

Written Testimony of Dana J. LePere, 2610 36th Place NW

Ladies and Gentlemen of the Board:

Thank you for your time today. My name is Dana LePere, I live at 2610 36th Place NW, immediately adjacent to and across the alley from the subject property.

I appear today before you in opposition to the proposed development referenced in Application 19751. I share the same concerns as others in my community, which they have shared or will share with you today.

I'm currently working on my master's degree in Interior Design with Marymount University, am planning on doing my thesis on Aging-In-Place design, and have conducted some academic research on best practices in facility design and operation.

Therefore, I would like to focus my testimony on my concerns regarding the design and operation of this proposed institution.

My three points are as follows:

- 1) This neighborhood is a low-density, residential conservation area, and allowing higher density on this land, particularly this facility with its lack of sufficient parking, goes against the DC Comprehensive plan.
- 2) The design of this building was derived from a homeless shelter the developer proposed in the recent past. It is not designed using best-practices for its intended users and is therefore not in the best interests of future residents.
- 3) The proposed operator has little to no experience with memory-care institutions, is historically a government contractor, and without seeing their business plan, they can cause potential harm to future residents.

Regarding point 1:

The proposed facility for housing memory-care patients is institutional in nature, not residential. According to occupational use benchmarks established by both the DC and International Building Code, Chapter 3, Section 308.2, "Institutional Group I-1 occupancy shall include buildings, structures, or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. [...] This group shall include, but not be limited to: [...] Assisted living facilities."

The needs of an institutional building, such as parking, services and deliveries, maintenance, traffic flow, etc., would create an undue burden on our R-1-B neighborhood. Either this facility needs to be built in line with a residential occupancy use, or it should be designated as an institution.

The DC Comprehensive Plan specifically kept the zoning of the subject property as an R-1-B, low density, residential conservation area. The dividing line on Wisconsin Avenue was not a mistake.

Regarding point 2:

Bradford Perkins, Founder of Perkins Eastman, wrote in 2009: “As I approach the end of nearly three decades of designing senior living facilities, I think I can safely say that there is no building type where you can see a more direct correlation between doing something right and its impact on people's lives. You can build an environment for the aging that is confusing, imprisoning, and depressing, or you can build one that frees them, encourages them, and enhances their quality of life.”

There are few things in this plan that I truly feel Mr. Perkins would find freeing, encouraging, or enhancing of the quality of one's life. This is a facility that needs to be done right, on the right land, with the right design. Based on my readings of best-practices in senior living design, including research from Perkins Eastman, this proposed plan is, in my opinion, not being created well or vetted properly.

I have outlined many reasons for this in my letter to the BZA dated September 14, Case Exhibit #52, but I will mention a two of the most concerning here.

- 1) According to Emily Chmielewski, Senior Design Researcher and Senior Associate at Perkins Eastman, providing a secure outdoor space for memory-care patients is paramount to reducing patient agitation, and these spaces “should be located in serene settings to minimize anxiety and disorientation. Walking paths should be continuous and loop back to building entrances; [...] There should also be a perimeter fence at least 6-feet high, ideally camouflaged and with no ladderlike elements that could be used for climbing.”
 - a. The miniscule proposed garden space is immediately adjacent to parking spaces, a loading dock, the trash area, and a small residential alley that the applicant intends to use as their primary roadway. This could very well have the potential to increase the disorientation and anxiety of residents.
- 2) Also according to Ms. Chmielewski, “Many persons with dementia feel the need to wander or think they are supposed to be somewhere, which can lead to agitation or elopement attempts. In addition, seeing others come and go and not having the same freedom may cause some people to feel frustration or anxiety. Accordingly, there needs to be careful consideration of spatial adjacencies to limit residents' exposure to active areas they cannot access as well as de-emphasizing entry or egress points and the visual access to them.”

- a. In direct contrast to this recommendation, the main entry/exit off of Wisconsin Avenue is directly across from the Living Room for residents. This immediate adjacency is flat out irresponsible. No matter what precautions are taken, elopements are bound to occur. I don't want to imagine the consequences of an elopement during rush hour traffic on Wisconsin Avenue or nearby Massachusetts Avenue.

3) Additional concerns include, but are not limited to:

- a. The lack of interior loops to walk, especially considering the applicant stated under Tab A of Exhibit 41A of their BZA submission, that the "Majority of the community living and recreation space will be within the building [...]"
- b. The majority of the common space in in the Cellar with little access to natural light.
- c. Hallways are straight with no variation and have dead ends with entry/exit points, which can entice patients to wander in a detrimental manner. Also, long, straight hallways have been shown to increase tunnel vision and agitation in memory care patients.

I would like to add that I do not see this as any fault of Ms. Dickey's. It is often the case that an architect or interior designer can suggest designs they feel is best for the occupants of a building, but in the end, they must design something in accordance to the wishes of the client writing the check.

Regarding point 3:

To allow an operator with little to no experience to run this facility is dangerous and irresponsible.

GSI Inc. was deliberately misleading to our community about how many Memory Care Facilities they operate. Only after continued questioning by residents did they finally admit there are only two. One is a 118-unit Retirement Community with a 14-suite Assisted Living Facility (with no specific memory-care listed). One is presently under construction. Both are in Florida.

When asked why they're interested in the DC market, and specifically this small building – when no other operator we spoke with considered a facility that has fewer than 50-80+ units economically viable – their answer was simply "Our headquarters is here, it's in our back yard." I don't know about you, but that's not a good enough answer for me.

GSI had stated in a community meeting on August 29th:

- 1) That once these residents required more skilled nursing than they were able to provide, the residents would have to move out of the facility. This would be extremely traumatizing not only for someone in a frail physical and mental condition, but also for the staff and family members involved.
- 2) GSI stated to that the residents would be on a schedule, and that the goal would be to keep them out of their rooms and interacting with others. However, this strategy blatantly ignores the fact that, According to John Zeisel, president and co-founder of the I'm Still Here Foundation, a dementia advocacy and research organization, "Remaining autonomous, among other factors, can contribute to successful aging [...and...] 'the link between independence and the way caregivers and family treat residents, is central to providing residents with high-quality life despite their dementia.'"

We can all imagine how mismanagement of a facility like this can bring unnecessary tragedy. We have to look no further than the recent fire at the Arthur Capper Senior Public Housing complex, where not only fire and life safety systems failed residents, but also a 74-year old resident was found still inside the building 5 days after the fire.

In conclusion, this facility is being set up to fail. Inadequate design will fail its residents, mismanagement will fail its residents, and when the use for this proposed institution fails, the neighborhood will be stuck with another non-conforming building with a future unknown use – further changing the R-1-B character of our neighborhood.

Again, thank you for your time.

ATTACHED SOURCES:

Askew, L., Calkins, M., & Zeisel, J. (2013, April). Alzheimer's Care Facilities Design [Interview by A Place For Mom]. Retrieved September 1, 2018, from <https://www.aplaceformom.com/planning-and-advice/articles/alzheimers-care-facilities>

Alzheimer's Care Facilities Design

Read this interview with Lee Askew, representative from an architectural firm that designed a memory care home in Memphis, TN, and John Zeisel, president and co-founder of Hearthstone Alzheimer Care, in Woburn, Massachusetts. Discover what Margaret Calkins, leading designer of dementia care facilities, has to say about environment's role in treating Alzheimer's disease.

The old Cadillac convertible parked comfortably in a small enclosure of Trezevant Terrace's garden in Memphis, Tennessee, is not out of place. Neither is the screen door that in summer slams each time a resident exits for a refreshing walk in the garden. What is peculiar, though not readily apparent to the residents of this dementia care home, is that both the garden and the Cadillac are on the roof of a building.

"It doesn't run," says Lee Askew of Memphis's Askew Nixon Ferguson Architects. "But it has nice seats."

Askew, whose firm designed Trezevant Terrace, an assisted living community with a resident Alzheimer's care home, also known as dementia care or memory care home, acquired the Cadillac and installed the screen door on the advice of John Zeisel, president and co-founder of Hearthstone Alzheimer Care. Zeisel's background includes degrees in sociology and architectural design from Columbia and Harvard universities.

GARDENS A KEY ELEMENT IN MEMORY CARE DESIGN

"We had the Alzheimer's residents on the ground floor," recalls Askew, who hired Zeisel for his renown expertise in designing memory care facilities, "but John said very quickly that it was no good-too accessible, too much going on." So Askew and his team moved the 30-resident Alzheimer's special care unit (SCU) to the third floor. "We started thinking about the roof of the adjacent building as the garden," Askew comments.

Gardens, according to Zeisel, are crucial in helping dementia care residents feel less trapped and more attuned to the natural rhythms of day and night. An

easily accessible garden comprising a simple circular path is a star feature in Hearthstone's seven Alzheimer's care facilities in New York and Massachusetts.

ENVIRONMENT AS MEDICINE

To Zeisel and his colleagues around the country, medication is not the only treatment for [Alzheimer's disease](#). While medication can slow the progression of Alzheimer's-related symptoms, another equally effective treatment is the environment itself. For the last 15 years, Hearthstone has specialized in creating environments in memory care facilities that have qualitatively improved their residents' lives when measured in terms of fewer injuries, less medications required, less sleep disturbances and less wandering.

"We're a leader in this movement," Zeisel says of his company's holistic approach to treating Alzheimer's. "In the design and in the use of arts and, generally, in non-pharmacological approaches. Before we look for a medical solution, we look for a non-pharmacological one."

