing unit functions as a different type of use in our housing stock relative to a unit with inclusive design features, thus, it should be considered as a request for a variance from the otherwise permitted use.

With respect to preexisting housing, including buildings preserved for their historical significance, a different standard may be more practical and reasonable given concerns for inclusion, and for fairly

---

143. Id. at 1040; see also Pima County Visitability Ordinance, supra note 113.
144. Washburn, 83 P.3d at 1040.
145. See supra note 33.
146. In-home lifts and elevators add to the cost of a house by much more than the estimates of making a home otherwise visitable. For example, a simple stairway lift costs between $2,500 and $4,000 for a standard straight stairway, and between $4,000 and $15,000 for a curved stairway. See Stairlifts—TheMedSupplyGuide, http://www.themedsupplyguide.com/stair-lifts/ (last visited Mar. 23, 2009). Residential elevators and flat lifts placed within a housing unit range in price from $10,000 to $16,000 and up. Id.
balancing market and technical feasibility. A lower standard may be
acceptable for rehab work on existing housing if the higher standard
imposes a substantial and unreasonable burden or hardship on the owner.
All currently existing housing units should nonetheless strive to meet at
least a Level I Visitability standard over time. This can be addressed
when unit owners seek to do significant remodeling or when they
undertake major additions to an existing home. In these situations it is
fair to evaluate the feasibility of adding at least Level I Visitability
features to the existing home while making any additions to the structure
compliant with Level II standards. This can be evaluated in ways similar
to that provided under Titles II and III of the ADA with respect to the
categories of property covered by those provisions. And, perhaps a tax
credit can also be given for rehab work in these situations.

In the rehab of housing units in a structure such as a walkup
brownstone, there are a couple of potential difficulties. The first involves
accessibility to the entrance which is usually greatly off-grade from the
street or sidewalk, and built with very little set-back from the sidewalk
and street so that ramping may be difficult. The second problem involves
getting to the upper floor units once inside, since these buildings were
not typically built with an elevator and generally lack structural support
for such an addition. Unlike new residential housing buildings, which
should include elevators in the design and construction, older buildings
may not have been built with the structural support or space to meet
appropriate design and construction criteria for an elevator installation.
Requiring installation of elevators could involve the need for new steel
reinforcements and impose space needs that substantially reduce the
usable square footage of some units, making the project economically or
technically impractical. Nonetheless, efforts should be taken to ensure
that all reasonable measures are taken to bring every rehab project, not
otherwise subject to higher requirements, up to at least a Level I
Visitability standard.

In recognizing the need for a much more inclusive housing stock we
can also note that other countries have already moved in this direction.
The European Union, for instance, already has a plan to make Europe
accessible to all by the year 2010, and this plan includes accessibility
standards for private dwellings. And, in Britain, the government
extended its building regulations dealing with accessibility to cover
houses as well as public buildings. The regulations require that all

149. There are, for instance, tax deductions, 26 U.S.C. § 190 (2006), and tax credits, 26 U.S.C. § 44
(2006), for removing barriers to certain types of existing facilities.
150. See EUR. Commun'N, 2010: A Europe Accessible for All 5 (2003), available at
151. See Welcome to Lifetime Homes, http://www.lifetimehomes.org.uk/ (last visited Mar. 23,
housing built after October 1999 must include features of visitability so that housing can be used and adaptable by people over many years. This will facilitate aging in place. In taking this step it was determined that this move would benefit home occupiers and also save taxpayers £5.5 billion over sixty years as a result of reduced expenses in rehabbing houses later on, and as a result of a reduced need to move people, particularly the elderly, into more expensive residential care units at a premature date.

Thinking beyond considerations of owner and occupier benefits from inclusive housing design, it is also important to consider another public benefit related to building and maintaining an inclusive housing stock. In emergency situations, hundreds and even thousands of people may find themselves homeless and in need of a shelter. While public shelters may be set up to provide immediate short-term assistance, it is critical that people also be able to easily and safely employ self-help by seeking housing in the homes of extended family members and friends. This important rehousing option is increasingly feasible when there is an abundance of inclusive housing in our national housing stock. And, to the extent that the vast majority of our current housing stock does not even meet a Level I Visitability standard, it means that such self-help options are not available to the mobility impaired.

