



## **Housing as a Platform for Improving Outcomes for Older Renters**

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## Introduction

The aging of the population as the baby boom generation progresses into retirement ages will have profound implications for society, the economy, and the health care system, just as the sheer size of this group has sequentially affected education and labor and housing markets over the past 50 years (Frey 2011). A particular concern is the threat to independence and well-being associated with the rising prevalence of chronic disease and disability with age, and particularly after retirement age. By 2030, the proportion of Americans age 65 or older will increase from its present 13 percent to nearly 20 percent (Vincent and Velkoff 2010), as the youngest of the baby boomers, now age 45–64, pass age 65. Barring dramatically larger improvements in old-age functioning than have been seen in recent decades, the result will be growth in the number of older Americans needing safe, accessible housing that can accommodate reduced physical or cognitive capacity and supportive services to help them manage daily life.

Beyond providing basic shelter, housing can be a critical platform for maintaining health, daily functioning, quality of life, and maximum independence for Americans as they age. Key factors for maintaining independence are the affordability of the home, including rent or mortgage payment, utilities, and maintenance costs; the condition and accessibility of the home and whether it can be readily and affordably modified to be more accessible; the availability of supportive services, including formal services and informal help from family and friends; and whether neighborhood characteristics foster independence or make navigation difficult or unsafe. Older Americans who lack the flexibility and economic resources to maintain their homes and modify them to fit changing physical or cognitive needs, access to supportive services, or affordable options for relocating to a more accommodating residential situation face a higher risk of declining health, function, and independence, and even premature or avoidable nursing home placement.

In this paper, we focus on low-income older renters and how housing can provide a platform for supporting their independence and well-being. While ostensibly more mobile than similar homeowners, low-income older renters nevertheless may face particularly challenging housing-related issues because of their lower financial resources and the reduced housing stability and control typically associated with being a renter rather than an owner. Rental options include private market-rate housing, privately owned but publically subsidized housing with affordability requirements, and publicly owned housing.

We define low income as income below three times the federal poverty level (FPL). This level of income corresponds roughly at the national level to 80 percent of Area Median Income (AMI), which is the low-income threshold used by the U.S. Department of Housing and Urban Development (HUD). We define the older population as those age 50 or older, although much of the evidence on the relationship between housing and well-being in the older population focuses on people age 65 or older, the age range when the risk of health and functional decline begins to rise more rapidly. We include those age 50 to 64 because of the wealth of evidence of health disparities for people with low incomes throughout their lives and specifically a strong association of low income with higher mortality and poorer health in this age group near retirement (Sudano and Baker 2006; Adler and Newman 2002; McDonough et al. 1997).

In the following two sections, we first provide context for the important role of housing and neighborhoods in supporting independence for older Americans generally and low-income older renters in particular. We next present a conceptual framework for the pathways between the housing and

service environment, favorable housing outcomes, and well-being and discuss options for achieving positive housing outcomes and the barriers to realizing them. The third section examines the theoretical basis and empirical evidence for a link between favorable housing outcomes and improving well-being in terms of health, functioning, and ability to remain independent. Finally, we discuss a plan for future research to address gaps in current knowledge and summarize our conclusions.

In choosing to focus on older, low-income renters, we do not minimize problems specific to older homeowners with low incomes. Being a renter or homeowner is not a fixed state, and some issues we address apply to both groups. Homeowners with low incomes may face distinct challenges, such as being “house bound” in homes that are inadequate but would not generate sufficient sales proceeds to support living elsewhere—if the home can be sold at all in the current housing market. On the other hand, older homeowners with low incomes may become renters by choice or be at risk for losing their homes owing to upheavals in the housing and mortgage markets and the slow economic recovery (Harrell 2011). Thus, many issues we discuss in the context of older renters with low incomes are relevant to a broader population than those who currently rent.

## Housing Preferences and Challenges

A large majority of older Americans, including both homeowners and renters, report a preference for remaining as long as possible in their current home and community as they age—to “age in place”—according to a nationally representative survey of the 50+ population (AARP 2006). The ability to remain independent, convenient location, and affordability are key reasons cited for preference to stay in the current home. Being near family and friends and safety from crime are top reasons given for wanting to stay in the same neighborhood or community. Census data show that older Americans are, in fact, aging in place (Frey 2011), but the data do not show whether the accessible housing and services that may be needed to maintain older Americans’ independence are available.

Supporting the ability to age in place, or at least to remain in community settings rather than nursing homes, has been a major public policy focus in recent years, in large part because of the high cost of long-term nursing home care for those who become too frail to remain independent. A substantial portion of that cost is borne by Medicaid, the joint federal-state program that provides a health and long-term care safety net for those who have low income and assets, including those who have exhausted their resources paying for care. Medicaid is the largest single payer for long-term care and spent \$75 billion on long-term care for the elderly and other adults with disabilities in 2009. Of that amount, most was for nursing home care, a mandatory benefit, with only about a third spent for community-based supportive services, which may be offered as an optional benefit or through special waiver programs that allow states to limit the number of people served (Eiken et al. 2010). The proportions are essentially reversed for the younger population with developmental disabilities, for whom community-based care represented about two-thirds of the \$37 billion spent on long-term care. The Affordable Care Act (ACA) provides additional incentives for states to expand Medicaid community-based care and to reorganize care for high-cost, high-need beneficiaries to better integrate physical health, mental health, and nonclinical supportive services, with the aim of reducing institutional care of all types.

## Challenges to Aging in Place

Many older Americans appear to realize that their ability to age in place depends critically both on characteristics of their home and neighborhood and on changes in their health and functioning. Responses to a 2005 AARP survey of people age 50+ indicated only about half believed that their home would be able to accommodate them “very well” as they age, and 12 percent responded “not well” or “not well at all” (AARP 2006). Respondents reporting that their homes were less accessible also were more likely to report less community involvement and feelings of isolation.

The attributes of the community where housing is located are important because the neighborhood increasingly can become the primary interface with the outside world and with informal social interactions, as individuals age and responsibilities that take them outside the neighborhood are reduced (Gardner 2011). Access to public transportation; well-maintained and accessible sidewalks and traffic control to promote “walkability;” nearby amenities, such as parks, churches, and grocery and drug stores, that can be accessed by public transit or walking; and low crime rates all contribute to the ability of older people to remain active, socially engaged, and independent. Although urban settings, where most low-income older renters in subsidized or unsubsidized housing reside, may be more likely to offer many of these attributes in principle, that often is not the case in impoverished or low-income areas where public and other low-cost housing is located (Milbank Memorial Fund 2006). Recent findings from the 2010 Census also indicate significant growth in the older population in suburbs, which may promote or hinder independence, depending on how well suburban communities are responding to the needs of their aging populations (Frey 2011).

