



## The Aging Readiness & Competitiveness Report

# UNITED STATES

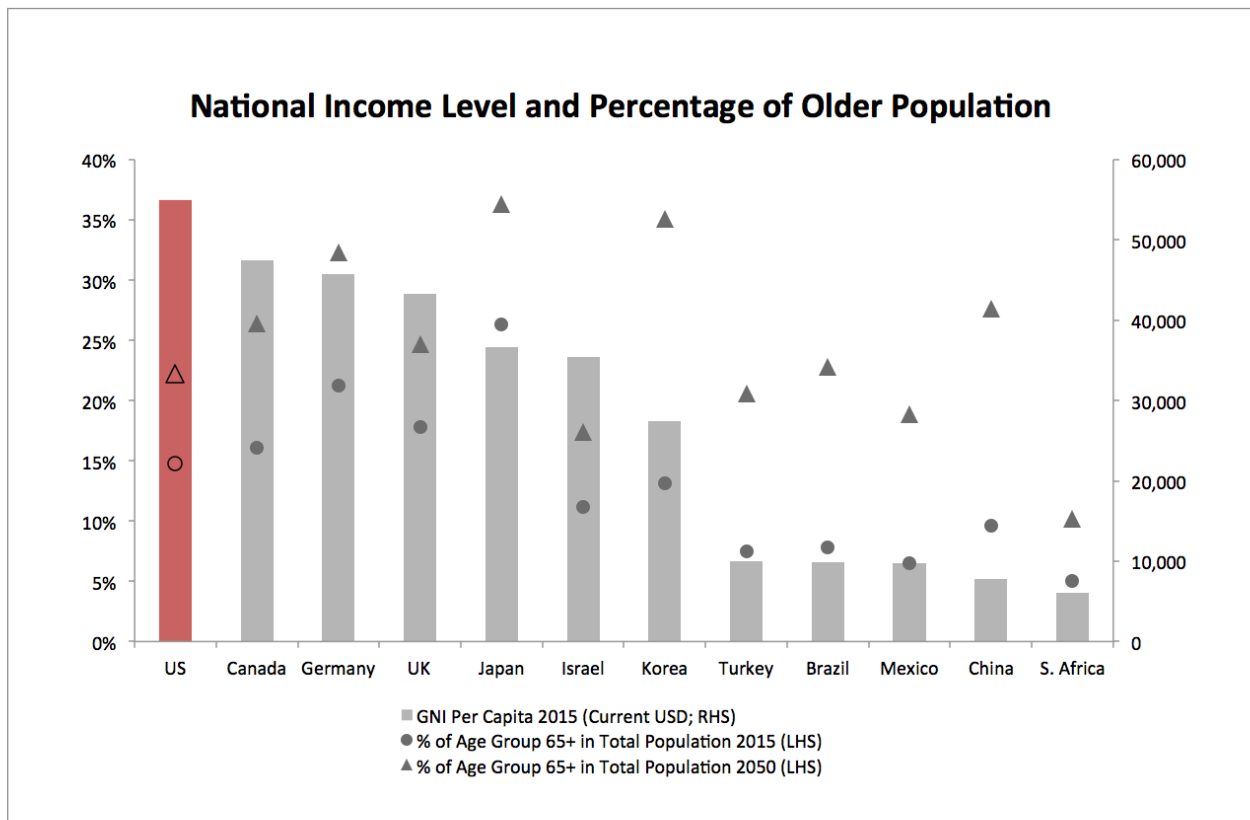
## Overview

Every day in the United States, 10,000 people turn 65, and the number of older adults will more than double over the next several decades to top 88 million people and represent over 20 percent of the population by 2050.<sup>12</sup>

The rapid pace of change creates an opportunity and imperative for both the public and private sector to harness the potential of the growing segment of society and address the welfare of older Americans. A confluence of forces is helping to extend older adults' working lives and their productivity. Americans are living longer, and many older adults want to remain in the labor force, as it provides continued income, social connection, and a measure of self-worth. Further, the need to finance extended retirement

<sup>1</sup> Administration on Aging. [https://aoa.acl.gov/Aging\\_Statistics/future\\_growth/future\\_growth.aspx#age](https://aoa.acl.gov/Aging_Statistics/future_growth/future_growth.aspx#age).

<sup>2</sup> *The Washington Post*. [https://www.washingtonpost.com/news/fact-checker/wp/2014/07/24/do-10000-baby-boomers-retire-every-day/?utm\\_term=.6da459401a8d](https://www.washingtonpost.com/news/fact-checker/wp/2014/07/24/do-10000-baby-boomers-retire-every-day/?utm_term=.6da459401a8d).



(Sources: World Bank, United Nations, OECD)

and growing healthcare costs is creating additional impetus. While the U.S. labor force is expected to grow by just 0.5 percent over the next decade, adults over age 65 represent the most rapidly growing segments: the age groups of 65 through 74 and 75 and older are projected to grow at 4.5 percent and 6.4 percent, respectively.<sup>3</sup> Recognizing this productive potential, and the need to retain skilled workers and to transfer institutional knowledge, companies and other employers are introducing phased-retirement and part-time work opportunities so that older adults can remain in the labor force longer.

The aging population is also generating demand for healthcare services and healthcare workers. Federal Medicare and Medicaid spending are projected to account for an increasing share of the federal budget and will be the subject of

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<sup>3</sup> United States Department of Labor, Bureau of Labor Statistics. <https://www.bls.gov/opub/mlr/2015/article/labor-force-projections-to-2024.htm>.

policy debates. A variety of options will likely be proposed to address this issue, including options to curb unnecessary spending, or those that increase resources to address the needs of the expanding demographic. However, future funding for age-related programs remains tenuous.

Meanwhile, the trend toward aging in place is accelerating along with the demand for home healthcare workers. Programs such as Self-directed Medicaid services, which enable older adults to manage their healthcare spending more directly and help offset caregiving costs, are helping to address some of the need. Among people ages 65 and older, the population 85 and older is growing at a faster rate and will increasingly need services at home or in the community to maintain their independence. These trends are generating public, private, and non-profit partnerships that are working to find innovative ways to fill the gaps.

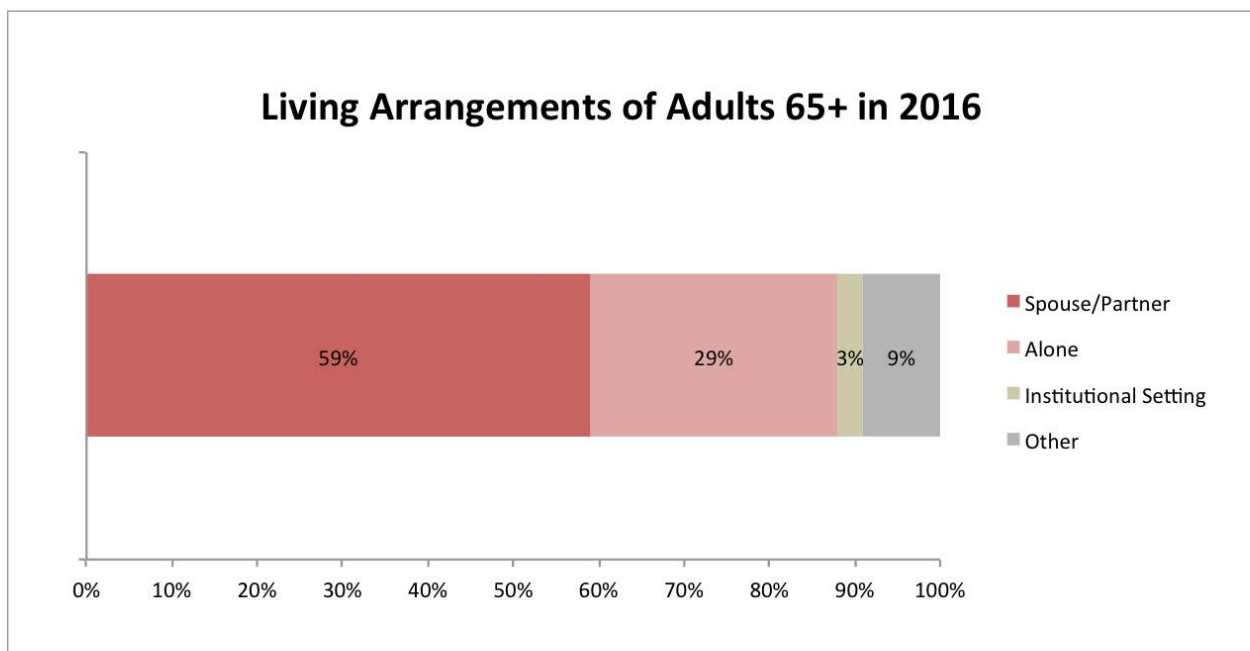
## Community Social Infrastructure

The relatively independent nature of American culture and the tendency for older adults to live alone or with their spouse and away from their children put older adults in the U.S. particularly at risk of social isolation. Limited transportation options and the lack of affordable housing have been identified as leading issues inhibiting connectedness and social interaction. Though new forms of paratransit are expanding as evolving mobility services penetrate the market, the growing number of older adults as a share of the population, coupled with constraints on ADA paratransit, results in notable service gaps. A network of public, private, and community-based service

organizations are working to address older adults' needs exacerbated by these gaps by way of meal delivery and a range of in-home services in an effort to meet the growing and varied needs of a population increasingly aging in place.

### Social Connection

As in other countries, social connection is a key factor contributing to older adults' overall wellness. Historically, multigenerational families have not been common in the U.S., with older adults often living with their spouse or alone, and the majority living away from their children or other family members. In 2016, 59 percent



(Source: U.S. Department of Health and Human Services)

of older Americans age 65 and older who did not live in an institutional care facility lived with their spouse or partner, and 29 percent lived alone, while just 9 percent lived with family or in other arrangements.<sup>4</sup> Among older Americans who have children, approximately 90 percent are in contact with at least one of their children – by either phone or e-mail or in person – at least once per week.<sup>5</sup>

Millions of older Americans suffer from persistent loneliness – 32 percent of people ages 60 through 69, and 25 percent of those age 70 and older reportedly feel lonely.<sup>6</sup> Loneliness is not just a concern among seniors living alone – according to a 2012 study, 43 percent of surveyed older adults felt lonely, yet only 18 percent lived alone.<sup>7</sup> Such loneliness can diminish overall well-being and present risks to physical and mental health, underscoring the importance of establishing strong channels, both physical and digital, for social connection and a sense of community support.

In addition, older adults living alone are less likely than those living with others

to describe their financial situation favorably, which can compound mental and emotional stress. In 2014, about 20 percent of older adults living alone were in poverty, compared to just 6 percent of older adults living with others.<sup>8</sup> According to recent research, over one-quarter of those living alone face an increased risk of mortality,<sup>9</sup> and homebound seniors are twice as likely to develop Alzheimer's disease as are more active and socially engaged individuals.<sup>10</sup> Expanding social and community infrastructure that facilitates greater social connection has the potential to mitigate a range of cross-cutting issues limiting older adults' well-being and continued engagement in society.

There is limited direct government intervention on this issue, and as a result, advocacy organizations and NGOs are taking the lead to combat it. Recognizing the myriad risks associated with loneliness and social isolation, organizations such as the National Association of Area Agencies on Aging (n4a), which has 622 area agencies that provide a range of services such as meals, rides, home visits and care services, seek to mitigate the adverse impacts of isolation.<sup>11</sup> One long-

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<sup>4</sup> U.S. Department of Health and Human Services Administration on Aging (2016). [http://www.giaging.org/documents/A\\_Profile\\_of\\_Older\\_Americans\\_\\_2016.pdf](http://www.giaging.org/documents/A_Profile_of_Older_Americans__2016.pdf).