PROOF THAT PLACE MATTERS IN DEMENTIA CARE

Zeisel was the principal investigator of a three-year National Institute on Aging study, published in *The Gerontologist* in 2003. This study found that a balanced combination of medication, behavioral and environmental approaches is likely to be the most effective treatment of dementia and Alzheimer's symptoms. The key finding was that environmental factors are equally as important as behavioral approaches and medication. "We have done the empirical work to know that we reduce anxiety, depression, social withdrawal, hallucinations and agitation," Zeisel says. "The only way to reduce those is to affect people's brains."

After two decades of research into how environment affects the brains of people with dementia in general, and residents of memory care facilities in particular, Zeisel and his Hearthstone colleagues have developed a set of guiding principles for designing Alzheimer's care homes.

PUTTING THE HOME INTO MEMORY CARE HOMES

At Hearthstone homes and in others sensitive to the functional needs of Alzheimer's residents, home is more than a place. It is, as leading designer of Alzheimer's care facilities Margaret Calkins says, as much a way of being as it is a location. Following this principle, Hearthstone makes sure its homes look like homes, not institutions. Nursing stations are absent. The staff does not wear uniforms and every room is at a residential scale so that a few people-not too

many, not too few-can congregate together. Shared spaces are clearly defined and private bedrooms, complete with doors that look like front doors, surround well-placed kitchens, living rooms and dining rooms with working hearths. Sometimes a home will contain more than one kitchen, living room and dining room, depending on the number of residents.

Privacy is paramount, so that residents can surround themselves with personal and memorable objects to enhance feelings of safety. Free access to open outdoor spaces creates a feeling of autonomy, while discreet fences keep residents safe.

REDUCING WANDERING

Wandering can be a particularly dangerous symptom of Alzheimer's disease. To prevent wandering without "imprisoning" residents, Zeisel recommends camouflaging exit doors and using unobtrusive or keypad locks. Exit doors can also be placed off to the left, or right of hallways so they are not conveyed as destinations. Knowing that residents are not going to disappear if left alone, staff can feel safer about their care-also increases a level of autonomy in the residents.

At Hearthstone Alzheimer's care facilities, paths are very clear with wholesome destinations. "John is a proponent that every vista must have a destination," says Askew of Zeisel. For example, one hallway may lead to a painting, while another may lead to a toilet, and yet another, to a kitchen.

In sensory elements often decorate the hallways, such as pictures, that are cohesive with the destination and era of the residents. In gardens, simple unilateral paths prevent residents from feeling lost, which is the feeling, in general, that leads to wandering. Beside rooms, "memory boxes" contain personal memorabilia so that residents don't have to remember room numbers or locations but can rely on recognition of iconic images from their pasts.

THE IMPORTANCE OF "SENSING HOME" IN DEMENTIA CARE

Because Alzheimer's tends to destroy the brain's cognitive maps of the environment, it is important, according to Zeisel, to "triangulate" the senses of residents to their location in a setting. "Design the entire environment so that what people see, hear, touch, and smell, all give them the same information about the environment," he writes in a 2005 edition of *Alzheimer's Care Quarterly*. "If the country kitchen is meant to be the social hub of the setting, make sure it looks, feels, sounds, and smells like a social hub. If a garden is to be

used frequently, make it highly visible through a window and accessible through an easily located and unlocked door."

At Hearthstone, a sense of "residentiality," as Zeisel calls it, is conveyed as much by the way the staff encourages residents to experience the environment through their own realities as it is by the absence of traditional institutional touchstones such as nursing stations and uniforms.

"Create a home that is residential," Zeisel concludes, "then people feel at home and people don't feel anxious."

Updated April 2013

Chmielewski, E. (2017, March 1). Designing for memory care, senior-living facilities. Retrieved August 31, 2018, from <https://www.hfmmagazine.com/articles/2730-designing-formemory-care>

Designing for memory care, senior-living facilities

High-quality, person-centered design can help support a growing patient population with dementia
March 1, 2017

Emily Chmielewski, EDAC

The rapid aging of America creates a distinct need to explore the way spaces are designed and the manner in which care and services are delivered. Further complicating this need, it is estimated that one in nine Americans 65 and older has Alzheimer's disease and that by 2050, there will be nearly 14 million Americans with Alzheimer's — not to mention those who suffer from other forms of dementia.

This is a prominent issue in the senior living industry, but other sectors can learn from senior living designers and providers to make ready for the coming "silver tsunami."

For instance, many health care environments today are not prepared for the sheer number of baby boomers who will be showing up with traditional health care needs and various forms of dementia. Persons with cognitive impairment will be in emergency department waiting rooms, agitated, uncomfortable and confused by the unfamiliar setting. They will be in their post-op beds unable to communicate articulately and may not have their glasses and hearing aids so their sensory deficits will be further compromised, to say nothing of the interference of medications. They may even just be visiting a loved one who has been hospitalized and be feeling confounded by mazelike corridors.

Designers and service providers who typically don't focus on this population need to recognize the importance of maximizing the remaining strengths of those with dementia, through built form as well as programming. To help achieve this goal, the **2014 white paper co-published by design firm Perkins Eastman and the Alzheimer's Foundation of America, titled "Excellence in Design: Optimal Living Space for People with Alzheimer's Disease and Related Dementias," provides guidelines for the design of residential memory support settings that facilitate high-quality, person-centered care.**

Four key concepts

Though the white paper is focused on senior living residences, many of the recommendations can be applied to other environments. Specifically, four key concepts transfer easily when looking at how these design guidelines could be applied to health care settings.

The first concept that readily applies to health care settings is to minimize overstimulation. Many patients become overwhelmed by large groups or spaces, and those with dementia are particularly susceptible to confusion and distraction when faced with these kinds of environments. The added stress of a medical visit or treatment can compound these issues. Because many persons with dementia function better in quiet, smaller spaces, options for various group sizes and more intimate settings should be provided. Noise and visual stimulation also should be controlled to minimize overstimulation and reduce stress.

The second concept is to introduce the familiar. Medical settings often can appear unfriendly and clinical, which can be disorienting for someone with dementia. To create more comfortable and relaxed settings, designers are now introducing hospitality and residential features to health care environments. Abundant daylight and natural (or natural-looking) materials also are becoming more common as biophilic design principles gain popularity. Further, medical equipment is being disguised or hidden so a patient's room feels more like a residential bedroom or hotel room rather than a clinical space. A patient can be further comforted if the environment and policies allow for personalized details, such as the ability to incorporate furnishings, artwork or even family photos from home.

To support an aging population, however, it is important for physical environments to go beyond homey interiors and introduce design elements that offer safety and security, such as handrails, slip-resistant flooring and low hospital beds. Healing environments also can reduce stress by providing social supports, positive distractions and a sense of control. Even something as basic as providing simple and intuitive controls for lighting and thermal comfort can make all the difference in helping patients to feel in control of their surroundings versus feeling at the mercy of the environment.

The third concept is to provide easy and supportive wayfinding and orientation, which can mitigate unnecessary stress, minimize the need for additional staffing to direct people and create a positive experience. In addition to providing an intuitive building layout, visual cues and distinctive landmarks, health care settings also can offer clear sight lines to hospital rooms, nurse stations and help desks, which can be important for patient safety as well as enabling people to orient themselves.

Lastly, patients' families also should be supported. Patient rooms and waiting areas should be designed to alleviate stress and accommodate both patients and their families. Things like extra seating in a patient room, nearby places to get food and drink, and even a place to take a walk or have a quiet moment to oneself are often appreciated. Providing amenities and respite areas for caregivers is also important because their quality of work correlates to their work environment.

Design recommendations

Looking more closely at specific design recommendations, the following advice from the residential care white paper may translate to other health care environments:

Household and neighborhood model. The household model supports persons with dementia by creating smaller-scale, homelike environments that are not as overwhelming as large-scale institutional settings. Households typically include 10 to 14 private bedrooms organized around a shared living-dining-kitchen area, plus additional staff support and storage spaces, and access to a secure outdoor space. A neighborhood model is like a household, but the shared common and support spaces serve two or more wings of 10 to 14 private bedrooms. Both households and neighborhoods support person-centered care and relationships among residents, their families and professional caregivers — an important factor given that social support has long been known to have a positive effect on an individual's emotional and physical health and well-being.

Residential vs. nonresidential qualities. The residential quality of the building is very important, inside and out. Building massing and internal layout, hierarchies of space and circulation (i.e., hallways, stairways, elevators and lobbies), materials and furnishings, color palettes, inaudible alarm/alert systems and even the labels used for certain rooms (i.e., living room or den versus lounge) can make a difference. However, depending on the setting, a nonresidential appearance may be desirable because it would cue people on the appropriate behaviors for that place. For instance, a clinical-style setting suggests different acceptable behaviors than a comfortable living room setting. Regardless of the feel, there are many products and furnishings that meet the demands of high-use spaces while offering a comfortable and familiar appearance.

Wayfinding and orientation. To aid wayfinding, spaces should be distinct in appearance and overall layout, including unique and varied landmarks at each decision-making point along one's path. Distinctive cues, such as recognizable objects and artwork or a view to a specific outdoor feature, have been shown to be more effective than subtle changes, like an understated

change in flooring color that could be overlooked. Furthermore, not only is spatial orientation necessary, but the environment also should offer cues for temporal and seasonal orientation. Views to the outdoors also can promote the use of exterior spaces and walking. Additionally, exposure to natural light helps to regulate circadian rhythms, which can alleviate sleep disorders, sundowning and seasonal depression.

