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Perkins Eastman is a global architecture firm dedicated to the idea that design can have a direct and positive impact on people's lives. For almost forty years, our senior living experts have shared a passion for research and design that focuses specifically on improving the quality of life and level of care of older adults. We create places and spaces that put the user at the heart by employing best practices, sustainability, and a thorough understanding of our clients' missions and operations. Our diverse teams partner with our clients globally to deliver next-generation projects suited to users who will live, work, play, learn, age, and heal within the environments we plan and design.

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Don't accept any ideas, practices, or standards just because everyone else is doing them.

Neil Strauss ¹ Rolling Stone

Why This Matters

Forty years after humans developed the first personal computers for use as word processors and calculators, we now harness computer-generated artificial intelligence to diagnose diseases, write music, and even develop the next generation of computers for us. Technology and innovation is happening at a pace that is, as inventor and futurist Ray Kurzweil put it, "so rapid and profound, it represents a rupture in the fabric of human history."

Businesses like hotels and taxi services that have existed for hundreds or even thousands of years are being upended overnight. Challengers like Airbnb and Uber, on the other hand, are taking over the marketplace and have only been around for twenty-one years, combined. Despite there being almost no warning, users of these fundamental services quickly adapted to new models that met their needs more expeditiously, inclusively, and cost effectively. At what point might the industries associated with providing care and services to older adults go through a similar transformation into something wholly new, and perhaps unrecognizable?

Every year, Perkins Eastman takes a step back and reflects on trends, influencers of change, and the need for unique solutions to the challenges associated with aging. During this process in 2017, we decided to undertake a year-long effort to identify the external influences that have the potential to reshape the senior living industry, much in the same way the hotel and taxi industries have been disrupted. These conversations were the genesis of what would eventually be called the *Clean Slate Project*—a title (and mentality) that gave us the freedom to ask the question: If senior living could have a fresh start, what could it look like?

On page six of this publication, we've included a road map that will help you follow along with our journey—from the extensive review of existing thinking, interviews with leaders and innovators from outside and inside the conventional senior living industry and, finally, to another important juncture in the study that occurred in Fall 2018.

This key moment was a workshop where we presented our preliminary findings and concepts for future scenarios to fourteen leading CEOs of nonprofit senior living organizations. Their feedback challenged some of our assumptions, clarified others, and trained our sights on how these scenarios might reshape current industry paradigms. The participants identified issues of affordability and care for the most frail, but also echoed the need for partners—particularly unconventional relationships that stretch the current limits of the way most senior living organizations think. These types of partnerships can connect

"As senior living providers, it is easy to become insulated and think that we are anticipating all of the critical variables driving change in our sector. The brilliance of the Clean Slate Project is its focus on potential influencing trends from outside our sector. This fresh eyes approach is critical to unleashing generative thinking to anticipate and develop our own disruptive innovations."

PAUL WINKLER, PRESIDENT & CEO, PRESBYTERIAN SENIORCARE²

"As leaders we all realize that we need to think outside the box to address the industry challenges we all are facing... Successful organizations will need to reimagine and innovate to be relevant."

STEVEN KASTNER, PRESIDENT & CEO, TRINITY HEALTH SENIOR COMMUNITIES 4

existing senior living providers with older adult consumers in new and innovative ways.

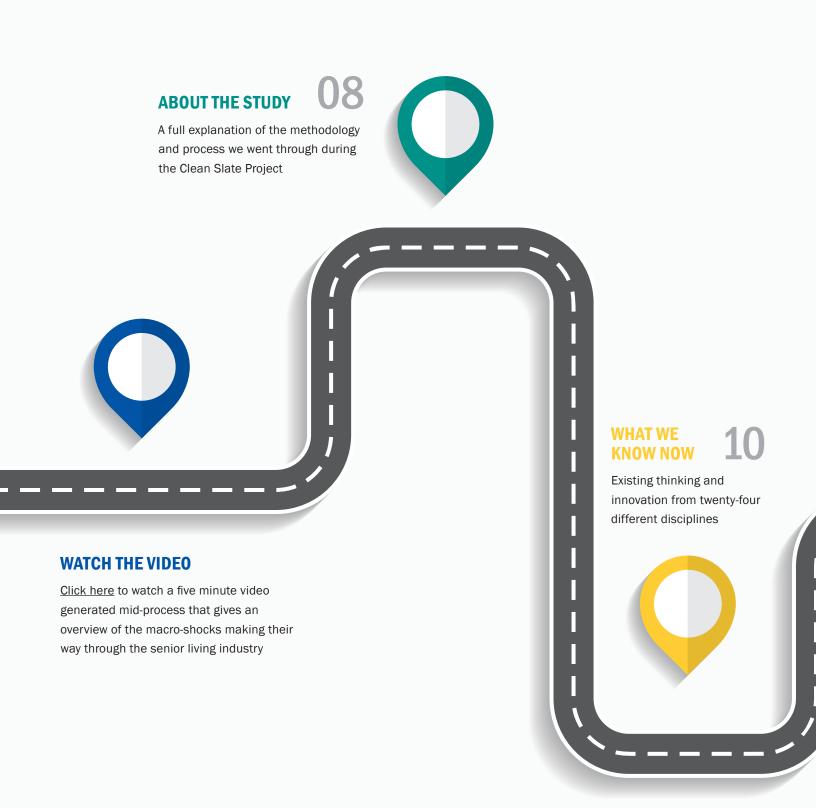
So, whether you are a senior care provider, developer, board member, low income housing/service provider, healthcare provider, tech entrepreneur, or other Big Thinker: you will play a key role in responding to the macro-shocks that are impacting every older adult in this country. By adopting, adapting, or reimagining the solutions conceived by this study, you will be at the forefront of meeting the needs of this generation of older adults—a generation that looks nothing like the ones before it.

Above all, we hope the work presented in this publication will inspire and challenge you to question the status quo. In an article about innovator and futurist Elon Musk, Neil Strauss suggests, "If you want to create or innovate, start from a clean slate. Don't accept any ideas, practices, or standards just because everyone else is doing them." It is only by questioning the status quo that we are able to open ourselves to the unlimited potential that sits in front of the senior living industry today.

If a clean slate is what senior living needs right now, we say... eraser, please.



How to Read this Publication





WHERE WE GO FROM HERE

50

Next steps and a call to action based on our year-long experience developing the Clean Slate Project

FUTURE SCENARIOS

25

Six scenarios for the future of aging, based on the research and conversations with thought leaders from inside and outside senior living



REFERENCES

A complete list of citations and references used throughout this publication

About the Study

At the end of 2017, during Perkins Eastman's annual senior living strategic planning retreat, the topic of industry disruptors came up during a conversation about trends. We asked ourselves not only what the industry disruptors are, but what if we actually consider them to be *opportunities for innovation* rather than challenges to overcome. From there, the *Clean Slate Project* was born.

The goals of the study were to:

- · Explore drivers of change;
- Consider how these ideas could influence new products, services, design strategies, research agendas, etc.;
- Go beyond senior living by engaging thoughtleaders in many fields; and
- Get ahead of industry disruptors and trends to bring about true innovation.

The year-long study was broken down into several distinct phases. First, we conducted a literature and media review to understand demographics, consumer preferences, trends, etc., to identify potential disruptors and shapers of the future of senior living. The objective of this first phase was to explore exciting thinking that was already going on in industries outside of senior living. In total, we reviewed over 100 different media items in 24 categories of exploration. By casting a wide net, media from all disciplines was explored—everything from algorithmic dystopias to buildings made of fungus. Each exploration was

evaluated for potential linkages to and impacts on the senior living industry. As more literature was examined, patterns began to emerge. Refer to the "What We Know Now" section of this publication for information from this phase.

The second phase of the study consisted of thirteen in-depth interviews with thought-leaders outside the senior living industry. Participants brought perspectives from such fields as healthcare, design, resiliency, R&D, finance, lifestyle, business market research, real estate, and technology. Refer to the "What We Know Now" section of this publication for information from this phase.

The third phase provided the research team with an opportunity to delve into what we had learned during the first two phases, and brainstorm the potential implications for the future of the senior living industry. We then held a workshop on October 30, 2018, in Philadelphia, PA, and invited thought-leaders within the senior living industry to test our thinking. Eighteen participants, excluding the research team members, provided feedback on our initial findings and concepts for the future. Based on this input, we were then able to synthesize our ideas and develop this publication, which we hope can be used to innovate the senior living industry, promote cross-sector partnerships, and support older adults everywhere. Refer to the "Future Scenarios" section of this publication for information from this phase.

Clean Slate Project Phases



Literature/media review to identify potential disruptors and shapers of the future of senior living



Interviews with thought-leaders outside the senior living industry



In-house workshops to brainstorm potential implications based on information from the first two phases



Workshop with thought-leaders within the senior living industry to test our thinking



Final synthesis of our ideas











What We Know Now

WHAT WE KNOW NOW, BY THE NUMBERS

literature and media items

in-depth interviews

categories of exploration:

Bio-Med **Business** Climate Change /

Resiliency

Demographics Design

Entertainment

Finance

Healthcare

Higher Education

Hospitality Housing

Lifestyle

Net Zero /

Passive House

Neuroscience

Other

Politics

Primary & Secondary

Education

Real Estate Regulatory

Retail

Sociology

Technology

User Experience / UX

Wellness

The Clean Slate Project began with a literature and media review of an array of sources from a wide variety of fields and industries outside of senior living. We reviewed over 100 items covering a diverse set of topics, ranging from bio-medicine to finance, real estate to sociology. In total, two dozen different categories of information were explored. We also conducted 13 in-depth interviews with experts from varied fields outside the senior living sector. Through this process, we identified four potential "macro-shocks" to the industry that, in turn, became the thematic categories of our exploration: Tech-Age, Aging in the Community, Third Act, and Paradigm Shifts.