<sup>5</sup> Pew (2009). Growing Old in America: Expectations vs. Reality. Retrieved from <http://www.pewsocialtrends.org/2009/06/29/growing-old-in-america-expectations-vs-reality/>.

<sup>6</sup> AARP (2010). All the Lonely People. Retrieved from [http://www.aarp.org/personal-growth/transitions/info-09-2010/all\\_the\\_lonely\\_people.html](http://www.aarp.org/personal-growth/transitions/info-09-2010/all_the_lonely_people.html).

<sup>7</sup> University of California San Francisco (2012). <http://www.ucsf.edu/news/2012/06/12184/loneliness-linked-serious-health-problems-and-death-among-elderly>.

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<sup>8</sup> Pew (2016). <http://www.pewsocialtrends.org/2016/02/18/3-well-being-of-older-adults-living-alone/>.

<sup>9</sup> Perspectives on Psychological Science (2015). <http://journals.sagepub.com/doi/full/10.1177/1745691614568352>.

<sup>10</sup> McNight's (2011). <http://www.mcknights.com/news/housebound-seniors-are-more-likely-to-develop-alzheimers-research-finds/article/201593/>.

<sup>11</sup> National Association of Area Agencies on Aging (n4a) (2016). <https://www.n4a.org/Files/H4H%20Campaign%20Press%20Release.pdf>.

lasting and effective program is Meals on Wheels America, which runs through a network of 5,000 independently run local programs delivering daily meals to isolated and vulnerable older adults. Not only is this service fulfilling a nutritional need, but recipients reported feeling safer and less lonely having more human contact, and studies have shown that they have shown improvements in mental health, including lower incidence of depression and anxiety.<sup>12</sup>

While many programs target the low-income and most vulnerable populations, middle- and upper-income seniors are also at risk of isolation and loneliness. Local community centers can play a vital role for all seniors in combating social isolation by providing a meeting place for older adults, as well as classes and other educational programs that help keep people socially, mentally, and physically engaged. The District of Columbia's Office on Aging's Senior Wellness Centers, for example, provide city-wide health education and applied learning centers with a range of programs, from nutrition classes to creative arts to classes on wellness and disease prevention.<sup>13</sup> City and local organizations are making strides, but advocacy organizations and service providers such as n4a, the Center on Aging, and the National Council on Aging are helping to elevate the issue of isolation and loneliness before the U.S. Congress, underscoring the need

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<sup>12</sup> *USA Today* (2016). <https://www.usatoday.com/story/lightpost/eldercare/2016/11/14/study-meals-wheels-delivers-cooked-food-companionship-and-safety-checks/93790366/>.

<sup>13</sup> DC Office on Aging (Accessed 2017). <https://dcoa.dc.gov/service/senior-wellness-centers>.

for continued funding to support these critical programs.<sup>14</sup>

## Physical Infrastructure

Physical infrastructure in the U.S. is generally supportive of older adults, but existing gaps, particularly in public transportation and age-friendly housing, continue to limit social engagement and general mobility. According to the 2015 United States of Aging Survey, nearly 8 in 10 older adults (78 percent) were generally satisfied with their community's infrastructure, and a majority (92 percent) stated that it is easy for them to get where they need to go. However, notable shortfalls were identified, as only 22 percent of older Americans surveyed found public transportation "acceptable," and 28 percent rated it as "poor,"<sup>15</sup> making transportation a key focal area for targeted improvements. Further, the housing stock in the U.S. is, by and large, not age-friendly, and high-cost upgrades are often out of reach for older adults who are living on limited or fixed incomes.

## Transportation

Despite ongoing efforts, there are enduring issues of limited public transportation accessibility and infrastructure. For older

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<sup>14</sup> The United States Senate Committee on Aging (2017). <https://www.aging.senate.gov/press-releases/senate-aging-committee-examines-the-mental-and-physical-effects-of-social-isolation-and-loneliness>.

<sup>15</sup> National Association of Area Agencies on Aging (n4a), the National Council on Aging (NCOA), and United Healthcare. (2015) The 2015 United States of Aging Survey National Findings. <https://www.ncoa.org/wp-content/uploads/USA15-National-Fact-Sheet-Final.pdf>.

adults who can no longer drive and who live in suburban or rural communities without adequate public transit, a lack of transportation options can have a profound effect on overall quality of life. Sixty percent of people age 50 and older reported in a 2010 survey that they did not have public transportation within a ten-minute walk from their homes.<sup>16</sup> Challenges accessing transportation are ranked as the number-one reason why people contacted the Eldercare Locator, a public service of the U.S. Administration on Aging that connects older adults and their families and caregivers with transportation in their communities.<sup>17</sup>

Transportation accessibility for the disabled has been facilitated by the Americans with Disability Act (ADA), but those services are limited and do not reach the needs of the broader population of older adults. The ADA, which was signed into law in 1990, prohibits transportation agencies from discriminating against individuals with disabilities and requires disability access in new vehicles. The law has had a marked impact on those with disabilities. Before its passage, only 36 percent of fixed-route buses were accessible to wheelchair users. By 2011, over 98 percent were wheelchair-accessible.<sup>18</sup>

<sup>16</sup> AARP (2011) Ensuring Transportation for Those Who Don't Drive. <http://www.aarp.org/home-garden/transportation/info-06-2011/aarp-transportation-for-those-who-dont-drive.html>.

<sup>17</sup> Eldercare Locator. <http://www.eldercare.gov/Eldercare.NET/Public/About/Index.aspx>.

<sup>18</sup> The U.S. Senate Committee on Health, Education, Labor and Pensions (2011). <https://www.help.senate.gov/imo/media/doc/Capozzi1.pdf>.

In addition, the ADA required public transportation agencies to provide paratransit services in cities, door-to-door services for qualified adults who are not able to ride public transportation. Though the ADA has helped to expand transportation services for the disabled, simply being older and/or having limited mobility are not qualifying criteria,<sup>19</sup> rendering many older adults ineligible for services and leaving major gaps in transportation options for this demographic.

Rising costs of paratransit also represent a threat to access. Nationwide paratransit costs stood at USD 5.2 billion in 2013, which was 12.2 percent of the total costs for transit services, and cost is projected to grow as the population ages.<sup>20</sup> According to the Government Accountability Office (GAO), the cost of paratransit trips in 2012 was 3.5 times higher than that of fixed-route trips, and increased utilization, enrollment, higher vehicle costs,<sup>21</sup> and urban congestion are driving costs higher.<sup>22</sup> Local governments can discontinue the service due to budgetary reasons, subjecting the routes to potential abrupt disruption and uneven service.<sup>23</sup>

<sup>19</sup> AARP, May 2017.

<sup>20</sup> New York University. Intelligent Paratransit. [http://wagner.nyu.edu/rudincenter/wp-content/uploads/2016/09/INTELLIGENT\\_PARATRANSIT.pdf](http://wagner.nyu.edu/rudincenter/wp-content/uploads/2016/09/INTELLIGENT_PARATRANSIT.pdf).

<sup>21</sup> New York University Rudin Center for Transportation Policy & Management. N.D. [http://wagner.nyu.edu/files/faculty/publications/INTELLIGENT\\_PARATRANSIT.pdf](http://wagner.nyu.edu/files/faculty/publications/INTELLIGENT_PARATRANSIT.pdf).

<sup>22</sup> Citizens Budget Commission (2016). <https://cbcny.org/research/access-ride>.

<sup>23</sup> FindLaw (Accessed 2017). <http://civilrights.findlaw.com/discrimination/transportation-and-the-americans-with-disabilities-act-ada.html>.

Medicaid can fill some of the unmet transit and paratransit needs by covering non-emergency medical transportation, such as trips to the doctor for scheduled appointments, but Medicaid funds are also vulnerable to cuts, which could threaten this service channel as well.

Federal agencies are also beginning to engage directly with communities to improve transportation access. In 2015, the Federal Transit Administration (FTA), in partnership with Easter Seals and the n4a, launched the National Aging and Disability Transportation Center to provide technical assistance to help communities create accessible transportation for older adults.<sup>24</sup> It connects transportation leaders, the aging, and disability networks to ensure that the perspectives of people with disabilities and older adults are incorporated into every aspect of transportation planning. Over 130 organizations across 37 states and two tribal nations competed for grant funding from the NATDC to test and develop their programs. The NATDC ultimately awarded USD 300,000 to six communities in five states – Massachusetts, Michigan, Mississippi, Ohio, and Virginia – and the recipients are moving forward with USD 50,000 each to expand mobility options for vulnerable populations in their areas.<sup>25</sup> Private-sector ride-hailing companies have recognized the market opportunity and have partnered with service providers to allow older customers to book rides through a phone operator (bypassing

smart phone apps entirely). Leading transportation companies such as Uber, a San Francisco-based company, launched UberASSIST, a ride option that is designed to provide additional assistance to seniors and people with disabilities. Users do not need an Uber account but can merely call to request a ride from a driver with a vehicle designed to accommodate their special needs.<sup>26</sup> The service is being launched first on Android technology in major cities across 46 states, with plans for further expansion.<sup>27</sup> In addition, Uber provides tutorials and educational training on how to use the service for community residents.<sup>28</sup> Uber's main competitor, Lyft, offers similar programs. As praised by Gretchen Alkema of the SCAN Foundation, "[Such services] demonstrate how the private sector can help older adults and people with disabilities get around their communities – extending beyond curb-to-curb service to door-to-door."<sup>29</sup> However, the services are still unable to reach many older adults as they do not offer specialized or handicapped-accessible vehicles on demand.

### **Affordable Housing**

Affordable and age-friendly housing are areas of major concern for aging Americans and are policy areas in need of greater support. Housing is the single largest expenditure for households age 55 and older, accounting for 32.9

<sup>24</sup> National Aging and Disability Transportation Center (2017). <http://www.nadtc.org/grants-funding/nadtc-grant-opportunities/nadtc-awarded-grants/>.

<sup>25</sup> Ibid.

<sup>26</sup> Uber. <http://ubermovement.com/uberassist/>.

<sup>27</sup> Uber. <http://newsroom.uber.com/transitapp/>.

<sup>28</sup> Uber. <https://newsroom.uber.com/us-florida/freedom-in-motion/>.

<sup>29</sup> Interview with Gretchen Alkema, Vice President of Policy and Communications, the SCAN Foundation. February 2017.



percent of their annual expenditures.<sup>30</sup> Thirty percent of renters ages 65 and older and 23 percent of those who own residential property with mortgages are spending more than half of their income on housing.<sup>31</sup> Federal programs have provided moderate incentives to expand supply, but there remain shortages of affordable, age-friendly housing stock.

Through Section 202 of the Supportive Housing for the Elderly program, the U.S. Department of Housing and Urban Development (HUD) provides capital and operational grants to developers for the construction of multifamily housing units for low-income older adults ages 62 and older. For over 60 years, the department has provided interest-free grants to finance these projects, which do not have to be repaid as long as the project remains affordable for at least 40 years. The funding covers the construction of new units or the acquisition and/or rehabilitation of existing units. Low-income, older residents rate these units as good-quality properties<sup>32</sup> that largely have supportive facilities; the majority of facilities (73.9 percent) have grab rails, and 91.1 percent have ramps or level entrances for convenient

access of seniors.<sup>33</sup> Almost all of the newer projects (built since 1990) have at least one accessible unit, and 43 percent of all units are wheelchair-accessible. The majority of projects also have the capacity to provide an array of communal services for their residents and include community spaces for social and recreational facilities, including congregate dining.<sup>34</sup>

Though this program has expanded supply, there remains a shortage of these facilities. The waiting lists in most states are long; the relatively high demand for this housing means that applicants often wait over two years for a unit. In New York City alone, the waiting list includes over 200,000 seniors.<sup>35</sup> The problem is only becoming worse as funding for the capital construction grants was eliminated in 2012, and only grants for the renewal of support for existing units continue. This lack of construction investment for new units slows efforts to meet the needs of the growing population of low-income, older adults who need affordable and adequate housing.<sup>36</sup>

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<sup>30</sup> U.S. Bureau of Labor Statistics (2016). A Closer Look at Spending Patterns of Older Americans. Retrieved from <http://www.bls.gov/opub/btn/volume-5/pdf/spending-patterns-of-older-americans.pdf>.

