Planning for the Growth of the Older Adult Population in Howard County

Appendix D: Narrative Description of Future Scenarios

Creating an Age-Friendly Community

A Report from the Howard County Department of Citizen Services 2015



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Appendix D: Narrative Description of Future Scenarios

Cenarios are stories of what could happen in the future. They help give form to the uncertainty inherent in contemplating the future, so that a broader range of opportunities and challenges can be explored than would be predicted by past events alone. Scenarios are particularly well suited to planning efforts where the time period being considered is long or where many factors will come together to shape the outcome.

When considering the future in this way, it is important to construct scenarios that reflect a range of preferred outcomes, including an *expectable* future that extrapolates existing trends and expectations; a *challenging* future that presents a plausible series of issues and outcomes; and an *aspirational* future characterized by visionary or surprising success. Four scenarios were created for this project as a means of helping Howard County community leaders articulate their own "preferred future."

These scenarios are based on the research conducted for this project, including scans of national and local trends in aging across a wide range of disciplines, an inventory of current Howard County programs and services, and original research into the possibilities that technology and societal changes might bring.

Each scenario includes a short vignette describing life in 2035, a list of key highlights, and a narrative describing what happened between 2015 and 2035. Discussion of the scenarios among Advisory Committee members and others led to definition of the "preferred future" used as a basis for planning recommendations in the main body of this report.

The four scenarios are:

- A Haven in the Suburbs An *expectable* future in which Howard County maintains its high quality of life and provides an expanded offering to older adults that evolves to meet the needs and preferences of the Boomer generation.
- Aging in a Hard Place A *challenging* future in which economic recession and cuts in federal employment swell the ranks of vulnerable older adults and reduce the funding available to meet their needs.

SCENARIO HIGHLIGHTS

- Proximity to Baltimore and Washington insulates the county from the economic ups and downs seen in the rest of the country, and top-ranked schools continue to attract high-income families, keeping property values high and the tax base strong.
- Despite a moderate increase in affordable housing stock, many low-income workers cannot afford to live in the county, creating a workforce shortage in home, health, and long-term care.
- Many older adults live in multigenerational homes or relocate from single-family houses to condos in more densely populated areas, but a significant number find themselves isolated in unsuitable housing.

- A Village on a Cloud An *aspirational* future in which high-tech entrepreneurship and a focus on strengthening community come together to create a new infrastructure for 21st century living, with new tools for older adults.
- **Keepers of the Meaning** An *aspirational* future in which policymakers detach physical and mental decline from the construct of chronological age, prompting a reorganization of social structures all across the life course.

Scenario 1: A Haven in the Suburbs

Life in Scenario 1

Lou put down a packing box and turned to his wife Betty. "I'm done unpacking for now," he told her. "I'll light the fire. You place the flowers in the vase that you bought today." "OK, honey," she replied. Lou and Betty had had a lot of memories in their old house in Wilde Lake, but he was glad to be moving into this new aging-friendly condo in the revitalized Oakland Mills village center. Lou knew he was too frail to be living in the old house, and Betty was getting there too. Fortunately, with Lou's federal pension and Betty's 401k from M&T Bank, they were able to afford one of the larger condos in the village center. The County had purchased and revitalized the village center in the early 2020s, and had required developers to include aging-friendly units in many sizes and layouts to support multigenerational and semi-communal living. Betty was thrilled to have a grocery store, a pharmacy, and even a Johns Hopkins health clinic within walking distance. There was a senior center right in their building too, and she was looking forward to joining their Thursday morning yoga class. Lou was glad that they were right on the bus rapid transit (BRT) system, which meant that Lucida, the home health aide he had recently hired, would have an easy commute from her home in the Route-1 corridor, where most low-wage workers tended to live.

Scenario Narrative

During the two decades leading to 2035, Howard County maintained its high quality of life and continued to attract a relatively affluent population. The most significant changes to the county over this period were demographic in nature. First, in 2019 the county as a whole became "majority-minority," although Caucasians remained a local majority in the western part of the county for another decade. Second, the county's 65+ population doubled during this time, from 39,150 in 2015 to 79,640 in 2035, even as the under 65 population stabilized after 2020. This growth in the older adult population necessitated changes in housing, transportation, services for older adults, and other areas.

As it adapted to these changes, the county benefited from the continued strength of its tax base. Proximity to Washington and Baltimore shielded the county to some extent from the economic slowdowns that occurred elsewhere in the U.S., as federal employment remained an important income source for county residents. At the margins, new economic activities were gaining momentum, such as the "maker" movement in which hobbyists designed and manufactured more of the products they needed for everyday life, often using the tools and designs from 3D Maryland's Innovation + Prototyping Lab in Columbia. The "sharing economy" also grew as more residents engaged in home gardening, time banking, collaborative consumption (e.g., Zipcar), and peer-to-peer rental of cars and other items.