About 25 million, or 26.5 percent, of all Americans age 50 or older have some level of difficulty with vision, hearing, memory, mobility, personal care (such as being able to bathe or dress), or handling the demands of independent living (such as shopping or meal preparation), according to tabulations of the 2009 American Community Survey (ACS). The rate of difficulties increases dramatically with age, from 17 percent for those age 50–64 to about 27 percent for those age 65–74 and 54 percent for those age 75 or older. Substantial evidence indicates improved functioning among older Americans through the 1990s, primarily in independent living activities (Freedman, Martin, and Schoeni 2002; Spillman 2004). These gains were concurrent with improvements in the physical and technological environment (e.g., prepared meals and microwave ovens, telephone or Internet shopping and banking) that are believed to have played an important role in improved functioning. Data for more recent years suggest, however, that gains have not continued since 2000 (Freedman, Spillman, et al. forthcoming) and that those with less education and income did not share equally in the gains of the 1990s (Schoeni, Freedman, and Martin 2008). Moreover, recent studies have found upward trends in difficulty with mobility-related activities among the population nearing retirement, corresponding to our 50–64 age group (Martin et al. 2010).

## Special Challenges of Older Renters

Within the older population, about one in five households headed by someone age 50 or older now lives in rented housing (Harrell 2011); by 2030, the number of households headed by someone age 65 or older is projected to increase by 6 million (Pendall et al. forthcoming). These older renters are more likely than homeowners to have low income as we have defined it (68 percent versus 35 percent), and within the low-income population, renters are nearly twice as likely as homeowners to have income below poverty (33 percent versus 17 percent), according to tabulations of the ACS. Thus, it is not surprising that among rental units occupied by older households, about 30 percent are either in public

housing or receive another type of government housing subsidy (U.S. Department of Housing and Urban Development and U.S. Department of Commerce 2011).

According to a HUD report to Congress earlier this year, 3.6 million renters age 62 or older had very low income in 2009, and 1.33 million had “worst case” housing needs, defined as being very low income renters who are *not* receiving government housing assistance and either pay more than half their income for rent, live in severely inadequate housing, or both (HUD 2011). This represents an increase of 120,000 since 2007, attributed in the report to fallout from the foreclosure crisis and recession, as shrinking incomes drove increased competition for already scarce affordable housing.

Older renters, and especially low-income renters, have a very high rate of disability. About 27 percent of all older renters age 50–64 and half of those age 65 or older have sensory, cognitive, mobility, personal care, or independent living difficulties, compared with 14 percent and 34 percent, respectively, of homeowners in the two age groups, according to ACS data for 2009. For low-income renters, the rates are 35 percent for those age 50–64 and 54 percent for those age 65 or older.

Older renters as a group also are more likely than older homeowners to be single, and those living in subsidized housing are less likely to have children (HUD 2011; Redfoot and Kochera 2004). This is significant because spouses and children are the primary source of informal supportive assistance for the older population, both before and after health or functioning problems begin. Among community residents age 65 or older who receive help with independent living or personal care activities, 90 percent receive at least some informal help, most often from spouses or children (Spillman and Black 2005b). Even those who have neither a spouse nor children or who live in supportive community-based residential care depend on informal support from other relatives or friends; two-thirds of those with neither spouse nor child and nearly 80 percent of those in community residential care receive some informal help. Moreover, having supportive children or other near kin can offer the option for co-residence, which may be mutually beneficial.

Consistent with the evidence for the older population at large, informal care, or the lack of it, is an important issue for the well-being of older renters in federally subsidized housing. About 2 million older adults, mostly low-income single women in their mid-70s to early 80s, live in federally subsidized housing (Harahan, Sanders, and Stone 2006b). Involvement of informal caregivers may make it more feasible for property managers to help their older residents remain independent in the face of high rates of health problems and difficulty managing daily activities on their own (Sanders et al. 2010).

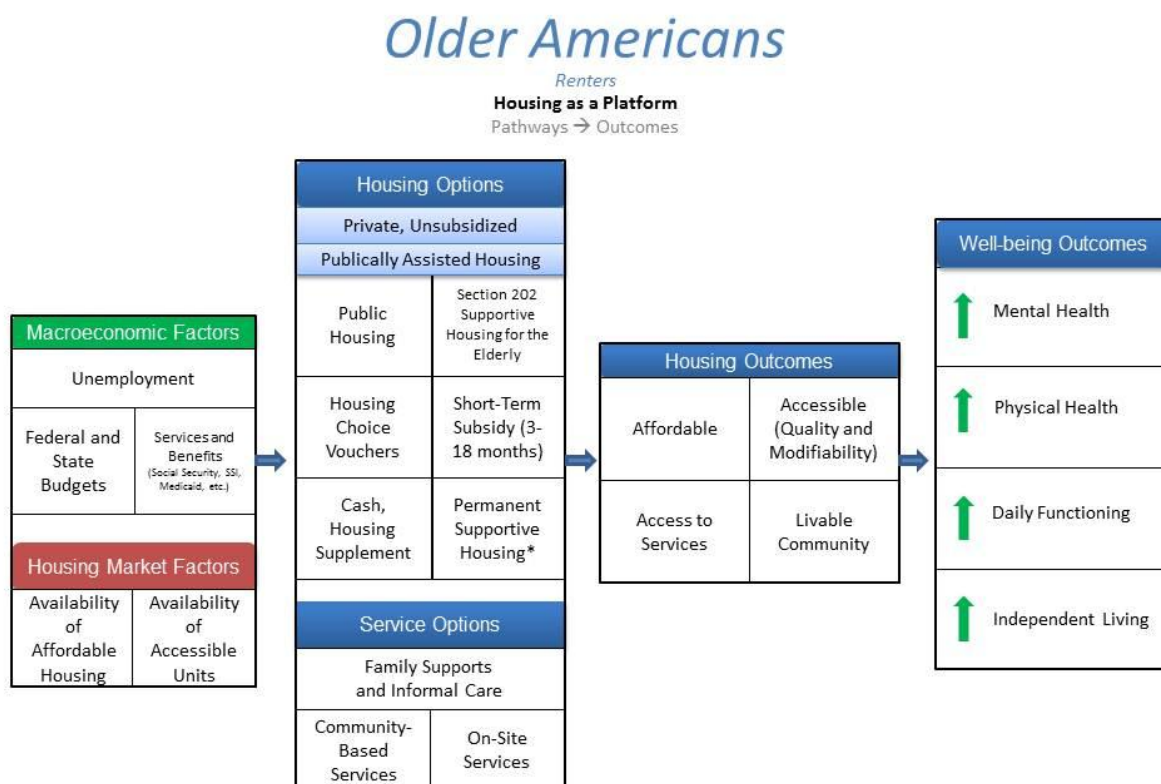
## Housing and Service Options and Barriers