Tech-Age focuses on how artificial intelligence, robotics, and virtual reality are poised to fundamentally change how older adults engage with the world, and how the rest of the world engages with them. Aging in the Community examines how services are moving away from a traditional strategy of centralizing care to instead branch out into the communities where older adults already live, work, and thrive. Third Act looks at how the traditional notion of retirement is changing, where lifestyle matters and continued engagement opportunities abound. Paradigm Shifts are the worldwide systemic disruptors we are all facing due to climatic, financial, and political trends.



TECH-AGE

Artificial intelligence, robotics, virtual reality, home automation



AGING IN THE COMMUNITY

Decentralized care and services



THIRD ACT

An alternative definition of retirement focused on lifestyle and continued engagement



PARADIGM SHIFTS

Climatic, financial, and political changes affecting the world

TECH-AGE

Technology as Caregiver, in Long-Term Care and at Home

Delivery of care will be a primary challenge for the senior living industry of the future, as the strain created by a population boom of "power users" is juxtaposed by a trend of high turnover and vacancies in frontline caregiving positions. With a higher demand for workers, and no one to fill the jobs, technology will likely intervene to fill the gap, transforming the delivery of care both at home and in healthcare environments.

Entrepreneurs and venture capitalists are already disrupting the senior care industry by developing technological advancements to produce products and services that allow the Baby Boomer consumer to be autonomous and proactive in their care. This phenomenon is not confined to small startups, however, as 2018 saw large corporations like Amazon and BestBuy make unprecedented moves that put them in a position to fundamentally disrupt the senior care market.^{7,8}

Robotics is one area of technology that has the potential to transform senior living, especially long-term care environments. Because of its ability to address the caregiver staffing crisis faced in many countries around the world, significant attention and funding has already been given to this approach. Japan (whose demographic ledger is even direr than the United States) is an early adopter in the realm of robotics for caregiving environments. In fact, The

The New Faces of Aging

Fred + W4TSON | Technology as caregiver

W4TSON, Fred's automated companion, was introduced to look after him and the house after Fred's wife died

When W4TSON sits with Fred at night on the couch, he is able to send a report of Fred's biometrics to a primary care physician



W4TSON reminds Fred to take his medication, asks him how his day is going, and makes sure the hallways are clear of any tripping hazards

Fred's grandkids love playing with W4TSON in the backyard when they come to visit

According to the 2019 State of the Industry Survey, 76% of the respondents said Technology as a disruptor will be very to extremely impactful on the senior living industry.9

Headquarters for Japan's Economic Revitalization has written and enacted a New Robot Strategy: Vision, Strategy, Action Plan. 10 One of the earliest demonstrations laying the groundwork for this effort is Robear, a nursing care robot, created by Toshiharu Ukai at Meijo University.11

In the United States, academia is beginning to study the potential effects of robotics on caring for the elderly. For instance, a study from the University of Texas at a Brookdale Senior Living community showed that after introducing robot caregivers there was "a significant drop in depression and an increase in human-robot social engagement."12 Delivery of care also has a wide variety of "behind the scenes" roles that are already becoming automated: robots that count and dispense medication, like ScriptPro, are already commonplace. In fact, the pharmacy automation market could be worth \$9.55 billion by the year 2022.13

Outside of more acute healthcare demands. new technologies have the potential to deliver telemedicine, healthcare concierge, and wellness services at home. These kinds of services will be increasingly appealing as preventative approaches to chronic conditions become the norm, instead of reactive—and expensive—stays in long-term care or a hospital.¹⁴ Social isolation leading to depression is one such condition that could be combatted by new interactive technologies like Hasbro's "Joy for All" line of robotic pets.

Voice-controlled products like Amazon Echo further remove the barrier of user interface and appeal to the already tech-savvy Baby Boomers, allowing them to tap into the potential of smart home technology. 15 Various sensors and apps on the market today can offer inexpensive alleviation to some of the fears associated with an older adult living alone. 16 CareCoach is another example of technology bridging care delivery to the home: it's an app that puts a live health advocate,

who becomes personified as a cartoon pet, in direct contact with older adults living at home to help with self-care reminders, therapeutic engagement, and safety supervision.17

Connecting Older Adults to the World Around Them

Previous generations of older adults were limited in their ability to connect with the world around them due to things like physical and social isolation. Now, however, technologies are being created at an incredible rate to address these problems, as all aspects of the world continue to become more interconnected. Coinciding with a Baby Boomer generation who is digitally literate and passionate about taking charge of their aging, these new tools are changing older adults' reliance on traditional senior living communities for physical and social connectivity.

Social media sites in general, and ones like Stitch and SeniorMatch that cater specifically to older adults, are combatting isolation and enabling social mobility—even among those physically isolated in their home. Meanwhile, the ride sharing apps of today and the driverless cars of tomorrow will tackle the problem of physical mobility for those who can't or don't want to drive. In fact, some ride sharing companies are already creating strategic partnerships with senior living communities.18

Enabling older adults to engage outside of their physical limitations can also grant them a sense of purpose, like those who work with the CAN Language School in Sao Paulo, Brazil. The school sponsors a program that pairs older adults in the United States with Brazilian students to video chat in English, which provides the adults with socialization and the children with practice of a new language.19

Virtual reality, sometimes referred to as "VR," is another technology that is changing the way seniors connect to the world around them by providing

The New Faces of Aging

Beatriz | Connecting to the world around her

No longer able to drive, but gets around via discounted trips using her Uber "VIP" membership

Organizes a local cohort of watercolor artists using MeetUp, who get together to review each other's work and discuss techniques and materials



Originally from Mexico, she can no longer go back to visit, but has enjoyed birthdays, weddings, and other family events through virtual reality video chat

Lives next door to an elementary school and volunteers in the library, reading and tutoring students in English and Spanish

experiences that were previously impossible to achieve. The first of its kind, Atria at Foster Square has partnered with Google Expeditions to allow residents to visit different global destinations through virtual reality three-dimensional imagery. This avenue also has the potential to transport seniors through time allowing them to re-live previous places and moments in their lives, such as the "BettVr With Age" project from product designer Jake Kahana.

Beyond entertainment and distraction, early work with VR has indicated some promising directions for using it as a tool for real social and medical outcomes. Some

communities are using VR approaches in reminiscence therapy for older adults with dementia.²³ These programs and others like them may also provide a common ground on which older adults suffering from cognitive impairment and those closest to them can interact.²⁴ While a loved one suffering from dementia symptoms may not be able to engage with the world of their loved ones, both sides can engage in virtual worlds that put them on equal footing.

Not only applied to cognitive approaches, physical impairment shows the potential to be engaged by virtual reality as well. Initial studies show a consistent

One of the benefits of moving into a retirement community is the concept of socialization and connectivity... [but] if people feel that they're part of a virtual community and feel a sense of connectivity... then what does that mean for a retirement community?

AARON RULNICK, MANAGING PRINCIPAL, HJ SIMS²⁰

reduction in pain both during and after VR therapy sessions, including chronic sufferers.²⁵ As virtual reality hardware becomes simpler, cheaper, and more seamless, it will continue to permeate the social and care aspects of the senior living industry in a powerful way.

Tomorrow's Technology Today

These myriad advancements represent boundless potential to either connect seniors to the world around them, or further isolate them. Will the caregiving robots and smart homes on the horizon solve the staffing crisis of today, or complicate it further? As senior living begins to converge with the healthcare and hospitality industries, how will care and service providers adapt to technologies that connect humans together and provide a limitless world of virtual experiences? In the end, the technology of the future will only be successful for combatting the challenges of aging in so far as it fosters real, deep, human connections.

AGING IN THE COMMUNITY

Drivers of Aging in the Community

As the first Baby Boomers enter the senior living marketplace, many of them are realizing that their finances may not support a traditional entry fee Life Plan Community model. Limited financial resources are making many older adults revisit their retirement plans, with people asking themselves how they might be able to receive high-quality care but at a lower cost, as they need it.

It's also no secret that most older adults would rather remain in their existing homes than move to a Life Plan Community or other senior living product.²⁶ Historically, this desire was often overridden by medical needs and/or complications associated with living unsupervised, which had no solutions other than expensive in-person monitoring and care. However, AARP projects that the market share of digital solutions and services for caregiving will double between 2017 and 2021,27 a predictor that technology will give older adults the ability to age in the

The New Faces of Aging

Susan | Independent together

Lives in a 65+ co-housing building located in the walkable downtown area of the town next to where her children live

Still able to travel to the grocery store on her scooter, because of specifically designated accessible routes in the public realm of her community



After fracturing her toe, her neighbors in her building help her with the stairs and difficult tasks

Accesses an in-home rehabilitation provider with preferred scheduling and a discounted rate as a member of her local Village community much later into life than ever before. With the hurdles of monitoring and caregiving now cleared by technology, a new generation of older adults will be empowered to maintain their independence and their place in the community like never before.

Independent Together

In light of this necessity and a new level of flexibility to maintain their connections and position within their existing community, older adults are finding ways to stay engaged with those around them and combat isolation. A well-trod example is the Village Movement, which sets up geographically-specific social alliances which help seniors help themselves by pooling resources to access volunteer services, ride sharing, and other offerings that support daily living.²⁹

Another example is co-housing, in which a group of usually like-minded older adults participate in a shared living arrangement to pool not only resources, but physical space as well. For example, Midwestern senior living provider Ecumen is building senior co-housing products in order to engage seniors at a younger age, and to combat the stigma associated with traditional senior living communities.³⁰ By pooling resources and/or physical space, seniors aging in the community are weaving services and socialization into the fabric of their existing neighborhoods, as opposed to the historic approach of segregating these services in a centralized Life Plan Community model.