During this period, older adults witnessed changes that would ultimately differentiate their experience as older adults from that of previous generations. First, new technologies developed to help older adults take care of themselves much later in life. Older adults benefited from new robots that assisted with caregiving tasks and household chores, smart pillboxes that opened only at the right times of day, wireless-enabled Personal Emergency Response Systems (PERS) to detect falls and obtain help, biomonitoring devices to continuously monitor their health and feed data to their health care providers, and in-home sensor systems that captured their daily activities and tracked them online for a loved one to review. These advances were part of the larger movement toward an "Internet of Things," which hit a tipping point in 2020 with an estimated 50 billion devices connected to the Internet worldwide.

Second, change was afoot in the area of greatest concern to older adults: health care. By 2020, the Affordable Care Act had successfully expanded health insurance coverage and improved the quality of health care in the U.S. Telemedicine and the expanded use of mid-level health care providers alleviated some of the provider shortage created by the retirement of Boomer health care providers, which was accelerated by cuts in reimbursement rates for Medicare and Medicaid. The large majority of older adults who could access health care benefited from tremendous advances in medical research, such as a new means for detecting and preempting Alzheimer's disease long before the onset of symptoms. Further, the growth of integrated delivery systems and new methods for coordinating care reduced cost and improved chronic disease management, as did improvements in patient engagement and self-care. Broader improvements in the food system, built environment, and public safety, which were often championed by health care leaders, offered the promise of improved population health.

Third, governments at national, state, and local levels became more effective and responsive than they had been in more than a generation with the infusion of younger Generation X politicians (born 1961-1981) who were more willing to collaborate across the aisle. At the state and local levels, task forces of governors and mayors tackled major challenges and applied new technologies to engage their citizens in the public discourse, though the citizens who engaged were younger, more progressive, and not necessarily representative of the population at large. Ultimately this sense of pragmatism and purpose reached Washington, where Congress in 2022 passed Social Security reform that instituted means testing as well as a more sophisticated phased eligibility structure to ensure the program's sustainability.

To many in Howard County, the growing older adult population required that the County reallocate its resources to ensure that the needs of this growing cohort were being met, but without sacrificing the high quality of life for families that had made the county successful. The sheer number of older adults implied that the number needing public support of some kind would increase, outstripping the resources that had been allocated to these purposes in the past. While many of the county's older adults had saved well for retirement or were continuing to earn income through work, about 15 percent reached age 65 with essentially no savings. This created a pool of people who were dependent on Social Security and other social supports. In response, the County created new programs to subsidize assisted living, in-home care, and other services for vulnerable older adults, including those above the eligibility thresholds for federal and state programs. Despite these efforts, however, the county's overall high cost of living forced many of these people to leave the county.

For older adults who stayed in the county, one of the most pressing needs was housing. In 2015, more than half of the county's older adult populations lived in single-family homes, and most of those had lived in the same home for more than a decade. Looking to the future, about half of these people hoped to stay in those homes, provided they could make the necessary home modifications to support their advanced age. This represented a significant expense, since it is cheaper to build new aging-friendly units (e.g., using "universal design" principles) than it is to upgrade an existing home to the same standard. Further, many young families eager to move into the county were unable to find single-family homes in desirable neighborhoods. County leaders responded by developing new aging-friendly condos in walkable areas like downtown Columbia and the Long Reach and Oakland Mills village centers. However, developers were hesitant to fully embrace "universal design" principles, particularly since the new housing would also attract young adults seeking a more urban lifestyle. As a result, many older adults remained in housing that was unsuitable for growing older.

Older adults who were unable to stay in their current homes, for reasons either financial or health-related, resolved this issue in diverse ways. By 2025, nearly one-in-five residents lived in a multigenerational household (defined as at least two adult generations living together) with either a parent moving in with an adult child or adult children moving back in with their parents given the difficult job market for younger workers. Many residents built accessory apartments in their homes for an older loved one to use, or placed temporary housing units on their property. Cohabitation by unmarried older adult couples became more common, as did house-sharing in which a "tenant" shared a house for free but did some tasks for the owner, like buying groceries or providing some in-home care. While it violated real estate covenants in many cases, this became a common work-around for the shortage of affordable housing in the county.

For those who needed more intensive long-term care, these options were insufficient. These residents lived in skilled nursing facilities, continuing care facilities, assisted living communities, or private nursing homes that sprouted up in residential areas to serve around 5-10 patients each, and were often affiliated with faith communities. The Federal government experimented with additional funding for long-term care, including the Program of All-Inclusive Care for the Elderly (PACE) model that integrated medical and long-term care, but many families still struggled to afford the care their older adults required. Many family members – including older adults who needed care themselves – were forced to take on a level of caregiving that was beyond their capacity in terms of time, stamina, money, and expertise.

A shortage of affordable housing contributed to this struggle, given that there were few places for a low-wage caregiving workforce to live. While affordable housing stock increased somewhat across the county, major developments in Columbia offered little new stock given that inclusionary zoning regulations (which require a certain proportion of affordable housing) did not apply there. As a result of the shortage, the costs of in-home care and other services were significantly higher in Howard County than elsewhere in the region. Low-income residents of Prince George's and Baltimore counties often sought these service jobs, but then left them if they found similar jobs elsewhere or if the price of gas made their commute prohibitively expensive. The shortage in the caregiving workforce was another factor contributing to the departure of lower-income older adults from the county.