Consider, for example, that in 2005, Hurricane Katrina hit the Gulf Coast of the United States, destroying or damaging more than 300,000 homes. As a result, thousands of people had to be rehoused, and we know from follow-up studies and interviews that assisting people with mobility impairment was more time consuming and frustrating for officials than dealing with those without such a disability. Support

---


153. See generally id.; Welcome to Lifetime Homes, supra note 151.


155. On a trip that I made to New Orleans June 7th to 9th of 2006, with Professor James Charles Smith, we interviewed people concerning housing issues and people with disabilities. We discussed
services were not up to the task and housing options were inadequate and inaccessible. The people with mobility impairment suffered, and the emergency responders had a more difficult time than they would have if there had been better preparation and if more rehousing options would have been readily available.

Hurricane Katrina is not the only example of a situation requiring massive rehousing efforts. Such events happen on a regular basis. A year earlier, in 2004, an Indian Ocean tsunami struck Aceh, Indonesia, destroying or damaging more than 370,000 homes. On May 12, 2008, a 7.9 magnitude earthquake struck China destroying 7.8 million homes, while leaving three times as many homes damaged. And, on September

emergency relief efforts with several leaders of nonprofit organizations dealing with recovery from Hurricanes Katrina and Rita in New Orleans. The groups we talked with during this period included Advocacy Center of New Orleans, Catholic Charities, Greater New Orleans Fair Housing Action Center, New Orleans Housing Resource Center, New Orleans Neighborhood Development Collaborative (NONDC), and the Housing Authority of New Orleans (HANO) (contact information on file with author). The people we spoke with identified a key problem area as one of dealing with people with disabilities. The city was unprepared for the disaster and all the more so in terms of the needs of people with disabilities. In addition, accessible buildings and housing with inclusive design features were difficult or impossible to find. Working to address the needs of persons with mobility impairment took added time, relative to that spent on people without disabilities, and caused greater delay and frustration for all involved. This view, on lack of accessibility and the problems confronted by people with disabilities is also echoed in some of the responses to surveys done of twenty-four organizations operating in Louisiana and Mississippi. The Author was given access to parts of the survey data used as part of a study by the Burton Blatt Institute (BBI) of Syracuse University done in conjunction with a report for the Department of Labor entitled Contributions of Disability Program Navigators to Emergency Response and Economic Recovery of People with Disabilities, Post-Hurricane Katrina: Findings And Recommendations (the Author contributed housing-related questions to the broad-based survey) (information on file with author).

156. Approximately 25% of Katrina evacuees were people with disabilities, but only between 1% and 2% from Louisiana and Mississippi were provided with accessible FEMA trailers for housing, and this led to a lawsuit and a settlement agreement where FEMA undertook to make its trailers accessible to the people assigned to them. See Susan Finch, U.S. Judge OKs Accord on Trailers for Disabled; Toll-Free Lines to Help FEMA Reach Out, NEW ORLEANS TIMES-PICAYUNE, Sept. 27, 2006, at METRO; Court Settlement: FEMA Provides Accessible Trailers for Katrina and Rita Victims (Sept. 26, 2006), http://sci.rutgers.edu/forum/showthread.php?t=70349. See generally Debra Lyn Bassett, Place, Disasters, and Disability, in LAW AND RECOVERY FROM DISASTER, supra note 154, at 51; Janet E. Lord et al., Natural Disasters and Persons with Disabilities, in LAW AND RECOVERY FROM DISASTER, supra note 154, at 71.

157. One person we spoke to in New Orleans, “Charlie,” explained his own personal experience of evacuating to housing that was inaccessible, where kitchen appliances could not be reached and the bathrooms could not be used because he could not access them in his wheelchair. Interview with “Charlie,” in New Orleans, La. (June 8, 2006). One year later he was still waiting for accessible and affordable housing back in New Orleans. Id. In enhancing our ability to be better prepared for emergencies and to build more inclusive housing, we must work to assist all segments of the community, and work to make housing both physically and financially accessible. See generally Jonathan P. Hooks & Trisha B. Miller, The Continuing Storm: How Disaster Recovery Excludes Those Most in Need, 43 CAL. W. L. REV. 21 (2006).

158. See Lovett, supra note 154, at 473.

13, 2008, Hurricane Ike hit Galveston, Texas, and displaced 45,000 people. In these situations displaced people may be in need of alternative housing for days, weeks, months, and even years.