Another set of premises that is leading away from the Life Plan Community's monopoly on supportive environments for older adults is the Age Friendly Cities initiative sponsored by the World Health Organization, and the Age Friendly Communities initiative from AARP. In the United States, 231 communities carry the AARP's designation, 31 and hundreds more worldwide fall under the WHO's. 32 These initiatives focus on universal design, equitable

development, and supportive living conditions for older adults at a community planning and strategy level. Other initiatives like Dementia Friendly America and Dementia Friendly Communities are working at the same level, but specifically tackling the issue of dementia. These community-level initiatives take the concepts of caring for and supporting older adults (traditionally the role of the "retirement community") and disperse them into the public realm.

Changing the Shape of Senior Living

The financial landscape affecting the Boomers may further drive the market away from the senior living communities of today, and toward the modification of existing homes, new housing stock, or accessory dwelling units to fulfill the needs of the senior who is aging in the community. For instance, an adaptable stand-alone home called the Open House was a dynamic 2018 prototype at the National Building Museum in Washington, D.C., which can adapt to a variety of non-nuclear family arrangements (e.g., a single mother, her young son, and a grandmother).35 Specific to senior living, a planning and design effort by the University of Arkansas Community Design Center looks at how stand-alone housing archetypes can promote socialization for older adults who are aging in the community in suburban and rural settings, which are less dense than their urban counterparts.³⁶ In a collision of the tiny house movement and senior living, "Granny pods" are accessory dwelling units that can be built in (e.g.) a backyard and serve as an alternative to traditional senior housing.37 These examples demonstrate that given a generation of fiscally diverse senior living consumers, the biggest competition to the traditional, centralized Life Plan Community might be the most supportive of aging in the community: the stand-alone home (albeit one that may look guite a bit different than those of today).

When moving into senior living, "there are some things that we know people value and they miss from their own homes. It's not just the space, it's that sense of community."

LORI BITTER, CEO/SENIOR STRATEGIST, THE BUSINESS OF AGING²⁸

The New Faces of Aging

John | Changing the shape of senior living

Owns a three bedroom house on an acre of property on the edge of the town where he grew up

Continues to mow the grass and keep up the landscaping in his yard, a lifelong passion of his, even though he no longer lives in the main house



No longer able to keep up with the house, John had a "tiny house" built on the property and rents out the main house to supplement his retirement income

Attends a weekly wellness seminar, sponsored by a senior living provider, which helps him track how his lifestyle is affecting his health

Boomers are not only diverse financially, but also in what they are looking for in a community to call home during their retirement. One shift in these attitudes is the desire to locate in denser urban settings that provide connections to non-senior specific amenities, volunteer opportunities, lifelong learning, and the cultural institutions of the city.39 To extend their reach into these urban areas, while still maintaining their centralized caregiving expertise, some Life Plan Communities are establishing "satellite" locations in denser areas that are linked back to their main hub.40 Some satellite approaches are informal ways to introduce potential customers to the organization and offer support to those who might not otherwise be able to afford it, such as the "More Than a Café" model from Mather Lifeways.41 In both cases, Life Plan Communities are morphing their sites and services to increase the diversity of living experiences they can offer and/or serve a more diverse customer base.

A Typological Transformation

Faced with the financial realities and changing lifestyle preferences of their Boomer customers, how will the senior living industry respond? Will "active adult" and "independent living" be replaced by "granny pods" and "virtual communities"? Is the Life Plan Community typology agile enough to embrace and engage alternative living arrangements, ranging from cohousing and urban options to sparser options in rural and suburban environments? If so, where is the line between an Age Friendly Community and a Life Plan Community Without Walls?

According to the 2019 State of the Industry Survey, 83% of the respondents said Aging in the Community as a disruptor will be very to extremely impactful on the senior living industry.³⁸

"People don't just retire anymore and swing in a hammock. There may be another life stage, or two, or three after 'retirement.'"

DAN PRESCHER, SENIOR EDITOR, INTERNATIONAL LIVING⁴²

THIRD ACT

Retirement Replaced by a Third Act

Partly due to a longer life expectancy and partly due to a significant increase in cultural and economic diversity among their generation, many older adults of tomorrow will not retire in any sense of the word that we know today. The first two acts of Baby Boomers' lives (for many: a rebellious and counter-cultural youth followed by domestication in adulthood/middle age) follow the patterns of previous generations. However, Boomers are now reimagining aging to look less like *retirement*, a terminological holdover from a factory-based economy, and more like a "third act" of living. 43

This new way of looking at older adulthood has changed expectations about what is "normal" for people during this period of their lives. Seniors are not leaving their careers at the pace they were expected to, and are finding new ways to participate in the knowledge economy of the American workforce. ⁴⁴ As technology and shifts in workforce culture move the United States more toward a "gig" economy based on contractor-style employment arrangements—ranging from apps like Uber and Task Rabbit to higher-end consulting arrangements—older adults are finding purpose and much needed income through

The New Faces of Aging

Winston | Embracing my third act

Still works part-time consulting for the company he has worked at for the last twenty years

Volunteers with the Boy Scouts of America during his free time



Started an online side business leading customized fishing tours through his local state park

Dating someone whom he met online, takes an hour-long train ride to see them on days he doesn't go into the office or lead a tour

According to the 2019 State of the Industry Survey, 71% of the respondents said Third Act as a disruptor will be very to extremely impactful on the senior living industry. 45

entrepreneurial pursuits.46 Alternatively, many older adults who are willing and able to leave their careers are finding new opportunities in volunteering for personal pursuits or collective ones like Senior Corps, taking up lifelong causes that they now have the time and energy to advocate for.47

Besides the "what" of this new act of life, the future senior is also changing the "who" of this third act. The realization that seniors want to connect with people of all ages (not just other seniors) has disrupted the notion of separating seniors, which has created different initiatives for intergenerational interaction. Chicago's Pat Crowley House is an example: independent living apartments sit alongside marketrate apartments that house college students and young married couples.⁴⁸ Another example is Mount St. Vincent nursing facility in Seattle, which hosts a preschool program that allows children and the residents to engage in shared activities to increase social engagement among the older adults and increase one-on-one attention for the children.⁴⁹

Where Boomers will retire is also beginning to change traditional notions about senior living. Climate change and the cost of living may affect many of the traditional destination locations for senior living communities, creating new opportunities for less traditional locations. Some older adults are also making dramatic lifestyle changes by choosing to move to destinations outside of the United States, where they can save on healthcare costs and add a sense of adventure to this new stage of life.50 To widen their networks abroad or at home, "third act-ors" will take charge of their own social well-being by using websites like Stitch that allow older adults to socialize, plan travel, make friends, and date all in one digital platform.51

Autonomy through Automation

As the first generation of modern American consumers, Boomers have continually redefined how products are sold and marketed in the United States. 52 The senior care industry, as it exists today, is not positioned to create or market services and products in the same way larger commercial industries and advertisers have been for the past half century. Entrepreneurs and tech companies who are already experienced at listening to their consumers are creating solutions that offer Boomers an alternative to the dependent and reactive approaches to care, which was the norm for the previous generation.53 Like many other innovations from the tech sector, these new innovations will, in short order, trickle down from the early adopters to become mass producible, affordable, and available to a larger cohort of Boomer users. This shift will enable a wider variety of choices for third act lifestyles, as older adults will no longer be tied down to traditional locations and constraints of aging.

Entrepreneurs are inventing products and services that empower a wider variety of lifestyles by allowing older consumers to take charge of their own wellness and care, reducing their dependence on caregivers. Apps like Peloton and Studio give older adults access to top-tier exercise instruction from the comfort of their living rooms. Similarly, grocery delivery systems like InstaCart or Kroger's HomeShop are giving older adults access to fresh and healthy grocery options, even when their mobility becomes limited.⁵⁴ Other solutions like Honor, known as the "Uber of healthcare," directly pairs qualified caregiving professionals to those in need of their services in a home health arrangement. Users can make their own customized care plan and also submit rankings and reviews of providers to help others. This service also empowers Honor's staff by allowing them a level of flexibility unrivaled by traditional caregiving jobs, while still gaining and documenting experience for career advancement.55

The New Faces of Aging

Gloria | Autonomous through automation

Uses her smart phone to schedule a Certified Nursing Assistant (CNA) to stop by her house to administer insulin injections when it's convenient for her

Monitors her blood sugar levels using a wearable device, which automatically uploads data to her primary care physician



Tunes into her live online yoga class every Tuesday and Thursday from her smart TV

Gets fresh, hard to find ingredients delivered right to her door to create the recipes she finds on her clean-eating blogs

Meanwhile, monitoring devices, like Fitbit or Xenoma (which is exploring smart clothing for older adults with dementia), are examples of new products that are wearable solutions to monitor vitals and even symptoms of chronic conditions.⁵⁷ These wearables can even sync to smart-home functions and double as safety monitoring devices for older adults living on their own.⁵⁸ Given the demographic opportunity, entrepreneurs from outside the senior living industry are capitalizing on it, and producing products that functionally and philosophically meet the expectations for the new independent, older adult consumer.

New Lifestyles for a New Generation

With lifestyle at its core, the traditional senior living community is made up of three basic components:
(1) a residential unit, like an apartment or cottage home, plus dining and housekeeping services,
(2) venues that promote opportunities for socialization, and (3) wellness and healthcare offerings. With all three of these components being fundamentally disrupted by new ways of thinking and technology, as well as the Boomers' market expectations, we must ask ourselves: How will the senior living industry respond? Will it become nimble and adapt into something different, or will it go the way of Blockbuster in a Netflix world?