Officials took deliberate action to improve the county's transportation options, which was critical to helping older adults remain in the community. Howard Transit upgraded its equipment and expanded service in order to grow its ridership beyond the low-income populations for whom public transit was typically the only option. Central to this upgrade was the 2025 launch of a bus

rapid transit (BRT) system made up of electric transit vehicles operating in dedicated lanes and applying new approaches (e.g., off-board fare collection and raised loading platforms) to reduce times for loading and unloading. For those with disabilities who were unable to take public transit, the County increased para transit services using its own electric vehicles and through grants to volunteer transit services for older adults like Neighbor Ride.

Perhaps the most significant change in the older adult population between 2015 and 2035 was in who the older adults were. The Boomers that made up the vast majority of the older adult segment in 2035 were different from their predecessors in several key respects. Rather than retire, many embarked on "encore" careers that offered greater flexibility and a chance to learn something new or make a difference in their community. They were more vocal in their demands, both for supports for low-income older adults and for cultural events and other activities for the more well-to-do. Boomers rejected the monikers of "senior" or "elderly," and sought to maintain their vitality in key areas (e.g., physical, mental, financial, social, and spiritual) up until their final moments. Boomers were also more likely to explore the topic of death and dying and to demand the right to die on their own terms – in most cases at home and without heroic medical interventions at the end of life.

The County's Office on Aging viewed its target population as the massive cohort of people over age 65, and to some extent over 50. Within this group, there was particular emphasis on low-income older adults and people with dementia or other significant disabilities, but officials knew that aging Boomers would make it known if they felt the County was not doing everything it could to help them maintain their vitality in their later years. Senior centers adapted to Boomers by dropping the word "senior" from their name and by evolving their programs and services to meet the specific preferences of older adults in the community in which they were located. Each "center" developed its own culture, which stayed roughly the same until the dominant cohort in that center had moved on. In fact, a center's existing clientele often acted as an obstacle to innovations by the center's staff to expand the user base or to serve younger populations (e.g., 50-65). Further, the needs of older adults often went unmet if they were out of alignment with the programs and services available at the center near them.

On balance, in 2035 Howard County remains a favorable place for growing older, provided one is able to afford the higher cost of living. Programs and services have adjusted well both to the size and the preferences of the Boomer cohort, but remain limited by funding constraints. County leaders inside and outside government can look back on many widely recognized successes, though they know there is more to do to address the needs of poorer older adults who want to stay in the county.

Scenario 2: Aging in a Hard Place

Life in Scenario 2

It was hard for Olabisi to believe this was the last time she would see Sandra. She had been taking care of Sandra for nearly seven years – ever since her 80th birthday – and she knew that Sandra's dementia had reached the point where it would be impossible for her to take care of herself. Sandra's son on the West Coast had bought her an EconoBot that was supposed to be able to do basic caregiving tasks, but its frequent glitches rendered it useless for much of the time. But Olabisi had to leave. With gas prices on the rise, it didn't make sense for her to be commuting from Savage to Glenwood every day just to make \$17.80 an hour. Moving to Montgomery County, where her husband Akono had found a custodial job at a small manufacturing plant, made a lot more sense. With Akono waiting outside, Olabisi helped Sandra sit down in her rocking chair in front of the computer screen before covering her with a blanket, kissing her forehead, and going out to get in the car. As she and Akono pulled out of the driveway, she lamented, "All the lonely people, where do they all belong?"

Scenario Narrative

In the two decades leading to 2035, Howard County lost the idealistic spirit for which it had been known since Columbia's launch in 1967. That spirit had driven the creation of top-ranked schools, community centers, senior centers, and libraries, as well as a host of other community benefits. All of these rested on an economic model that created a strong tax base by attracting young professionals to the county's high quality of life.

The troubles began in the mid-2010s with a fundamental challenge to the viability of this model. The county's economy had been growing steadily throughout the 2010s, particularly in the areas of health care and 3D manufacturing, but the deep recession of 2018 derailed this growth and shut down many promising start-ups. Further, this recession was different. Advances in robotics and intelligent systems meant that when the jobs finally did come back, they often went to machines instead of humans. The weakness of the national economy compounded the fiscal pressures associated with ballooning federal entitlement programs and the national debt. As a result, Congress enacted draconian budget cuts to get spending under control. Howard County's public sector employment took a big hit, with the only exception being the ever-growing cybersecurity and surveillance efforts at the National Security Agency (NSA).