In addition to natural disasters, we are also painfully aware of intentionally inflicted disasters such as the attack on the World Trade Center on September 11, 2001. And, we can easily imagine the turmoil that might follow in the event of a terrorist strike on a premier high-rise residential building such as the Trump World Towers, located near the United Nations in New York City.

The potential for natural and intentional disasters requires us to prepare for a rapid and flexible response capability. By building more inclusive design housing units in the first instance, we not only make a greater number of housing options available to everyone, we improve our ability to help each other, and as a nation to respond more effectively to disaster situations.

V. LOCAL AND NATIONAL MECHANISMS FOR INCREASING INCLUSIVE DESIGN

In working to open single-family residential housing to the mobility impaired, efforts should be undertaken at both the local and the national level. Housing markets, like all real estate markets, are no longer local even though they can appear that way as one looks at individual construction projects. The housing units may be locally situated but the markets that make this housing possible are national and global. Modern real estate transactions are financed and organized through fully integrated market mechanisms linking primary and secondary mortgage markets, security markets, banking networks, and multistate enterprises. This interconnectedness has been made painfully clear by


162. See Uzan v. 845 UN Ltd. P’ship, 778 N.Y.S.2d 171, 171–79 (N.Y. App. Div. 2004). This case involves the attempt by contract buyers of units in the Trump World Tower to get out of their contracts post September 11, because of the fear that the units in the high rise building bearing Trump’s name would be a target for further terrorist activity. Id.

163. See Farber & Chen, supra note 154; Jim Chen, Law Among the Ruins, in LAW AND RECOVERY FROM DISASTER, supra note 154, at 1.

164. See sources cited supra note 16.
the financial crisis that unfolded in the fall of 2008. The global market disruptions were largely attributed to the problems with low-quality mortgages in U.S. housing markets.

As a result of the local situs of individual home construction, local law should have some input on its regulation. Likewise, given the public interest in our national housing stock, and the financially integrated networks that support housing development, federal law should also be involved in advancing certain uniform and inclusive design features in all locally situated housing units.

In this Part of the Article, therefore, discussion focuses on several ways of using local and national mechanisms to advance the stock of inclusive housing. First, it addresses action that can be taken at the local level. And second, it addresses steps that can be taken at the national level. This discussion offers ideas that can serve as a starting point for advancing law and policy and should not be taken as an all-inclusive or definitive set of recommendations.

A. Local Action

Local action to improve inclusive design features in residential housing is likely to be implemented through land use and zoning regulation. Zoning and land use control can be used to regulate aesthetic elements of property use as well as to protect and advance the public health, safety, and welfare. This can be done as an exercise of the police power. Local zoning and land use regulation can also be used to address externalities flowing from the way in which property is used. Since externalities are not fully private, but by definition have impacts that spill over beyond the property, local governments can regulate property to reduce externalities, provided the regulation has both a nexus to the goal to be achieved and bears some reasonable proportionality to the impact of the externality.

Local zoning has long been recognized as being applicable to aesthetic design issues in a community. Local zoning and planning law also deals with building codes and with establishing design elements to implement basic values in land use. Regulating accessibility to a home and the design of the exterior leading to, and including the entrance to

166. Id.
167. See sources cited supra notes 16, 44 and accompanying text.
168. See Juergensmeyer & Roberts, supra note 44, at 52–69.
169. See id. at 507–45; Mandelker, supra note 44, §§ 9.11–21.
170. See supra note 44 and accompanying text.
the home falls within this traditional local power. Likewise, building codes have long regulated interior design and construction of residential housing. Ensuring entranceway accessibility, access to a usable bathroom, and an ability to easily navigate the primary gathering rooms within the home adds to public safety by eliminating barriers that might lead to unsafe conditions for a potential occupant or visitor to the property.

The objective purpose of making a home readily accessible need not manifest itself in poorly designed and unattractive ways. We have all seen the makeshift “handyman” ramps constructed in front of some homes, and we know how aesthetically displeasing some of these can be at times or in particular neighborhoods. Requiring inclusive entranceways does not mean that we are going to have handyman, two-by-four ramps stretching out across the front yard of every residential home in America. Ramp and landscaping design can be regulated to ensure approved aesthetic outcomes.