"[New retirees] feel that they're too young to stop doing what they're doing, and they want to keep doing it."

MICHAEL MONAHAN, PRINCIPAL IN CHARGE – NORTHEAST HUMAN CAPITAL SERVICES PRACTICE, GRANT THORNTON LLP $^{56}\,$

PARADIGM SHIFTS

Resilient Responses to the Natural Environment

A number of recent natural disasters in the United States and around the world have raised serious questions about the responsibility of senior living providers to be prepared when it comes to weatherrelated events. In 2005, Hurricane Katrina killed 1,833 people in and around New Orleans - 75% of whom were over the age of 65.60 Twelve years later and 300 miles west, Hurricane Harvey made landfall over Houston, Texas, and 143 senior living communities were forced to evacuate or were otherwise affected. 61 Later that year, Hurricane Irma caused a power outage that resulted in the deaths of twelve Florida residents; the deaths were ruled homicides and sparked regulatory changes across the entire state. 62 In 2018, wildfires in California affected numerous senior living facilities, putting several under question about their fire preparedness plans. 63,64 The impact of natural disasters on senior living in the United States can no longer be ignored, especially in the Sun Belt of Florida to California where many older adults have traditionally migrated to destination communities.

Future buildings, cities, and planning strategies will all need to recognize the importance of designing for climatic changes and severe weather events, with senior living facilities being particularly vulnerable to these trends due to the sensitivity and unique needs of older residents. Further, bond rating agencies like Moody's are now incorporating extreme weather preparedness into how they judge a community's risk of defaulting.65

Providers need to adopt resilient design and planning strategies, such as selecting sites that minimize flooding potential and are in areas that are less

susceptible to disruption and damage. Existing lifesaving systems, like power generators, will likely need increased redundancy to ensure loss of life is minimized. This may include creating back-up power or having on-site electric power via photovoltaic panels. In addition, it may be necessary to provide for on-site water management for when potable water is disrupted or not available. This will also require making the necessary investments in resilient infrastructure to help offset the damage and loss of life that flooding could pose, such as creating regionwide flood mitigation, storm water recapture and infiltration, and encouraging implementation of local renewable energy sources to help mitigate the effects of infrastructure disruption.

An Uncertain Financial Future

Previously thought to be a generation with secure finances, Baby Boomers have faced career setbacks, medical events, and assumed student debt from family members, creating a retirement savings gap of nearly \$10 trillion.66 They control more than half of the nation's investable assets, but rising healthcare costs, existing debt, the shift from pensions to retirement investment, and the murky future of social security have created an incredibly complex financial picture for the next generation of senior living consumers.⁶⁷ Boomers are also feeling the pressure of being the parents and grandparents of a millennial generation with 300% more debt, who are half as likely to own a home as young adults were in 1975, and of whom 20% live in poverty.68 Combined, these factors are breeding new challenges for older adults, which will disrupt the existing financial structures of many senior living communities, especially entry fee and high-end rental models.

According to the 2019 State of the Industry Survey, 63% of the respondents said Paradigm Shifts as a disruptor will be very to extremely impactful on the senior living industry.⁵⁹

"[Banks] are really trying to figure out how to get Boomers to think more about their money for themselves and to quit spending on everyone else. After the recession, they took on a lot of bills and a lot of debt that wasn't really theirs."

LORI BITTER, CEO/SENIOR STRATEGIST, THE BUSINESS OF AGING 69

This financial picture for Boomers (as well as the financial tension between them and Millennials) is precipitating their increased participation in a new phenomenon called the "sharing economy." The term describes a system of micro-economics fueled by technology that allows people to utilize their time, skills, and assets to receive income and social capital. As of 2015, adults 55+ were equally likely as those 25-34 years of age to be providers of a sharing economy service. An example that relates to the intersection of personal finance and senior housing is

Nesterly, a business that pairs older homeowners who want additional income and socialization with younger people who need cost-effective housing solutions.⁷² The Freebird Club is an Airbnb-like homestay program that is specifically for older adults, and consequently results in a byproduct of socialization and networking in addition to the economic component.⁷³ These examples are compelling because they empower older adults to reap income and social capital from their assets, instead of trading in their assets for the limited social capital offered by a senior living community.

The New Faces of Aging

James | Sunbelt retiree

Moved to the Gulf Coast for the weather, lower cost of living, and to be around other active adults

Found a new resilient design community that has à la carte services allowing him to stay within his budget



Home is in a floodplain in the path of hurricanes, is susceptible to flooding from intense rain events, and has lost value from recent flooding

Looking to rent out his second bedroom to offset costs as his retirement savings have to last longer

Regulatory and Political Turbulence

The Affordable Care Act of 2010 has had a significant impact on the care-intensive portions of the senior living industry, as changing reimbursement and regulatory structures are leading to a convergence with the healthcare sector.75 In some states. increased regulations and lower reimbursements for long-term care may drive providers to forgo their licensed nursing beds in order to offer higher acuity care in lower regulatory settings, such as assisted living. Consequently, state regulatory agencies are already pushing back and dictating more stringent requirements for assisted living environments.⁷⁶

As an industry that is already having trouble recruiting and retaining staff, another disruptor that could have a serious impact on senior living is immigration reform, since 20% of all nursing assistants in the United States today are immigrants.77 These and other political and regulatory changes are putting significant pressure on the higher acuity end of the senior living continuum, just as a population boom of potential "power users" enters the market with lighter pocketbooks than originally anticipated.

BIG CHALLENGES, BIG QUESTIONS

The senior living community of the future will need to be flexible and adaptable in the face of shifting climatological events, financial outlooks, regulatory environments, and political landscapes. How will natural disasters change the physical shape of senior living communities, especially in vulnerable areas? Will existing models of care and socialization be agile enough to compete with emerging and unforeseen products and services from outside the traditional senior living market? Is the industry capable of continuing to provide excellent housing and care in the face of tighter regulations and lower reimbursements?

These and many more questions are coupled with what we know now. Though it's easy to become pessimistic and frame these disruptors solely as challenges, when we however look at them as opportunities, we begin to see the future of senior living and start on the path toward innovation. We encourage all industries, all readers of this publication to join us on this road to innovation and the future of senior living.

"The World Health Organization did a study on outcomes and cost of healthcare around the world: The United States wasn't even in the top ten."

DAN PRESCHER, SENIOR EDITOR, INTERNATIONAL LIVING74



SHARON BROOKS, CEO, GLYNN DEVINS/SBA78



Future Scenarios

After learning so much through our literature/media review and interviews, and reflecting on the macro-shocks, we knew the next important step would be to explore how this information could reshape the world in which we live. Knowing that so many of these futuristic ideas are actually right on our doorstep, we opted to look at the near future. Thus, we created a premise for the year 2030 and explored how the world may look given a certain set of assumptions. This section presents these possible alternate future scenarios.

THE PREMISE

The year is 2030. Over the last decade, several macro-shocks have changed the landscape of how older adults age, as well as how and even where care and services are provided to this demographic. Technology, aging in the community, the redefinition of retirement to be a third act of living, and worldwide paradigm shifts involving political, climatic, and financial disruptions have reinvented the concept of senior living.

Each of the following vignettes takes a different perspective on the possible impacts of these macro-shocks, resulting in a different set of "givens" for each scenario. For each scenario, we begin with a set of assumptions. We present the scenario and test it across different locations, financial, and care circumstances to determine who it might best serve. As a whole, these scenarios represent a wide range of possible futures for what we currently call senior living.

FUTURE SCENARIO 1: WETEST WETHRIVE

Assuming these things happen...



TECHNOLOGY INNOVATIONS

Entrepreneurs and innovators are drawn to the untapped Boomer market



ECONOMIC DISPARITY

Wider socioeconomic gap between the "haves" and the "have-nots"



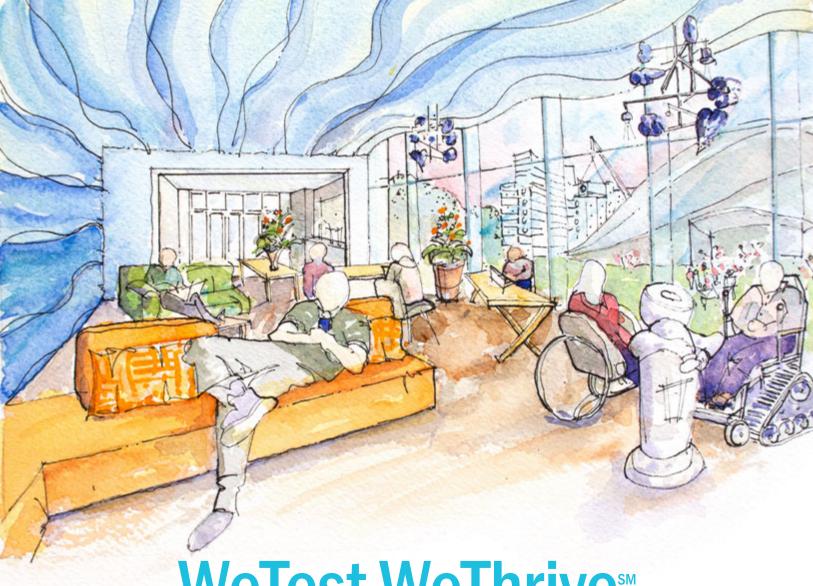
INCREASING LONGEVITY

Longer lifespans due to health monitoring, automated caregiving, and infusion technology



THIRD ACT

Boomers continuing to work, consult, and innovate long after "retirement"



WeTest WeThrive

INTELLECTUALLY CURIOUS OLDER ADULTS BETA-TEST THE LATEST TECHNOLOGIES

With WeTest WeThrive, you are at the forefront of everything. Get access to tomorrow's life-altering technology, today. Live within a sustainable technology showcase; breathe the cleanest air within a completely Net Zero community. Travel the world through our patented VR-4D virtual experiences. Realize your own entrepreneurial dreams in our Age-Work™ makerspace modules. Attend private lifestyle events with distinguished guests consisting of the best and the brightest of the political, artistic, and intellectual worlds. Get the latest in wearables, smart devices, robotic caregivers, and pharmaceutical enhancements. Included in the entry fee is a custom concierge medical plan delivering top-of-the-line treatments guaranteed to extend the excellence of your mind and body well beyond what mass market medicine can offer. In addition to being the world's very first betatesters for advanced technologies, Thrivers® also get early access to upcoming SpaceX Lunar day excursions. Do you feel like life has passed you by? Get back out in front by shaping your future at WeTest WeThrive. The Aging Evolution has begun — will you join us for Aging 2.0?