The shock to the county was both economic and psychological. Given the county's glossy image of high income, few residents had realized just how

SCENARIO HIGHLIGHTS

- An economic crisis prompted by federal spending cuts and private sector automation reveals how many county residents had always been living one paycheck away from economic catastrophe.
- Policy debates increasingly pit older adults against children, exacerbated by a cohort of retired "movers and shakers" looking for something to move and shake.
- Social isolation intensifies among older adults as lowincome caregivers leave the county, technologies replace human contact, and agingfriendly housing options remain limited, even for those able to sell their homes.
- Columbia's long-time idealism is viewed as a Boomer fad.

many of their fellow residents had been living one paycheck away from economic catastrophe. While Howard County residents were generally rich in income, they were not rich in wealth. Many lost hope as they watched their neighborhoods decay, their friends move away, and their property values decline. Further, the stigma associated with growing poverty rates among the county's schoolchildren, as well as the influx of undocumented children from Central America, discouraged would-be residents from moving to the county to fill the gap. Several of Columbia's village centers, with vacant storefronts and crumbling parking lots, became little more than remnants of a forgotten dream.

Older adults shared in this pain as they watched their 401k plans and other financial assets decline. In 2021 they marveled at Congress' spectacular failure to reform Medicare and Social Security to ensure the programs' sustainability. They paid far more of their health care costs out-of-pocket, had more difficulty finding physicians that would accept Medicare patients, and prepared for the 25% cut in Social Security benefits that was anticipated in the late 2020s when the program's trust fund would run out. Those requiring long-term care (for themselves or a loved one) spent down their own assets before becoming eligible for Medicaid, and encountered poverty for the first time in old age.

Facing these challenges, older adults had few options available to them. The jobs that existed were either low-wage or required a level of technological acumen that older adults were presumed not to have. While they had tuition-free access to job training at Howard Community College, the seats were limited and the waiting lists were long. Further, older adults were caught in something of a "catch-22" when it came to employment. If they retired on time they were criticized for living off entitlement programs supported by younger workers, but if they continued working they were criticized for taking jobs that those younger workers should have had.

Staying at home became a less attractive option. While some older adults could sell their existing homes and move into newly built aging-friendly condos in Columbia and Ellicott City, many remained in the single-family homes they had owned for most of their lives. This subjected them to the risk of physical injury and caused no shortage of calls for emergency services. Other older adults consolidated with family members in multigenerational households, often with three or even four generations living on the income of a single breadwinner. In some cases these households billeted their oldest members in temporary, detached accessory apartments that varied widely in quality and sanitary condition. Paid caregiving support was hard to find given the county's shortage of affordable housing for low-wage workers. For many households, the

burden of family caregiving reached a breaking point, particularly where dementia was present. Neglect and abuse became more common.

Transportation options for the county's older adult population dwindled as gas prices soared to \$8 per gallon and as Howard Transit bus service was reduced in order to minimize the County's liability for para transit services under the Americans with Disabilities Act (ADA). HT Ride, Neighbor Ride, and shuttle services run by the Office on Aging offered some mobility, but many older adults were effectively cut off from social and economic interaction. When they ventured out on foot, they were often asked to move along by owners of retail establishments who were afraid that a cohort of loitering old people would scare away younger, more profitable customers.

Fortunately, throughout the 2010s and 2020s a deluge of new technologies entered the market to help older adults age in place. By 2025 even the homes of lower-class older adults were awash with gadgets and gizmos, but many of these had significant downsides. First, the ease they provided left older adults unprepared for the Internet outages - or "brownouts" - that became common in the late 2020s and rendered many of these technologies inoperable. Second, overstressed and underfunded federal agencies like the Food and Drug Administration failed to regulate these new products, even when poor quality might result in injury or death or when a lack of privacy protections might subject frail seniors to physical or financial harm. Third, for many older adults these technologies displaced meaningful human contact with loved ones, since adult children no longer felt compelled to check in on their parents when they could just log on to a website to see if their parents had eaten, taken their pills, or seen a doctor. Some caregivers parked their older adult in front of an online game for hours on end, just as an overstressed parent might park a child in front of the TV.

As County officials struggled to address these challenges, they were constrained both by the county's limited resources and by the priorities of the state and federal agencies over them. Competing for scarce resources, rival agencies and resident groups found it difficult to see eye-to-eye. Debates over the County budget and appeals to donors like the Horizon Foundation increasingly pitted older adults against young families, exacerbated by a cohort of retired "movers and shakers" looking for something to move and shake. While the most vocal groups often got most of what they wanted, such as expansions to talented and gifted programs in the schools and cultural events for older adults, the needs of vulnerable and socially isolated older adults were consistently left off the agenda.

Though socially isolated throughout old age, many older adults found themselves with all the attention they wanted – and then some – once they

approached end-of-life. Though Americans had consistently expressed a desire to avoid heroic medical measures in the late stages of a terminal disease, these calls fell on the deaf ears of a health care system reeling from cuts in Medicare reimbursements and financially incentivized to do more, not less. Even the many older adults who had signed advance directives to limit such interventions ultimately died in the cold and inhumane intensive care units they had sought to avoid.