Independence, control and flexible rhythms. Remaining autonomous, among other factors, can contribute to successful aging. From self-determined daily routines to accommodating mobility-assistance devices, “the link between independence and the way caregivers and family treat residents, is central to providing residents with high-quality life despite their dementia,” according to John Zeisel, president and co-founder of the I’m Still Here Foundation, a dementia advocacy and research organization.

Safety and security. Not only is it important for people to be safe and secure, but they also must perceive themselves to be safe and secure. This can be a challenge because some cognitive impairments, like Alzheimer’s disease, produce anxieties and paranoia. These feelings can adversely affect one’s health and well-being, sense of home and comfort level, ability to concentrate and willingness to participate in social activities. The physical environment needs to offer features that support both actual and perceived safety and security so that people can feel confident and calm in their environment. For instance, independence can be maintained with the inclusion of subtle environmental supports, like lockable storage spaces for hazardous materials, restricted window openings and garden fences at least 6-feet high, anti-scald fixtures and regulated water temperatures, nontoxic plants, nighttime lighting to highlight the path from beds to bathrooms, and many other factors.

Entry and egress. Many persons with dementia feel the need to wander or think they are supposed to be somewhere, which can lead to agitation or elopement attempts. In addition, seeing others come and go and not having the same freedom may cause some people to feel frustration or anxiety. Accordingly, there needs to be careful consideration of spatial adjacencies to limit residents’ exposure to active areas they cannot access as well as de-emphasizing entry or egress points and the visual access to them.

Spa/bathing. For someone with dementia, the toileting and bathing experience can be stressful or overwhelming, and complex for caregivers to manage. Though there are many design guidelines for senior-friendly bathrooms, there are several specific recommendations for persons with dementia. For instance, providing a direct visual connection from the bed to the toilet may reduce incontinence and nighttime accidents. Additionally, bathing spaces should be as calm and peaceful as possible to alleviate anxiety, because many persons

with dementia have a fear of bathing and water. This may include providing familiar-looking fixtures, soothing lighting, peaceful music or even aromatherapy.

Secure outdoor spaces. Providing unrestricted access to secure outdoor spaces — even for persons with elopement issues — is vital because it can reduce agitation and frustration, relieve stress and improve physical fitness. By giving someone with dementia a secure place to go outside, it can even reduce elopement attempts because it lessens the feeling of being cooped up. These outdoor spaces should be located in serene settings to minimize anxiety and disorientation. Walking paths should be continuous and loop back to building entrances; and plantings should be nontoxic with no sharp edges or abrasive leaves. There should also be a perimeter fence at least 6-feet high, ideally camouflaged and with no ladderlike elements that could be used for climbing.

Active engagement and quiet spaces. Persons with dementia may need cues to initiate activities and may need to be protected from distractions that could hinder engagement or cause stress. When wandering behaviors reflect a person's desire for mobility or autonomy, these behaviors should be supported and positively redirected, rather than discouraged. The environment can be designed to help re-engage patients into safe, purposeful activities. However, just as it is important to include areas that support active engagement, it is also necessary to provide quiet, peaceful spaces.

Support for family involvement. Features of the physical environment that support and encourage visitation may bolster a patient's psychological and even physical health. Small, private or semiprivate group gathering spaces with flexible furniture arrangements, bedroom suites or even a convertible couch for overnight accommodations, and something as simple as an extra place to sit in one's bedroom can go a long way toward encouraging visitors. A building also can be designed to support the surrounding community so that it becomes a neighborhood resource center for dementia-related services, with provisions like a library, public clinic or multipurpose room for workshops.

Support for professional caregiver involvement. Professional caregiver involvement has grown as a result of the "culture-change movement," which focuses on person-centered care. This involvement can be promoted through organizational expectations, operations and management. However, the physical environment also should support such policies. For instance, how the built environment addresses proximity, communication and teaming becomes very important. Supplies regularly used by professional caregivers should be readily accessible. Strategically located and lockable storage spaces allow staff to access equipment, supplies and medications quickly and easily. This

arrangement not only is more convenient, but also keeps the professional caregivers engaged with residents.

Supportive design

Designers and health care providers are exploring how health care settings not only support the functional delivery of care, but also how they can be psychologically supportive.

Overall, it's important for health facilities professionals to think about the experience of someone moving through and occupying the space through the lens of cognitive impairment.

The resulting designs will support a wide range of people, regardless of age and impairment level.

Emily Chmielewski, EDAC, is an associate in Perkins Eastman's Pittsburgh office, and is a founding member of Perkins Eastman Research, an industry forerunner of practice-based environment-behavior research.

Dowell, C. (2015, February 05). How the 'Household Model' Is Redefining Senior Living Design. Retrieved August 31, 2018, from <http://innovation.seniorhousingnews.com/how-the-household-model-is-redefining-senior-living-design/>

How the 'Household Model' Is Redefining Senior Living Design

Culture change. That's the mantra behind a model gaining traction in the senior housing space that aims to replace the institutional setting often associated with long term care with something much more inviting.

The "household model" is much like the name implies, and brings with it both design and operational elements that focus on person-centered care. And, it can help to reduce employee turnover, providers who have adopted this model say.

While providers haven't just started putting money toward the emerging model — recently a N.J. continuing care retirement community (CCRC) pursued nearly \$100 million in financing for a renovation and expansion to repurpose its existing units to a household model of care — it is notably changing the way both residents, and staff, view long term care.

The team at Naperville, Ill.-based The Springs — the short-term rehabilitation, nursing care and memory support arm of CCRC Monarch Landing — knew they wanted to operate something different than the traditional long term care model before opening The Springs' doors in 2014.

"The industry is moving toward person-centered care," says Jennifer Roach, administrator of The Springs. "It's moving from tray to menu service — moving away from having residents wake up at a certain time. The household model takes this to the next level, and it's great that we get to start The Springs with this new model."

From bricks and mortar to operations, building the household model from the ground up requires a willingness to challenge the conventional, and arguably more outdated, notions surrounding senior care.

Research

Before The Springs was built, Monarch Landing, a Life Care Services LLC community, visited other long term care communities operating under the household model.

“We took all of our directors at the time and went to Kansas to look at different examples of the household model,” says Monarch Landing Executive Director Renee Garvin. “We wanted to compare and contrast the pros and cons of each [community’s approach to the household model]. We rented a big old white van and hit the Kansas countryside. We looked at financially how they’re doing, and employee turnover.”

One of the communities the Life Care Services team visited was nonprofit CCRC Pleasant View Home, in Inman, Kansas. Pleasant View Home provides the household model for those needing long-term care, in addition to other services.

“When we built our household model eight years ago we didn’t have any trouble filling those beds,” says Jalane White, administrator at Pleasant View Home, noting that they now have a waiting list. “The ultimate compliment we receive is ‘This is our home.’ It’s not just a place they’re staying.”

But why travel to Kansas?

PEAK (Promoting Excellent Alternatives in Kansas) started in 2002 as a recognition and education program to encourage providers in Kansas to adopt culture change.

In 2011, PEAK was revised to PEAK 2.0, with the new initiative offering a Medicaid pay-for-performance incentive program. Homes that engage in system changes to support person-centered care or who have demonstrated implementation of person-centered care receive financial incentives through Medicaid reimbursement.

To date, 224 of Kansas’ 350 nursing homes are enrolled in PEAK 2.0, says Gayle Doll, director of the Kansas State University Center on Aging.

Design

The Springs’ household model, implemented with the help of architecture firm Perkins Eastman, features 96 bedrooms, with six of those rooms being semi-private. All rooms have a private bathroom and shower.

The rooms are divided into “households,” with each household featuring 16 bedrooms, a dining room, living room with a TV, seating area by a fireplace, additional lounge area and kitchen. Memory care assisted living has two households made up of 14 suites.

“Think of each household as a separate house,” Roach says.

“People don’t go to a large dining hall at home, so why would they want that here?” she says, referring to the traditional skilled nursing’s cafeteria-style dining area.

Other changes, while seemingly simple, go a long way in accomplishing the household-effect, such as not installing an intercom system.

“Taking that alarm system out changes things — it eliminates all that extra noise, which can be disturbing to residents,” she says, noting that before coming to The Springs she worked in more traditional-style long term care environments. “It was scary at first. When you’re used to doing one thing and then it changes. I thought, ‘How do I inform staff when something happens?’”

Enter the information technology (IT) team.

“We sat down with our nursing and IT team and discussed how we could communicate with appropriate staff when needed without using an overhead paging system,” she says.

Staff wear pagers, so when a call light is activated in a resident room the staff on that household receive a page telling them the room and which call light was activated – bed, bath or toilet. A control panel at the nurses’ station alerts and tracks the call lights.

Sharing responsibility

In addition to getting IT involved in working out the logistics of the household model, a core component of the model involves staff being able to manage a variety of tasks — from preparing food to assisting with bathing.

“When looking at the household model we realized it goes well beyond a nice design,” Garvin says. “As a management team we thought, ‘How do we, as a team, enhance our operations to be truly person-centered and make sure our residents and staff feel empowered?’”

Prior to starting work at The Springs, new employees must undergo two and a half weeks of training, which includes education about the household model and how to carry out a variety of tasks.

“The training covers topics such as dementia, thorough sanitation and cooking,” Roach says. “In our households not everyone wakes up at the same time. So for breakfast, nursing staff working with a resident can prepare a meal when that person is hungry.”