Thriver® Gary's WeTest Story





ON GARY'S 50TH BIRTHDAY, his children bought him a subscription to WeTest WeThrive's line of home products, knowing his love for having the latest in technology. Quarterly, Gary was shipped a state-of-theart gadget from one of the sponsoring companies, all of which were compatible with his smart-home interface. Gary enjoyed rating the gadgets and giving feedback to the companies.

AT AGE 62, Gary was diagnosed with Type 2 diabetes. He updated his status in his WeTest subscription, and his next shipment included a pair of high-tech slippers containing sensors that constantly monitored his blood sugar and sent maintenance reminders to his entertainment devices, as well as data to his primary care physician and insurance company.

WHERE

Rural - The WeTest WeThrive brand has revolutionized the senior smart-home marketplace. Through a trickle-down effect from high-end beta test technology, many new devices and innovations have become cheaper and more widely accessible. No matter how far away the nearest neighbor is, any home can be connected to the world around it.

Suburban/Urban—The culture of innovation embedded in the WeTest model has empowered entrepreneurial and tech-savvy seniors to become innovation elders in their communities. Centered around WeTest WeThrive community-based innovation hubs, older adults can teach and be taught by intergenerational colleagues because of the hubs' affiliations with libraries, schools, and lifestyle centers.

WHO

Middle Market - While early adopters and beta testers are generally from a wealthier socio-economic group, the trajectory of consumer technology has made these devices and innovations more affordable, easier to use, and seamless with other technology infrastructures, thereby unlocking them for the middle/mass market.

Affordability—In a future with increased economic disparity, access to these kinds of life-altering technologies is out of reach for a significant segment of the population. Mission-driven organizations are grappling with the role of technology in care, and their role in delivering it to older adults. Healthcare institutions are realizing paying for preventative care will save on hospital costs for chronic low-income patients.





AFTER FINISHING HIS CAREER as a software engineer, Gary got involved teaching and learning at a local WeTest WeThrive premium makerspace community. These intergenerational technology clubs were a great place for Gary to share the wealth of knowledge he gained during his 50-year career, while still exploring exciting new projects and theories.

EVENTUALLY, Gary's ability to regularly contribute at his local WeTest branch declined, and his home became too much for him to keep up with. Moving into a WeTest WeThrive affiliated community allowed him to translate the physical and technological ecosystem of his smart-home to an easier to navigate environment, while allowing his involvement in the research, collaboration, and community of his WeTest counterparts to continue.

CARE

Healthcare—As our definition of care moved from reactive to proactive over the last 10 years, technology played a lead role in monitoring and delivering low-impact interventions to solve health problems on a population health level, rather than delivering specific acute responses to individuals. Technology has allowed providers to "care for seniors" by preventing future health issues at 40, instead of responding to them at 80.

Dementia – Partnering with the Dementia
Friendly Communities movement, WeTest
WeThrive has made significant breakthroughs
in outfitting existing communities with technology to
support older adults with cognitive impairment. By
incorporating assistive technology in the public realm,
entire neighborhoods and cities have become safe and
supportive, allowing seniors with dementia to maintain
unprecedented levels of connection with their existing
social and environmental networks.

If you're a senior living provider or want to partner with one to explore this scenario, here are three things you can do...

3 Things You Can Do

- 1 Embrace proactive healthcare interventions, as a response to the shifts in reimbursement and insurance structures, to prevent or defer complications associated with aging, rather than reacting to them.
- 2 Take cues from market-rate housing to understand which "smart home" technology is market ready, and what innovations could be applied to existing communities.
- 3 Look for tech company partners or sponsors to create plans for health monitoring/automated caregiving, provide occupational opportunities for older adults, and furnish unique advancements in social and entertainment offerings.

FUTURE SCENARIO 2: INTO THE WELLDERNESS

Assuming these things happen...



HEALTHCARE COSTS

Skyrocketing costs of care in the U.S. force people to turn to overseas providers



NATURAL DISASTERS

Increased frequency of severe events drives resilient design strategies



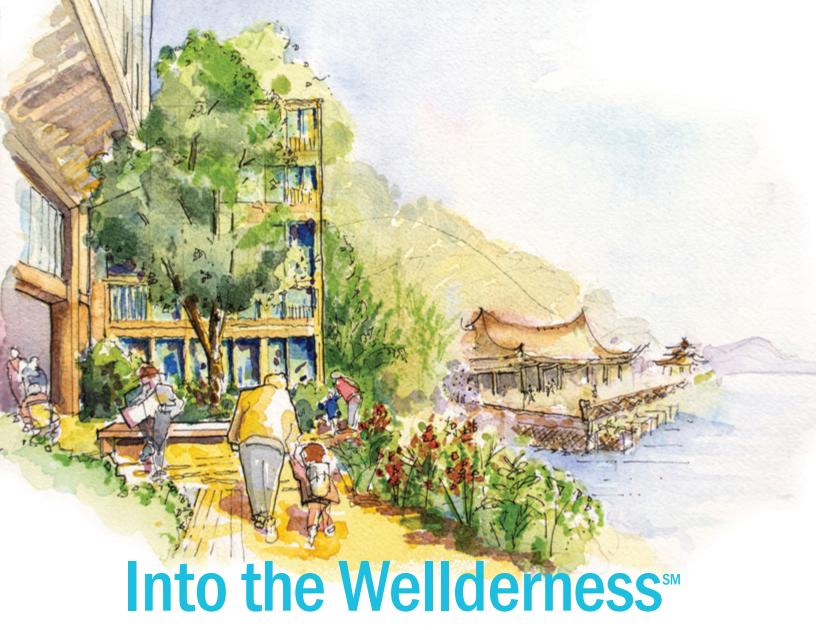
WHOLE-PERSON WELLNESS

Biophilic environments and alternative medicine are market expectations



TECHNOLOGY INNOVATIONS

New technologies lead to a further globalized society and help connect people across the world



AFFORDABLE OVERSEAS CARE IN A RESILIENT AND BIOPHILIC SETTING

Fed up with not being able to get the care you need here in the States? Why not find it in the comfort and luxury of Singapore's lush tropical islands? Developed as a test site for a water desalination system, Into the Wellderness is a cutting-edge community focused on holistic wellness and alternative medicine. Biophilic design elements will help restore you, while high performance design strategies help restore our relationship with nature. Our five-star accommodations are eclipsed only by our five-star care facilities. Well-trained but less costly staff gets you the care you need for HALF the price. Our health coaches will create a wellness plan that is tailored specifically to you—whether you're going in for surgery, recovering for a few weeks, or navigating a longer-term condition. Regardless of your length of stay, the resilient design and construction of this community means you will never have to evacuate your new home, no matter what weather event is on the horizon. While enjoying your time in this exotic hospitality-focused setting, you can get involved in the local community and participate in volunteering programs. The latest in InstaTranslate® technology will connect you to the region and to other international guests, while our patent-pending holographic connection rooms allow you to stay in close touch with loved ones back home. Sometimes you just need to get lost to find your best self... at a price you can afford!

Ken and Janet's Story





KEN AND JANET WERE ALWAYS PASSIONATE ABOUT TRAVELING, and had made a conscious decision during their middle years to save less for retirement in favor of enriching their lives through travel and other once-in-a-lifetime experiences.

AFTER KEN SUFFERED HIS FIRST STROKE, he and Janet realized that while there had been significant advancements in medical care and longevity aids for seniors, the road ahead was going to be a costly one. Paired with their modest finances and seeing no other viable options. Ken and Janet decided to move to Into the Wellderness.

WHERE

Overseas Retirement - Overseas destinations have become increasingly appealing to Baby Boomers because of their adventurous quality and low cost of living. Communication technology has evolved to the point where being on the other side of the world doesn't mean missing birthdays, recitals, and other important family events. This further globalization of society has removed some of the stigma of spending some of your valuable Third Act outside of the United States.

WHO

Affordability—The primary case for Into the Wellderness was a financial one. With a massive number of Boomers experiencing a \$1 trillion savings gap, combined with skyrocketing healthcare costs, many aging Boomers simply couldn't afford the level of care they needed. After the initial startup costs of moving, Into the Wellderness provided the comfortable lifestyle and quality care these people were looking for at a price they could afford. Not to mention, expatriates also support the local economies of where they settle overseas.

Adventure-seekers - Into the Wellderness has appealed to an increasingly large group of Baby Boomers who are looking for a new adventure in a new setting for their Third Act. A group of older American expatriates has risen to this challenge and built a rich community with strong connections back to the U.S. and forward to the local Singaporean culture.