For affluent residents, however, the two decades leading to 2035 fulfilled the promise of the retirement that they had come to expect. New products, such as exoskeletons and other assistive devices, provided for enhanced mobility, while small autonomous vehicles offered transportation within the gated communities where they lived. Smart devices embedded throughout their homes took care of most daily chores and monitored them for changes in health and wellbeing that warranted professional attention. Most notably, an expensive procedure to anticipate and preempt Alzheimer's disease had spared many rich older adults from this debilitating condition. When the end of life arrived, these older adults could look back from the vantage point of a "concierge" hospice facility upon many years of enjoyable and fulfilling life in a county they loved, and that many of them had in effect created.

Poor and middle-class older adults, on the other hand, consistently found themselves on the wrong side of a tourniquet that cut them off from suitable housing, convenient transportation, economic opportunity, and even from each other. Given its fiscal constraints, the County came to recognize social isolation among older adults as the one social ill that it could effectively "wait out," so officials focused their resources and attention in other areas where a clear, positive impact could be identified, achieved, and measured. By 2035, social isolation among older adults has become the open secret of Howard County.

In 2035, the Office on Aging is the lone voice demanding something better for older adults. It focuses on indigent, disabled, and socially isolated older adults and has abandoned much of its health, wellness, and educational programming for the affluent and middle class, except where federal and state mandates prevent it from making such distinctions. Senior centers have evolved into human service outlets, taking on a look and feel that discourages those without significant needs – or those who are unwilling to acknowledge their needs – from entering. County employees who serve these older adults know they are doing important work, but their awareness of all the work that is *not* being done has created a culture of despondency among those who care about the older adult population.

Scenario 3: A Village on the Cloud

Life in Scenario 3

The door was open, so Robert walked into the apartment where his friend Jim was sitting at a desk with his brain fitness headset on. "What do you think of the new Cogno-Enhancer?" he asked. "I'm pickin' up good vibrations," Jim replied. "She's giving me excitations." "I bet she is," Robert replied. "Hey, I brought the new blood oxygen monitor I 3D-printed for you. Sorry it took so long; I've been doing some freelance work for Hopkins on their second-generation Alzheimer's pre-diagnostic." "No worries," said Jim. After a successful medical research career at Johns Hopkins, Robert had bought a 3D printer, which he enjoyed using to make things for his friends at St. John Baptist Church. There were so many open-source designs available online, Robert was just amazed at how much he could do with his machine. In fact, he was amazed at how much technology had revolutionized so many aspects of life over the previous two decades. Despite concerns about privacy and the degradation of human relationships, technology had actually brought people closer, and in the process created new tools and supports for older adults like himself.

Scenario Narrative

As had been expected, the technologies coming on to the market in the late 2010s had a profound impact on people's daily activities and created a new infrastructure for 21st century living. For example, the proliferation of sensors and devices connected to the Internet, which reached 50 billion in number by 2020, made manifest the much-anticipated "Internet of Things" that merged the real and virtual worlds. By 2025, new devices and user interfaces, foreshadowed by earlier products like Google Glass, allowed people to seamlessly stay in contact with friends and access relevant knowledge as they went through their day. Further, the ability offered by nanotechnology to embed such devices in materials like concrete and steel made possible a physical environment that could actually reconfigure itself in response to changing conditions.

At the same time, a widespread desire for greater engagement at the community level suggested new opportunities to apply these technologies. In fact, many of these technologies were local by their very nature. For example, 3D printing allowed for local manufacturing of consumer products as an alternative to global supply chains and provided for the creation of new business models that kept money circulating within communities. The community focus was also driven by a tech-savvy Millennial generation (born 1982–2004) that did not understand why the problems of

SCENARIO HIGHLIGHTS

- County government provides wireless access across the county, since it has become a prerequisite for participation in civic life.
- A Village-led consortium creates a distributed network of supports for older adults, including a secure online data platform on which older adults can share data from smart devices in their homes, allowing human service agencies to monitor their wellbeing and intervene as appropriate.
- Howard County becomes a test bed for companies developing home modifications, smart and assistive devices, and other technological innovations to support aging-in-place.

the world, such as poverty and climate change, had been allowed to persist for so long. These young people aspired to change the world, but they often started within their own communities.

The interplay of these two trends created a world in 2035 that few in 2015 would have expected. Communities – both online and off – were more connected technologically, but in ways that enhanced rather than displaced human relationships. For older adults, these trends created new opportunities to live independently much later in life. New tools for "aging-in-place" rendered obsolete many of the concerns of previous generations of older adults. However, the new technologies also required local governments and nonprofits to take greater action to ensure that older adults were not left out of the emerging structures and systems. One key step in this regard was Howard County's 2018 launch of HoCoWiFi, a free and ubiquitous wireless Internet service available throughout the county.

Older adults who had used computers and the Internet during their professional careers were quick to adopt high-tech tools to help them age the way they wanted. As a result, technology remade the living environment of the typical older adult in Howard County. At home, smart sensors and devices collected data on all facets of the older adult's wellbeing. Biomonitors measured vital signs and key body functions, and transmitted data to their electronic medical record. Smart refrigerators monitored food intake, detected food spoilage, and placed automatic orders for grocery delivery when inventory got low. Motion sensors detected falls and identified healthrelated changes in gait. Communications systems, which by 2025 offered more emotional interactions via virtual reality or holograph, kept track of the most recent contact with members of the older adult's social network, since research suggested that the quality of an older adult's relationships with at least three other people was a key predictor of health outcomes.