In more traditional models, employees are often expected to perform one role only.

“So, if the resident wanted some cereal, in a traditional model the nurse would have to alert kitchen staff and then have to wait until someone on the kitchen staff became available,” she says. “The household model empowers both the employee and resident.”

While main meals are still prepared in Monarch Landing's main kitchen by a professional chef, giving nurse staff the authority to prepare simple meals, from cereal to grilled cheese, helps promote staff confidence, Roach says.

Self-scheduling

Self-scheduling is also a key component of the household model.

Every month, the director of nursing at The Springs will post a schedule and then all household staff, including the receptionist, sign up for what shift they want.

“There are days that don't get filled, and then we have to ask around to see who can take that shift,” Roach says. “But overall staff have responded well to setting their own schedule. They like that it puts the power back into their hands.”

Self-scheduling promotes a healthy work/life balance, which helps reduce employee turnover, White with Pleasant View Home says.

“When we've empowered the workers they are more satisfied,” she says. “They have better relationships with residents.”

Ultimately, being flexible is key to the household model's success, Roach says.

“Nursing homes are one of the most highly regulated industries,” she says. “It's about working within the regulations, while making sure it's all about the resident. Everyone has to be there to support each other.”

Written by Cassandra Dowell

Liao, A. (2018, June 29). Getting Better with Age: Design for Senior and Assisted Living Facilities. Retrieved September 2, 2018, from <https://www.architectmagazine.com/practice/gettingbetter-with-age-design-for-senior-and-assisted-living-facilities> o

DIGNITY AND ARCHITECTURE:

**Getting Better with Age: Design for Senior and Assisted Living Facilities
The imminent surge of Americans who will be entering facilities that provide varying degrees of assisted care has led to improvements in architecture and amenities.**

By ALICE LIAO

In the late 1990s, a movement began to deinstitutionalize senior living and, in particular, nursing homes. The concept of person-directed care focuses on the needs of individuals, rather than on those of the institution, and gives them agency in determining how best to fulfill those needs. As part of the movement, open-plan, residential-scale settings, in which empowered residents and caregivers partner to create nurturing communities, became popular.

This shift could not be more timely. Although the 70 million-plus baby boomers are still about a decade away from the average age at which most people move into these communities—82—their influence can already be seen in the greater choice of amenities, services, and locations available across the continuum of care. Moreover, the small household model is particularly suited for people with Alzheimer's, whose numbers will nearly triple from 5.7 million to 14 million by 2050, according to the Alzheimer's Association.

Several key standards, codes, and guidelines apply to the building and design of senior living. Accessibility issues are addressed by the Americans with Disabilities Act (ADA). The Facility Guidelines Institute (FGI) Guidelines for the Design and Construction of Residential Health, Care, and Support Facilities, published every four years, provides direction on programming in skilled nursing, or nursing homes, and assisted living. Building inspectors use the International Building Code (IBC), which is updated every three years by the International Code Council. And NFPA 101, Life Safety Code, updated by the National Fire Protection Association every three years, guides fire officials.

Though every state recognizes the IBC and Life Safety Code, individual jurisdictions can deviate from the published editions. And while 40 states reference some version of the FGI guidelines as a base standard from which to craft regulations, the remaining balance write their own. This lack of consistency across regions can create conflicts over how senior housing is constructed,

which materials are used, and how safety measures are implemented. For example, clients operating facilities in multiple states may question why projects cost more in one state than another, says Martin Siefering, AIA, a Pittsburgh-based principal of Perkins Eastman and co-chair of the AIA Design for Aging advisory group.

Although recent revisions to the codes and standards have focused on assisted living and nursing homes or skilled nursing, the continuum of senior housing is defined by a progression in the level of care provided, beginning with the most self-sufficient seniors.

Independent Living

Independent living covers a wide gamut of building typologies, from cottages to townhouses to apartments, and can range in size from 1,500 square feet to 2,000 square feet. Floor plans typically include a full kitchen, living, and dining areas. Residents have access to shared dining venues, amenities for socializing, recreation, and fitness, as well as concierge services such as laundry and housekeeping.

In recent years, food service in these communities has expanded to encompass different types of cuisines, restaurants, pubs, cafés, and bars, says Cynthia Shonaiya, AIA, director of the senior living studio at Hord Coplan Macht in Baltimore. Menus are also emphasizing healthy, fresh ingredients, a departure from the more institutionalized cooking served in the past.

The IBC classifies independent living as R-2 residential use, which subjects it to the same building and safety requirements as multifamily housing and dormitories. The appendix of the FGI guidelines also offers design recommendations.

Assisted Living

Seniors in assisted living receive help with the activities of daily living, which include bathing, eating, dressing, toileting, getting in and out of a bed or chair, and walking. Typically designed for single occupancy, an apartment may range from 320 square feet to 650 square feet and contain a bedroom, bathroom, living area, and kitchenette. Dining is mostly communal and a host of shared amenities and services are available. Assisted living communities are licensed by the state.

Memory care is a type of assisted living that provides a safe, controlled environment for people with Alzheimer's, dementia, and other forms of memory

impairment. Because high levels of noise and activity can agitate residents, a memory care building or household, if part of a larger project, will consist of 10 to 20 residents who each have their own apartments or bedrooms but share dining, living, and other activity spaces.

Memory care environments also employ design features and technology to keep occupants from wandering. Doors to corridors, for example, are kept locked and obscured, and tall fences concealed by landscaping enclose outdoor recreational areas.

The 2015 IBC brought clarity to the occupancy and use classification of assisted living buildings that house 16 or more people. While assisted living is generally considered institutional, confusion lingered over whether an I-1 or I-2 designation was more appropriate, says James Warner, FAIA, principal of housing and senior living, at JSA in Portsmouth, N.H. The I-1 designation assumes the ability of residents to evacuate in an emergency and allows wood-frame construction; I-2, which applies to hospitals and skilled nursing, requires noncombustible construction for multistory buildings.

This 2015 update addresses the issue of self-preservation by appending two conditions to its I-1 classification: Condition 1 stipulates the ability for occupants to evacuate a building without any assistance; Condition 2 allows minimal verbal and physical assistance, which aptly describes seniors in assisted living. “The I-1 Condition 2 requires a higher standard of construction, but it, too, can be built out of wood up to three stories,” Warner says.

Some issues remain, however. The I-1 Condition 2 classification mandates doors with a 20-minute fire-protection rating and automatic closers, making them difficult for frailer occupants to operate and for memory care staff to observe residents, who “are often frustrated when confronted by closed doors,” Shonaiya notes.

Skilled Nursing

Skilled nursing houses seniors who need long-term medical care or short-term rehabilitation after a hospital procedure. Traditional nursing home designs were modeled after hospital wings and may cram 60 beds among two quarters with a nursing station in the middle, Warner notes. Some have double-occupancy rooms, with a cubicle curtain for privacy. Dining occurs at set times, and meals are pre-packaged, pre-portioned, and prepared in a large, central kitchen.

The Linthicum, Md.-based Green House Project is one organization proposing an alternative design. Its eponymous small-house solution creates a home-like

environment by limiting the number of residents to 10 and decentralizing support staff and services. Resident rooms are grouped around an open-plan living area (often with a fireplace), dining area, and kitchen that's accessible 24/7, "so anyone who wants a meal, a beverage in the middle of the night, for example, would have access to that," says senior director Susan Ryan.

Currently, 80 percent of the 246 Green House homes—in 33 states—are designated for skilled nursing (the rest are assisted living). None of these would have been possible without changes in state and federal building and fire codes. The open kitchen, for example, required adding new sections on hazardous areas to the Life Safety Code, which any nursing home receiving Medicare or Medicaid funding must follow. The federal government currently uses the 2012 edition, which permits open kitchens in new qualified nursing homes, says Skip Gregory, president of Tallahassee, Fla.-based Health Facility Consulting.

Updates to the FGI guidelines have also helped advance the design and culture of nursing homes, Gregory says. The 2010 edition led to a new room design by specifying that all residents have unimpeded access to an exterior window and, hence, daylight, a closet for personal belongings, and a toilet room that can be accessed without going through another person's space. In 2014, FGI issued two sets of guidelines—one for the design and construction of hospitals and outpatient facilities, and the aforementioned guide for residential health, care, and support facilities—that focus on person-centered care and incorporate cultural shifts in values: choice, dignity, respect, self-determination, and purposeful living. In 2018, FGI released separate guidelines for hospitals and for outpatient facilities.

Life Plan Communities

Also called continuing care retirement communities, life plan communities enable access to higher levels of care by placing the full or parts of the continuum of care under one roof or in one development. These typically multi-acre campuses are located in suburban or rural areas, but newer developments are popping up in urban centers.

Today's seniors "want to be where the action is, so we're seeing a number of mixed use projects in a denser environment where there's retail on the ground floor and a senior living community above it," Sieferting says. The proximity also helps seniors feel less isolated.

However, providing the required number of parking spaces can be a challenge. "The regulations related to parking are not caught up with senior living uses, particularly as you get far down the continuum with assisted living, memory

care, and skilled nursing, where the need for a car drops significantly," says Scott Fitzgerald, senior associate at Perkins Eastman.

Furthermore, in California, skilled nursing cannot be in the same building as the other types of senior housing, says Alexis Denton, AIA, who is a principal of SmithGroupJJR in San Francisco and co-chair of the AIA Design for Aging advisory group. "So the location does determine the type of product, how much you can fit," she says. "It's everything."

