Accessibility Needs and the Existing Stock

With the 50-and-over population growing rapidly over the next two decades, the numbers of older adults living with disabilities will also soar. Since most of today's housing stock is not designed to accommodate the physical and cognitive difficulties that come with age, many older households will either have to make potentially expensive modifications to their current homes or move to more accessible units. In recognition of growing need, some states and municipalities are taking steps to promote accessibility in both new and existing housing.

HOUSING FOR TODAY'S OLDER POPULATION

Most adults aged 50 and over live in single-family homes that they own **(Figure 16).** Even so, the types of housing that older adults occupy vary by region. For example, in rural areas of the South, 18 percent of older homeowners live in mobile homes—more than double the 7.5 percent share for the nation as a whole. Similarly, 14 percent of 50-and-over homeowners in central cities of the Northeast live in units in multifamily buildings, compared with a national average of just 5 percent.

Compared with small apartment buildings and single-family homes, larger multifamily properties are more likely to be newer and to have more accessibility features such as elevators, ramps, and units with single-floor living. Just over 60 percent of older renter households live in multifamily units, about half of which are located in larger buildings with 10 or more apartments. Another 34 percent rent single-family houses, while the remaining share of older renters lives in mobile homes.

At any given time, just 2 percent of older adults live in group quarters. This type of housing includes nursing homes, residential treatment facilities, and other living arrangements where residents share regular meals and may receive supportive services such as assistance with personal care or skilled nursing. The likelihood of living in group quarters remains very low until age 80, when the share increases to 8.3 percent or one in 12 persons.

DEFICIENCIES OF THE EXISTING STOCK

A major challenge to aging in place is ensuring that homes are safe and accessible. The goal of the universal design movement is to make the environment more accessible to people of all ages and abilities. Of specific focus here are five features that make homes accessible to those with impaired mobility and who have difficulty grabbing and turning knobs: no-step entries and singlefloor living, which eliminate the need to navigate stairs; switches and outlets reachable at any height; extra-wide hallways and doors to accommodate those in wheelchairs; and lever-style door and faucet handles.

FIGURE 16

Even at Advanced Ages, the Vast Majority of Older Adults Lives in Private Homes

Share of Population by Age Group (Percent)



Notes: Mobile home occupants include owners and renters living in trailers, boats, RVs, vans, and other structures. Group quarters residents may live in either institutional or non-institutional facilities.

Source: JCHS tabulations of US Census Bureau, 2012 American Community Survey.

Geographic Differences in Accessible Housing

Like the age and character of the housing inventory, the shares of homes with universal design features differ geographically. Given its older stock, just 12 percent of homes in the Northeast have three or more accessibility features—a much lower share than in other regions of the country. At the metropolitan area level. less than a quarter of suburban and rural homes have three or more accessibility features. The share in core cities is even lower. While nearly 90 percent of existing homes have at least one of these five features, only 57 percent have more than one. Single-floor living is most widely available (found in 76 percent of housing units), followed by accessible electrical controls (44 percent) and no-step entries (42 percent). The least common amenities are extra-wide doors and hallways and lever-style door and faucet handles (both available in only 8 percent of units).

Newer housing is much more apt to be accessible **(Figure 17).** Relative to housing built before 1940, units constructed since 2000 are five times more likely to have lever handles (20 percent vs. 4 percent), and more than twice as likely to have extra-wide hallways and doors (16 percent vs. 7 percent) and no-step entries (52 percent vs. 24 percent). Still, only one in six newer units has extra-wide hallways and doors, while only one in five has leverstyle handles. Although home to over a third of all older renters, apartments in smaller multifamily buildings (fewer than 10 units) and attached single-family units are the least likely to have multiple accessibility features.

Despite the limited availability of universal design features in today's housing stock, adults aged 50 and over are more likely than

	Share of Units with Accessibility Feature (Percent)				
	No-Step Entry	Single-Floor Living	Extra-Wide Hallways and Doors	Accessible Electrical Controls	Lever-Style Handles on Doors and Faucets
Region					
Northeast	31.2	56.8	7.3	37	6.5
Midwest	32.4	72.5	8.2	49.2	8.6
South	48.5	84	7.8	41.8	6.9
West	49.5	80.9	8.3	48.7	12
Metro Area Status					
Central City	39	74	6.6	40.5	7.1
Suburb	46.2	72	8.1	45.8	9.7
Non-Metro	37.4	86.3	9.1	45	7.1
Total	42.1	76	7.9	44.1	8.3

Note: Single-floor living units have both a bedroom and bath on the entry level.

Source: JCHS tabulations of US Department of Housing and Urban Development, 2011 American Housing Survey.

younger adults to live in homes with at least one accessibility feature. Even so, disability rates increase much faster with age than the shares of people living in accessible units. As a result, people aged 80 and over are twice as likely to have a disability as they are to live in homes with at least three accessibility features (Figure 18).

Perhaps even more pressing, the homes of those reporting disabilities do not necessarily include more accessibility features. For example, among households that are headed by someone at least 50 years old and include a person with serious difficulty walking or climbing stairs, only 46 percent have homes with nostep entryways.