<sup>31</sup> Joint Center for Housing Studies of Harvard University (2014). Housing America's Older Adults. [http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-housing\\_americas\\_older\\_adults\\_2014.pdf](http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-housing_americas_older_adults_2014.pdf).

<sup>32</sup> Housing for the Elderly (Section 202): 2013 Summary Statement and Initiatives, available at <http://portal.hud.gov/hudportal/documents/huddoc?id=housing-elderly-2013.pdf>.

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<sup>33</sup> House of Representatives Staff Analysis (2014). <https://www.flsenate.gov/Session/Bill/2014/925/Analyses/h0925a.LFAC.PDF>.

<sup>34</sup> U.S. Department of Housing and Urban Development Office of Policy Development and Research (2008) [https://www.huduser.gov/portal/publications/sec\\_202\\_1.pdf](https://www.huduser.gov/portal/publications/sec_202_1.pdf).

<sup>35</sup> New York Housing Conference (2017). <http://thenyh.org/2017/03/01/budget-cuts-proposed-president-trump-exacerbate-new-yorks-affordable-housing-homeless-crisis/>.

<sup>36</sup> AARP Policy Book 2016. Accessed via: <http://policybook.aarp.org/the-policy-book/chapter-9/subsub028-1.3091814>.

## Community Support for Aging in Place

Federal and state government support is channeled largely through community organizations, which play a vital role in helping older adults to live independently and age in place. The Older Americans Act (OAA), enacted in 1965, was a foundational piece of legislation that established the Administration on Aging (AoA) and, through the Department of Health and Human Services (HHS), has helped to provide essential services to vulnerable seniors for decades. The OAA funds critical services that keep older adults healthy and independent, including meals, job training, senior centers, caregiver support, transportation, health promotion, and benefits enrollment. The impact of OAA services is widespread as funding is distributed to 56 state agencies, more than 200 tribal organizations, more than 600 area agencies on aging, and more than 20,000 local service providers.<sup>37</sup> While the services are available to older adults generally, OAA targets individuals with the greatest social economic need, such as those who have a low income or are living in rural, isolated areas. Approximately three million seniors received OAA-funded services in 2014.

However, while services are widespread, and demand for those services is increasing, funds have not kept pace with the needs of the growing aging

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<sup>37</sup> National Committee to Preserve Social Security & Medicare (2016). <http://www.ncpssm.org/PublicPolicy/OlderAmericans/Documents/ArticleID/1171/Older-Americans-Act>.

population. The federal funds allocation rose minimally from USD 1.80 billion in FY 2004 to USD 1.88 billion in FY 2014, while the population of people ages 65 and older grew by nearly 30 percent over the same period.<sup>38 39</sup> Though President Obama signed bipartisan legislation reauthorizing the OAA for three years and proposed a funding increase in his proposed FY17 budget,<sup>40</sup> future funding remains uncertain.

In light of tenuous funding, community-based organizations are seeking supplemental financial resources for their survival. In order to help expand organizations' business and development capacity, in 2013, HHS, under its Administration for Community Living (ACL), launched the Business Acumen Learning Collaborative. Under this initiative, ACL provides technical assistance to networks of community-based organizations to assist them in marketing, contracting, and pricing the services they provide to older adults and individuals with disabilities. In the few years since its inception, the ACL has expanded its reach, providing technical assistance to pilot learning collaboratives in nine networks in 2013 and 2014, and

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<sup>38</sup> AARP Public Policy Institute (2014). [http://www.aarp.org/content/dam/aarp/research/public\\_policy\\_institute/health/2014/the-older-americans-act-AARP-ppi-health.pdf](http://www.aarp.org/content/dam/aarp/research/public_policy_institute/health/2014/the-older-americans-act-AARP-ppi-health.pdf).

<sup>39</sup> United States Department of Labor Bureau of Labor Statistics (2015). <https://www.bls.gov/opub/mlr/2015/article/labor-force-projections-to-2024.htm>.

<sup>40</sup> National Committee to Preserve Social Security & Medicare (2016). <http://www.ncpssm.org/PublicPolicy/OlderAmericans/Documents/ArticleID/1171/Older-Americans-Act>.

eleven more networks in 2015. In 2016, two grants totaling USD 3.75 million over three years were awarded to the National Association of States United for Aging and Disabilities (NASUAD) and the National Association of Area Agencies on Aging (n4a) to build business capacity in the aging and disability services networks.<sup>41</sup> Each of the grant recipients partners with a range of affiliated organizations, including those that specialize in advocacy, meal delivery, home care, and other service providers to help boost the capacity of the network. The ACL's successful model of building business acumen through its Center for Integrated Programs, Office of Integrated Care Innovations has been replicated by other entities, including those that provide integrated health care services.<sup>42</sup>

In another bid to allow aging in place, in 2015, the U.S. Department of Agriculture (USDA) proposed to improve access to groceries for homebound seniors who participate in the Supplemental Nutrition Assistance Program (SNAP),<sup>43</sup> a government program that provides financial assistance for food purchases to low- and no-income people living in the U.S., by offering home-delivery service for those who are unable to shop. One in five SNAP recipients is elderly or disabled.

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<sup>41</sup> Administration for Community Living (2016). [https://acl.gov/NewsRoom/NewsInfo/2016/2016\\_10\\_07.aspx](https://acl.gov/NewsRoom/NewsInfo/2016/2016_10_07.aspx).

<sup>42</sup> National Council on Aging (2016). [https://www.ncoa.org/wp-content/uploads/LC-2016-FINAL-REPORT\\_edited-0317.pdf](https://www.ncoa.org/wp-content/uploads/LC-2016-FINAL-REPORT_edited-0317.pdf).

<sup>43</sup> SNAP, a federal nutrition assistance program for low-income people.

The program is moving forward, and the USDA now permits grocery purchasing and home-delivery services run by government and non-profit organizations to accept SNAP benefits as payment.<sup>44</sup> This is particularly important for older adults who have limited access to public transportation or otherwise limited mobility. According to Tom Vilsack, former U.S. Secretary of Agriculture, home delivery of groceries is an important first step toward meeting the needs of vulnerable older adults, particularly those living in rural areas, given that America's rural population is older than the average age in the nation overall, and rural seniors experience a higher incidence of poverty than seniors nationwide.<sup>45</sup> In January of 2017, the USDA selected private-sector retail firms, online retailers, and smaller regional stores to test which types of firms are best positioned to facilitate online SNAP purchasing in differing settings.<sup>46</sup> The USDA is conducting pilot programs across seven states in urban and rural areas, the results of which will inform future programs.

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<sup>44</sup> U.S. Department of Agriculture (2015). <http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=2015/07/0201.xml>.

<sup>45</sup> U.S. Department of Agriculture (2017). <https://www.usda.gov/media/press-releases/2017/01/05/usda-announces-retailer-volunteers-snap-online-purchasing-pilot>.

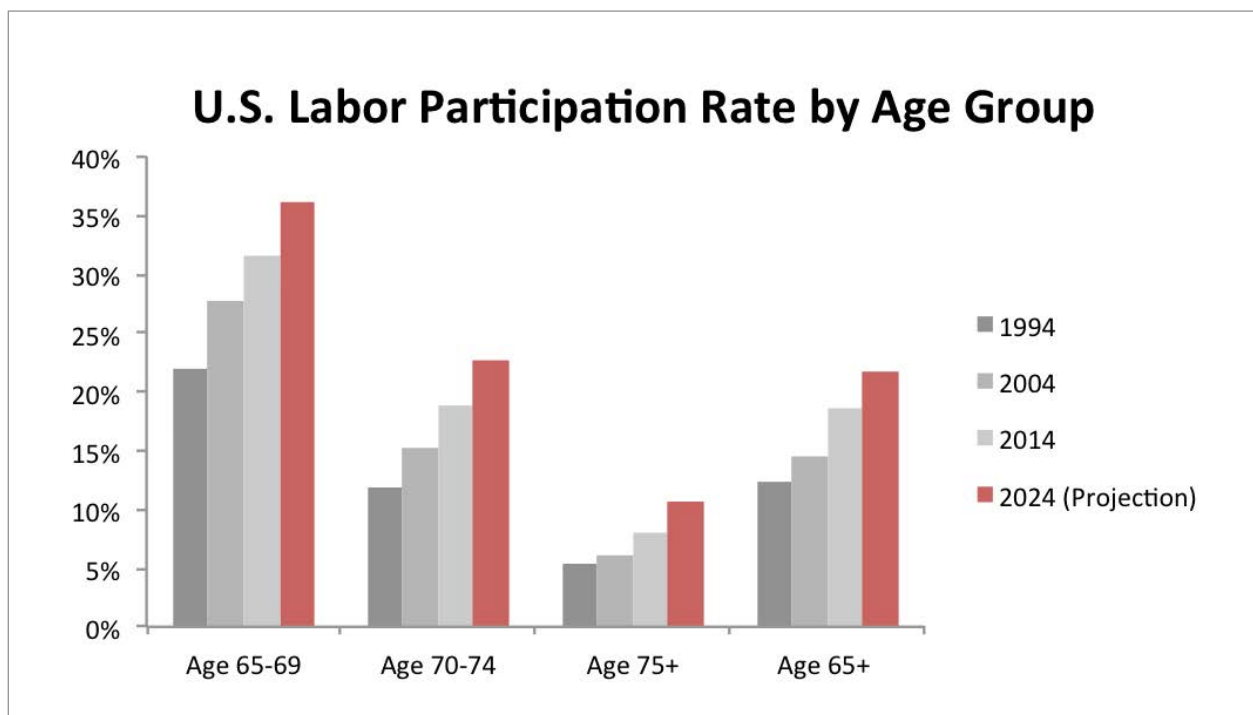
<sup>46</sup> U.S. Department of Agriculture (2017). <https://www.fns.usda.gov/pressrelease/2017/fns-000117>.

## Productive Opportunity

Aging baby boomers represent a major potential loss to the economy if they drop out of the labor force prematurely. A looming wave of retiring baby boomers and an impending skills gap have policymakers and management across economic sectors looking at ways to phase retirement, extend productive potential, and pass on institutional knowledge to the next generation. Further, as Americans are living longer lives and need greater economic security, a growing number are seeking to stay working or return to work. However, age discrimination and a lack of familiarity with new technology, among other issues, remain barriers.