Many houses in subdivisions and planned unit communities have their own design criteria which are enforced by deed restrictions, covenants, and rules. It is important to appreciate the fact that the inclusive design standards discussed in this Article would not eliminate covenants or restrictions governing architectural review standards in a subdivision or planned community. At most, the design standards would simply constrain some of the potential design options available to homeowners. Architectural review boards would still be able to review and regulate the design and aesthetic quality of accessible entranceways, for instance. One could not simply put up an unattractive handmade wooden ramp in the front yard; one would still need to have the design reviewed and approved by the review board. Review boards could still address matters of design, quality of materials, color of finished product or nature of landscaping, and a variety of aspects related to the way in which the inclusive entranceway is constructed and situated on the lot. It would be possible, for instance, to use landscaping or design features to create a street view of the home as having a wrap-around front porch while having a ramping system built behind the porch façade and concealed from view. There are many creative possibilities, from the simple to the elaborate, to accomplish the goal of inclusive housing design, and doing so should not require the elimination of covenants, restrictions, and architectural review requirements.

Exclusionary housing design also imposes unnecessary externality costs on a community. Externality costs arise as a result of truncating the social network relationships of the mobility impaired, by reducing the efficiency of housing markets, and by reducing the ability of older

172. See supra note 38 and accompanying text.
Americans to age in place. While it is true that one of the fundamental characteristics of home ownership is the right to exclude, this right is not unlimited. One cannot exclude firefighters coming into the home to put out a fire and taking action to reduce damage on other nearby properties. Moreover, the right to exclude does not mean that one is accountable for externalities, and the right to exclude is not the same as claiming a right to design. With inclusive housing design standards, homeowners retain the right to invite or exclude people from their private homes. People do not have to allow uninvited guests into their homes; the homes simply need to be designed so that a person can be invited in without regard to mobility impairment. The real issue is one of regulating the desire to privately contract for design features that exclude approximately 17% or more of families from being able to easily and safely visit each other in their respective homes, and to do so under circumstances in which individuals fail to account for the externality costs of their agreements.173

Full participation in civic life requires an ability to safely and freely visit the homes of neighbors, friends, family, co-workers, and business associates. Local regulation of entranceways, of basic door sizes, and of bathroom space (for providing appropriate space to accommodate a wheelchair) is no more intrusive than many other design and building regulations currently enforced. These inclusive design standards make the home safer, not only in terms of entry, but in terms of a need to exit a home in the case of an emergency. In the event of a fire, a person with mobility impairment should be able to easily navigate hallways and exit from the same points of ingress and egress as any other person in the home. Similarly, a home being visited by a person with mobility impairment should have a reasonably accessible bathroom so that safe and sanitary conditions exist for all potential users of the home. We know that we have an aging population and close to 17% of families include a person with a mobility impairment; in addition many people find themselves with short-term mobility impairment during their lifetime (from injury for example), thus we need to build in basic design features that reflect concerns for public health, safety, and welfare.174 The inclusive design standards outlined in this Article offer an affordable and reasonable balancing of public and private interests in addressing basic residential housing design.175

Considerations of public health, safety, and welfare have long been accepted as the grounds for the valid exercise of the police powers.176 In
this context, it should be noted that falls in bathrooms and on stairways lead to significant numbers of deaths and injuries each year in the United States. In 2002, for example, "12,800 people over the age of 65 died," and "1.6 million were treated in emergency departments because of falls." 177 In addition, "falls are the leading cause of accidental death for the elderly," accounting "for about half of all accidental deaths in the home." 178 And, approximately 150 children each year die from accidental falls in the home. 179 In 1990, some one million people "required hospital room treatment for falls [occurring] on stairs and steps" located within the home. 180 For these reasons, the Center for Disease Control (CDC) and the Home Safety Council are among those who suggest that all Americans are safer if we install grab bars in all bathrooms, next to the toilet, shower, and tub. 181 It is also clear that reducing the number of steps and improving stairways in housing design will enhance safety for all users, without regard to mobility impairment. Thus, from the point of view of local zoning and land use planning authorities there should be an ability to promote inclusive design in residential housing through voluntary incentive programs and mandatory regulations. Mandatory regulations need to be in place to establish a baseline for inclusive design. Incentive programs may be useful to encourage people to go beyond minimal compliance, and should therefore be an additional element of a local approach. Such incentives might include density bonuses, parking space variances, or other benefits made available to a developer willing to build or rehab housing using enhanced inclusive design standards.