STARTING IN A "CONCIERGE LIVING LITE" APARTMENT, Ken and Janet made new friends with other expats from the United States and got involved by leading seminars and discussion groups both inside the community and in surrounding villages based on their extensive world travels. Janet also began to stretch her wings and started doing things on her own.

AS KEN'S HEALTH BEGAN TO DETERIORATE and Janet's day-today caregiving responsibilities began to take a toll on them both, they decided to continue onto the "concierge living plus" plan at Into the Wellderness. Ken receives excellent care, and Janet's time is freed up to continue participating in the seminars and discussion groups that they started together.

CARE

Healthcare—In a World Health
Organization Study that indexed national
healthcare systems worldwide based on
health, responsiveness, and affordability, Singapore
ranked sixth out of 191 countries. (By comparison,
the United States was ranked thirty-seventh.)⁷⁹ Into
the Wellderness taps into this incredibly successful
healthcare market and provides top-of-the-line care to
seniors in a beautiful, natural setting.

Dementia – Despite being significantly less expensive than comparable care in the United States, the dementia households at Into the Wellderness boast a 1:4 staffing ratio, because of the reduced labor cost and the strength of the U.S. dollar. The biophilic setting also provides significant connections between the residents and the natural environment, which significantly reduces sundowning and associated issues.

If you're a senior living provider or want to partner with one to explore this scenario, here are three things you can do...

3 Things You Can Do

- Understand what resiliency challenges exist in your region and prepare to weather the next natural disaster or long-term climate changes that may impact your community.
- 2 Find ways to cater to adventure-seeking Boomers who want unique experiences in their Third Act of living, rather than traditional retirement.
- Make connections with an institute of higher learning with robust experience in study abroad programs to learn about the opportunities and challenges associated with programs and partnerships in foreign countries.

FUTURE SCENARIO 3: CENTERS FOR CREATIVE LIVING

Assuming these things happen...



SHARING ECONOMY

Boomers are increasing participants in an economy of collective rather than individual ownership



EXPERIENCES VS. THINGS

Older adults are more interested in having experiences rather than owning things



THIRD ACT

Pursuing specific lifelong passions becomes a larger part of the new "retirement"



MEDICAL TECHNOLOGY

Advancement in telemedicine allows care from anywhere



EXTENDED STAY MICRO-HOTELS FOCUSED ON LIFE EXPERIENCES

The Centers for Creative Living is a lifestyle experience subscription service that lets you spend the best years of your life living out your dreams in some of the most beautiful and iconic locations in America and around the world. Our senior-friendly, extended-stay micro-hotels let you go anywhere and get the same level of care and service. On-site care facilities and clinics have access to state-of-the-art telemedicine portals to ensure you can focus on what really matters. Three subscription levels allow you to either (1) have a full-time experience, with four 3-month experiences (or equivalent) at any Center of your choosing each year; (2) select a "home base" Center, with two 2-month experiences (or equivalent) at any Center each year; or (3) become a member and pay as you go for the experiences of your choosing. Each Center is located in a unique site, with flexible packages and one-of-a-kind programming. Need to recover from surgery? Why not do it at the Grand Canyon? Feel the need to flex your mind and spirit? Sign up for the Burning Man experience. Yearn for a simpler time? Visit the nation's premier agrarian lifestyle community and work side-by-side with the Center's chefs and artisans-inresidence to hone your skills as a sommelier, master woodworker, gourmet chef, artist, writer, or something else entirely. Or try an educational immersion at one of the 32 Centers based at a top-tier university. Whether you're looking for a new life experience for a few weeks or a season, the Centers for Creative Living have what you're looking for. Why invest in just one property and one life experience when you can have them all? At the Centers for Creative Living, we kick the Bucket List for you!

Juan and Susan's Story





FOR THEIR 30TH WEDDING ANNIVERSARY, Susan surprised Juan with a week-long African safari. It was a lifelong dream of Juan's that had always gone by the wayside, until a coworker of Susan's gave her rave reviews of a 55+ micro-hotel located on the border of the Maasai Mara nature preserve in Kenya.

WHEN VISITING THEIR DAUGHTER IN CHARLESTON, Susan and Juan noticed another Center for Creative Living opening near Charleston's historic downtown. They decided to downsize their three-bedroom house to a smaller condo and spend some of the difference on extended stays in Charleston during the winters. They were now able to attend more of their grandson's basketball games.

WHERE

Partnership Locales—Centers for Creative Living are co-located with a variety of "bucket list" and experience-based partners including universities, once-in-a-lifetime destinations, and lifestyle-specific communities like an agrarian community in Vermont and one in Marfa, Texas (otherwise known as the "Quirkiness Capital").

Home Swap—By partnering with a popular sharing economy rental provider, Centers for Creative Living can offer unique extended-stay contracts in houses, condos, and apartments, in addition to their chain of experiencebased micro-hotels. The Centers for Creative Living realize that spending time with one's family and friends is an experience well worth having, and by offering options in more residential locations, people can do just that.

WHO

Masterclass Partners—The Centers for Creative Living's partnership with Masterclass.com allows them to offer oneof-a-kind programming at select locations throughout the year. Their Acadia National Park location hosts writers' workshops featuring authors-in-residence, such as Stephen King, Margaret Atwood, and James Patterson. These highly sought after retreats offer an in-person component to the online course material in top-of-the-line destinations.

Middle Market - Centers for Creative Living employs a sharing economy approach where one's residential assets work for them while they're away. By adding one's house or condominium to the Centers for Creative Living network, rental fees generated by one's property offset the cost of their subscription.





AFTER FINISHING THEIR RESPECTIVE CAREERS, Susan and Juan decided to join the Centers for Creative Living lifestyle subscription service, which allowed them to maintain their condo as a base of operations while spending extended stays at a variety of Centers for Creative Living micro-hotels and private home swapping partners (and contribute their condo to the program as part of the buy-in).

LATER IN LIFE, Juan developed Parkinson's, and their travel became confined mostly to their condo and the Charleston Center for Creative Living, where many of the staff have known them since their first visit. He and Susan were able to check in virtually with his neurologist and complete his rehab regimen using the Center's WellLink® space. He still loves going to the basketball games at the school where his grandson used to play.

CARE

Healthcare — Each Center for Creative
Living location has a WellLink® space
that combines fitness and rehabilitation
with emotional and social wellness spaces. All are
outfitted with sensors and communication devices for
a comprehensive telehealth experience. People can
upload their electronic medical records at all locations
to log health and wellness activities regardless of
where they find themselves.

Dementia — Specializing in day-programs and respite care, Centers for Creative
Living gives members peace of mind to continue having new adventures even after the diagnosis of a loved one. During the day, someone's partner can enjoy top ranked dementia day-programming, then at night, rejoin them for a variety of dementia-friendly nightlife options, including dinner in the locally-inspired restaurants.

If you're a senior living provider or want to partner with one to explore this scenario, here are three things you can do...

- Hire a consultant from the hospitality industry to learn from that sector's experiences with time-sharing, multiple brands under one portfolio, and providing unique experiences.
- Consider which of your services can be delivered virtually — and how to do so — in order to adapt to a broader, more transient clientele of Boomers.
- 3 Develop an exchange program that allows residents to spend a pre-determined amount of time in partner destinations, domestically and/or abroad.

FUTURE SCENARIO 4: LIFEPOD HOMES

Assuming these things happen...



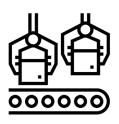
AGING IN THE COMMUNITY

Automation of transportation, services, and care reduces the number of older adults moving into senior living



MIDDLE INCOME

Many Boomers will not have the finances to afford traditional senior living



MASS CUSTOMIZATION

Prefabrication processes allow for affordable and customized home construction and delivery



SUSTAINABLE TECHNOLOGY

Advancements in building practices and technology facilitate increased "off the grid" living



CUSTOMIZABLE MASS-PRODUCED ACCESSORY DWELLING UNITS WITH OFF-GRID TECHNOLOGY

Do you want the peace of mind of living with your grown children, but don't want to give up your independence? Leverage the property you already have! Add a fully off-the-grid pod to your backyard that is specifically designed to fit your changing needs. We'll deliver and install an age-friendly accessory dwelling unit to your backyard, freeing up your home to rent out for additional income or for extended family to move in. Integral smart-home devices and wearable technologies keep you connected to your friends and family, and give you independence and peace of mind. Each LifePod Home also comes with a membership to your local "Village" and exclusive access to the Village2Village™ app, putting on-demand services at your fingertips. For just a little more each month, subscribe to the driverless-car service that gets you where you want to be in a flash. Just because you don't need three bedrooms anymore doesn't mean you have to give up the life you've built. When you lease one of our custom home solutions, you're getting a new lease on life!

Mary's Story





AFTER 52 YEARS OF MARRIAGE, Mary's husband Dennis passed away. Despite being in his late 70s, Dennis had continued to keep up with the maintenance on their three-bedroom house and their one acre of property. In his absence, though, Mary was completely overwhelmed by the amount of upkeep required.

LOOKING TO DOWNSIZE, but not ready to leave the home she built with her husband, Mary chose to rent a smaller, accessible one-bedroom/one-bath accessory dwelling unit from LifePod Homes. They helped her design a custom unit that fit her specific needs, and delivered it right to her backyard.

WHERE

Suburban – LifePod Homes would be especially successful in locations where there is a balance between supply of land and the cost of land. Suburban locations may offer zoning environments that are more conducive to accepting accessory dwelling units than tightly regulated urban environments.