Living the Life

Senior living communities are introducing wellness-enhancing amenities, such as walking trails, spas, and healthy eating, as well as elements of biophilic design through living walls, water features, and natural textures, says Myles Brown, AIA, principal of Amenta Emma Architects in Hartford, Conn. Also critical, plentiful daylight and outdoor views not only improve mood but also help regulate circadian rhythm.

"Senior living is an exciting section of architecture," but one that students are rarely exposed to in school, Shonaiya says. To designers seeking to have a positive impact on society and older Americans, she adds, "I would say senior living deserves a look."

Note: This article has been updated since first publication. This article previously labeled the location for the Green House Homes at Saint Elizabeth Home incorrectly. The project is in East Greenwich, R.I.

Long, M. (2017, August 31). Washington, D.C. Named First LEED Platinum City in the World. Retrieved September 14, 2018, from <https://www.usgbc.org/articles/washington-dc-named-first-leed-platinum-city-world>

Washington, D.C. Named First LEED Platinum City in the World

Marisa Long
Aug 31, 2017

Washington, D.C. recognized by the U.S. Green Building Council for achieving sustainability and resiliency goals

Washington, D.C.—(Aug 31, 2017)—Today, Washington, D.C. was named the first LEED for Cities Platinum city in the world. D.C. Mayor Muriel Bowser was presented this honor by [Mahesh Ramanujam](#), President and CEO of USGBC and GBCI, at an event on the steps of Dunbar High School, the highest-rated LEED-certified school in the United States. Bowser and Ramanujam were joined by the mayor's chief technology officer, Archana Vemulapalli, and Jay Wilson, the District Department of Energy and Environment's green building expert.

"It is in the best interest of Washington, DC's safety, economy, and future to take sustainability and resiliency seriously, and as the nation's capital, we have a special obligation to lead the way on environmental issues," said Mayor Bowser. "We are proud to be recognized as the world's first LEED Platinum city. Our commitment to these issues will not yield, and we look forward to continuing to build a greener, more resilient, and more sustainable DC."

LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world and is designed to help buildings achieve high performance in key areas of human and environmental health. LEED for Cities was launched last year and enables cities to measure and communicate performance, focusing on outcomes from ongoing sustainability efforts across an array of metrics, including energy, water, waste, transportation, and human experience (which includes education, prosperity, equity and health & safety). LEED for Cities projects benchmark and track performance using Arc, a state-of-the-art digital platform that uses data to provide greater transparency into sustainability efforts and helps cities make more informed decisions.

Washington, DC's LEED Platinum certification recognizes the outcomes, rather than intent, of the city's leadership in creating a sustainable and resilient built environment, which includes: reducing greenhouse gas emissions, supporting

clean energy innovation, and focusing on inclusive prosperity and livability in all eight wards.

“Washington, DC is setting the bar for smart cities all around the world by leveraging technology and data to achieve sustainability and resiliency goals, creating healthy and safe communities where citizens can thrive,” said Mahesh Ramanujam, President and CEO at USGBC and GBCI. “Mayor Bowser and the city are once again showing that our nation’s capital is performing at the highest levels and that its buildings, neighborhoods and communities are as sustainable as possible.”

As the District looks to achieve the goals of the Sustainable DC Plan and the targets of the Paris Climate Accord, tracking and improving upon the city’s progress is essential. As part of achieving these goals, under Smarter DC, the Office of the Chief Technology Officer works to develop more open access to data and LEED for Cities will be a valuable tool in these efforts.

“Smarter DC is fundamentally about leveraging technology strategically to deliver a more sustainable, resilient, equitable, and healthy city transparently,” said Chief Technology Officer Vemulapalli. “This recognition was only attainable by working together to deliver real outcomes for the District.”

Today, the Bowser Administration also announced that Brookland Middle School has achieved LEED Platinum certification by the USGBC. The school was awarded 85 out of a possible 109 points, making Brookland Middle School the third DC Public Schools (DCPS) project to achieve Platinum certification and the 19th LEED certified DCPS facility.

Throughout the Bowser Administration, Washington, DC has served as a leading city on issues of sustainability. Over the past two and a half years, the Administration has released Climate Ready DC, entered into one of the largest municipal onsite solar projects in the U.S., completed the largest wind power purchase agreement deal of its kind ever entered into by an American city, launched Sustainable DC 2.0, and, most recently, signed a Mayor’s order pledging to uphold the commitments in the Paris Climate Accord. Today, 65 percent of DC neighborhoods are walkable, 58 percent of commuter trips are by bike, walking, or public transit, and the DC Government is 100 percent powered by renewable energy and DC is on track to derive at least one-half of the entire city’s electricity from renewable resources by 2032.

Norton, L. (2014, July 10). Putting the 'Home' in Nursing Home [Interview by M. Evans]. Retrieved September 13, 2018, from <https://www.theatlantic.com/health/archive/2014/07/puttingthe-home-in-nursing-home/374241/>

Putting the 'Home' in Nursing Home Redesigning senior living spaces to feel less institutional

MARISSA EVANS
JUL 10, 2014

Mealtime. Naptime. Bath time. Bedtime. Everything is on a schedule for residents in a traditional nursing home, leaving little flexibility for personal decision making.

But LaVrene Norton is working to change that.

Norton is founder and president of Action Pact, a national consulting firm. It specializes in helping retirement communities and nursing homes train staff and design their facilities to feel and be more like living at home. Since beginning work on the "household model" in 1984, Norton has helped design hundreds of these communities.

The idea is that residents' rooms are clustered around a common area, with a kitchen and living room. The size varies from four people in a private home to a bigger building with up to 20 people in "household" groups. Nursing assistants and caretakers help with the more traditional side of things, such as helping residents take their medicine and bathing. Norton says the household model is "the new nursing home" that helps focus on "person-centered care" and helps meet the wave of demand for more quality services from aging consumers. Five percent of people over age 65 in nursing home-type facilities – more than 1.3 million.

Norton recently spoke with Kaiser Health News' Marissa Evans. Her comments have been edited for space and clarity.

How does your design compare to a modern day senior home?

There is no comparison. A traditional nursing home is institutional. When you move in, you in a way lose your identity. You definitely lose your uniqueness. It's not like the staff is at fault, it's the way the system is set-up. It's very different when you're in an institutionalized nursing home which most nursing homes are. The thing you'll hear people talk about is person-centered care and that [means] teaching staff to seek the residents' suggestions on things more, do

more at the residents' timetable and attend to the residents' needs and wishes more. But the truth is this system fights against all of those things.

What are the challenges you've seen with people wanting to build a household model?

There's the need to get everybody involved without getting scared. If you say we're going to do universal workers and all of the housekeepers are going to become CNAs [certified nursing assistants] and everybody in the kitchen is going to become CNAs and CNAs are going to do the cooking, it just freaks everybody out. We promote something that's called a "versatile worker" instead of a "universal worker." So we don't expect everybody to become a CNA. We expect everybody to cross-train in something. From the CEO down, everybody cross-trains in something and that makes them more versatile.

Is this scalable on the national level?

It is scalable on a national level and I think it is going to be the new nursing home. My generation of people, and I'm 69 years old, who were born and raised and toughened up in the 60s are not going to tolerate bad service, shared rooms, a bath time that's scheduled by somebody else. So the market is changing and we have to respond to that market. The neighborhood model is where you have a small group of staff, a very homey kitchen area, living room and dining room for each small group. I bet there are thousands out there already. So either neighborhoods or households so some of that or one of that, is going to be in that new building once it's built and all buildings will be rebuilt or renovated overtime.

You call it the "new nursing home." Is this a movement?

It's a movement because people want it. First of all, all of us want a good life for our elders and we're frustrated by the old nursing home way. We don't want that. Every CNA and every nurse and every cook and every housekeeper in this country, every activities person, every social worker in this country who works in a traditional nursing home doesn't want it for the residents they serve. They would so much rather have a good way for them to live. So you got that going for you. That's the movement part of it. Then you've got the market. Anybody who's got a household model in their market area knows the pressure of having a decent place to showcase, to attract people to come to your home. Thirdly, you've got the customer. People my age, and 10 years older than me for that matter are not wanting the old way. They want to have a say in their life, they want to continue to contribute and give to others, they want to have a good daily life and when they look at this, and they're much more consumer savvy, they're not going to put up with the old way.

Is this a long-term solution?

More and more people are able to stay in their assisted-living environments. That goes for residential care as well. Residential care is a lesser life than assisted living and people are able to stay there and home care keeping people at home. So, really and truthfully, whether or not in the future there are licensed nursing homes or not, there will be some kind of homey household model of community living. That allows [residents] the quality of life of home, that gives them freedom and independence and being in charge of their own life and yet has services that they need. So that's going to be the ideal world for the future. We'll never go back to institutionalized, long hallways filled with tons of people and warehousing people again, that's done.

Who doesn't this model work for?

I can't think of a population that this concept does not work for. You use a smaller configuration which allows more interpersonal relationships with the residents to tend to them individually whether they're severely disabled physically, whether they're mentally ill, have severe memory loss, severe dementia.

People say "Well what about someone who is really sick, it won't work for them, will it?" Well, of course it will. If I'm in bed all day I'd much rather live in a homey little space where someone could wheel my bed up to the door or help me into a lounge chair and help me into the living room area and I could just be there, whether I could talk, whether I could even be sure of where I'm at, just being around the clatter of dishes in the kitchen, and the smell of coffee pouring or bread baking, of genuine laughter in the other room. If I'm really, really sick I'm going to love it so much better. The best place to die would be at home, and this is as close to home as possible.