Figure 1 provides a conceptual framework for the pathways through which housing may serve as a platform for achieving favorable housing and service outcomes and through them, improved independence and well-being among older renters with low incomes, starting with the macroeconomic factors that affect the housing and service options available and barriers to achieving these options. These macroeconomic factors include tight federal, state, and local budgets; resulting limitations on the supply of public services and benefits, including housing supports; and housing market factors, including scarcity of affordable housing and accessible units. Older low-income renters also may be disproportionately affected by the still-languishing job market. Although unemployment among all older workers remains lower than for the younger population, older workers remain unemployed longer—an average of over a year for those age 55–64 and nearly a year for those age 65 or older (U.S. Bureau of



Labor Statistics 2010, 2011). In this section, we focus on the housing and service options available to older renters and barriers to achieving the favorable housing outcomes in Figure 1. In the next section, we explore the theoretical basis and empirical evidence for how housing, service, and neighborhood outcomes may affect the well-being outcomes in Figure 1.

**Figure 1. Conceptual Model**



\* In this case, Permanent Supportive Housing refers specifically to Permanent Supportive Housing for homeless persons with mental illness

## Housing Options

Low-income renters can, of course, look for housing in the private market. A shortage of rental units that are both low cost and adequate makes finding private market housing difficult, however, and low-income renters must compete with higher income renters (HUD 2011). Further, relatively low-cost market-rate units are not necessarily “affordable” for the low-income population, under the definition used by HUD: housing costs, including utilities, that are no more than 30 percent of income.

The scarcity of affordable private-market units relative to the demand for them makes federally subsidized rental housing all the more important, especially for the older population. Of all publicly assisted housing units, 47 percent are headed by someone age 51 or older, and 31 percent are headed by someone age 62 or older (HUD 2008). Federal affordable housing programs provide assistance to renters in several ways:

- **Public housing** accounts for over 1 million units of affordable rental housing; half of households in these units are headed by someone age 51 or older, and nearly a third are headed by someone age 62 or older (HUD 2008).
- Privately owned federally subsidized housing developments account for an additional 1.7 million affordable units through various project-based programs administered by HUD, including Section 8, Section 221, Section 236, Section 811, and Section 202. The **Section 202 Supportive Housing for the Elderly program**, which has created 300,000 units nationwide, is the only federal program that specifically targets the older population with very low income, defined as income below 50 percent of area median family income, adjusted for family size (Schwartz 2010). Only households with at least one member age 62 or older are eligible to live in Section 202 housing. Median income of Section 202 residents in 2006 was \$10,000 (Haley and Gray 2008). Between 20 and 25 percent of Section 202 funds are set aside for use in nonmetropolitan areas. Section 202 developments are explicitly intended to allow residents to age in place, are designed so they can accommodate residents as they become frailer, and often include a service component. However, these features are not universal across all properties or all units (Haley and Gray 2008). Privately owned affordably housing developments are also subsidized through the **Low Income Housing Tax Credit (LIHTC)** program. Of the current publicly assisted stock, approximately 1.7 million units are financed through LIHTCs, making it the largest program currently producing affordable housing (HUD 2008). It is unknown how many of these units are occupied by older Americans; however, recent legislation has attempted to remove regulatory barriers so developers are able to use LIHTCs in conjunction with Section 202 grants (Perl 2010).
- The primary program providing tenant-based rental assistance is the **Section 8 Housing Choice Voucher (HCV) program**, the largest housing subsidy program in the United States. HCVs are issued through local public housing authorities (PHAs) and provide assistance to more than 2 million households, 35 percent of which are headed by someone age 51 or older (HUD 2008). HCV helps very low income households secure housing in the private market while maintaining affordability. PHAs must allocate at least 75 percent of their vouchers to households with extremely low incomes, defined as income no more than 30 percent of the AMI. After procuring a qualifying unit in the private market, the tenant is responsible for paying 30 percent of household income toward the rent, and the voucher amount is paid by the PHA directly to the landlord and is the difference between 30 percent of income and the typical cost of a moderately priced unit in the local market, as determined by HUD. The tenant pays any difference between actual rent and the typical cost, within upper limits allowed by law.
- The **U.S. Department of Agriculture's Rural Housing Service (RHS) Section 514/516, Section 515, and Section 521 programs** offer affordable housing options for residents of rural communities. Section 514/516 and Section 515 RHS programs provide loans to developers to build affordable housing, while Section 521 provides tenant-based rental assistance to make up the difference between the development's operating costs and the amount of rent tenants can afford to pay.
- Older renters in extreme circumstances may also be able to benefit from **homeless assistance programs**. If an older household is at risk of losing its housing unit and becoming homeless, the household can receive a short-term subsidy or other housing supplement to prevent homelessness. In the most extreme cases, people with disabilities or families headed by people with disabilities who are homeless or at risk of becoming homeless and may obtain **permanent supportive housing**, which provides housing and more comprehensive supportive services than are found in other federally subsidized settings. Nationally there are fewer than 240,000 permanent supportive housing beds, about 70,000 of which are occupied by people age 51 or older (HUD 2010).

## Service Options

Informal assistance is the most common (and often the preferred) option among the older population for help with independent living activities, such as shopping, meals, and housekeeping, or with personal care activities, such as bathing and dressing. Where informal assistance is not available or is not sufficient to meet needs, formal assistance from paid providers can substitute for or supplement the efforts of informal caregivers. Supportive services may be obtained separately from external providers brought into the home, whether in private-market or publicly supported housing, and or through various housing with services models where services or coordination with community-based service providers are part of the housing package.