Rural – Building a single LifePod Home in a rural setting where greater supply drives down the cost of land could be financially challenging. However, zoning flexibility and land supply of these rural areas provides a conducive environment to building multiple units arranged in communal groups and physical villages; for instance, lifelong friends who decide to rent units adjacent to each other on the same piece of land.

WHO

Middle Market — Leveraging rental income from existing homes presents a very attainable option for the middle market to lease LifePod Homes. While LifePod Homes can be expensive to buy outright, a rental model is a win-win for both the lessee and the leaser.

Demographics—As more Boomers enter their Third Act either single or divorced, there will be a decrease in desire for a large, single-family home. Further, the expectation of larger square footage living arrangements has decreased in parallel with the amount of furniture and other belongings that "make the cut" in the downsizing process.





MARY RENTED OUT THE MAIN HOUSE, which covered a large majority of the cost of renting her LifePod Home. Included in her monthly payments are a membership in her local Village, a monthly credit allowance for Uber, and a member's only discount to the grocery delivery service of her choice.

A DAILY UBERPOOL CARPOOL gave Mary the option to visit her local senior center, where she has access to a gerontologist, wellness coaching, and rehabilitation services. The senior center has also become a social destination for Mary. She has made many new friends in this new chapter of her life, and there's always a friendly face who knows her name and is checking in on her.

CARE

Healthcare – Community health hub
locations will play a significant role in delivering
preventative care for seniors at a younger
age and at a larger scale. Automated transit will provide
unprecedented access to these health hub locations, even
in sparsely populated areas. Though, high levels of acuity
will still require moving to a residential care facility.

Dementia — Many of the smart-home technology innovations integral to the LifePod Homes would allow older adults with mild dementia to stay in their homes for longer, even by themselves. However, life at home still becomes difficult for older adults with cognitive impairment when their ability to navigate the automated transit declines, and when they require more support than a local senior center can be expected to give them. However, family living nearby (e.g., across the yard) can offer support that could mean the difference between staying home longer or having to move to a more specialized environment.

If you're a senior living provider or want to partner with one to explore this scenario, here are three things you can do...

- Create or expand at-home service programs that can support older adults who are not interested in moving to a traditional senior living community.
- Recruit a board member from a large general contracting company, and exchange ideas related to new, age-friendly products that appeal to the middle market.
- 3 Expand your offerings beyond the walls of your community either in the form of physical sites that are "spokes" off your main "hub" location, or through virtual community approaches like the Village to Village Network.

FUTURE SCENARIO 5: VERTICAL MAIN STREET

Assuming these things happen...



AGING IN THE COMMUNITY

More services delivered into existing communities generates less interest in senior living



DECLINE OF PHYSICAL RETAIL

E-commerce leaves underutilized commercial real estate in existing town centers and malls



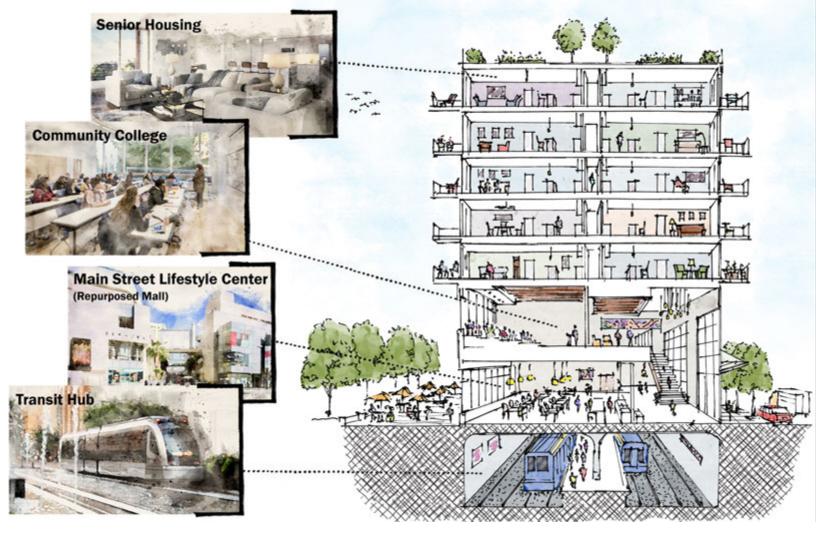
AUTOMATION OF LABOR

Community colleges and technical schools become important retraining centers when automation displaces American workers



TRANSIT-ORIENTED DEVELOPMENT

Increased connectivity to traditionally car-based suburbs through new transit infrastructure



Vertical Main Street™

REPURPOSED MALL WITH A COMMUNITY COLLEGE PARTNER

A joint venture between Fox Mountain Technical College, Simmons Malls, and The Meadows at Foxbrook Senior Living, the Foxbrook Lifestyle Center has completely transformed the town of Foxbrook into one of the most age-friendly communities in America. A new mid-rise residential tower has been added onto the existing shopping mall that now houses a variety of community amenities. In addition to senior-friendly apartments, this new town center hosts rent-by-the-day co-working office space, makerspaces, retail, the public library, and state-of-the-art culinary facilities that serve double-duty as teaching kitchens for the local college and as a dynamic restaurant experience for both the independent living residents in the apartments above and for the greater community of Foxbrook. Students pursuing careers as medical technicians gain experience and provide needed care in the outpatient clinic, pharmacy, and the community's first "pop-up" surgery center. Members of the greater community can bring their loved ones to the memory support day facilities and respite suites, or drop their children off at the intergenerational daycare center. An extension of the light rail system of a nearby urban area connects community members to downtown in minutes. Whether you're stopping in for a great meal, great care, or great company, the Foxbrook Lifestyle Center has what you need. Having sparked a revitalization of the surrounding area, it is a place for all members of the community to gather together and experience the extraordinary contributions of their younger and older citizens alike. The Foxbrook Lifestyle Center brings the spirit of the community back to the heart of the community.

Sonia and Sara's Story





SONIA AND HER FRIENDS regularly scheduled outings to the Foxbrook Lifestyle Center to see a movie, go out to eat, or shop in the stores. It was an important way for them to stay connected to each other regardless of what else was going on in their lives, and the Lifestyle Center was a central meeting place convenient for everyone.

SONIA'S GRANDDAUGHTER SARA was accepted into Fox Mountain Tech's culinary program. Sonia and Sara arranged a weekly lunch date in one of the Lifestyle Center's restaurants. Sonia enjoyed staying up-to-date on Sara's life inside and outside of school, and Sara was able to get the support and advice that she's always treasured from her grandmother.

WHERE

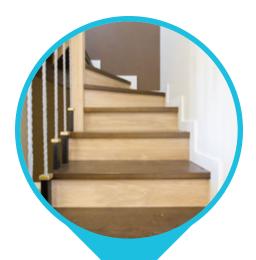
Suburban Centers—This "Lifestyle Center" approach to senior living could be especially successful in suburban areas. The ability to create central locations that can be accessed by a significant density of people was key to choosing sites for suburban shopping centers in the 1980s and 1990s, and would now be key to siting services and cultural destinations well into the 2000s.

WHO

Intergenerational — By partnering with schools or other cultural institutions, the "vertical main street" presents natural and authentic opportunities for senior living to embrace housing and programming that cross-pollinates between age groups. Co-locating them is one thing, but comparing the assets and needs of each group reveals opportunities for symbiosis between them, and results in a "1+1=10" formula—such that by partnering certain services and agencies, the outcome is far greater than they alone would provide.

Older Adults Staying at Home -

Centralizing and co-locating services with cultural assets would be beneficial not only for the older adults who can afford to live in a vertical main street, but also older adults who want to (or must out of necessity) remain in their current homes in the broader neighborhood. It becomes a one-stop shop for food, shopping, learning, care, socialization, and community participation.





AS SONIA STARTED TO HAVE TROUBLE getting around her multi-level townhouse, she decided to move into an independent living apartment in the Foxbrook Lifestyle Center. Most of her friends visited that part of the neighborhood regularly anyway, and she was excited about the opportunity to stay close to her granddaughter who landed a job in one of the Center's restaurants upon graduation.

HAVING DEVELOPED DEMENTIA in her early 80s, Sonia moved into the residential dementia household in the Foxbrook Lifestyle Center, where her friends were still able to visit her regularly. She and Sara are still able to maintain their weekly lunch date in their favorite restaurant, where the wait staff knows Sonia and is trained on how to cue her and interact with her. Sometimes, Sara visits the household and cooks special meals for Sonia and her housemates, which Sonia loves even more.

CARE

Healthcare — Creating a central community hub would provide an attractive base of operations for a variety of medical professionals, and a perfect setting for residential care for seniors. Community college partners could be at the forefront of retraining workers displaced by automation into more human-focused positions (such as caregiving), which provides an excellent partner for staffing and innovating residential senior care environments.

Dementia – Discreet monitoring and sensing technology would enable much larger and complicated environments to become dementia-friendly. Many sites would allow older adults with dementia to wander and engage with the entire building, creating a naturally occurring "dementia village" within the vertical main street. Senior living staff, teachers, and students of the community college, and the staff of the restaurants and shops within the building could be given extensive training on how to interact with and support older adults with dementia.

If you're a senior living provider or want to partner with one to explore this scenario, here are three things you can do...

- Engage an institute of higher learning to develop tangible programs and spaces that facilitate genuine intergenerational synergy — preventing both organizations from having to duplicate programs, services, and spaces.
- Connect your organization to local real estate markets in order to position yourself to respond to unique opportunities that aren't inside the confines of your existing campus(es).
- 3 Build a staffing "pipeline" by creating and maintaining strong, mutually-beneficial relationships with schools and training centers that teach the next generation of team members in your region.