Perkins, B. (2009, January 19). 10 top design trends in senior living facilities. Retrieved September 13, 2018, from <https://www.bdcnetwork.com/10-top-design-trends-senior-living-facilities>

10 top design trends in senior living facilities

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BY BRADFORD PERKINS, FAIA, MRAIC, AICP

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The surge of silent generation retirees and the impending burst of baby boomers marching toward retirement age are creating a burgeoning market for senior living. What is less widely appreciated is how much creativity is being applied to addressing this critically important part of the built environment. All the old design models are being challenged, serious environmental design research is being done, and a wide range of new models is being planned and built based on this research.

Following are 10 design trends that I believe have the most interesting implications for senior living facilities.

1. Optimizing resident privacy and dignity

The largest, and most disliked, of the available senior living options is the nursing home. Almost all of the existing stock of about 1.9 million beds in skilled-nursing centers, long-term care facilities, and nursing homes was built in accordance with the concept (enforced by state codes) that these were low-tech hospitals. The typical semi-private room with one bed by the window, one by the bathroom, and a curtain in between to separate the two occupants probably is only minimally larger than the code minimum for two inmates in a maximum security prison.

Other activities of daily living also strip privacy and dignity. Bathing, for example, often takes place in a gang shower or tub room down the hall from the residents' rooms. As for disabilities access, many of the bathrooms are too small for wheelchairs.

Nonprofit and for-profit sponsors of senior living are responding to these ignominious conditions with new, less institutional facilities where residents have their own rooms, usually with a three-fixture bath—sink, toilet, and shower. (Tubs are out—most of the elderly frail can't use them and they take up too much room—except in specialized tub rooms or in cases where spa-like facilities are feasible.)

If this sounds expensive, I would agree, but only to a certain extent. I think back to the first all-private home we did some 25 years ago, for the Montefiore Home in Beachwood, Ohio. Most of their reimbursement was coming from Medicaid, but the chairman felt strongly, even back then, that nobody wanted a semiprivate room anymore. Once they went to single occupancy, the other nearby homes also had to convert their rooms to private.

In terms of affordability, the nonprofits are leading the way, through creative project management, especially the faith-based organizations—the Jewish Homes for the Aged, Episcopal Ministries on Aging, Presbyterian Association on Aging, Catholic Charities, etc. They know that the next generation of long-term care residents will not accept a semiprivate.

The high-quality operators in the for-profit sector are increasingly dependent on the high end of the market. To attract private-pay residents, they have to offer all private rooms. In my opinion, however, the for-profits have been under a lot of pressure and are not where the innovation is taking place.

They could take a lesson from a project we're doing in New Rochelle, N.Y., for a nonprofit with very little money. The facility is pretty spartan, but they put the premium on client privacy, and they'll add the amenity touches later if funds become available.

2. Creating homelike settings

A related trend has been the movement toward smaller, more homelike, environments. The Green House movement, which started about five years ago in Tupelo, Miss., is perhaps the most widely publicized form of such environments. Such “small house” senior living revolves around the concept that elderly people don't want to be in an institution; they want a much more homelike setting. Here, skilled nursing care takes place in facilities that are essentially big houses of 8-10 bedrooms with common living rooms and dining rooms, staffed by 24-hour caregivers.

The reality is that when you get into the urban situation, the economies of scale to pay for a rehabilitation staff, or professional dietary staff, or really skilled nursing require that you have facilities with 400-600 beds. But the same idea of

homelike settings can be applied by breaking down traditional huge nursing-home complexes into small neighborhoods and houselike settings.

3. Introducing hospitality design concepts

For reasons of market acceptance and operational feasibility, many providers of senior living and their design teams are incorporating hospitality design concepts into their facilities, not only in the interior design but also in the planning and programming.

As I have noted, there has been huge movement to make these facilities look less institutional, although there may be limits to what can be accomplished to make these settings seem truly residential when you have several hundred frail people living there.

At the other end of the spectrum, however, retirement communities and higher-end facilities are taking note of the design sensibility of hotel chains and applying their concepts to long-term care, assisted care, and continuing care. Some of these innovations are fairly simple to implement and rely on the use of conventional products—for example, shifting from vinyl composition tile to carpet, or from painted gypsum board to wall coverings. Others are more substantial: additional dining options, separating “back of house” operations from residential areas, and concierge-like services.

Then there are many new products that have been developed to meet more stringent healthcare codes or owner/designer specifications, but which are much more attractive than yesterday's offerings.

These include wall coverings that meet infection control requirements, and solution-dyed carpets with moisture backings that can be cleaned with industrial-strength cleaners. There's new furniture that's been designed specifically with the frail elderly in mind—as basic as removable seat cushions for cleaning, arms on the chair to assist lifting, all these little details. So much of senior living is about detail: what the clients can see, what they can do, even when they're very frail.

And in extreme cases, such as the eight projects we have done in Japan for the senior living operator Half Century More, the amenities and finishes, not to mention the dining facilities, are such that your first impression is that you've walked into a five-star hotel.

4. Expanding individual choice

All three of the above trends, as well as others, are about the market's desire for choice. The individuals considering retirement options for themselves or a family member have not been satisfied with the limited options of the past and are demanding new choices. This can be seen in new ownership options—"condo for life," a wide variety of entry-fee options, rentals, time shares, etc.—all catering to niche markets and offering alternative delivery options for skilled care, richer programs, and other benefits.

5. Using technology to enhance senior living

Technology is finally beginning to have a significant impact on seniors' choices. There are wireless pendants that activate a phone in case a client falls; health-monitoring devices that can be applied to a parent's unit, as a motion-detector; devices that monitor vital signs, or even manage medications. There's a growing array of technologies that are making it possible for people to live longer, in less restrictive facilities. Given the growth in the senior market, it is likely to expect technology to have an accelerating impact in the field.

6. Filling in the continuum

Twenty years ago most sponsors of senior living facilities had only one or two options to offer—a nursing home or traditional old-age home for the frail elderly—and many of the new sponsors came in with facilities that addressed only one part of the need. Now they are faced with the problem that, as their residents get older and frailer, sponsors do not want to discharge people who need more care than they normally provide, in part to keep their facilities full. Thus, a growing part of the market wants to choose an option that gives them security for the remainder of their lives—long-term care (i.e., 24-hour nursing homes), assisted living for the frail who do not need 24-hour care, independent living ("senior housing" for those who are ambulatory), and continuing care retirement communities, or CCRCs, which offer all three options.

Nursing home operators are adding housing and other options, while assisted-living operators are moving into full-scale retirement communities. This move to offer a fuller array of options is producing some of the most interesting projects.

7. Taking the 'R' out of CCRC

As noted above, "CCRC" stands for "continuing care retirement community." In today's climate, many seniors looking at their options do not see moving into a senior living facility as a decision to drop out of life. Instead, they want to continue their lives and interests long after age 75.

One of the more progressive manifestations of this change in attitude is the development of senior living facilities built either directly in association with universities or near academic campuses.

For example, Kendal at Oberlin, a continuing care community serving seniors “in the Quaker tradition,” is a short van ride from the Oberlin College campus in Ohio. More than a third of its residents are retired Oberlin faculty, alumni, or staff. Similar Quaker tradition centers have been established by Kendal Corporation at Cornell University, Ithaca, N.Y.; Dartmouth College, Hanover, N.H.; and Denison University, Granville, Ohio. The Kendal at Lexington, Va., offers a two-fer: it is near the Virginia Military Institute and Washington and Lee University. And Kendal's two facilities in western Massachusetts are within a 10-mile radius of five colleges and universities.

At the high end of such facilities is the Classic Residence by Hyatt, in Palo Alto, Calif. Opened in 2005 at a cost of \$370 million on land leased from Stanford University, it offers 388 independent living residences, 38 assisted-living units, 24 memory-support suites, and 44 skilled nursing suites. Amenities include a pool, fitness center and spa, library, computer center, art studio, beauty salon/barbershop, and meals at three dining locales. There are more than 20 such Classic Residences today, although not all are on college campuses. These near-campus locations offer residents access to public lectures, beautiful campus settings, high-level medical facilities, and athletic and cultural events; for example, Oberlin's Conservatory of Music holds 400 concerts a year.

Senior living facilities like these represent a redefinition of retirement. They are not warehouses, but represent a lifestyle change. Their common spaces are a long way from the arts-and-crafts and woodworking shops of yesteryear, to theater and conference facilities, business centers, spas, and wellness centers that allow people to be active and fit and to live longer.

There have also been a number of efforts to develop “intergenerational” campuses. Hebrew SeniorLife's new CCRC, Newbridge on the Charles, in Dedham, Mass., shares a campus with a day school. Lasell College in Newton, Mass., 10 miles west of Boston, has a CCRC on its own 13-acre site on the college grounds. Lasell Village features a formal continuing education program for senior residents to attend classes at the college.

8. Expanding urban options

Urban options have been harder to develop for a variety of reasons, among them the ability of people in high-density apartment neighborhoods to have services and food brought in and the combination of the cost of land and the cost of living in cities.

Nevertheless, a lot of empty nesters and seniors want to move back into city centers to enjoy the richness of an urban lifestyle and amenities such as having a doorman and home meal deliveries. This phenomenon is stimulating a variety of interesting new projects, such as The Clare at Water Tower Place in Chicago, a full CCRC in an urban high-rise setting.