### Services brought into the home

As with housing options, older renters with low income can look to the private market for in-home homemaker/companion or personal care aide services through licensed agencies. Privately paid services from less formal, usually unlicensed providers may be obtained at a lower cost by those able to locate a reputable provider and manage the requirements of being an employer. Publicly paid supportive services are an option for some. Nearly one in three older low-income renters reports being enrolled in Medicaid or other medical assistance programs, according to tabulations from the 2009 ACS.

States have made significant strides toward expanding Medicaid community-based support services for older low-income people in recent years and have new options for doing so under the Affordable Care Act. Thirty-one states offer personal care, which provides attendant services, as an optional benefit in their Medicaid state plans, and the ACA provides additional incentives for states to expand this benefit. The Program of All Inclusive Care for the Elderly (PACE), also an optional state plan benefit, is offered in 29 states for beneficiaries age 55 or older who would be eligible for Medicaid nursing home benefits. As the name implies, PACE offers a full array of services including primary care, nutrition counseling, transportation, meal provision, personal care, home care, nursing and inpatient care, and prescription drug assistance, with many services provided in adult day health centers. All 50 states and the District of Columbia offer at least some home and community-based waiver programs, through which a wider array of supports may be offered than are available through the personal care benefit. Waivers allow states greater flexibility to target particular groups or geographic areas where needs are greatest, set income and asset eligibility thresholds at the higher level allowed for nursing home residents, and set the maximum number of people served. Provisions of the ACA that will expand Medicaid eligibility to cover adults with income up to 133 percent of the poverty level may make Medicaid home care benefits available to additional low-income renters, particularly those age 50–64.

### Housing with services models

Models that combine housing and services are becoming more common. Some are largely or entirely private pay, but others are supported by public funds or a combination of public and private funds. Substantial growth has occurred in recent decades in retirement communities and other types of accessible housing designed for the older population, as well as in explicit noninstitutional settings where services to support independent living and personal care needs are available and can be accessed as individual needs change over time (Spillman and Black 2005a; Spillman, Liu, and McGilliard 2002).

The most prominent model is the licensed assisted living residence, which may be freestanding or part of a larger community offering a range of supportive housing options from independent living to assistance with personal care and medication management to, sometimes, nursing facility care. Assisted living residences remain primarily private pay, although Medicaid pays for services for a small minority

of residents. Medicaid covers room and board only in nursing homes, but states may use state funds to help cover those expenses in other residential care settings (O’Keeffe, O’Keeffe, and Bernard 2003). Housing Choice Vouchers may also be used for the shelter costs of assisted living facilities, but not for the cost of services (Golant 2003). Older licensed supportive housing options include small “board and care,” or “personal care” homes, which traditionally have served lower income people, often in or near their own neighborhoods and frequently with Medicaid funding for services.

Other models that combine or link housing and services also are important, although there is little evidence about the total population served or their availability to the low-income population relative to the need for them. These include naturally occurring retirement communities (NORCs), in which services are provided either purposefully or as an ad hoc property, community, or resident association response to needs in residential settings or neighborhoods with a high concentration of older people (Ormond et al. 2004). NORC supportive services programs (SSPs) may provide health and social services, transportation, and case management, with a focus on supporting healthy aging, rather than only intervening after health and function have declined (Colello 2007). NORC SSPs may occur in subsidized or unsubsidized housing. The Administration on Aging (AoA) provides grant support to local entities that provide comprehensive and coordinated health and social services in NORCs, as well as supporting other programs providing nutrition, transportation, other supportive services, and senior centers. One recent variant of NORC SSPs is the “villages” model, in which the organization and delivery of services is funded primarily through subscription fees paid by participating residents (Wardrip 2010). To date, however, the villages model appears to have arisen primarily in areas with a concentration of older middle-income homeowners, so its generalizability to other groups is unclear (Scharlach, Graham, and Lehning 2011).

The phrase affordable housing plus services (AHPS) has been coined for a family of models including NORC SSPs that have in common the aim of integrating multifamily housing environments with supportive services to allow older people to age in place (Harahan, Sanders, and Stone 2006b). All AHPS initiatives have three common characteristics: (1) they are independent, unlicensed multifamily housing communities with large numbers of low- and moderate-income older residents; (2) health-related and supportive services are funded separately from housing and are available to at least some older residents; and (3) there is a purposeful link connecting residents to services that can facilitate their ability to age in place (Harahan, Sanders, and Stone 2006a). Many AHPS initiatives operate in housing developments that receive some type of federal subsidy, but some operate in privately owned housing developments that remain affordable to low-income older people.

Federal programs linking older renters in federally subsidized units to supportive services are the following:

- The **Congregate Housing Services Program** provides grants funding for programs in federally subsidized housing aimed at preventing premature or unnecessary institutionalization of older people. The programs provide meals and supportive services necessary to independent living at affordable rates. Only residents of federally subsidized housing who are frail elderly (defined as being unable to perform at least three personal care activities) or are nonelderly with permanent or temporary disabilities are eligible for the program. No new grants have been funded since 1995, but Congress has continued to extend expiring grants annually.
- HUD also provides funds for publicly assisted housing developments to employ **service coordinators** who link residents to services through the Multi-Family Housing Service Coordinators program in privately owned federally subsidized housing developments that are specifically for the elderly and

people with disabilities, and the Resident Opportunity and Self-Sufficiency Service Coordinators (ROSS) Program, which provides for service coordinators in public housing.

- The **Assisted Living Conversion Program** provides funds to federally subsidized developments designated for the elderly to modify some or all of their rental units and common areas to an assisted living setting so they better meet the needs of elderly and disabled residents in need of additional assistance in order to age in place. Before passage of the Section 202 Supportive Housing for the Elderly Act of 2010 in January 2011, participating developments were required to meet state licensure requirements for assisted living facilities, which vary by state. Under the new law, the program is expanded to include “service-enriched housing,” allowing developments to provide supportive services through third-party licensed or certified providers, without the requirement that the development be a licensed assisted living provider.

## Barriers to Achieving Favorable Housing Outcomes

A number of barriers affect the supply of suitable housing and services and, thus, the ability of low-income renters to achieve the favorable housing outcomes of affordable, accessible homes, access to services, and livable neighborhoods shown in Figure 1.

### Affordability

Not surprisingly, housing costs represent a large proportion of income for older renters. According to the American Housing Survey (AHS), 60 percent of all renters age 65 and older spend at least 30 percent of their income on housing, while 36 percent spend at least half, one of the HUD criteria for “worst case housing need.” In contrast, only 34 percent of homeowners age 65+ spend at least 30 percent of their income on housing, and just 18 percent pay at least half (HUD and U.S. Department of Commerce 2011). The upward pressure on rents because of increased competition for affordable rental housing makes it even more difficult for low-income households to obtain affordable housing.