By the early 2020s, each older adult in Howard County was surrounded by a "personal data cloud" that to a great extent described their wellbeing at any point in time. Older adults were increasingly willing to share this data with others who could help them stay healthy and active. At first they did this only with close friends and family in order to make sure that changes in their wellbeing were noticed in a timely manner. But soon it became possible to create a community-wide monitoring platform for older adults. Thus, in 2024 a partnership between the Village in Howard and a consortium of high-tech start-ups in and around Columbia created a secure online data platform that allowed participating human service agencies and nonprofits to monitor the wellbeing of older adults in the community and to intervene as appropriate. Private sector entities were able to access this data in an anonymized form in order to design better products for the immense older adult market in

Howard County and beyond. The online platform also included a registry where older adults could list the technologies they were using so that they could receive additional support in the event that those services were disrupted. By 2027, this platform also became the point of entry into a distributed network of supports for older adults that were tailored based on an individual's data and preferences.

These advances were facilitated by improvements in the quality of governance enjoyed by Americans that removed some of the key obstacles to large-scale social change. After the Mayday PAC launched by Larry Lessig successfully unseated two members of Congress in 2016 and seven more in 2018, politicians got the message that voters cared about the health of their political system. In 2019, Congress adopted new transparency requirements for campaign finance, as well as new filibuster rules and other recommendations from the Bipartisan Policy Center's 2013 Commission on Political Reform. As a result, incumbent corporations and special interests lost their hold on both political parties, as well as their ability to restrict innovations that might threaten their own business models and positions.

At the same time, Americans more actively engaged in the policy discourse. Millennials led the way in using online tools like GitHub (the open-source version control system associated with the Linux operating system) to crowdsource legislative proposals. One such proposal ultimately became a Social Security reform that instituted an individualized distribution scheme based on a personalized risk profile at age 60. In this new system, payments increased over time, initially providing a small supplement to existing income for older adults who had recently left full-time employment, and then providing a full retirement later in life. When the president signed the bill into law in 2023, she noted that such an overhaul would not have been possible without the ability to engage citizens in such a meaningful way.

Howard County remained on the cutting edge of effective governance, particularly since the county's economic vitality – particularly its entrepreneurial response to the growing older adult market – allowed local officials to go beyond the budget priorities of state and federal agencies. Agencies frequently applied the Collective Impact model, inviting stakeholders from the public, private, and nonprofit sectors to develop a shared goal and shared metrics to measure progress toward the goal. This collaboration led to a number of innovative community governance solutions. In 2018, the County launched a 311 phone system that allowed residents to bring attention to issues they encountered that warranted government attention, and gave local officials a more granular sense of what was actually happening in the county. In 2022, this granular understanding was reflected by a real-time virtual simulation of the county that drew from multiple data

sources (e.g., health care data, environmental sensors, and social media) and allowed policies and interventions to be tested in virtual space before they were implemented in the real world.

One of the most exciting changes in Howard County was the launch of a self-driving rapid transit network in Columbia that in many ways brought to fruition James Rouse's original vision for the city's transit system. In fact, the autonomous electric transit vehicles traveled primarily on dedicated lanes that Rouse had included in his original drawings. While homeowners had encroached upon some of these lanes, most were easily reclaimed and put into service. As of 2028, Columbia residents could summon a self-driving vehicle to take them anywhere in the city. Transit efficiency improved as these vehicles "platooned" together and followed signaling systems that were embedded in road materials using nanodevices.

The proactive stance of County leaders, the strong collaboration among the public, private, and nonprofit sectors, and the overall affluence of the older adult population made Howard County a test bed for "aging apps" and other innovative tools for aging-in-place. Many cutting-edge companies opened offices in the county, and start-ups became a major source of employment. Howard County General Hospital became an important conduit for the spread of innovations coming out of the Johns Hopkins system. Other promising innovations came from local entities, such as an aging-friendly 3D printer launched in 2024 by 3D Maryland that came with an intuitive user interface and a preloaded library of pre-tested, open-source designs for a wide range of products that older adults might need.

The County took on the challenge of providing suitable and affordable housing both for older adults and for the low-wage workers who often cared for them. New developments in Columbia and Ellicott City included universaldesign housing for aging adults and followed an inclusionary zoning policy that mandated a certain proportion of affordable housing for low-wage workers. Further, these areas included a wide range of lot sizes and floor plans to ensure units were available for the growing number of multigenerational households. County officials ensured that plans for these projects were approved by a broad base of stakeholder groups to ensure that all voices in the community were taken into account regarding projects that would significantly shape the county's future.