FUTURE SCENARIO 6: BED MATCH & BEYOND

Assuming these things happen...



LIFESTYLE AND DEMOGRAPHICS

Fewer marriages, more divorces, and fewer children create fewer familial caregivers



SHARING ECONOMY

Boomers are increasingly participants in an economy of collective rather than individual ownership



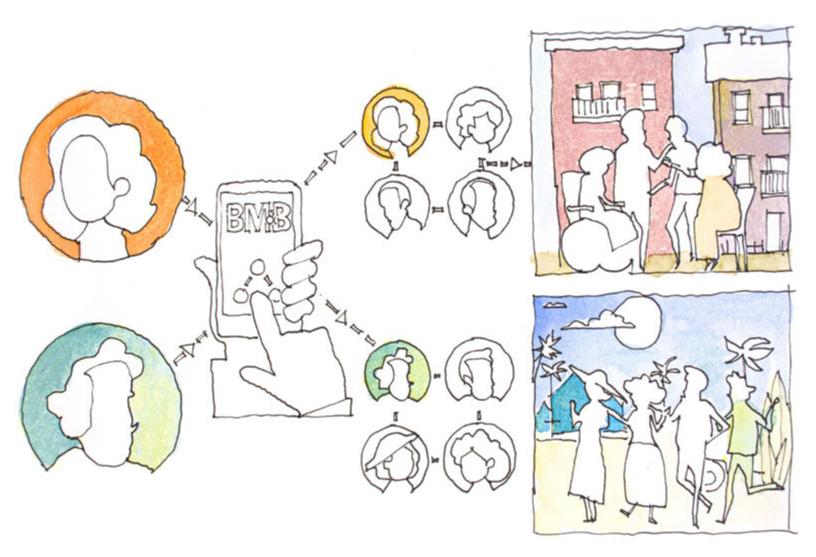
DECLINING OCCUPANCY

Economic and consumer preferences lead to declining occupancy in traditional Life Plan Communities



THIRD ACT

Pursuing specific lifelong passions becomes a larger part of retirement



Bed Match & Beyond[™]

AN APP THAT LINKS LIKE-MINDED INDIVIDUALS WITH AVAILABLE SENIOR-FRIENDLY REAL ESTATE

Dubbed the "Match.com of Co-housing," Bed Match & Beyond is a digital service that connects older adults who are looking for community with like-minded individuals. This digital platform links real estate listings in established senior care settings with social-profiling and matching software to bring together like-minded people with a place in which to create a new intentional community. Bed Match & Beyond has turned the senior living marketplace upside down and is now the main marketing tool for many established senior living providers. Independent living towers now have "lifestyle floors" ranging in theme from "Supportive Sisterhood" to French horn enthusiasts to "Animal House at 80." Outside the walls of traditional senior living communities, countryside villas host communities of seasoned fishermen; urban brownstones are home to art aficionados. Instead of being grouped by frailty, older adults are now connected with compatible people, forming new bonds for this new stage of life.

Li's Story





ON THE INSISTENCE OF HER ADULT CHILDREN, Li moved into a Life Plan Community after retiring from her professorship at a local university. Li's children assured her that this was the way she could 'stay connected.' While the other residents were very nice and welcoming, Li missed the camaraderie of working closely with other academic peers. This new community just didn't seem to fit. After seeing an ad on a popular news website, Li decided to give Bed Match & Beyond a try.

LI SPENT SEVERAL WEEKS COMMUNICATING back and forth with a wide variety of people until she found three other people that gave her that feeling of being back at the university. Two of them lived fairly close to her, and the other one was willing to relocate from out-of-state. Bed Match & Beyond was then used to pair the group with a four-unit, age-friendly apartment building in a university town, a few hours away from Li's home.

WHERE

Real Estate Matching—Bed Match & Beyond is about bringing people together, but it is also about finding the right place for them to live. By tapping into a database of senior-friendly real estate and employing algorithms that take into account important proximities, travel access, lifestyle preferences, and potential medical and care-related issues, Bed Match & Beyond would take the worry out of finding the perfect place to call home.

WHO

Diversity — Because users would be matched based on lifestyle, rather than frailty and geography, Bed Match & Beyond can appeal to people with a wide range of ethnic and cultural backgrounds, chronological ages, and life stages. This could be especially appealing to a Boomer generation who is significantly less homogeneous than the generations before them.

Middle Market/Affordability—In many states, affordable housing rules could be updated so that real estate owners who offer reduced rent to BMB-ers based on economic situation would receive property tax breaks. This would make lifestyle housing achievable for a wider range of economic situations, and could lead to increased socioeconomic diversity among Bed Match & Beyond participants nationally.





LI LOVES LIVING ALONGSIDE HER FELLOW "BMB-ERS."

They've quickly become like family to her. Their dinners are full of stimulating conversation, and they've gotten involved in several book clubs and discussion groups with other retired professors in the area.

AS LI AND HER FRIENDS HAVE STARTED TO EXPERIENCE MOBILITY AND COGNITIVE ISSUES, they have pooled some of their retirement savings to hire in-home care services. Starting with a flexible, rotating pool of caregivers, they grew especially attached to one caregiver, Jessica. As their needs increased, they hired Jessica full-time during the day, and use the larger pool to cover any nighttime emergencies.

CARE

Healthcare—Integrated into the BMB app is an add-on from a partner homecare company, where residents can schedule caregiving hours. This provides flexibility for both the BMB-ers and the caregivers, and users receive a discount by buying from inside the BMB app. Some BMB-ers even pool enough money to hire homecare coverage during the day or full 24-hour coverage.

Dementia — Many existing senior living communities with dementia expertise can adopt the Bed Match & Beyond interface as a way to create lifestyle groups within their residential dementia communities. By tagging their real estate as "dementia-friendly" in the app, they can engage a specific segment of the senior population who is looking for dementia care as part of their lifestyle preferences.

If you're a senior living provider or want to partner with one to explore this scenario, here are three things you can do...

- Engage cultural/lifestyle groups that are prevalent in your region to create unique lifestyle experiences and housing options that appeal to these particular populations.
- 2 Partner with a tech company or dating app to develop a lifestyle app for seniors that addresses socialization, co-housing options, vocational opportunities, entertainment, and lifelong learning.
- Explore à la carte approaches to services in order to cater to potential customers who would be interested in parts of your offerings, but are still independent enough or otherwise capable of providing their own housing.

Where We Go From Here

At the very start of this publication, we talked about the rapid pace of innovation and technology in our society. There is no question that every industry has been (or soon will be) changed by the technological advances occurring at all levels, from how we connect with friends to how we receive medical care. During the year-long effort of researching and imagining the Clean Slate Project, we experienced firsthand how technology could impact the senior living industry.

Almost every future scenario we dreamed up had an undercurrent of technology. In some cases, like WeTest WeThrive, technology is the main thrust. In Bed Match & Beyond, technology is the platform by which like-minded people connect. Even our off-thegrid concept, Into the Wellderness, uses technology to connect people near and far.

The pace of innovation, however, goes beyond just adapting to new technologies. There already are senior care providers creating **interesting partnerships** with non-senior living providers, and we're seeing **new** senior living models that respond to new market demands. In fact, while we were researching what we know now and brainstorming future scenarios, some of the ideas we were generating were already passing us by in the fast lane!

In some cases, what we are calling "the future" is, in fact, already here. Our LifePod Homes scenario, for instance, is already being realized with products like Minka Homes⁸⁰ from Dr. Bill Thomas and the

rolling tiny homes of Wheelhaus.81 Many American seniors are already pursuing a Centers for Creative Living lifestyle, earning \$700 million in supplemental income through Airbnb in 2017,82 and spending it on experience-based lifestyles like the one outlined in the book Your Keys, Our Home about a couple of "Senior Nomads."83 These and other real-life versions of the scenarios we've outlined in this publication are being undertaken by organizations who are not traditional senior living providers. As one of the CEOs in our pivotal workshop put it: the fifth macro-shock we left out is that everyone is interested in older adults as a market sector.

With a long list of disruptors and new players in the senior living marketplace, the traditional provider is left with three responses: beat them, join them, or get out of the way. Some organizations will choose option three, continuing on with business as usual, serving an increasingly smaller niche market. Others may be able to truly adopt a "clean slate" mentality and create new models and ways of thinking at a level that exceeds the disruptors and new players in the marketplace. For most organizations, however, joining with these disruptors and innovators as partners seems like the most logical, and hopefully very successful, approach. Taking this tactic would allow for the years of expertise of senior living providers to be enhanced by the innovative thinking from other, more nimble sectors.

With a long list of disruptors and new players in the senior living marketplace, the traditional provider is left with three responses: beat them, join them, or get out of the way.

"It is imperative that non-profit leaders look forward to the 'what if' scenarios and prepare for the next generation of seniors that we are privileged to serve. There are many market forces in play that will move more and more quickly in the years to come."

ANDREW BANOFF, PRESIDENT & CEO, JEWISH SENIOR SERVICES 84

Returning to the quote that sparked the name for the Clean Slate Project, we charge you to ask yourself: What ideas, practices, or standards are WHERE DO you accepting just because that's the way you've done it in the past, or simply because everyone else is doing them? When the assisted living model was first conceived, many not-for-profit senior living organizations hesitated because of the perceived regulatory complexities associated with a new model of care. Meanwhile, for-profit developers jumped at WE GO FROM the opportunity for a more residential approach and now control roughly eighty percent of the assisted living beds in the country.85 We stand at a similar juncture, only with a path forward that is much less clear, and with much higher stakes. What will it take for your organization to innovate, and what partners do you need by your side? HERE? Consider starting with a clean slate.

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