Ignoring the geographic distribution of units, which aggravates shortages in some areas, HUD estimates that in 2009, for every 100 low-income renters, there were 136 total affordable units, 105 actually available for rental, and only 95 that also met minimum adequacy standards. For every 100 very low income renters with income up to 50 percent of AMI, there were 60 affordable, available, and adequate units; for extremely low income renters with income only up to 30 percent of AMI, there were only 32 units per 100 (HUD 2011).

Contributing to the shortage of affordable rental housing is the loss of units from the current affordable rental stock. Between 1999 and 2009, 28 percent of the low-cost rental housing stock was lost (Joint Center for Housing Studies 2011). Moreover, it is unclear how much of the existing stock of subsidized rental housing will remain affordable. Much of it is privately owned and may be lost as contracts requiring affordability expire and owners convert the property to market-rate rents (PolicyLink 2002). Further, both public housing and privately owned federally subsidized housing developments have large capital investment needs, due to age of the properties and years of deferred maintenance (Finkel et al. 2010). Without funding for major capital improvements, the stock will continue to decline. Local government regulations (i.e., bans on apartment construction, caps on building permit issuance, and density restrictions) impede the development of new affordable, multifamily housing in many areas (Pendall, Puentes, and Martin 2006).

The publicly assisted housing options described above attempt to bridge the affordability gap, but housing assistance has not increased, despite the growth in the number of very low and low-income households (HUD 2011). As a result, applicants for publicly assisted units face long waiting lists. Applicants frequently have to wait more than two years for Section 202 housing, and projects in the largest metropolitan areas can accommodate fewer than half their applicants within two years (Haley and Gray 2008). For many older renters, waits that long may contribute to declining health, well-being, and function and ultimately loss of independence, particularly for those without strong informal support networks.

Some particularly vulnerable older renters in the 50–64 age group may benefit from the joint U.S. Department of Health and Human Services (HHS) and HUD Year of Community Living initiative, for which HUD has devoted \$40 million to public housing authorities to fund over 5,000 new Housing Choice Vouchers for nonelderly people with disabilities. Up to 1,000 vouchers will be specifically targeted to Medicaid beneficiaries in the Money Follows the Person (MFP) program, which provides supports to help nursing residents who are willing and able to move back to the community. HUD also is encouraging housing authorities to make some or all of their remaining allocation of vouchers available to individuals with disabilities who, without housing assistance, are at risk of institutionalization.

### Accessibility and Home Modifications

Although inadequate income rather than severely inadequate housing is the dominant reason for “worst case housing needs,” incipient health or functioning problems may make housing inadequate for older renters that would be adequate for younger, healthier renters. Poor condition of the home and lack of accessibility can create “housing-related disability” and may reduce the safety, effectiveness, and even feasibility of bringing help into the home (Newman 1995, 2003). Low-income renters have limited financial resources to pay for maintenance, repairs, and modifications, even if the property owner agrees to them, and both limited resources and the shortage of suitable housing reduces the ability to move somewhere else more accommodating.

The age of housing alone is a factor in accessibility and the cost and feasibility of modifications to improve safety and accessibility. The median age of low-cost rental housing has risen to 38 years (Joint Center for Housing Studies 2011), making it less likely that affordable units would have accessibility features or design that could accommodate the needs of older people with health or functioning problems. The short supply of suitable, affordable housing has presented a major obstacle for helping nursing home residents return to community living under the MFP program (Denny-Brown and Lipson 2009).

### Access to Supportive Services

Both informal care and formal services may be able to bridge some of the gap between functional capacity and housing. As noted earlier, however, older renters are less likely than homeowners to have a spouse, and those in publicly supported housing are less likely to have children, the most common providers of informal support. Access to formal services is affected by the same types of barriers as housing options: lack of affordability, supply shortages, and uneven availability, even in public or subsidized housing.

For many low-income renters, privately paid community-based services and some models of housing with services described above are not affordable. The average cost of privately paid at-home homemaker/companion or personal care aide services through licensed agencies is nearly \$20 an hour (Metlife 2010; Genworth 2011). The average and median “base” private pay rate in an assisted living



facility in 2010 was about \$3,000 per month, or \$36,000 annually (Prudential 2010; MetLife 2010; Genworth 2011), which is unaffordable for the low-income population as we have defined it. In the minority of cases, where private assisted living residences do serve Medicaid patients, only services are covered; room and board must be paid privately or through other types of public or private support. In addition, because of low Medicaid reimbursement rates, assisted living residences have an incentive not to admit Medicaid beneficiaries, to admit only those with lesser care needs, or to evict Medicaid-funded residents when care needs increase (National Senior Citizens Law Center 2011). Protections available to residents vary by state. Smaller personal care homes are faced with various uncertainties, since their small size means loss of a single resident or imposition of new regulations that would be easily absorbed by larger facilities can have profound implications for viability—and for the affordability of care (Carder, Morgan, and Ecker 2008).

Publicly funded community-based services through Medicaid waiver programs have waiting lists of up to two years (Kaiser Commission on Medicaid and the Uninsured 2011). In addition, services through the most common Medicaid waiver programs have caps on enrollment, are limited to those who have reached a high level of need qualifying them for Medicaid nursing home benefits, and, in some cases, are available in limited areas of a state.

Although on-site services or coordination of off-site services are available in some publicly assisted developments, the long waits required indicate that the supply is inadequate to meet current, let alone increasing, demand in the next few decades. The level of service provided also varies considerably. Even in HUD's Section 202 Supportive Housing for the Elderly Program, only 46 percent of properties had HUD-financed service coordination and 8 percent had non-HUD financed service coordination (Levine and Johns 2008). Service coordinators are even less likely to be found in other publicly assisted housing properties (Redfoot and Kochera 2004). Federal, state, and local funding uncertainty also limits the expansion of supportive programs, such as the Congregate Housing Program (discussed above), which is a legacy program with only 51 participating properties, compared with more than 90 in the 1990s. A HUD-funded demonstration of the **HOPE IV Hope for Elderly Independence** program in 1993 provided income-qualified, frail elderly people with a housing choice voucher and both service coordination and actual service delivery, but no new funding has been provided after the first round of grants.