County leaders took on the responsibility of ensuring that older adults – loosely defined as those over 50 – were not overwhelmed by the changes taking place around them, and that they were proficient in the technologies that were critical to participation in social, economic, and civic life. Much of this training took place online or in one-on-one coaching sessions at

community centers. In the late 2020s, the Department of Recreation and Parks took on many of the programmatic activities of the Office on Aging, with embedded support from Office on Aging staff to ensure that the unique needs of older adults were not overlooked. This freed up the rest of the Office on Aging to focus its attention on the subset of older adults who would never be able to keep up. Senior Center Plus and other adult day care programs expanded, and in most cases made up the bulk of a senior center's operations. Efforts to oversee and subsidize the community-based long-term care market expanded as well.

In 2035, society has been radically transformed by the combination of high-tech entrepreneurship and a greater focus on strengthening local communities. Howard County remains at the forefront of these trends and serves as an example to communities across the U.S., especially with respect to effective collaboration among the public, private, and nonprofit sectors. Many residents are deeply proud of the county's success in keeping older adults of all income levels and demographic groups engaged in the ever-evolving spheres of social, political, and economic life.

Scenario 4: Keepers of the Meaning

Life in Scenario 4

Eunjung sat down beside Tanisha at a table in the community room. At age 75, Eunjung was thrilled that her health still allowed her to volunteer in the community, and mentoring Howard Community College students like Tanisha brought her unique pleasure. "What should we work on today?" Eunjung asked. "I'm working through an online module on social change," Tanisha replied, "and I have to do a case study of a social change that has happened during my lifetime. I was thinking I could talk about how U.S. society has adjusted to longer life-spans." "Wow, that's quite a topic," replied Eunjung. "It's amazing that we used to expect people to retire at 65 and then just spend another 30 years playing golf and watching TV. What a waste!" "But wait a second," said Tanisha. "Didn't you come out pretty strongly against the entitlement reform back in 2021, which let go of a traditional retirement age and instead focused on ensuring equitable opportunities for everybody?" "Well, that's true," Eunjung replied. "Ah, but I was so much older then. I'm younger than that now."

Scenario Narrative

As expected, the Boomer generation reinvented the last stage of life just as they had reinvented all the life stages that came before. Rather than retire at 65, more than half of all Boomers started what came to be known as "encore" careers. Many started new for-profit ventures, selling products and

SCENARIO HIGHLIGHTS

- Economic engagement among aging Boomers, means-testing of safety-net programs, compressed decline at endof-life, and greater attention to the social determinants of health lead policymakers to disconnect the concept of decline from the construct of chronological age.
- Boomers finally finding fulfillment in "encore" careers and community engagement promote that level of fulfillment throughout the life course by distributing 20th century longevity gains across all life stages: adolescence until 25, young adulthood until 40, career life until 65, the "encore" phase until 80, and retirement at 80+.
- Housing options for older adults vary and include many multigenerational models.

services designed by Boomers for Boomers. Others mentored young people, particularly those at risk. Still others advocated for policy changes to make communities more livable for older adults or to reduce the inequities that existed across society more generally.

As a result, fears of economic crisis due to an aging population did not materialize. In fact, it soon became clear that many Boomers over 65 were contributing more to society's wellbeing than they ever had before. Rather, the factors differentiating vulnerable older adults from those who were thriving had less to do with age than they did with socioeconomic factors like income, education, and housing. This mirrored health care leaders' increasing focus on the "social determinants of health." As a result, policymakers lost interest in the "dependency ratio" that had framed the discussion of older adults for several decades. Research on health outcomes among older adults had effectively detached physical and mental decline from the construct of chronological age.

This shift in thinking had huge implications for entitlement programs, for which age had always been the primary eligibility criterion. Amidst a growing public call for social justice, lawmakers in 2021 converted the "entitlement programs" of Social Security and Medicare into a "social safety net" that included income supports (through a "negative income tax," or minimum guaranteed income) and expanded health care insurance for low-income Americans of all ages. While some resisted the detachment of benefits from contributions, most Americans – even among the affluent – accepted the argument for a more progressive safety net designed to ensure that society worked for everybody.

Boomers' "encore" pursuits provided a level of personal fulfillment they had not known before in their lives such that by the mid-2020s, many Boomers were asking themselves why they had not had that much fun throughout their whole lives. As they confronted their own mortality, as a generation they recognized that their one last chance to change the world had come. Many Boomers expressed a desire to change society's approach to aging *across the entire life span* so that their grandchildren and great-grandchildren did not have to wait as long as they did to feel truly fulfilled in their lives.

The public conversation about aging soon expanded to the topic of what a good life looks like. Some sociologists and psychologists proposed a new approach that would distribute the longevity gains of the 20th century across the life course, with adolescence until 25, young adulthood until 40, working age until 65, and the new "encore" phase until full retirement around age 80. Some observed that this change was already well underway. Many Millennials had lived with their parents well into their twenties and – under

the Affordable Care Act of 2010 – stayed on their parents' health insurance plan until age 26. Millennials were also getting married later than previous generations and were likely to have many "mini-careers" before settling into a long-term professional identity in their late 30s. Further, more than 70% of Americans said they intended to work past age 65, suggesting that the traditional retirement age was already obsolete.