9. Seeking more sustainable environments

Sustainable design concerns have come to senior living and are an increasingly important factor in the design and operational goals of new projects. The kinds of green design concepts that are being applied to office buildings and schools—daylighting, improved indoor air quality, energy and water conservation, views of nature, gardens and water features, efficient lighting and lighting controls—are also being applied to senior living.

Another sustainability concept that we're seeing is adaptive reuse of existing buildings. One of the more interesting of these has been the conversion of monasteries and convents—some of which sit on very prime real estate—into senior living facilities. With the decline in religious vocations, these buildings are being converted initially for the older nuns and priests; sadly, as these religious die off and are not replaced, the buildings are converted into senior facilities for the public.

For example, the new facility for Dominican Sisters in Grand Rapids, Mich., is designed to serve the sisters and later the surrounding community.

10. Capitalizing on globalization

These trends are not confined to the United States. Many other countries, particularly in Asia, have ballooning senior populations and are looking to stimulate new senior living options—some of which are heavily influenced by American prototypes.

What's driving this? We've done a whole series of high-end senior projects in Japan, and we're working on several in China and Korea. These societies all have millennia-long traditions of families taking care of their elderly, but conditions are changing: in many extended families, the adult children, both men and women, are now working, as often as not in different cities from their parents. Thanks to better healthcare, the parents are living longer, and need more care than their children can give them. Moreover, in societies like Korea and Japan, there is greater acceptance of aging parents not necessarily wanting to live with their grown children.

There's a big potential market in every country, but it's happening all around the world. Although Europe dealt with the aging population issue awhile back, and their models are not easily transferable, the U.S. model, the best of it, is being copied by other countries, particularly in Asia. We're looking to Asia for ideas, and Asia is looking to us for models.

As I approach the end of nearly three decades of designing senior living facilities, I think I can safely say that there is no building type where you can see a more direct correlation between doing something right and its impact on people's lives. You can build an environment for the aging that is confusing, imprisoning, and depressing, or you can build one that frees them, encourages them, and enhances their quality of life. This is a building type where you don't have to look very hard to see what difference you've made in people's lives.

Study, E. (2014, October 09). 3 Must-Haves in Designing for Dementia Care. Retrieved September 13, 2018, from <http://innovation.seniorhousingnews.com/3-must-haves-in-designing-for-dementia-care/>

3 Must-Haves in Designing for Dementia Care

A surge in memory care construction is bringing more competition into the space, dragging senior living designers back to the drawing board to create stand-out communities.

In the past year and a half, the supply of memory care units has increased by 3.1%, far outpacing growth rates in other senior housing property types. Because of this influx, overall occupancy has dropped across memory care facilities, bringing vacancy levels up to 9.3%.

So with increased competition and more choices for prospective residents, memory care providers are finding that to carve out their niche, they must implement top-notch design techniques specifically catered to those with Alzheimer's or other forms of dementia.

Meet the Innovators

Two providers are ahead of the curve, showcasing three emerging design trends and must-haves in their communities. The LaSalle Group's nationwide Autumn Leaves properties and Capri Communities' Mätterhaus Memory Care Community provide a blueprint for design innovation in the space. Autumn Leaves — designed, developed, built, managed and owned by The LaSalle Group — operates 36 communities in four states, serving more than 1,800 residents.

Mätterhaus Memory Care Community — operated by Capri Communities, developed by Tarantino & Company LLC and designed by PDC Midwest — is a new 24-unit, 26-bed memory care community in Germantown, Wis. It is located at The Gables of Germantown's existing campus and opened for occupancy in April.

For those providers whose memory care properties are still in the making or have yet to break ground, implementing these three techniques may push the community from average to occupied, their creators say.

1. Wandering Encouragement — Six in 10 people with dementia will wander, according to the Alzheimer's Association. With a majority of memory care residents likely to roam about the property, designing buildings for the population is a unique task.

Many communities have incorporated built-in sensors throughout the buildings and apartment units to track resident movement and ensure safety, but Autumn Leaves and Mätterhaus have taken wandering design to a new level.

Dead ends have been shown to frustrate or confuse those with dementia, which can lead to agitation among those who are wandering. To prevent this agitation, Autumn Leaves has implemented strategic interior decor, as well as structural design elements.

At the dead ends of its communities' hallways, Autumn Leaves has placed off-center photos to encourage residents to keep walking. When looking down the hallway, only a portion of the photo is visible, which signals to the residents that there is more to see and that they can continue down the next hallway.

Although wandering has been discouraged in years past, providers like Autumn Leaves are seeing the benefits of implementing safe design techniques that encourage the activity.

“Walking exercises help stimulate [residents] so they have more energy, but also when they have more energy they become more hungry,” says Nicole Gray, director of design at Winfield Design, LLC, LaSalle Group’s design division. “That’s a huge factor for us — to encourage eating.”

Water and snacks are stationed throughout the community so wandering residents can eat when they are hungry.

The hallways also have sitting areas in alcoves, which serve two purposes: They allow wandering residents to take breaks when they are tired, but they also create the illusion that the hallway is a winding corridor, not a straight path, decreasing the tunnelvision commonly experienced by those with dementia. Capri Communities has also addressed the dead-end challenge at its Mätterhaus Memory Care Community to promote wandering and reduce agitation.

PDC Midwest designed the community in the shape of a figure-eight or double racetrack with the kitchen, dining area and living room at the intersection of the two loops. In the center of one loop is a common room focused on music; in the other loop’s center is a multisensory area incorporating elements of Snoezelen therapy. And along the perimeter are resident rooms.

Located throughout the community are “memory stations” designed to spark memory and activity among residents. These themed stations engage wandering residents and also help with cognitive functions.

“It’s not just the ability to wander, it’s about the ability to find something that you’re interested in while you are wandering,” says Aaron Matter, real estate development manager at Tarantino & Company LLC, the developer of the property. “You’re not just walking to the end of a hallway; there are different elements along the way that help to attract [residents’] attention to avoid [them] having to experience agitation.”

The stations’ themes include gardening, nuts and bolts, sports memorabilia, ironing/laundry and child care, among others. They are designed so that residents can stop and interact with the stations while they are wandering, and potentially feel a connection with the items.

“Generally people [with dementia] place themselves somewhere in their mind in the past — whether they were a teacher, took care of children in a household, or had building in their background or gardening,” Matter says. “We went back to antique stores and found elements that people could place themselves into. It allows them somewhat of a release because it places them where they feel comfortable.”

2. Themed Wings — Another must-have design element in memory care communities are themed wings, which help trigger residents’ memory. Though becoming more commonplace in memory care design, Autumn Leaves and Mätterhaus have incorporated unique elements that make their communities’ wings rise above the rest.

At most Autumn Leaves properties, the four themed wings are Music, Harbors, Cities and Gardens, which all have a designated color and design scheme. The Music hall is a wheat color, Gardens is green, Harbors is blue and Cities is brown.

“What that does is as the mind progresses and deteriorates, if they have a hard time understanding a photograph of our themes — if they’re looking at pictures of flowers, for example, and don’t understand what they’re looking at — they at least have the back-up reinforcer that they’re in a green hall,” Gray says.

What sets apart Autumn Leaves’ wings, though, isn’t the colors or the themes. Unlike other memory care communities, Autumn Leaves encourages residents’ families to decorate their rooms according to their themed wing. So the decor continues from the hallways into the residents’ rooms, adding another component that will help residents remember where they live.

As an added touch, special flooring has also been designed into the space, allowing for a safe wandering environment. Transitioning between wings is

seamless (literally), as the flooring has a secure heat-weld transition seam so there are no thresholds or trip hazards in the buildings.

Like Autumn Leaves, Mätterhaus also has themed wings, City Side and Country Side, which are indicated by their decor.

There are different gates on the feature walls for each wing: a metal gate for City Side and a picket fence for Country Side.

But it's the artwork that sets apart Mätterhaus' wings from others. The community chose local art to trigger memories and foster a connection with residents.

For example, on Country Side, there are photos of the state bird of Wisconsin and a picture of the state of Wisconsin with different flowers found in different areas.

"We really tried to focus in on local art as much as we possibly could," Matter says, "and things that could mean something to a particular resident."

Along with hallway and unit decor, both communities have also installed shadowboxes outside residents' rooms — the background of which also reflects the color of the themed hallway at both communities — where family members can display photos of their loved ones and their cherished items. This acts as yet another reinforcer meant to remind residents where they live.

3. Sensory Stimulation — This technique has been proven to reduce behavioral and psychological symptoms of dementia among individuals with Alzheimer's disease, according to the Alzheimer's Association. So implementing design elements that increase sensory stimulation has become an important part of memory care construction.

Autumn Leaves and Mätterhaus have taken cues from this research and have developed their own approaches to addressing this challenge.

Several years ago, research found that displaying tanks of brightly colored fish may curtail disruptive behaviors and improve eating habits of people with dementia.

In fact, the study showed that patients who were exposed to the fish tanks appeared to be more relaxed and alert, and they ate up to 21% more food than they had before the introduction of the fish tanks. The average increase in food consumption was 17.2%.

In hopes of replicating this success, Autumn Leaves designed fish tanks into the space outside of the dining room areas.

“It allows more natural light in, which is better for the eating experience, and the movement of the fish and the sound of the water helps them relax during eating,” Gray says. “Plus, visually seeing the fish actually helps increase appetite.”