In response to the substantial challenges that those experiencing functional difficulties face in locating and obtaining the combination of housing and services that meets their needs, several current HUD and HHS Year of Community Living initiatives seek to improve access to services by better integrating housing programs with health and social services, increasing state and local interagency communication and coordination, and promoting Aging and Disability Resource Centers as “one-stop” shops for information on eligibility and service options, including health and supportive services, home modification assistance, and affordable housing.

In the absence of affordable supportive housing options and access to formal or informal support, a likely trajectory for low-income people with functional difficulties is declining health and functioning and, ultimately, relocation to a nursing home. If functional needs are sufficiently severe, nursing home residence may be the only remaining feasible option, but it is the most costly place to receive long-term care and is by far the least preferred by both individuals and public policymakers. For individuals it represents a complete loss of independence. For state and federal public policymakers, it is costly, because nearly all people with low incomes will be covered by Medicaid either at admission or soon after. Both the average and median private-pay cost of even a semi-private room is about \$200 per day, or \$73,000 per year (Prudential 2011; MetLife 2010; Genworth 2011).

## Livable Communities

The neighborhood or community where affordable housing is located can affect the ability of older low-income renters to remain active, socially engaged, and as independent as possible. As noted earlier, impoverished urban neighborhoods where affordable housing is located may often fail to provide safe and navigable space and needed general services (such as nearby medical providers, pharmacies, and affordable nutritious food) and transportation options. A HUD-supported study found indirect evidence suggesting that the ability to age in place may be affected by both the poverty of the neighborhood surrounding publicly subsidized housing and the concentration of older tenants (Locke et al. 2011). Both factors were associated with age at exit from subsidized housing among residents age 62 or older, although the reason for exit and destination upon exit were not known. In low-poverty neighborhoods, 32 percent of exits were at age 85 or older, compared with 19 percent in high-poverty neighborhoods, and rates of exit at these advanced ages were higher in properties primarily occupied by tenants age 62 or older. The average age at exit also was highest in Section 202 and other assisted multifamily programs and lowest for voucher recipients. From the service provision perspective, lower poverty neighborhoods, geographic concentration of older care recipients, and adequate transportation also may improve the safety and feasibility and reduce the cost of providing services at home (Newman 2003). Low population density and few transportation options in rural areas and in some suburban areas may present additional challenges for both service delivery and the ability of older low-income renters to maintain independence.

## Housing as a Platform for Improving Outcomes among Older Renters

In this section, we discuss the theoretical and empirical support for how housing can promote better mental and physical health, daily functioning, and maximum independence. Improved well-being is a desirable outcome in itself. From a policy perspective, however, potential savings from reduced need for costly hospital and nursing home care are a critical concern. Thus, both the cost of policies aimed at improving well-being in the older population and their effectiveness in avoiding or delaying institutional care are important considerations.

### Theoretical Basis

The theoretical underpinning for links between the housing and community environment and well-being is based on the conceptual framework of the disablement process from the 1991 IOM report, *Disability in America*, and later elaborations and applications that focus on the importance of the home and surrounding environment in disability and dependence (Nagi 1991). The motivation for the framework is identifying points at which preventive activities can intervene to promote healthy aging and independence. Much of the empirical work in these areas draws on this framework.

In the Nagi framework, disablement occurs in four stages. The first is *pathology*, disease or injury, which may lead to *impairment*, such as damage from a heart attack, or hip fracture after a fall. Impairment in turn may lead to *functional limitation*, or difficulty doing basic building-block activities for independent living, such as walking short distances or climbing a flight of stairs. Functional limitation may then lead to *disability*, the inability to carry out personal, familial, and societal roles and tasks.

At each step, whether an individual progresses to the next step depends on both personal and external factors that may prevent or retard progression, or have the opposite effect. For example, older people



with low incomes living in impoverished areas are at higher risk both for initial health events and for progression to disability. They are more likely to have inadequate or poorly maintained housing; to be subject to physical and psychological stresses (e.g., poorly maintained neighborhood infrastructure, high crime, poor air quality) that may affect health, well-being, activity levels, and social contact; and to have poor access to basic services (e.g., healthful food, medical care, transportation).

An important insight elaborated by Verbrugge and Jette (1994) is that disability is not a personal attribute, but rather reflects a gap between the person and the environment. Such a gap can be reduced or eliminated by increasing the capacity of the person, reducing the demands of the environment, or a combination of both. For example, given sufficient economic and family resources, a person with mobility limitations may obtain mobility aids to increase personal capacity and/or modify the home, or move to more suitable housing to reduce environmental demand. If economic and family resources are inadequate, both public and private-sector policies may be able to intervene (Wardrip 2010).

A second key insight is that failure to address these person-environment gaps can create “feedback” loops leading to additional pathologies, impairments, and functional limitations, increasing the likelihood of losing independence. For example, if unaddressed, initial mobility difficulties can lead to reduced activity, additional loss of fitness, the onset or aggravation of related conditions such as obesity and associated health conditions, social isolation and poor mental health outcomes, and, ultimately avoidable loss of independence.

## Empirical Evidence

In our review of empirical evidence, we focused on literature that addressed the relationship between the favorable housing outcomes and the well-being outcomes shown in Figure 1. Where available, we relied on review articles. Although our review was necessarily not exhaustive, in general we found few studies that were able to address causation, rather than association, and no recent studies that rigorously examined cost-effectiveness of the publicly subsidized housing programs for older renters with low incomes discussed above.

## Improved Affordability

Affordability is a necessary, but not sufficient, first condition for increasing access to the expanded housing attributes that can support improved well-being: safe, accessible housing and, when needed, supportive services. Improved affordability can be achieved by public or private subsidies on the demand side, providing tenants with greater purchasing power, or, on the supply side, supporting development of additional affordable units to reduce the current shortage. Increased support for programs such as Section 202 Supportive Housing, which is one of the few remaining HUD programs constructing new units, and Congregate Housing and the Assisted Living Conversion Program, which increase accessibility and/or the level of services available in existing units, can expand the number of affordable and accessible units with access to supportive services available to accommodate older renters as they age. We found no evidence that affordability itself can improve mental and physical health, daily functioning, and independence. In fact, there can be a trade-off between housing quality and affordability that may work against achieving favorable well-being outcomes. Some evidence suggests that living in deteriorated public housing units is associated with poorer health outcomes among older residents (Price and Popkin 2010). As noted, a large proportion of older renters with low incomes are aging with long-standing health deficits resulting from lifelong disparities (Sudano and Baker 2006; Adler and Newman 2002).