In considering the feasibility of inclusive design for any given structure or any particular community, especially in a rehab situation or in a historic district, we should require the highest level of inclusion that is reasonably possible, unless a substantial hardship will result to the developer or owner. In this context one should consider factors that go beyond simple cost and benefit analysis. It is not enough to simply argue that the costs outweigh the benefits since many of the costs and benefits are diffuse, indirect, and impossible to account for by the immediate individuals engaged in a transaction. Thus, the goal is one of achieving

177. Senior Falls, A Home Fall Prevention Checklist for Older Adults—NCIPC, http://www.cdc.gov/ncipc/pub-res/toolkit/checklistforpfsafety.htm (last visited Mar. 23, 2009) (noting that while bathrooms and stairways are a primary source of falls, they are not the only ones included in these numbers).


179. Id. at 2.

180. Id.

safe and inclusive housing in a cost effective way without being constrained by a simple economic calculus in search of an illusive and ambiguous sense of efficiency.

While new construction can be made more inclusive at low cost, the question arises as to how best to bring existing exclusionary housing up to a more inclusive standard. Here it may be possible to require homeowners requesting permits for substantial remodeling or significant additions to a home to include adding certain visitability improvements as well. This might be accomplished through the use of conditional building permit approvals. Stated another way, once new standards are passed, all houses without inclusive design features might be considered nonconforming uses and would be grandfathered in as such. Making a material change to the structure or property after the date of the new standard could trigger a need to bring the property up for review to consider the ability to bring it within the currently applicable code.

In other cases, inclusive design features might be implemented through the site plan review process and the permit approval process.182 In addition, other local incentive programs might be used to encourage inclusive design, such as providing breaks from real property taxes or granting financing credits to builders and homeowners agreeing to build, rehab, or remodel homes to incorporate an appropriate standard of inclusive design.

The downside of relying on local regulations to achieve fully inclusive design includes the problems of dealing with vested rights, the availability of variances, and the fact that it requires significant transaction costs in developing, passing, and implementing appropriate design standards in so many local communities across the country.183 There are, for instance, 3141 counties in the United States, and within counties there are often additional entities such as cities and towns that may exercise zoning and planning authority.184 Furthermore, local zoning and land use planning is weak or virtually nonexistent in some communities, particularly in the more rural areas of the country. Thus, local action is one way to advance inclusive design but it will likely tend to produce varying standards across the country, and be slow in materializing because of the vast number of local authorities needed to be coordinated.

182. See generally Fuergensmeyer & Roberts, supra note 44 (addressing all aspects of land use planning and zoning); Mandelker, supra note 44 (same).
183. See discussion supra note 112.
184. See U.S. Census Bureau, supra note 112.
B. National Action

At the national level there are also ways of regulating and promoting inclusive housing design. In the current housing markets we have local construction of housing units and completely integrated financial markets. Funding for residential real estate development, including the individual purchase of housing units, is facilitated through an integrated system of primary and secondary mortgage market operations. Likewise, we have interstate advertising and operation of real estate companies, brokers, title companies, insurance companies, and mortgage lenders. The end result is that while housing units are built locally they are actually part of an integrated housing and financial network with huge implications for interstate commerce. For these reasons there is ample ground for federal regulation establishing inclusive design standards in all new residential housing, and existing housing that is being remodeled or refinanced.

We have a national policy in favor of providing housing, and we have a national policy in support of making reasonable accommodations for persons with disabilities. One approach would be to amend or supplement the ADA or the Fair Housing Act (“FHA”) to provide for the desired national standard for inclusive design in all new residential housing, including private single-family units. In the absence of an amendment or supplement to the ADA or FHA, one could implement a national standard for inclusive design by working indirectly through the mortgage and financial markets.

Residential mortgage lending is done primarily on uniform documents promulgated by HUD, the FHA, and other government-related entities such as Freddie Mac and Fannie Mae. Funding comes primarily through entities and institutions regulated by the federal government, and the federal government can regulate underwriting standards for loans it originates, insures, or purchases in the secondary mortgage market. Therefore, the government can set standards for the loans it is willing to support, and these standards can relate to compliance with building codes, local zoning regulations, and national standards on inclusive design in residential housing.