### Labor force Participation of Older Americans

Older Americans tend to be more active in the labor market than counterparts in most OECD countries: the labor force participation rate of people ages 65 and older in the U.S. was 18.9 percent as of 2015, more than one-third higher than the OECD average. In fact, older Americans' participation rate has increased dramatically over the past several decades, up by more than 50 percent over the period of 2000 through 2017, with labor force participation for older women growing over 70 percent during



(Source: U.S. Bureau of Labor Statistics)

that period.<sup>47</sup> The labor force participation rate for both men and women is expected to grow further to reach 21.7 percent by 2024.<sup>48</sup>

The increase in the labor force participation rate resulted from the convergence of acute economic shock and persistent trends. Two major economic recessions and market selloffs adversely impacted retirement savings, and this has been exacerbated by longer-term factors. Over the last few decades, American employers have been shifting away from defined benefit plans, which guarantee retirees a specific cash benefit, toward defined contribution plans such as 401(k)s, where employees are responsible for contributing to and managing their own retirement accounts.<sup>49</sup>

Americans are living longer, and an increasing share of older adults are seeking to extend their working life for additional income, social engagement, and purpose. People are also staying in the labor force longer as the responsibility for contributing and managing retirement account investments, as well as the risk of poor investment returns, shift

from employers to employees.<sup>50</sup> The Government Accountability Office (GAO) reported in 2015 that over half of households ages 55 through 64 had little or no retirement savings.<sup>51</sup> The National Institute on Retirement Security's survey in 2015 also found that more than half of respondents would seek employment after retirement for the purpose of financial security.<sup>52</sup> Indeed, those who are financially less prepared for retirement have tended to work longer. Among those who are physically able to continue working, Americans who find themselves struggling financially expect to delay their retirement to age 73 on average, compared with the average age of 66 among those who believe they are financially prepared.<sup>53</sup>

As of 2016, nearly one in five Americans ages 65 and older was active in the labor market.<sup>54</sup> According to Jim Emerman, Executive Vice President at Encore, a non-governmental organization focused on older

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<sup>47</sup> Advisor Perspectives (2017). <https://www.advisorperspectives.com/dshort/updates/long-term-trends-in-employment-by-age-group>.

<sup>48</sup> OECD Statistics; U.S. Department of Labor (2015). [http://www.bls.gov/emp/ep\\_table\\_303.htm](http://www.bls.gov/emp/ep_table_303.htm).

<sup>49</sup> Bipartisan Policy Center (2014). <https://bipartisanpolicy.org/blog/shift-defined-contribution-retirement-plans/>.

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<sup>50</sup> Interview with Robert Bednarzik, Visiting Professor at Georgetown Public Policy Institute. October 2016. Interview with Richard Johnson, Director of Program on Retirement Policy of Urban Institute. February 2017. Interview with Jim Emerman, Executive Vice President of Encore. February 2017.

<sup>51</sup> U.S. Government Accountability Office (2015). Retirement Security – Most Households Approaching Retirement Have Low Savings. Retrieved from <http://www.gao.gov/assets/680/670153.pdf>.

<sup>52</sup> National Institute on Retirement Security (2015), Retirement Security 2015: Roadmap for Policy Makers Americans' View of the Retirement Crisis. Retrieved from [http://www.nirsonline.org/storage/nirs/documents/2015%20Opinion%20Research/final\\_opinion\\_research\\_2015.pdf](http://www.nirsonline.org/storage/nirs/documents/2015%20Opinion%20Research/final_opinion_research_2015.pdf).

<sup>53</sup> Gallup. (2013). <http://www.gallup.com/poll/166952/baby-boomers-reluctant-retire.aspx>.

<sup>54</sup> <http://www.pewresearch.org/fact-tank/2016/06/20/more-older-americans-are-working-and-working-more-than-they-used-to/>.

*“Minor tweaks could make the social security system more flexible and create incentives for seniors to work longer. For example, if people want to stop working for a little while to obtain training, they shouldn’t lose credits.”*

– Jim Emerman, Executive Vice President, Encore

adults’ skill development and productivity, “Minor tweaks to the social security system could make it more flexible and create incentives for seniors to work longer.” He points out, for example, “If people want to stop working for a little while to obtain training, they shouldn’t lose credits.”<sup>55</sup> At present, one who reaches the eligible age for full retirement benefits, which is currently 66 years old and will gradually rise to 67 by 2027, receives an additional 8 percent benefit for each year he or she delays collecting benefits until age 70.<sup>56</sup> This financial bonus could partially explain the greater increase in labor force participation within the 65 through 69 age group when compared with other older age groups over the past two decades.<sup>57</sup> However, many are not aware of the delayed-benefit bonus, and a proportion of those working after age 65 are also receiving Social Security benefits. Adjustments in the program could increase that rate even further while continuing to support seniors.

<sup>55</sup> Interview with Jim Emerman, Executive Vice President of Encore. February 2017.

<sup>56</sup> National Academy of Social Insurance (2015). <https://www.nasi.org/learn/socialsecurity/retirement-age>.

<sup>57</sup> Interview with Richard Johnson, Director of Program on Retirement Policy of Urban Institute. February 2017.

## Barriers to Labor force Participation

Although the U.S. labor market has gradually recovered from the Great Recession, older adults are still encountering barriers to remaining in or rejoining the labor force. According to the Schwartz Center for Economic Policy Analysis at the New School, more than one in ten older workers ages 55 and older is unemployed or underemployed, when accounting for people who work part-time while preferring full-time work, as well as those who have given up looking more than a year.<sup>58</sup>

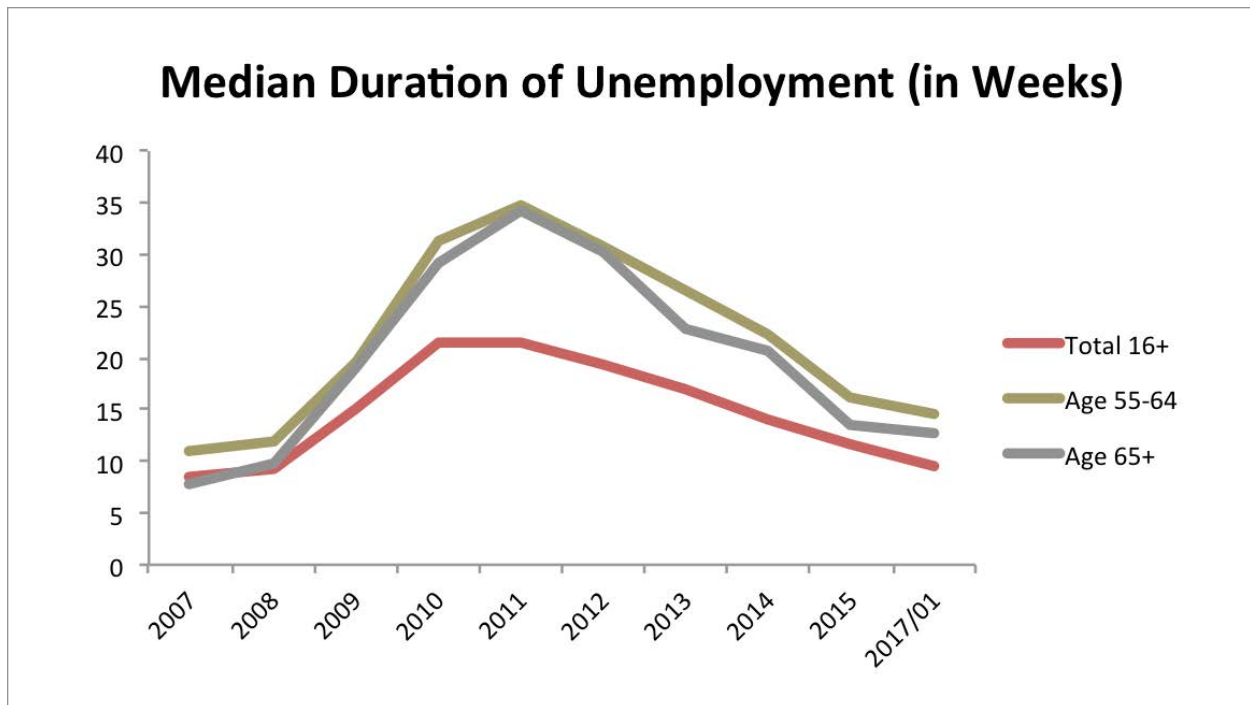
Older people suffered more from long-term unemployment than younger people during the latest recession and have also recovered more slowly. According to the Bureau of Labor Statistics, the median duration of unemployment for people ages 55 and older peaked at 34 to 35 weeks in 2011, more than 50 percent longer than that of overall jobseekers at the same time. As of March of 2017, 33 percent of older jobseekers ages 55 and older were out of work for 27 weeks or longer, 46 percent higher than the percentage for people ages 16 through 54.<sup>59</sup> The longer older people remain unemployed, the greater the risk of losing relevant skills or of dropping out of the labor force altogether.<sup>60</sup>

<sup>58</sup> The New School Schwartz Center for Economic Policy Analysis (2016). <http://www.economicpolicyresearch.org/index.php/wealth-insecurity-news/1673-september-2016-unemployment-report-for-workers-over-55>.

<sup>59</sup> United States Department of Labor Bureau of Labor Statistics (2017). <https://www.bls.gov/web/empsit/cpseea36.htm>.

<sup>60</sup> U.S. Government Accountability Office (2012). <http://www.gao.gov/assets/600/590408.pdf>





(Source: Current Population Survey by Bureau of Labor Statistics)<sup>61</sup>

<sup>61</sup> <https://www.bls.gov/cps/tables.htm>.

Age discrimination has also been a major barrier for older jobseekers. In a 2014 survey, 57 percent of respondents who were 45 through 70 years old and had been unemployed at some time over the past five years believed that employers thought they were too old or that age was either somewhat of a barrier or a major barrier to employment.<sup>62</sup> Although U.S. laws prohibit age discrimination when considering an application for employment (the law sets the age threshold at 40 and older), in reality age discrimination is hard to eliminate due to the difficulty in proving it.<sup>63</sup>

<sup>62</sup> AARP (2015). The Long Road Back: Struggling to Find Work After Unemployment. [http://www.aarp.org/content/dam/aarp/ppi/2015-03/The-Long-Road-Back\\_INSIGHT.pdf](http://www.aarp.org/content/dam/aarp/ppi/2015-03/The-Long-Road-Back_INSIGHT.pdf).

<sup>63</sup> Reuters (2016). <http://www.reuters.com/article/us-column-miller-unemployment-idUSKCN11E297>.

Employers also report concerns regarding the costs associated with hiring and training older workers, according to a study by the GAO.<sup>64</sup> Some employers are hesitant to hire older workers because work history and experience enable them to command higher salaries. Costlier healthcare expenditure for older workers as compared with younger workers represents another prevalent concern for employers. For people ages 65 and older who are employed, health benefits through employers remain their primary reimbursement sources even though they are eligible for Medicare (i.e., the national social health insurance). Richard Johnson, who directs the Program on Retirement Policy at the

<sup>64</sup> U.S. Government Accountability Office. (2012) <http://www.gao.gov/assets/600/590408.pdf>.

*“One potential way to mitigate this issue is to make Medicare the primary payer for older workers’ healthcare costs regardless of their employment status.”*

– Richard Johnson, Director, Program on Retirement Policy at the Urban Institute

Urban Institute, suggests, “One potential way to mitigate this issue is to make Medicare the primary payer for older workers’ healthcare costs regardless of their employment status.” Still, other issues, such as the increasing utilization of technology in the workplace, have made some employers reluctant to hire older workers if they believe the individuals will not be working long enough to recoup the value of the employer’s investment.<sup>65</sup>

### **Assisting Job Placement**

The U.S. federal government has established a nationwide labor force-development system that provides financial aid and various support services to improve employability of those currently working and the unemployed, and to assist their job search. However, the Senior Community Employment Program (SCSEP), established in 1965, is the only one that provides training and employment services specifically for older Americans.<sup>66</sup>

<sup>65</sup> Interview with Richard Johnson, Director, Program on Retirement Policy, Urban Institute, February 2017.

<sup>66</sup> U.S. Department of Labor. Evaluation of the Senior Community Service Employment Program (SCSEP) (2013). [https://wdr.doleta.gov/research/FullText\\_Documents/ETAOP\\_2013\\_03.pdf](https://wdr.doleta.gov/research/FullText_Documents/ETAOP_2013_03.pdf).

The program is operated by the U.S. Department of Labor’s Employment and Training Administration in collaboration with state agencies and 19 national NGOs. It provides subsidized minimum-wage, part-time community service- and work-based job training for low-income, unemployed people ages 55 and older. By helping participants gain work experience in community service activities at non-profit and public facilities, including schools, hospitals, day-care centers, and senior centers, SCSEP aims to prepare them for unsubsidized employment opportunities.