MOVING TO ACCESSIBLE HOUSING

Older households that move are more apt to choose homes with several universal design features (Figure 19). Indeed, the share relocating to more accessible housing rises from roughly a quarter of movers in their 50s to more than a third of movers in their 70s, and then to more than half of movers in their 80s. Meanwhile, older households with disabilities living in housing with all five universal design features are more likely to have moved into those units within the previous five years. With these transitions, the share of movers living in accessible housing far exceeds that of non-movers—particularly in the oldest age groups.

Households that move to more accessible units are able to secure amenities that are difficult to add through home modifications. For instance, more than 90 percent of movers in their 80s relocate to homes with single-floor living. Movers in this age group are also much more likely to live in units with no-step entries than nonmovers (63 percent vs. 49 percent), and in homes with extra-wide doors and hallways (35 percent vs. 13 percent). Many of these moves are into rentals in larger multifamily buildings, which are most likely to have all five of these accessibility amenities.

HOME MODIFICATIONS

Most older households—and particularly owners—prefer to remain in their own homes (Keenan 2010a). Given the characteristics of the existing housing stock, however, many of these older adults will have to make modifications to their homes to accommodate the physical limitations that arise with age.

While some accessibility improvements can be made relatively easily, others can be complex and costly. A 2010 MetLife Mature Market Institute report estimates that home modifications range in price from well under \$1,000 for installation of grab bars and grips in bathrooms, hand rails on both sides of steps, and lever-style handles on doors and faucets, to \$800–1,200 for each door widened, \$1,600–3,200 for wheelchair ramps, and \$3,000–12,000 for stair lifts. Major remodeling projects such as bathroom or kitchen renovations, additions to create first-floor bedrooms or bathrooms, and elevators to enter the house or to access upper floors can cost even more.

About 10.3 million households aged 50 and over report having someone at home with serious difficulty walking or climb-

FIGURE 17

Newly Built Units Are Most Likely to Have Accessibility Features



Share of Units with Accessibility Feature (Percent)

Year Built

● Pre-1940 ● 1940-59 ● 1960-79 ● 1980-99 ● 2000 and Later

Notes: Single-floor living units have both a bedroom and bath on the entry level.

Source: JCHS tabulations of US Department of Housing and Urban Development, 2011 American Housing Survey.

FIGURE 18

By Age 80, Adults Are Far More Likely to Have Disabilities than to Live in Accessible Homes

Shares of Housing Units and Population with Disabilities by Age Group (Percent)



Housing Units With 3 or More Accessibility Features

Population With Disabilities

Notes: Accessibility features specifically include no-step entry, single-floor living, extra-wide hallways and doors, accessible electrical controls and switches, and lever-style handles on doors and faucets. Disabilities include hearing, vision, cognitive, mobility, self-care, and independent living difficulties. Data include only occupied housing units. Source: JCHS tabulations of US Department of Housing and Urban Development, 2011 American Housing Survey, and US Census Bureau, 2012 American Community Survey.

FIGURE 19

Older Adults Who Move Are More Likely to Live in Accessible Units

Share of Households in Units With 3 or More Accessibility Features, by Age Group (Percent)



Notes: Recent moves are within the previous 24 months. Accessible units have three or more of the following features: no-step entry, single-floor living, extra-wide hallways and doors, accessible electrical controls and switches, and lever-style handles on doors and faucets. Data include only occupied housing units.

Source: JCHS tabulations of US Department of Housing and Urban Development, 2011 American Housing Survey. ing stairs. At the same time, 5.5 million of these households also report having to climb stairs to enter or exit their homes. Assuming the average outlay for a ramp falls at the midpoint of the range described above (\$2,400), the cost of improving the accessibility of these 5.5 million homes would total \$13.2 billion— an amount that not only speaks to the extent of need, but also to the potential market opportunity that accessibility modifications hold for the remodeling industry.

New technology is also enabling older adults to remain safely in their homes. Sensors are available to provide alerts in the case of falls, tools and robotics provide support for those with difficulty performing ADLs, and automated systems monitor activities in the home. Medical consultations via video-conferencing also help to support those living independently. For instance, the Health Buddy program at the Michael F. Blakely VA Medical Center in Houston uses technology to manage patients' care in their homes, helping to reduce hospitalizations.

But much of this technology is still in the development stage, and it can be prohibitively expensive. In addition, not all older adults have the computer skills or high-speed internet connections that some of these tools depend upon (Baker and Seegert 2013). Moreover, technology involving virtual socialization is unlikely to replace the need for, and value of, in-person contact and may

The High Cost of Falls

Falls are the number one cause of injury and injuryrelated deaths among adults aged 65 and over. The Centers for Disease Control and Prevention (2013) estimated that the real cost of falls to the US healthcare system in 2010 was \$30 billion. In that year, 2.3 million older adults were treated for nonfatal fall injuries in emergency departments, with roughly 29 percent resulting in hospitalization. Injuries from falls often reduce mobility and independence, and the decrease in physical activity post-injury raises the likelihood of other falls. This undermines confidence and physical activity, creating a vicious cycle.