## Increased Accessibility

In a review of previous research, Liu and Lapane (2009) found studies indicating that home modifications to improve accessibility are associated with lower likelihood of nursing home entry (Newman et al. 1990), reduced need for help with bathing (Gitlin, Miller, and Boyd 1999), and less functional decline (Mann et al. 1999). Much of this evidence, however, is based on cross-sectional data that can indicate associations between accessibility and favorable well-being outcomes but not causal relationships (Wahl et al. 2009). Mixed results have been found for the relationship between household hazards and falls, which often are related to injury and functional decline. Hazards examined include housing in poor repair, tripping hazards, and housing lacking safety features such as grab bars in bathrooms. The mixed findings have been attributed to a complex interaction between an older person's physical abilities and his or her exposure to hazards in the home (Lord, Menz, and Sherrington 2006).

## Greater Access to Supportive Services

Numerous studies have found family support effective in helping older Americans remain independent (Charles and Sevak 2005; Lo Sasso and Johnson 2002; Van Houtven and Norton 2004; Waidmann and Thomas 2003). Relatively little is known, however, about the effectiveness of existing public policies to support caregivers in encouraging co-residence, maintaining family support, or contributing to reducing nursing home entry, and other adverse outcomes, such as rates of hospitalization and re-hospitalization, that can have negative effects on both health and functioning (Spillman and Long 2009).

The policy rationale for providing subsidized housing plus services for older renters with low incomes is that doing so will improve well-being and extend independent living outside nursing homes, and much of the evidence on effects of supportive services has come from these settings. The evidence from public housing programs and other models linking housing and services is stronger for improvements in well-being, however, than for improvements in independent functioning or reduced nursing home admissions. Several examples are cited in Golant, Parsons, and Boling (2010):

- Studies of HUD's Congregate Housing Services Housing Program and the HOPE IV Program, both designed to link low-income, publicly assisted older residents to a broad range of supportive services, found that service recipients scored significantly higher in four major mental health dimensions (anxiety, depression, loss of behavioral/emotional control, and psychological well-being), social functioning (quantity and quality of social activities), vitality (energy level and fatigue), and other measures of social well-being, but that the services did not consistently produce gains in physical functioning or reduce nursing home use, hospital admission rates, costs, or mortality rates (Ficke and Berkowitz 2000; Monk and Kaye 1991).
- A study of the Massachusetts Supportive Housing Program, developed in 1999 to create an assisted living-like environment in state-funded, public housing for the elderly (service coordination, case management, 24-hour personal care, on-call response, housekeeping, laundry, medication reminders, social activities, and at least one meal a day), found earlier recognition of tenant needs; greater sense of safety, security, and support among tenants and family members; avoidance of crisis situations; and reduced tenant turnover (Mollica and Morris 2005).
- A HUD-funded study of nutrition and human services interventions that targeted older and younger people with disabilities living in the Seattle Housing Authority's Low Income Public Housing program reported greater social interaction with other residents, fewer residents with chronic conditions, lower eviction rates, improved grocery delivery service, and more frequent preventive health procedures (Siu 2009).

- Service coordination in housing with services settings has been found to promote a greater sense of security and emotional support and stronger social supports through high resident and manager ratings of service coordinators' ability to increase service awareness, better link older people with needed services, and find solutions to their problems (Levine and Johns 2008; Sheehan and Guzzardo 2008).

## Promoting Livable Communities

A large body of research posits that favorable neighborhood characteristics, such as access to public transportation and pedestrian-friendly “livable communities” with nearby amenities, such as parks, churches, and grocery and drug stores, can promote greater well-being. Outcomes that have been examined include physical activity level and functional capacity (Beard et al. 2009; Booth et al. 2000; King et al. 2000, 2005; Wilcox et al. 2003) and the ability to self-manage chronic conditions such as diabetes, cardiovascular disease, arthritis, and asthma (Brown, Ang, and Pebley 2007). Social and physical aspects of poor neighborhoods also may influence individual risk factors for such conditions (e.g., inactivity, poor diet, smoking, and stress), which in turn may influence biological risk factors such as blood pressure, diabetes, weight, cholesterol level, and inflammation (Freedman, Grafova, and Rogowski 2011).

Studies have established a cross-sectional association between poverty, poor neighborhoods, and poor outcomes for independent functioning and mental and physical health. Yet, there is relatively little direct empirical evidence of the causal link between specific characteristics of the neighborhood and functional decline or disability, particularly after controlling for personal characteristics (Freedman et al. 2011; Beard et al. 2009). Some research has indicated an association between functional loss in older people and living in neighborhoods that are not pedestrian friendly or have excessive noise, inadequate lighting at night, heavy traffic, and limited public transportation (Clarke, Ailshire, and Lantz 2009; Balfour and Kaplan 2002). Yet, again, there is a relatively little research demonstrating a causal link between specific aspects of “livable communities” and key outcomes—for example, between access to transportation and walkability and extended independent living.

## Plans for Future Research

Both theory and evidence support a role for appropriate housing, safe and accessible communities, and availability of social, health, and routine services in improving well-being. But substantial gaps remain in what is known about these relationships. Filling these gaps would improve our understanding of how housing can serve as a platform for improvements in independence and well-being in the older population and the most effective ways to target scarce resources. Specific research that could fill some of these gaps—or build a foundation for doing so—is outlined in Table 1 and would address the following questions:

1. What is the scope of the problem? How many older low-income renters in subsidized and unsubsidized housing are at risk of losing independence, and what is the gap between available housing support and public units with appropriate services and the number of people who need them?
2. Which accessibility features are most effective in helping older Americans maintain their health, daily functioning, quality of life, and maximum independence in the face of changing health and functioning?

3. What *services* are available to low-income renters in publicly assisted housing developments? What service models are available? Which of those models is most effective for which types of residents?
4. How do neighborhood characteristics, such as access to transportation and walkability, affect the well-being and independence of older renters? Which characteristics are most important?