SCSEP has been effective, but on a limited scale.<sup>67</sup> In Program Year (PY) 2015, just over 40,000 older adults – out of millions seeking work – participated in SCSEP nationwide, and 41 percent of those who exited the program during the year were placed into unsubsidized employment.<sup>68</sup> According to Jim Seith, a director at the National Council on Aging, given the participants’ demographic – some of whom were long-term unemployed prior to participating the program – this transition rate is encouraging.<sup>69</sup> However, there is room for further improvement. According to the PY 2015 participant survey, the average rating by respondents on the question of “How helpful has the SCSEP been in preparing you for success

<sup>67</sup> Interview with Jim Emerman, Executive Vice President of Encore. February 2017.

<sup>68</sup> U.S. Department of Labor Employment and Training Administration (2015). [https://www.doleta.gov/Seniors/html\\_docs/Docs/Nationwide\\_QPR\\_Final\\_PY\\_2015.pdf](https://www.doleta.gov/Seniors/html_docs/Docs/Nationwide_QPR_Final_PY_2015.pdf).

<sup>69</sup> The Atlantic (2017). <https://www.theatlantic.com/business/archive/2017/03/trump-budget-dol/519933/>.



in the workforce?” was 7.9 out of 10. The survey also found that participants’ interests and needs were not fully understood or met by local programs, suggesting the necessity of engaging participants in determining what skills need to be developed for them to succeed in the labor force. Computer training is one area that requires particular improvement as local programs failed to meet the needs of 45 percent of participants.<sup>70</sup> While experts consider SCSEP to play an important role in older-adult employment, the program has been constrained by insufficient government funding and faces an uncertain future.<sup>71</sup>

### **Tapping Productive Potential of Older Workers**

While job-placement programs for older adults are often focused on those with low incomes or the unemployed, other programs are working to harness productive opportunity resident in older adults and to address the growing skills gap that is already affecting major productive sectors within the U.S. economy. The need is increasingly urgent as it is estimated that 2.7 million jobs are likely to be needed due to retirement within the existing labor force, while more than 700,000 new jobs will be created from economic

growth.<sup>72</sup> As the population continues to age, harnessing older workers’ potential will be critical to continued growth and competitiveness.

Since 2014, the U.S. government has been promoting phased retirement as part of its strategy to transfer the institutional knowledge of federal workers prior to the anticipated wave of retirement of one-third of its labor force by the end of fiscal year 2017. However, implementation of the program has been relatively slow, partly due to a lack of motivation of managers at many federal agencies who see it as a form of job-sharing that results in redundancy and higher human resource costs.<sup>73</sup>

Within the private sector, management is acknowledging the increasingly acute nature of the skills gap. In a survey, 82 percent of CEOs believe the skills gap will affect their ability to meet customer demand, and 78 percent believe it will impede their ability to remain competitive.<sup>74</sup> An increasing number of U.S. employers are allowing phased retirement by enabling older adults to reduce their working hours while still harnessing their productive potential. Program specifics are tailored to the companies’ structures and workflows but generally allow employees to reduce working hours

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<sup>70</sup> U.S. Department of Labor Employment & Training Administration (2015). [https://www.doleta.gov/Seniors/pdf/Participant\\_Survey\\_Report/PY2015\\_Nationwide\\_Participant\\_Survey\\_Report.pdf](https://www.doleta.gov/Seniors/pdf/Participant_Survey_Report/PY2015_Nationwide_Participant_Survey_Report.pdf).

<sup>71</sup> Ibid.

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<sup>72</sup> Deloitte. The Manufacturing Institute (2015). [http://www.themanufacturinginstitute.org/~/\\_/media/827DBC76533942679A15EF7067A704CD.ashx](http://www.themanufacturinginstitute.org/~/_/media/827DBC76533942679A15EF7067A704CD.ashx).

<sup>73</sup> University of Pennsylvania Wharton School (2016). <http://knowledge.wharton.upenn.edu/article/the-case-for-phased-retirement/>.

<sup>74</sup> Deloitte. The Manufacturing Institute (2015). [http://www.themanufacturinginstitute.org/~/\\_/media/827DBC76533942679A15EF7067A704CD.ashx](http://www.themanufacturinginstitute.org/~/_/media/827DBC76533942679A15EF7067A704CD.ashx).

while phasing in retirement benefits. The managed phase-out of employees allows employers to facilitate the transfer of skills and institutional knowledge from older to younger workers more systematically.

Manufacturing is a sector that will be hit particularly hard, and companies such as Steelcase – a Michigan-based office furniture manufacturer – have attempted to be proactive; the company began implementing a phased retirement program in 2012. Steelcase has 800 employees, 15 percent of whom are eligible for retirement, and just over one-third of them have elected to phase out.<sup>75</sup> The company asks those interested in participating to make a business case for their phase-out, which must be a minimum of six months and a maximum of two years, and how it will benefit the company. Decisions are then made on a case-by-case basis.<sup>76</sup>

According to a 2015 report by the Society for Human Resource Management, 14 percent of U.S. companies offered either a formal or informal phased retirement program in 2016, up from 10 percent in 2012.<sup>77</sup> There are divergent views from experts for the reason for the slow uptake, as some contend that phased retirement

is creating jobs for select groups of people who could open employers up to legal challenges,<sup>78</sup> while others believe that age-discrimination laws make it difficult to take an older worker and put him in another job for lower pay.<sup>79</sup> Meanwhile, staying in the same position while facing pay cuts represents another disincentive for older employees as well.<sup>80</sup>

In areas where the government and private sector are falling short, NGOs have stepped in to fill the gap and match older adults with productive endeavors. One notable program is the Encore Fellowship, which aims to leverage older adults' talents to benefit society. Encore Fellows, who tend to be age 50 or older, are matched with nonprofits for six or twelve months, working full- or part-time. The fellowship's goals are threefold: to provide older people who are considering transitioning into nonprofits with exposure to the sector and relevant experience; to change the perception of NGO employers about older people and enable them to value their talents; and to strengthen NGOs' capabilities to carry out their missions and solve critical social issues with the help of older workers' talents. The work of the fellows is wide-ranging, depending on their experience and skill

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<sup>75</sup> Bloomberg (2016). <https://www.bloomberg.com/news/articles/2016-12-16/american-firms-want-to-keep-older-workers-a-bit-longer>.

<sup>76</sup> CNBC (2016). <http://www.cnbc.com/2016/08/19/employers-offer-flexible-retirement-options-to-keep-older-workers.html>.

<sup>77</sup> Bloomberg (2016). <https://www.bloomberg.com/news/articles/2016-12-16/american-firms-want-to-keep-older-workers-a-bit-longer>.

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<sup>78</sup> Interview with Richard Johnson, Director of Program on Retirement Policy of Urban Institute. February 2017.

<sup>79</sup> University of Pennsylvania Wharton School (2016). <http://knowledge.wharton.upenn.edu/article/the-case-for-phased-retirement/>.

<sup>80</sup> Interview with Richard Johnson, Director of Program on Retirement Policy of Urban Institute. February 2017.

set, including volunteering for foster care advocacy, literacy tutoring, and non-profit management mentoring.<sup>81</sup> Each fellow earns a stipend (ranging from USD 20,000 to 25,000 per year), which is typically financed by the NGOs. Some corporations, like Intel and Hewlett-Packard, also pay for partial or whole stipends for their retirees who participate in the fellowship.<sup>82</sup>

Encore.org has selected and partnered with several NGOs to host the fellowship programs and so far has achieved considerable success. Since the 2009 launch of two pilot projects in Silicon

Valley, the organization has placed more than 1,500 fellows in 42 metropolitan areas across the U.S., with 750 to 800 active fellows in 2017 alone. Cumulatively, the fellows have contributed 1.5 million hours of service at an estimated market rate ranging from USD 70 to 200 per hour – or USD 105 to 300 million in value. Encore.org plans to expand the program geographically over the next five years, although it acknowledges that NGOs' financial ability to pay for the stipend could be the biggest challenge.<sup>83</sup>

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<sup>81</sup> Encore (Accessed 2017). <http://encore.org/story>.

<sup>82</sup> Interview with Jim Emerman, Executive Vice President of Encore.org. February 2017.

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<sup>83</sup> Ibid.

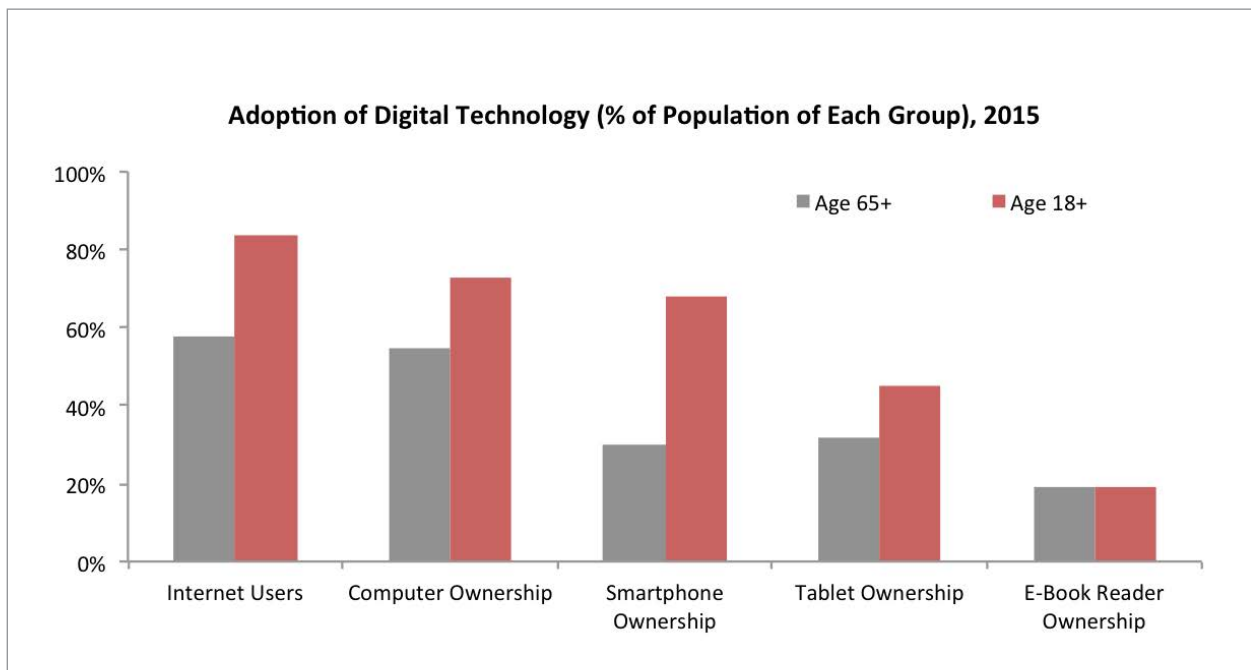
## Technological Engagement

The U.S. is a leader in digital technology penetration, with an increase in technology utilization by older Americans who are seeking greater social connection, assistance with personal tasks, support in the workplace, and health and home care. Internet access and the expansion of broadband services, particularly into rural areas, has been and continues to be critical to service delivery. Recognizing the growing share of older adults in the total population and the associated market opportunities, a range of startup companies are developing solutions specifically targeting this demographic. However, the vast majority of older adults need assistance understanding and

utilizing these technologies, and a range of service organizations are developing tech-related education and training programs to help older adults effectively leverage these new technologies and enhance their quality of life.