With its culture of idealism and activism, Howard County was at the forefront of this shift. In the late 2010s, the county's senior centers had rebranded themselves as "vitality centers," responding to Boomers' desire to remain vital across multiple dimensions (physical, mental, financial, social, and spiritual) until their last breaths. Vitality centers offered the senior programs mandated by the Older Americans Act of 1965 as well as an expansive range of fitness, cultural, and educational programs. But as these centers expanded their scope to include younger residents, it became clear that granting eligibility by age no longer made sense. In fact, in the emerging model of a good life, a "50+ center" would ostensibly serve people who had only been full adults for a decade. Thus, vitality centers evolved into "community vitality centers" that offered some age-segregated programs where appropriate, but more importantly provided a platform for meaningful intergenerational engagement to make the entire community stronger.

Community vitality centers were distributed across the county and took many different forms. Serving primarily as a platform for self-organization by residents, they evolved alongside the culture and preferences of the local community they served. For example, local residents with unique skills often organized classes or mentorships on their own. Others set up online meetings with representatives from other communities around the world. The centers also offered a wealth of volunteer opportunities, since they served as satellites of the Center for Nonprofits and Volunteerism, which the County had built in 2021 at a site shared by government human services agencies. The growth in volunteerism at the local level made many things possible that in the past would have been prevented by funding constraints.

While these facilities served the community as a whole, County leaders recognized that a certain cohort of older adults needed a specific set of supports that a community vitality center could not provide. This cohort included the one in two residents over age 80 who suffered from dementia in some form. Fortunately, private sector and nonprofit organizations throughout the county offered a variety of options for adult day care, adult medical day care, and caregiver support (including respite care) that allowed these more challenged older adults to maintain a relatively high level of wellbeing. These services were located in homes, churches, public facilities, and other locations. The Village in Howard maintained a list of these services

for public reference, and the Office on Aging provided financial support for these services to those in need.

Reorganizing the life course was not the Boomers' only agenda item. As they encountered health challenges, they paid much greater attention to the overall failure of the U.S. health care system to improve the nation's health. In Howard County, a group of highly connected Boomers came together in 2019 to draft a manifesto for a new approach to the county's health. The proposed "Howard County Life Care" system aimed to promote the healthiest way to live from conception to death, and to make this way of life the default for Howard County residents. This required community leaders to collaborate in a new way, working first through informal networks to build consensus around a shared vision and then through their own formal structures to achieve the component of that vision for which their entity was responsible. The result in health care was a network of health care providers who coordinated their care using a standardized county-wide electronic medical record system and who collaborated based on mutual trust to deliver the best care possible in terms of cost, quality, and patient satisfaction.

Throughout the 2020s, Howard County replicated the success of the Columbia project by creating planned communities within Columbia and Ellicott City, as well as in other parts of the county. These projects increased population density and created walkable communities that promoted health and wellbeing and reduced the need for major investments in transportation infrastructure. These communities were also intentionally multigenerational and included a wide range of income levels, reflecting the realization that the relationship between rich and poor was a key indicator of the county's wellbeing.

The vitality of Howard County was increasingly apparent in the local economy. Throughout the 2020s, residents adopted new behaviors that reduced income requirements, kept more wealth within the community, and allowed many more economic needs to be met via non-monetary exchanges. For example, community gardening, collaborative consumption (e.g., Zipcar), ride-sharing (e.g., Uber), and peer-to-peer rental all expanded significantly. The growth of distributed manufacturing using 3D printing technology, which benefited from the increasing availability of high-quality open-source or crowd-sourced designs for everyday products, allowed for the manufacture of personalized products either at home or at a small facility within the neighborhood. Further, in 2025 the Columbia Association launched its own currency to keep wealth circulating within the community and to insulate the city from the vicissitudes of the national and global economies. By 2029 the "Rouse" was accepted by more than half of businesses in the county.

Looking back from 2035, one could see that Boomers had even reinvented the very last stage of life – that is, the process of death. In the early 2020s, new biomarkers had offered the ability to map out an individual's probability of morbidity and mortality over a given period of time, and simulations pointed to changes in behavior and lifestyle that might change the probability picture for when and how one would get sick and die. This awareness led many to make better choices and to plan more effectively for the inevitable. With this improved information, many Boomers made some unconventional choices, such as refusing heroic medical care at end-of-life. When the end came, Boomers made concerted efforts to die comfortably at home surrounded by loved ones rather than in hospitals.

In 2035, it is clear that the growing older adult population anticipated in the early 2000s was not just a population in need of care. Rather, it signified a major shift in the way society organized itself in relationship with the natural rhythms of life. In particular, Howard County's successes in addressing the issue of aging is apparent not just in the positive experiences of those over 65 but also in the greater fulfillment enjoyed by county residents of all ages. In 2035, the term "aging" refers not to a specific stage of life but to a cherished process of continuously unfolding human potential.