---

185. Uniform residential accessibility standards also facilitate the easy movement of productive people within and between communities. See generally Juergensmeyer & Roberts, supra note 44.
189. See sources cited supra note 188.
It would be possible to simply make a certification of inclusive design part of the underwriting requirement for a mortgage loan. The inclusive design certification could be done on a one-page certification sheet just as we require a certification as to the property location with respect to a flood zone, and as to the premises being free of lead-based paint and plumbing. At the time of a sale of a residential housing unit, the seller would complete an accessibility disclosure form confirming that the house met the required standard of accessibility as to entranceway and the other criteria of the given standard. This disclosure form would need to be in a loan file prior to closing and funding the loan. And, as a backup to this approach, mortgages originated without such certification could be excluded from the secondary mortgage market. In as much as the vast majority of residential home mortgages are written on uniform documents, rely on integrated and regulated financial institutions and markets, and pass into the secondary market, this approach would effectively establish a national standard of accessibility.

We saw a similar result with the inclusion in the uniform mortgage documentation of a clause permitting prepayment of residential mortgage loans. The inclusion in the uniform documentation essentially made all residential mortgage loans subject to prepayment, without penalty, by borrowers without a need for any state-by-state or even federal regulation on the substantive issue of when and if prepayments should be permitted. This effectively, even if indirectly, preempted state law that had permitted prepayment penalties.

These financial and mortgage market approaches do not seem to raise any difficult legal barriers to establishing a national inclusive design standard for single-family residential housing. Much of the goal can be achieved by getting Freddie Mac, Fannie Mae, the FHA, and HUD to change mortgage lending documents and underwriting standards to include the need for meeting a particular inclusive design standard. Another way to approach this matter includes creating a state-supported standard. The federal government, via its mortgage-market operations, could promulgate a rule that simply barred loans originated in any state jurisdiction without an acceptable statewide inclusive housing design standard. The financial power of the secondary mortgage market and

---


integrated financial networks would effectively require states to enact appropriate statewide legislation so as to continue to access the market for funding sources. Without access to the secondary mortgage market, and integrated, national or global financial markets, there would be inadequate resources to meet the consumer demands for housing. This would create pressure for change and facilitate the adoption of inclusive design standards.

In the end, a number of steps can be taken at the local and the national level to improve accessibility to housing for people with mobility impairment. This can be accomplished by using strategies that work indirectly through incentive programs and financial markets, and by using strategies based on direct regulation.

VI. ACCESSIBILITY VERSUS AFFORDABILITY

Finally, let us conclude by considering the relationship between inclusion and affordability.102 Some will suggest that even if inclusive design imposes relatively small costs on new housing units, it nonetheless adds to costs and therefore raises a conflict between competing goals of housing accessibility and housing affordability.103 In response, it should be acknowledged that exclusionary housing design is not cost free; to the contrary it is expensive and imposes costs in ways not readily captured by economic models because of the market imperfections discussed in this Article. Large costs are imposed on the people with mobility impairment who have a difficult time navigating our neighborhoods, who are marginalized and isolated by our existing housing policy, and who have important social networks truncated as a result of being excluded from the vast majority of residential units existing in this country.

These costs continue to mount as we add increasing numbers of exclusionary units to our housing stock every day. Likewise, we have added health costs from falling injuries in the home, and we have added costs from having to relocate or institutionalize older Americans who are unable to age in place because of the design of their homes, or who are prematurely in need of institutional support as a result of falling and injury.104 Building accessible housing now is cheaper than having to do

102. See generally Peter David Blanck, Communicating the Americans with Disabilities Act—Transcending Compliance: A Case Report on Sears Roebuck and Co. (1994), available at http://www.anenberg.northwestern.edu/pubs/sears/. This classic study looked at a number of variables with respect to accommodations made at Sears under the Americans with Disabilities Act, and concluded that in spite of concerns regarding the potential costs of compliance, accommodations, when thoughtfully implemented, increased productivity and resulted in very little cost impact on the overall organization. Id. In the residential housing area, the reality of implementing a new standard of inclusive design, as set out in this Article, will likewise be cost effective.

103. See Pyrones et al., supra note 77, at 79–85; sources cited supra notes 177–81 and accompanying text. In addition, it follows logically, even if not directly by legal precedent, from the landmark case of
the more costly rehab work later. In reality, therefore, it is clear that cost and affordability issues run both ways.