### Digital Technology Penetration

Like other countries, older Americans tend to lag behind the younger population in the adoption of digital technology, with considerable variation among age groups. As of 2015, 58 percent of people age 65 and older use the Internet, compared with 84 percent for the population age



(Source: The Pew Research Center)

18 and older.<sup>84</sup> Approximately 74 percent of adults ages 65 through 69 are online, while Internet adoption falls to 37 percent among adults age 80 and older.<sup>85</sup> The divide is also exhibited in the ownership and use of digital devices, including computers, smart phones, and tablets.<sup>86</sup> One exception is the e-book reader, which is as popular among older adults as it is with younger people, although the use is concentrated among those with higher levels of income and/or education.<sup>87</sup>

The Internet-penetration gap in the U.S. is among the smallest within OECD countries (only greater than those of Luxembourg, Denmark, and Iceland).<sup>88</sup> In spite of the lower penetration of digital technology compared with younger generations, older Americans have been catching up. Between 2000 and 2015, the percentage of people age 65 and older who use the Internet more than quadrupled. As a result, the difference in the Internet-penetration rate between people age 65 and older and those age 18 and older shrank by nearly one-third.<sup>89</sup>

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<sup>84</sup> Pew (2015). Americans' Internet Access: 2000 to 2015. <http://www.pewinternet.org/2015/06/26/americans-internet-access-2000-2015/>.

<sup>85</sup> Pew (2014). [http://www.pewinternet.org/files/2014/04/PIP\\_Seniors-and-Tech-Use\\_040314.pdf](http://www.pewinternet.org/files/2014/04/PIP_Seniors-and-Tech-Use_040314.pdf).

<sup>86</sup> Pew (2015). The Demographic of Device Ownership. <http://www.pewinternet.org/2015/10/29/the-demographics-of-device-ownership/>.

<sup>87</sup> <http://www.pewinternet.org/2014/04/03/older-adults-and-technology-use/>.

<sup>88</sup> OECD Science, Technology and Industry Scoreboard 2015.

<sup>89</sup> Pew (2015). Americans' Internet Access: 2000 to 2015. <http://www.pewinternet.org/2015/06/26/americans-internet-access-2000-2015/>.

The increased use of digital technology among older adults is attributed to a combination of drivers, including curiosity about new technology, desire to stay in touch with younger generations (especially grandchildren), and the need to develop job skills, among others.<sup>90</sup> There has been particularly notable growth in older adults' use of social media – the percentage of people age 65 and older who use social media has more than tripled since 2010,<sup>91</sup> indicating their interest in staying socially connected through those new media channels.

Nevertheless, a range of hurdles exist, inhibiting older Americans' adoption of digital technologies. Not digitally native, older people today often have more difficulty learning to use new technologies than do younger people. Seventy-seven percent of older Americans responding to a survey by the Pew Research Center in 2013 indicated they would need assistance learning to use a new digital device, and 56 percent of older Internet users said they would need help using social networking sites. Other major hurdles include physical challenges using technology and skeptical attitudes about the benefits of it.<sup>92</sup>

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<sup>90</sup> Interview with Richard Adler, Distinguished Fellow, Institute for the Future. February 2017.

<sup>91</sup> Pew (2015). Social Media Usage: 2005–2015. <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>.

<sup>92</sup> Pew (2014). Older Adults and Technology Use. <http://www.pewinternet.org/2014/04/03/older-adults-and-technology-use/>.

## Promoting Older Adults' Adoption of Digital Technology

Internet access is one of the most critical factors affecting technology adoption among the aging population – availability and cost of Internet access are fundamental components determining the degree to which seniors are able to get online and benefit from technologies that enhance social participation, reduce isolation, improve transportation options, and expand access to healthcare solutions. Broadband Internet availability varies considerably across urban and rural areas in the United States, and expanded coverage will be key to enabling the proliferation and penetration of assistance technologies. The new administration and the Congress have called for ambitious infrastructure investment to boost economic growth, and the inclusion of expanded broadband and other connectivity provisions could help facilitate access and undergird greater use of a range of assistive technologies.

The federal government's latest effort to increase digital inclusion, the Recovery Act-funded Broadband Technology Opportunities Program (BTOP), lacked a focus on older Americans. The Recovery Act appropriated approximately USD 4 billion to 233 BTOP projects in 2009 and 2010, aiming to reduce the digital divide by increasing broadband access and adoption and providing digital training. While nearly 90 percent of the BTOP funds were allocated to infrastructure projects, around USD 450 million were granted to projects that helped to establish

new public computer facilities, upgrade existing facilities, or promote Internet use, particularly among vulnerable populations.<sup>93</sup> Among these 110 non-infrastructure projects, fewer than one-fifth provided services targeting seniors in at least some capacity.<sup>94</sup>

In addition to limited access, older adults lack spaces to learn and gain exposure to digital technologies. Experts consider face-to-face assistance to be particularly important for older adults to learn new technology. As older people tend to be apprehensive about new technology, personal instruction is particularly helpful to overcome these initial fears. In addition, a venue exclusively dedicated to older people helps to eliminate peer pressure from younger participants and to minimize the associated anxiety commonly sensed by older adults in Internet access or training facilities that are open to the general public.<sup>95</sup> Senior centers and social service agencies are increasingly recognizing this need and are integrating programs and classes designed to enhance older adults' digital competency and fluency. In some select cases, centers are exclusively dedicated to facilitating older adults' digital technology adoption.

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<sup>93</sup> U.S. Department of Commerce National Telecommunications & Information Administration (2016). [https://www.ntia.doc.gov/files/ntia/publications/ntia\\_btop\\_30th\\_qtrly\\_report.pdf](https://www.ntia.doc.gov/files/ntia/publications/ntia_btop_30th_qtrly_report.pdf).

<sup>94</sup> U.S. Department of Commerce National Telecommunications & Information Administration (2012). <https://www.ntia.doc.gov/blog/2012/getting-older-americans-online>.

<sup>95</sup> Interview with Richard Adler, Distinguished Fellow, Institute for the Future. February 2017.

One innovative program that adopts and advances this philosophy is the Senior Planet Exploration Center, launched by Older Adult Technology Services (OATS), a social-impact organization whose mission is to harness the power of technology to change the way people age. Opened in 2013, the Senior Planet Exploration Center is centrally located in Manhattan, providing easy access to transportation and a 2,700 square-foot retail-level space that facilitates walk-ins. Outfitted with the state-of-the-art digital technology, it is the country's first tech-themed community center for older people. The Center not only provides training courses on how to use the Internet and devices like PCs and iPads, as traditional training centers do, but also teaches older people how to use technology for social engagement. OATS provides an extensive curriculum of training courses at the Center's 23 satellite labs around the city.

The Center, together with its satellite technology labs, represents a model that aims to utilize digital technology to help older adults stay connected, work, and live independently in the digital era. It is a comprehensive ecosystem that includes facilities, curriculum, training staff, volunteers, and various local partners. The program has proven to be successful and has received a positive response from participants and the community; in the Center's most recent survey, 100 percent of participants responded that they would recommend the program to others.<sup>96</sup> As

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<sup>96</sup> Older Adults Technology Services (OATS) (Accessed 2017). <https://oats.org/approach/>.

*“We have established this comprehensive ecosystem of facilities, methodology, curriculum, staff, and partners that are all aligned and collaborating successfully. We are serving tens of thousands of people in the New York City every year. We are now seeking to take this great ecosystem and get it into a new scale and new geographies, and eventually make it into a social movement.”*

– Thomas Kamber, Founder and Executive Director of OATS

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a result, according to Thomas Kamber, Founder and Executive Director of OATS, the organization is seeking to replicate and expand this model in other states and outside the U.S.<sup>97</sup> In 2015, OATS opened a second Senior Planet Exploration Center in Plattsburgh, a town in upstate New York. OATS is also working with the government of Israel to develop a model that is tailored to the needs of older adults in that country.

### **Developing Technology for Older Adults**

Aging baby boomers who have a strong desire to maintain independence and stay active while aging are increasingly recognizing that digital technologies can be leveraged toward these ends. As a result, U.S. companies – ranging from multinational corporations to start-ups – have been developing new technologies to tap into this fast-growing market.

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<sup>97</sup> Interview with Thomas Kamber, Founder and Executive Director of OATS. February 2017.



According to a 2017 report by Aging in Place Technology Watch, the market for technology to assist aging adults in the so-called Longevity Economy is expected to grow rapidly. Though estimates range considerably, explosive growth is expected from USD 2 billion today to USD 20 to USD 30 in the next several years. Recognizing the growing market opportunities for age-friendly technologies, investors are funding new start-ups, and tech companies are rolling out new offerings to cater to the growing demographic. Tech-enabled home care start-ups, for example, attracted USD 200 million in funding in 2016.<sup>98</sup>

Indeed, experts agree that this burgeoning market has been very private-sector-driven, with relatively limited government involvement.<sup>99</sup> Given the heterogeneity of the older adult population, with some adults more or less familiar or adept with its use, technologies must be developed to accommodate a range of abilities. New technologies were on display at the 2017 South by Southwest (SXSW), a cutting-edge tech conference, from communication and engagement, safety, and security to health and wellness. Technologies such as voice-first interfaces for apps and devices and Internet of Things devices are increasingly popular. Some of the companies that are expanding in this rapidly evolving marketplace include August Home, which turns a user's smart

<sup>98</sup> Aging in Place Technology Watch (2017). <https://www.ageinplacetech.com/files/aip/Market%20Overview%202017%20Final.pdf>.

<sup>99</sup> Interviews with Richard Adler, Gretchen Alkema, and Thomas Kamber. February 2017.

phone into a key to manage home access from anywhere, allowing users to manage codes for family members or service or care providers. Another company, CareJOY, is growing its online in-home care platform and professional caregiver matchmaking, while Clarity TV Listener provides headphones for seniors, allowing them to adjust the volume of any audio device without affecting others.<sup>100</sup>

As President Obama's Council of Advisors on Science and Technology pointed out, industry – with its ongoing work to improve user interfaces and user experience regardless of age – retains vast knowledge and expertise in this area and can be a vital partner in developing more tailored technologies to older adults with variable vision, memory, and dexterity.<sup>101</sup> To further encourage research and development in this space, in 2015, the AARP and JPMorgan launched a USD 40 million AARP Innovation Fund to invest in early-to-late-stage innovation-focused companies whose mission is to improve the lives of older adults.<sup>102</sup>

<sup>100</sup> Aging in Place Technology Watch (2017). <https://www.ageinplacetech.com/blog/six-new-technology-offerings-older-adults-march-2017>.

<sup>101</sup> "Report to the President: Independence, Technology, and Connection in Older Age," Executive Office of the President, President's Council of Advisors on Science and Technology, March 2016. <https://www.broadinstitute.org/files/sections/about/PCAST/2016%20pcast-independence-tech-ging.pdf>.

<sup>102</sup> AARP (2015). <https://press.aarp.org/2015-10-01-AARP-J-P-Morgan-Asset-Management-Create-First-of-its-Kind-Innovation-Fund-to-Invest-in-Innovative-Companies-Focused-on-Improving-the-Lives-of-People-50-Plus>.



Despite the high level of engagement from the business community in the development of technology innovations for older adults, experts note that companies, particularly start-ups, tend to underestimate the challenge of older people actually adopting their technology. Limited direct demand from older adults themselves as well as underdeveloped distribution channels remain barriers to broader technology deployment.<sup>103</sup> In light of this reality, a few notable partnerships have been formed between companies and NGOs in an attempt to overcome these challenges. One such effort has been undertaken at Avenidas, a community-based nonprofit organization that serves

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<sup>103</sup> Interview with Richard Adler, Distinguished Fellow, Institute for the Future. February 2017.

multiple communities in the San Francisco Bay Area. In 2016, Avenidas launched the Generations Lab initiative, which takes advantage of its proximity to Silicon Valley tech hubs and creates a space where older adults can increase their familiarity and comfort with new technologies through focus groups and pilot testing. In addition to helping the older adults become more adept with new technologies, it helps the companies to refine their products and develop technologies targeted toward seniors.<sup>104</sup>

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<sup>104</sup> Avenidas. <http://www.avenidas.org/assets/pdf/GenerationsLab.pdf>.  
<http://www.avenidas.org/services/generations-lab>.