But several simple, low-cost measures can go a long way toward preventing these accidents: removing tripping hazards such as slippery area rugs, installing grab bars in bathrooms and railings on both sides of stairs, and improving the lighting around the home and on outdoor walkways. The CDC also recommends a number of health and wellness practices to prevent falls, including having regular eye exams, evaluating medications for sideeffects, and promoting exercise for balance. require sharing private medical information, which potential beneficiaries might find objectionable.

ACCESSIBILITY IN AFFORDABLE HOUSING

HUD-assisted rental units are much more likely to have accessibility features than unassisted low-cost rentals. For example, larger shares of assisted rentals have no-step entries (48 percent vs. 37 percent), extra-wide doors and hallways (12 percent vs. 6 percent), and lever-style door handles (10 percent vs. 5 percent). Nevertheless, only 26 percent of all assisted rental units have three or more accessibility features. In addition, compared with those without assistance, the population aged 65 and over that receives HUD rental assistance is more likely to have chronic health conditions that require accessibility features and services (HHS 2014).

The availability of affordable and accessible rental units in the private market is also very limited. Only 551,000 unassisted units rent for \$400 or less and also have at least three universal design features. The greater accessibility of assisted units largely reflects requirements for federally funded construction, which mandate that a minimum share of units be accessible to house-holds with mobility impairments and another share to those with visual or hearing impairments. In addition, buildings with four or more units built after March 1991, regardless of federal subsidy, must meet certain accessibility requirements outlined by the Fair Housing Act and related HUD regulations.

POLICIES TO PROMOTE ACCESSIBILITY IN THE HOME

Government at all levels, as well as nonprofit organizations, are pursuing a number of strategies to encourage the production of a more accessible housing stock and to help older adults make accessibility modifications to their existing homes.

Visitability Ordinances

Many state and local governments are recognizing the growing need for accessible housing and are either incentivizing or mandating certain universal design features-particularly a no-step entry, a main-floor accessible bathroom, and wide interior doors—that ensure residents and guests alike can navigate the home. The nonprofit Concrete Change began advocating for these "visitability" standards in the late 1980s. In 1992, Atlanta, Georgia, passed the first ordinance requiring certain visitability features in single-family homes built with public subsidies. Since then, many communities have adopted their own ordinances applying to housing built with public funds, while other jurisdictions and the State of Vermont have mandated visitability in all new residences regardless of funding. Arizona's Pima County has had particular success: since 2002, its ordinance requiring a no-step entry, extra-wide interior doors and halls, reinforced walls for the possible installation of grab bars in bathrooms, and outlet and light switches reachable by someone in a wheelchair has added 15,000 visitable singlefamily homes to its housing stock.

Vancouver, British Columbia has gone a step further, promoting a number of universal design features through its building bylaw. The bylaw requires all new housing (whether single-family or multifamily units) to feature a number of universal design elements or to facilitate their future installation. Required elements include a barrier-free or adaptable shower; wide stairs, halls, and doors; reachable switches and outlets; a fully accessible bathroom on the ground floor; installation of kitchen sink drainpipes at a lower height; and lever-style handles. Vancouver is also working on making the public realm more accessible, through additional curb cuts on sidewalks, audible crosswalk signals, and improved accessibility of public transit. Vancouver's approach is consistent with British Columbia's overall strategy of building housing in such a way that it can be easily modified as residents' needs change.

Tax Incentives

To encourage universal design in new construction and to defray the costs of adding accessibility features to existing homes, some states and localities are making tax credits available to builders and homeowners. For example, Ohio's Livable Homes Tax Credit offers personal income tax credits of up to \$5,000 to builders constructing accessible homes, as well as to homeowners either building new or adding accessibility features to existing homes. Canada's Healthy Homes Renovation Tax Credit, worth up to \$1,500 per year, helps to cover certain remodeling expenses for older homeowners, renters, and those who share homes with older relatives. At the state level, Georgia, Virginia, and Pennsylvania offer tax credits for installing accessibility features (MetLife 2010).

Grants and Low-Interest Loans

In some states, low-interest loans or grants are available to fund remodeling projects that improve accessibility in order to support aging at home. For example, the Massachusetts Home Modification Loan Program provides up to \$30,000 for adding accessibility features to the permanent residences of older adults and households that have members with disabilities. States may also employ Medicaid Home and Community Based Waivers, while the VA and nonprofit organizations may provide assistance to older veterans.

Volunteer Assistance

Nonprofits may also provide volunteers to make accessibility improvements in the homes of older adults. Affiliates of the nonprofit Rebuilding Together provided modifications to 4,200 homes in 2013.

Finally, many states and communities promote consumer and builder awareness of universal design options, but stop short of mandating visitability or broader accessibility standards. Indeed, education of both the design and construction industries and older adults themselves is key to the expansion of an accessible housing stock.