The cost is not simply one of paying nominally more for a new home using inclusive design standards. There are many costs associated with not having inclusive housing, and many benefits are to be gained from mandating inclusion by design.\footnote{See \textit{Olmstead v. L.C.\textsuperscript{*}}, 527 U.S. 581 (1999), that inclusive design may arguably be one way of complying with a requirement that elderly people with mobility impairment should not be involuntarily removed from their homes and placed in institutions, when the government could have readily required housing units to be designed to be inclusive. See \textit{supra} note 77.\textsuperscript{195}} Even if we assumed that design changes would cost as much as $2250 (approximately twice the current estimates), this cost can be easily offset by reducing the size of the average 1858 square foot home by as little as fifteen square feet, or the size of a closet.\footnote{For example, the British assume a savings of £5.5 billion from inclusive design. See \textit{Welcome to Lifetime Homes, supra} note 151.} \footnote{For example, a reasonable average cost estimate, per square foot, for new residential construction using average finishes, excluding land, on a 2000 square foot house would be $150 per square foot. See \textit{New Construction Square Foot Costs: Home Construction Improvement}, http://www.homeconstructionimprovement.com/2007/12/new-construction-square-foot-costs.html (last visited Mar. 23, 2009). Keep in mind, however, that actual square foot cost depends on many factors including design of the house, total size, and quality of finishes. \textit{Id.} The point is that $150 per square foot is a reasonable estimate for some basic planning. \textit{Id.} As noted earlier the typical American single-family residential home is now about 1858 square feet and one way to make housing more affordable is simply to reduce the physical size of a unit. \textit{Id.}; see also sources cited \textit{supra} note 52 and accompanying text.\textsuperscript{196}}

Under the current law, the mobility impaired, their families, and future generations absorb the cost of exclusion. Moreover, the individual housing design needs of the mobility impaired are currently framed as expensive aberrations from the legal and social norm. This type of framing marginalizes the mobility impaired and positions them as a financial burden on the rest of the community. This perspective is, however, simply a consequence of past housing policy, and does not provide a rationale for preventing us from adopting new policies that reflect evolving values with respect to inclusion and our greater understanding of the situation.

As a matter of public policy, we have already made a collective decision about inclusion, and about the negative social costs related to buildings expressing exclusion by design. Under the ADA and other building regulations we have struck the balance in favor of inclusive design.\footnote{See discussion \textit{supra} notes 23–33 and accompanying text.\textsuperscript{197}} The only real difference with respect to our failure to make privately funded single-family residential housing inclusive arises from the legal acceptance of the false assumption that such housing is a matter of purely private concern. In contrast, this Article has demonstrated that even privately funded housing is a matter of significant public interest.
therefore makes sense only to talk about how to make inclusive housing affordable, rather than to suggest that exclusion by design is cost free.\textsuperscript{198}

CONCLUSION

In the midst of pervasive national efforts at improving accessibility to public places, there is no national standard for making residential housing inclusive and accessible to the mobility impaired. As a consequence, people with mobility impairment are unable to safely and easily visit the homes of family, friends, neighbors, and colleagues. They are cut off from important social networking opportunities and excluded from the normal rhythms of community life. This incongruent approach to public and private places is not due to lack of advocacy in support of making residential housing design more inclusive. Many advocates for people with mobility impairment argue that housing needs to be more accessible, but their arguments have not been fully successful.

A reason that their arguments fail to resonate with the general public rests largely upon the public's mistaken belief in the ability to clearly distinguish private from public interest in residential housing. For many people, the home is considered private and design choices are accepted as the outcome of consumer preferences expressed in the free marketplace. This Article challenges these assumptions by explaining that while a home may be a private space, the house, as a physical structure, is infused with a substantial public interest. In so doing, the Article reveals the public nature of private residential housing while explaining market imperfections that foster suboptimal consumer choices—choices that result in underproduction of inclusive design housing units.

In addition, this Article demonstrates the significant degree to which mobility impairment is an issue in the United States. Many people seem to think that the issue involves only a few individuals; but, when considered from a family perspective, approximately 17% of all families are dealing with issues related to mobility impairment. Further, as our population ages the implications of mobility impairment increase. The end result is that America has a dynamic and changing population, and it needs a coherent and inclusive housing policy capable of meeting the needs of current and future generations. This requires a response at local and national levels to ensure that all housing is accessible and inclusive.

\textsuperscript{198} It is important to understand that there is a distinction between saying that inclusive design is affordable and addressing another problem, which is the affordability of home ownership. The problems of poverty and of building affordable housing for low-income people involve a distinct set of legal and policy considerations. This Article focuses on mandating inclusive design as an affordable approach in building privately funded housing; it is not about low-income affordable housing, which is generally concerned with publicly funded or subsidized housing. The fact is that inclusive design benefits people in both public and private housing markets.