## Healthcare and Wellness

While older Americans' lifespans have improved over the past decade, they remain below the average for high-income countries. Researchers and public health experts point to a range of factors contributing to America's relatively poor and deteriorating health outcomes, including education, income, job security, food insecurity, and social safety net. Poverty and the widening income gap are major factors, as 17 percent of Americans live in poverty, whereas the median for OECD countries is only 9 percent.<sup>105</sup> A vicious cycle, growing poverty among a larger share of the population affects diet, lifestyle, stress, and ability to pay for increasingly costly healthcare.

From 2005 through 2015, life expectancy of Americans ages 60 through 64 on average increased by 1.1 years to 23.4 years, while their healthy life expectancy growth lagged behind, with an increase of 0.7 year to 17.7 years.<sup>106</sup> By comparison, the life expectancy of high-income countries on average reached 24.2 years, and the healthy life expectancy reached nearly 19 years as of 2015. The U.S. also has an estimated 5.7 years' difference between life expectancy and healthy life expectancy among people age 60 through

64, about half a year greater than the high-income country average and also greater than other major OECD countries, including Japan, Canada, Germany, the UK, and Korea.

Government-funded entities such as the National Institutes of Health (NIH) are increasingly focusing on prevention, providing supplemental support to organizations that help older adults to lead healthier lives and enable them to stay safely in their homes for longer. One major effort is the Go4Life Campaign. Launched by NIH in 2011, this exercise and physical-activity campaign fosters the integration of exercise and physical exercise into the lives of older adults.<sup>107</sup> As of 2015, the Go4Life campaign had developed more than 250 public and private partners, many of whom host Go4Life monthly activities – including endurance, strength, balance, and flexibility exercises, and more than 41,000 people subscribe to the Go4Life e-mail updates.<sup>108</sup> Not only do these types of public-private partnerships expand the reach of services, they are not completely reliant on government dollars and therefore are less vulnerable to funding cuts.

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<sup>105</sup> The New Yorker (2014). <http://www.newyorker.com/tech/elements/why-america-is-losing-the-health-race>.

<sup>106</sup> Institute for Health Metrics and Evaluation.

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<sup>107</sup> National Institute on Aging <https://go4life.nia.nih.gov/>.

<sup>108</sup> National Institute on Aging (2015). <https://www.nia.nih.gov/research/blog/2015/08/translating-research-action-go4life-month-promotes-exercise>.

## High Cost of Healthcare

Healthcare is exceptionally costly in the U.S. and places significant financial burdens on older Americans. United States per capita healthcare spending is the highest in the world and more than twice the average of other developed countries, according to 2016 research by the Peter G. Peterson Foundation.<sup>109</sup> According to the Centers for Medicare & Medicaid Services, U.S. health care spending hit USD 3.2 trillion or USD 9,990 per person.<sup>110</sup> These costs represented 17.8 percent of gross domestic product (GDP) for 2015, having

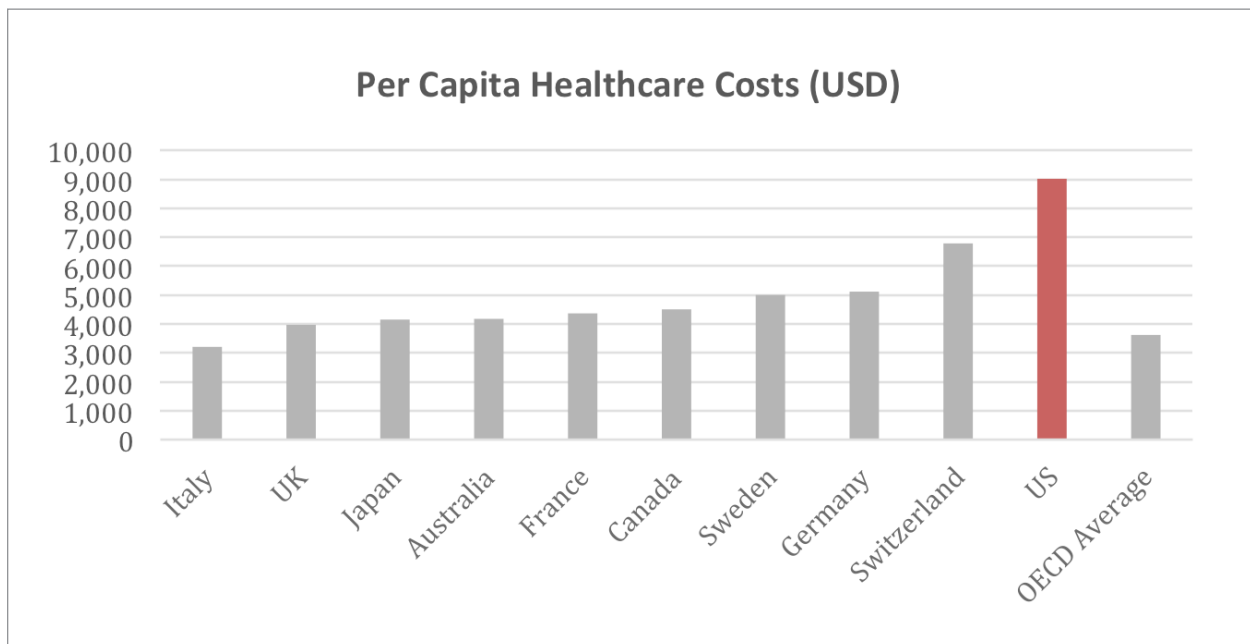
increased steadily from 13.3 percent in 2000.<sup>111</sup> Spending rates are largely driven by the more frequent use of medical technology and higher healthcare prices rather than more frequent visits. Despite higher spending, research from 2015 demonstrates that Americans have lower life expectancies and higher rates of chronic illnesses than their OECD counterparts.<sup>112</sup> Healthcare expenditure is the second largest expenditure for Americans age 75 and older, after housing, and it is the third largest expenditure for Americans ages 65 through 74, after

<sup>109</sup> Peter G. Peterson Foundation (2016). [http://www.pgpf.org/chart-archive/0006\\_health-care-oecd](http://www.pgpf.org/chart-archive/0006_health-care-oecd).

<sup>110</sup> <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html>.

<sup>111</sup> National Health Expenditure (NHE) Tables. <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html>.

<sup>112</sup> The Commonwealth Fund. <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>.



(Source: OECD Statistics, 2016; Peter G. Peterson Foundation)<sup>113</sup>

<sup>113</sup> The Peter G. Peterson Foundation (2016). [http://www.pgpf.org/chart-archive/0006\\_health-care-oecd](http://www.pgpf.org/chart-archive/0006_health-care-oecd)

housing and transportation.<sup>114</sup> For older Americans, out-of-pocket healthcare expenditures reached USD 5,849 in 2013, representing a 50 percent increase since 2003 and an increase over the rate of inflation.<sup>115</sup> Concerns about rising healthcare costs and the associated fiscal challenges for governments were noted in almost all conversations with experts. How to reform the U.S. healthcare system, however, remains controversial and a challenge for policymakers.

<sup>114</sup> U.S. Bureau of Labor Statistics (2016). A Closer Look at Spending Patterns of Older Americans. Retrieved from <http://www.bls.gov/opub/btn/volume-5/pdf/spending-patterns-of-older-americans.pdf>.

<sup>115</sup> Administration on Aging (2014). A Profile of Older Americans. [https://aoa.acl.gov/aging\\_statistics/profile/2014/docs/2014-profile.pdf](https://aoa.acl.gov/aging_statistics/profile/2014/docs/2014-profile.pdf).

## Need for Expanded Coverage

The United States does not have universal healthcare coverage. While federal health insurance programs for older adults do exist, they only cover a portion of healthcare-related costs. The federal Medicare system is available for people age 65 or older, as well as other select groups, and is generally provided in two parts: Part A, which provides hospital insurance, and Part B, which covers physician services. Older adults are eligible for premium free Part A if they are age 65 or older and they or their spouse worked and paid Medicare taxes for at least ten years. While most older adults do not have to pay for Part A, Part B coverage is optional, and people pay for Part B if they want that coverage. Since

**Comparison of Costs for Medical Services**

	Total Hospital and Physician Costs, 2013		Diagnostics Imaging Prices, 2013		Price Comparison for In-patient Pharmaceuticals, 2010 (U.S. set to 100)
	Bypass Surgery	Appendectomy	MRI	CT Scan (abdomen)	
<b>Australia</b>	\$42,130	\$5,177	\$350	\$500	49
<b>Canada</b>	–	–	–	\$97	50
<b>France</b>	–	–	–	–	61
<b>Germany</b>	–	–	–	–	95
<b>Netherlands</b>	\$15,742	\$4,995	\$461	\$279	–
<b>New Zealand</b>	\$40,368	\$6,645	\$1,005	\$731	–
<b>Switzerland</b>	\$36,509	\$9,845	\$138	\$432	88
<b>United Kingdom</b>	–	–	–	–	46
<b>United States</b>	\$75,345	\$13,910	\$1,145	\$896	100

(Source: The Commonwealth Fund)<sup>116</sup>

<sup>116</sup> The Commonwealth Fund (2015). <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>.

2006, basic prescription drug coverage is included, with additional coverage available at additional cost.<sup>117</sup> Medigap, an extra, private health insurance, is available to be purchased to fill the coverage gap between what Medicare covers and the full cost of services. People on Medicare can also receive their coverage through private health plans, also called Medicare Advantage plans or Part C. The majority of these plans provide drug coverage, in addition to hospital and physician coverage.

A means-tested program, Medicaid, is also available for people whose income is under a certain threshold, thus seniors can be eligible for both Medicare and Medicaid. To promote affordable and better-quality care, especially for low-income people, the U.S. enacted the Affordable Care Act (ACA), also known as Obamacare, in 2010. The ACA expanded Medicaid to adults with income at or below 138 percent of the federal poverty line. Though only 32 states (including the District of Columbia) are implementing it<sup>118</sup>, the expansion has enabled more low-income senior Americans to be eligible for both Medicare and Medicaid. The ACA has enrolled more than 10 million low-income Americans into Medicaid and has included reforms to improve affordability,

quality, and availability of healthcare.<sup>119</sup> As implemented, the reform greatly improved coverage for older Americans, particularly those with pre-existing health conditions, and helped them obtain better-quality care while reducing out-of-pocket spending.<sup>120</sup>

Repeal or reform of the Affordable Care Act is under debate in Congress in 2017. Proposals floated thus far have indicated significant cuts in coverage and have generated widespread public backlash and resistance from a range of stakeholders and advocacy organizations.

### Long-Term Care (LTC)

Demand for long-term care services has been increasing and is expected to rise rapidly in the coming decades. It is estimated that 70 percent of adults turning 65 in 2016 will eventually need some form of long-term care and support services.<sup>121</sup> According to the Centers for Disease Control and Prevention, 60.5 percent of Americans 65 and older (26.1 million) self-reported to have at least one physical difficulty or complex activity limitation.<sup>122</sup>

Around 3.5 percent of Americans age 65 and older lived in institutional settings such

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<sup>117</sup> Medicare.gov. (Accessed 2017). <https://www.medicare.gov/sign-up-change-plans/decide-how-to-get-medicare/whats-medicare/what-is-medicare.html>.

<sup>118</sup> The Henry J. Kaiser Family Foundation. <http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicare-under-the-affordable-care-act/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

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<sup>119</sup> ObamaCare Facts. <http://obamacarefacts.com/obamacare-facts/>.