The first step toward better understanding how housing can act as a platform for the continued well-being of low-income older renters is to better understand the size and characteristics of the population at risk of losing independence and how their numbers compare with the stock of affordable housing with appropriate services. As far as we could determine, there is no ongoing process for timely assessment of the gap between demand and supply, although waiting lists are known to be ubiquitous and waits lengthy. Besides the aging of baby boomers, the state of the economy and the housing market since 2008 have aggravated unmet need among older low-income renters, as suggested by the HUD report to Congress (2011), but they also may have eroded retirement savings, housing wealth, and even housing stability among older homeowners. The same factors are straining both public funding and private development to address potentially growing needs, increasing the importance of understanding and tracking the scope of the problem and the capacity of public housing and health policy to meet it. A key aspect of this capacity is tracking the progress of joint HUD and HHS efforts to improve access to and better integrate housing and social, health, and supportive services.

An important next step is to examine how the condition and accessibility features of the physical housing units occupied by the older population affect the ability to age-in-place and maintain health and independence. Research is needed to assess which accessibility features are most important in enabling older renters to achieve these goals. Besides the lack of specific accessibility features, age and quality of housing can contribute to “housing-related” disability, making it important to understand both the feasibility and cost-effectiveness of housing rehabilitation and home modification to improve accessibility.

There is a need for a more rigorous and systematic way of characterizing the extent to which services are available in public and publicly subsidized or unsubsidized affordable housing; the range of service models available, including how housing and services are funded; and, most important, which models and components are most effective and cost-effective for which types of residents. According to the proceedings of a recent national summit on affordable housing with services hosted by the American Association of Homes and Services for the Aged, weak evidence for the effectiveness of alternate models and components is attributable in part to the lack of baseline information on the supportive characteristics of these settings and on the health and functioning trajectories of their residents (AAHSA 2010—now LeadingAge). A recommendation of that meeting was the creation of a typology of models like the one we describe in Table 1, which can serve as a platform for designing more careful evaluations. Part of the gap in knowledge about access and effectiveness of service models is a lack of broader information on whether older renters with low incomes are more or less likely to be in housing with services settings, relative to other older renters and homeowners; how the service packages and physical attributes of the home and neighborhood compare; and whether outcomes by type of setting differ for older renters with low incomes versus others.

Finally, beyond the physical housing unit, it is important to examine the characteristics of the larger neighborhood environment in which low-income older renters live. How do the neighborhood characteristics either facilitate or hinder the ability of older renters to age in place and continue to live independently? Both theory and empirical evidence—although mixed—suggest that the physical and service environment near the home may affect declines in functioning and health. More research is

needed to more conclusively determine how important neighborhood characteristics are in enabling older people to remain independent.

Across all these questions, the research should focus on cost-benefit analysis. Given the current economic climate and the fiscal constraints described above, it is all the more important to quantify what health-related savings we can achieve in the long-term by making investments in housing in the short-term. The research should also capitalize on the ability of states to serve as natural laboratories for experimentation and innovation because of the flexibility afforded to states in implementing Medicaid.

## Conclusion

Older renters with low incomes are particularly vulnerable to problems associated with housing and neighborhoods that do not meet changing needs. As a group, older renters are more likely than homeowners to have low income and assets, and within the low-income population, low-income renters are more likely to be poor, making it more difficult to find housing that is both affordable and suitable and will remain so over time. They face increasing competition for a shrinking stock of affordable housing. Low income is also associated with a greater risk of health and functioning problems in old age. Theory and evidence support a role for safe and accessible housing and services as a way to maintain maximum health, functioning, and independence in the older population and potentially delay or avoid nursing home placement, which is least preferred by older people and very costly for public programs. More research is needed, however, to confirm and quantify the costs and benefits of public policies to improve access to affordable and accessible housing and services. The research projects we propose represent steps toward a better understanding of the size and situations of the at-risk population and how housing could serve as a platform for improving their well-being.

**Table 1: Potential Research Projects**

Research questions	Potential research projects
<p>The at-risk population and scope of the access problem</p> <ul style="list-style-type: none"> <li>• How many older renters in subsidized and unsubsidized private rental housing, are at risk of losing independence?</li> <li>• What is the gap between available housing support and public units with appropriate services and the number of people who need them?</li> </ul>	<ul style="list-style-type: none"> <li>• Design and produce a “report card” on housing, economic status, family support, and functional status of the older population in the community using population-based data from sources such as the ACS and the AHS that could be repeated annually or biennially, perhaps augmented by administrative data from HUD or Housing Authorities.</li> <li>• Track the progress of HUD and HHS initiatives seeking to expand access and better integrate health and social services with housing.</li> <li>• Analyze HUD data on assisted housing quality to understand the potential impact of future loss of stock (through expiring contracts, housing quality deterioration, and demolition).</li> </ul>
<p>The role of accessibility and housing quality</p> <ul style="list-style-type: none"> <li>• Which accessibility features are most effective in helping older Americans maintain their health, daily functioning, quality of life, and maximum independence?</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze data from the 2009 AHS, which provides detailed information on housing characteristics and quality, to better understand the extent to which poor quality housing is associated with disabilities.</li> <li>• Analyze data from the Health and Retirement Study (HRS), which provides greater detail on accessibility features and to better understand which accessibility features are most common, who has them, and how their presence relates to changes in functioning.</li> </ul>
<p>Service models available and their effectiveness</p> <ul style="list-style-type: none"> <li>• What service models are available to support low income older renters?</li> <li>• What services are available to low income renters in publically assisted housing developments?</li> <li>• Which of those models is most effective for which types of residents?</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a typology of housing with services models, defined by how services are provided and paid for, the types of services available, key components of the service package, and the residents served.</li> <li>• Conduct a scan of states to determine how many states are making use of their ability to use Housing Choice Vouchers for assisted living facilities, identify major barriers to doing this, and pinpoint innovative state-level practices for overcoming those barriers and making this a successful model providing supportive housing for low-income older renters.</li> <li>• Analysis of the HRS to develop relevant outcome measures and compare two-year outcomes for older people in housing with services settings versus other settings, controlling for key baseline characteristics, including health, functioning, physical characteristics of the home and neighborhood, and family support.</li> </ul>
<p>The role of neighborhood characteristics</p> <ul style="list-style-type: none"> <li>• How do neighborhood characteristics associated with “livable communities,” such as access to transportation and neighborhood walkability, affect the well-being and independence of older renters?</li> </ul>	<ul style="list-style-type: none"> <li>• Use Census tract information linked to the HRS to examine differences in two-year outcomes, controlling for personal characteristics, for older renters living in “livable communities” versus those in less desirable neighborhoods that lack such basic features as safety, transportation, and access to important routine and health services.</li> </ul>

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