<sup>120</sup> ObamaCare Facts. <http://obamacarefacts.com/healthcare-reform-seniors-advantage/>.

<sup>121</sup> U.S. Department of Health and Human Services. Who Needs Care? (Accessed 2017). <http://longtermcare.gov/the-basics/who-needs-care/>.

<sup>122</sup> Centers for Disease Control and Prevention (accessed 2017). <http://www.cdc.gov/nchs/fastats/disability.htm>.

as nursing homes in 2013.<sup>123</sup> As those numbers rise, the cost of institutional LTC in the U.S. will place a significant financial burden on older Americans. According to a survey in 2016, a private room cost an average of USD 253 per day, more than USD 92,000 per year; and the average cost for a semi-private room (i.e., a private room that shares a bathroom with another) was USD 225 per day and USD 82,125 per year.<sup>124</sup> This high cost can exhaust the savings of older Americans and their families, only 10 percent of whom have private LTC insurance, and even with these plans, fully one-third of the expenditures are still paid out of pocket.<sup>125</sup>

Medicaid is the only federal program that provides financial support for long-term care. The benefit covers the cost of Medicaid-certificated nursing homes, and depending on the state where the facility is located, it may also cover the cost of long-term care services that are provided at home. Medicaid is managed between the federal government and the states and is a means-tested program for people whose income is below a certain threshold, leaving the middle-class at risk of not being able to afford coverage.<sup>126</sup>

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<sup>123</sup> Administration on Aging (2014). A Profile of Older Americans. [https://aoa.acl.gov/aging\\_statistics/profile/2014/docs/2014-profile.pdf](https://aoa.acl.gov/aging_statistics/profile/2014/docs/2014-profile.pdf).

<sup>124</sup> U.S. News. How to Pay for Nursing Home Costs (2016). <http://health.usnews.com/wellness/articles/2016-11-16/how-to-pay-for-nursing-home-costs>.

<sup>125</sup> The U.S. National Bureau of Economic Research. The Market for Long-Term Care Insurance. <http://www.nber.org/bah/winter05/w10989.html>.

<sup>126</sup> U.S. Department of Health and Human Services. Medicaid Eligibility. <http://longtermcare.gov/medicare-medicaid-more/medicaid/medicaid-eligibility/>.

## Growing Preference for Aging in Place

Given the cost of facilities and loss of independence, among other factors, older Americans tend to prefer to age in place. As the population has aged, this has also increased demand for at-home care and care within communities. In a survey conducted in 2010, three-quarters of respondents expressed their preference to stay in their current residence, and two-thirds expressed their preference to remain in their local community for as long as possible.<sup>127</sup> The shift toward aging in place will generate high demand for home health care workers. According to the Bureau of Labor Statistics, 1.3 million new jobs in the home healthcare field are expected to be created through 2020 – a 69 percent growth rate, compared with an average 14 percent growth rate across other sectors.<sup>128</sup>

However, much of the home healthcare assistance that is being provided today is falling outside the formal sector and is unpaid, and the U.S. is less supportive than most other developed countries in providing direct financial support and time away from work. Approximately 34 million American family members and friends (equivalent to roughly 14.3 percent of all American adults) were providing unpaid care to an adult age 50 or older in 2014.<sup>129</sup>

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<sup>127</sup> AARP (2010). Home and Community Preference of the 45+ Population. <http://assets.aarp.org/rgcenter/general/home-community-services-10.pdf>.

<sup>128</sup> MatrixCare (2016). <http://www.matrixcare.com/blog/growth-home-care-industry/>.

<sup>129</sup> AARP (2015). Caregiving in the U.S. [http://www.caregiving.org/wp-content/uploads/2015/05/2015\\_CaregivingintheUS\\_Final-Report-June-4\\_WEB.pdf](http://www.caregiving.org/wp-content/uploads/2015/05/2015_CaregivingintheUS_Final-Report-June-4_WEB.pdf).

The cost of providing free care for family members is high for caregivers themselves, carrying substantial financial, medical, and emotional burdens. U.S. tax policy provides up to USD 3,000 in deductions for some caregiving expenses, but it is not compensation. While the federal Family Medical Leave Act (FMLA) requires employers to give workers a minimum of 12 weeks of leave from their jobs to care for family members, that time is unpaid. Bills seeking to provide Social Security earnings credits to caregivers who have taken off work have been repeatedly introduced in Congress, but never passed, leaving informal caregivers vulnerable and incurring substantial financial burdens.

In the absence of federal leadership, some employers and organizations are attempting to address this issue. The employer coalition ReACT (Respect a Caregiver's Time), Care.com, and the Massachusetts Institute of Technology joined forces to generate the tools employers need to effectively support employees who are caregivers. In 2013, ReACT and Care.com launched an employer-engagement effort to drive broad employer adoption of best practices and effective strategies that support their employees' caregiving responsibilities.<sup>130</sup> MIT and Care.com will jointly conduct a case study based on MIT's approach to employer-supported elder care.

Given a lack of community based programs, particularly in rural areas, the integration of technology for both

*“Limitations on cross-state telemedicine are still a real challenge and one of the policy barriers that, if addressed, could make a real difference.”*

– Dr. Elizabeth Mynatt, Executive Director, Institute for People and Technology IPaT

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institutional and in-home care setting has the potential to significantly improve older adults' access to healthcare services and facilitate aging in place. However, at present, restrictions on physicians' ability to deliver telemedicine services across borders are limiting reach and development of scalable business models for health-related start-ups. According to Dr. Elizabeth Mynatt of the Institute for People and Technology, “Limitations on cross-state telemedicine are still a real challenge and one of the policy barriers that, if addressed, could make a real difference.” Policies that reduce market barriers and strengthen the business case for health-related technologies – such as addressing existing cross-border limitations on telemedicine – could substantially increase older adults' access to needed care and improve health outcomes and facilitate the trend toward aging in place.

### **Growth and Potential of Self-Directed Care**

Self-directed care programs, which enable older adults to more directly manage and have greater choice over how they spend their health-care dollars, have demonstrated early success in the U.S.

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<sup>130</sup> AARP (Accessed 2017). <http://www.aarp.org/react/>.



The programs have grown 30 percent in the last three years alone to top over one million in total enrollment, a level that is higher than any other country in the world, according to Applied Self Direction, the technical assistance, training, and membership arm of the National Resource Center for Participant-Directed Services (NRCPS).<sup>131</sup> Still, implementation among states is uneven, and a general trend toward Medicaid managed care models where service companies are being contracted to manage self-directed care has presented challenges, particularly with respect to outreach and clear communication and education about self-directed care options.

Self-directed care initiatives have been an outgrowth of the Cash and Counseling Program. They are paid for by participating states under Medicaid and have grown in popularity over the last decade, with every state in the country plus the District of Columbia now offering a self-directed care program. Started in 1995, the Medicaid Cash and Counseling Program, a state-level, long-term-care assistance program, has provided direct payments to Medicaid beneficiaries that could be used to pay family members or other caregivers compensation for the time they spend providing care. In addition to allowing for the payment of caregivers, the program provides Medicaid beneficiaries the option to manage a flexible budget and to decide which

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<sup>131</sup> Interview with Applied Self Direction, March 2017.

*“Allowing seniors to be more in control of their care decisions and the ways in which their care dollars are spent represents a paradigm shift in senior care and for the range of stakeholders, but more work with stakeholders is needed to make that shift effectively.”*

– Merle Edwards-Orr, Senior Consultant at ASD.

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healthcare-related goods and services best meet their needs. An empirical study has shown that this program reduces the unmet needs of Medicaid participants, improves the quality of life for participants, and results in positive health outcomes.<sup>132</sup> The program is available at the local level in covered states; for example, in California, eligible people can apply through “In Home Supportive Services,” which are part of the county-provided service system.<sup>133</sup> In addition, tax exemptions and tax benefits may be available for a family caregiver based on individual cases, which depends on employment status, income, and other qualifications.<sup>134</sup>

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<sup>132</sup> National Resources Center for Participant-Directed Services. Retrieved from [http://www.bc.edu/schools/gssw/nrcpds/cash\\_and\\_counseling.html](http://www.bc.edu/schools/gssw/nrcpds/cash_and_counseling.html).

<sup>133</sup> Department of Social Services. Government of California (Accessed 2017). <http://www.cdss.ca.gov/agedblinddisabled/pg1296.htm>.

<sup>134</sup> U.S. IRS. (Accessed 2017). [https://www.irs.gov/help-resources/tools-faqs/faqs-for-individuals/frequently-asked-tax-questions-answers/irs-procedures/for-caregivers?\\_ga=1.250473798.1980189352.1481223511](https://www.irs.gov/help-resources/tools-faqs/faqs-for-individuals/frequently-asked-tax-questions-answers/irs-procedures/for-caregivers?_ga=1.250473798.1980189352.1481223511).



According to Merle Edwards-Orr of Applied Self Direction (ASD), “Allowing seniors to be more in control of their care decisions and the ways in which their care dollars are spent represents a paradigm shift in senior care and for the range of stakeholders, but more work with stakeholders is needed to make that shift effectively.” Edwards-Orr and other staff at ASD emphasized that a shift in mindset is one of the most significant barriers to greater adoption of self-directed care, and underscored the importance of stakeholders understanding that the cash and counseling/self-directed model is not just a system of giving cash, but rather one that provides a strong support architecture with program rules. It provides counseling on spending options, and financial services to manage those resources. This is not always the case in other countries. The U.S. system provides a high level of support. While initial programs have demonstrated success and hold great promise as a means of enabling older adults to age in place, experts note that more research needs to be done on costs to be able to demonstrate relative efficiency to institutional care and to garner the support needed to enable broader rollout.<sup>135</sup>

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<sup>135</sup> Interview with Applied Self Direction, March 2017.

## Potential for Technology to Enhance Health and Well-Being

Where government programs are leaving gaps, the market potential of aging of baby boomers is increasingly drawing interest and investment from the business community. According to a 2016 study, people age 50 and older represent an annual consumption market of USD 5 trillion (including healthcare spending).<sup>136</sup> The health market revenue generated by this population is expected to total USD 102 billion from 2015 through 2020, with one-third driven by innovative new products and business models.<sup>137</sup> In addition, technology for the informal caregiving to older adults is projected to represent a total market of USD 279 billion from 2016 through 2020.<sup>138</sup>

A range of products and services have been developed to cater to diverse needs of older adults and caregivers and to support independent, active aging. Some of the leaders in the space include established brands, such as Walmart and Walgreens, which have attempted to provide services to improve accessibility and cater to this age group. For example, Walmart – a major retailer with stores across the U.S. – has made advancements connecting individuals with its telehealth services provider, which offers customers constant access to U.S. board-certified

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<sup>136</sup> AARP (2017). <http://www.aarp.org/technology/innovations/innovation-50-plus/research/#longevity>.

<sup>137</sup> AARP (2016). 2016 Health Innovation Frontiers.

<sup>138</sup> AARP (2016). Caregiving Innovation Frontiers.

doctors. Walgreens, a prominent pharmacy, and WebMD, an online medical information provider, have also developed apps that enable users to track their health-related choices and behaviors to monitor wellness.

In addition to these established companies, start-ups are building technology solutions aimed at home care, remote monitoring for family caregivers, and keeping seniors

connected.<sup>139</sup> As part of its annual HackFest, LeadingAge, an association of 6,000 not-for-profit organizations and businesses representing a broad field of aging services, will partner with Hewlett-Packard using the latter's 3D immersive computing platform and federal open data to challenge innovators to create technology-driven tools to improve the lives of older adults and their families.

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<sup>139</sup> Health Standards (2014). <http://healthstandards.com/blog/2014/09/18/trends-aging-wearable-tech/>.