To ensure that the fish tanks are working as the research suggested, Autumn Leaves has conducted in-house polls, which have shown an increase in the percentage of residents who are eating.

“When you gather 30-plus properties with the fish tanks, it weighed more on the ‘yes’ percentage. We feel that the study was truthful,” she says.

In the center of one of the community’s figure-eight loops is a multisensory room that incorporates elements of Snoezelen therapy, as well as other stimulating activities.

Snoezelen, or a controlled multisensory environment (MSE), allows memory care residents to guide their own therapy using lights, sounds, textures and aromas to stimulate their senses and promote relaxation.

Inside Mätterhaus’ multisensory room, one side is devoted to traditional Snoezelen elements, including a bubble tube with a remote control to change the colors of the tube, a spotlight and a disco ball. But this design element is becoming increasingly more common among memory care communities.

So what sets apart Mätterhaus’ multisensory environment is the other half of the room, which addresses what’s called “sunsets” in dementia care.

“[Those with dementia] tend to get agitated as the sun goes down,” Matter says. “We find that by giving them something to do during that period of time that relates to a place they were at in their past helps manage that agitation.”

On this half of the room, there are bookshelves with 28 baskets, one for each resident. Inside each basket are different items that the resident can interact with, which are meant to improve cognitive functions and dexterity.

For example, a retired teacher would have a basket of papers with a red pen to grade papers.

“We did some research and figured we would want to be a forerunner in different types of Alzheimer’s care,” Matter says. “We’re planning to get a feel for how people respond to it and have some discussions with people in the memory care/Alzheimer’s community.”

These sensory stimulation techniques, along with the themed wings and wandering encouragement design elements at both Mätterhaus and Autumn Leaves, have come a long way from memory care design just a decade ago. And these must-haves will no doubt shape memory care design in the future as construction in the senior housing segment continues to increase.

Written by Emily Study

DFAR12 Insights and Innovations

by Emily Chmielewski, Perkins Eastman Research Collaborative

About the Design Competition and Insights Study

In the summer of 2013, the American Institute of Architect's Design for Aging Knowledge Community (DFA) conducted its 12th biennial Design for Aging Review design competition (DFAR12). In total, there were 64 submissions, 34 of which were recognized by the jury for an award or publication. Eleven projects received an award of merit; 7 projects were given a citation award; and 16 projects were recognized for publication within this book.

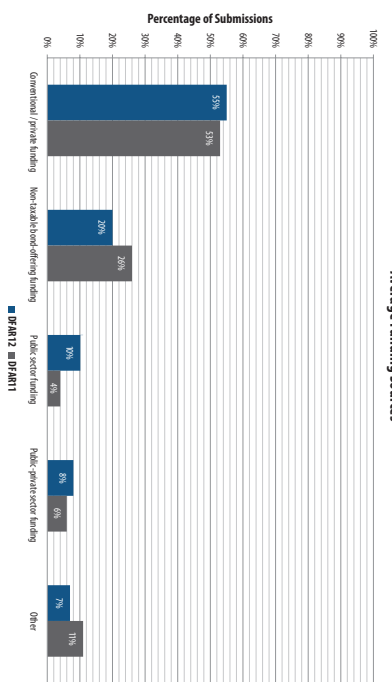
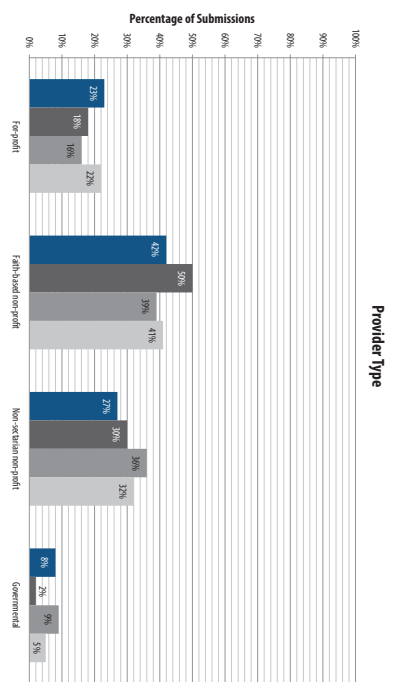
Projects submitted to DFAR12 and recognized by the jury include:

Merit award winners:	Published:
• Atria Valley View	• Asbury Place at Arbor Acres
• Brandman Centers for Senior Care	• The Deupree House and Nursing Cottages
• Garphill Ghent	• The Friendship House at Royal Oaks
• Cosby Spear Highrise	• Haven Hospice Custeard Care Center
• Marian's House	• Laclede Groves
• The Mather	• Legacy Place
• Moorings Park	• Mary Helen Rogers Senior Community
• Rockhill Mennonite Community	• Merritt Crossing
• The Summit at Central Park	• Orchard Cove
• The Townhomes on Hendricks Place	• Rydal Park Repositioning
• White Oak Cottages at Fox Hill Village	• Sharon Towers Dining Renovation
Citation award winners:	• St. Ignatius Nursing & Rehab Center
• Armed Forces Retirement Home	• Sun City Tower Kobe
• Cohen Rosen House	• The Village at Orchard Ridge
• Creekside Homes at Givens Estates	• The Village at Rockville
• Good Shepherd Cottage, Santa Teresita, Inc.	• Workman's Mill Village Center
• Mather More Than a Cafe	
• Rose Villa Pocket Neighborhoods & Main Street	
• Tohono O'odham Elder Home	

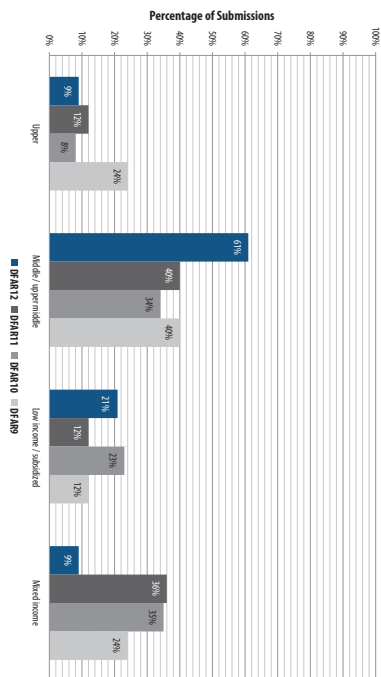
Categories for submission included: Built (with 46 submissions, 21 of which were recognized by the jury); Planning / Concept Design—formerly called Not Built (with 9 submissions, 7 of which were recognized by the jury); and Small Projects, for those with \$3 million or less in total construction costs (with 9 submissions, 6 of which were recognized by the jury). Note that the Research / POE category included in previous DFAR cycles was eliminated this year due to low submission rates since its introduction.

Project Statistics

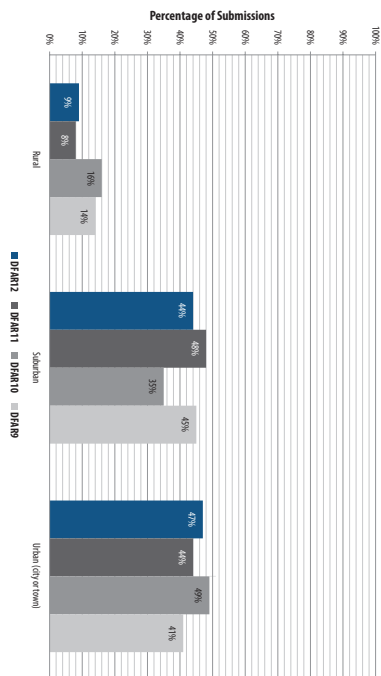
The following graphs are derived from all 64 projects submitted to DFAR12, with comparisons to 3 previous design competition cycles (DFAR9, 10, and 11) where possible:



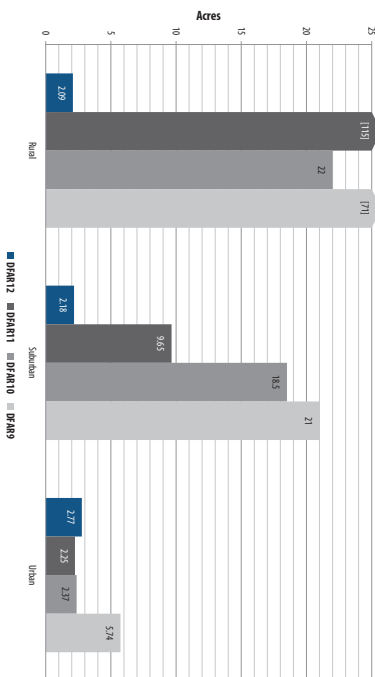
Target Market



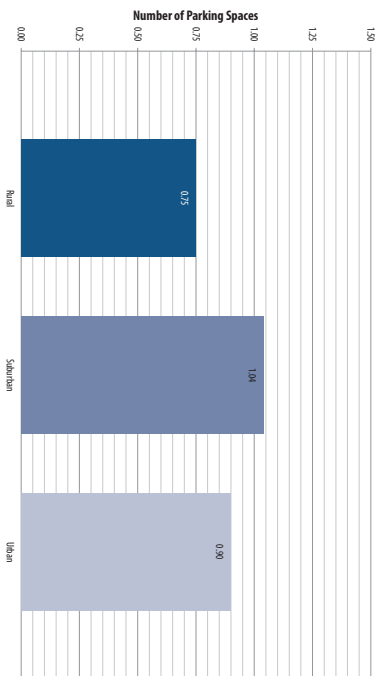
Site Location



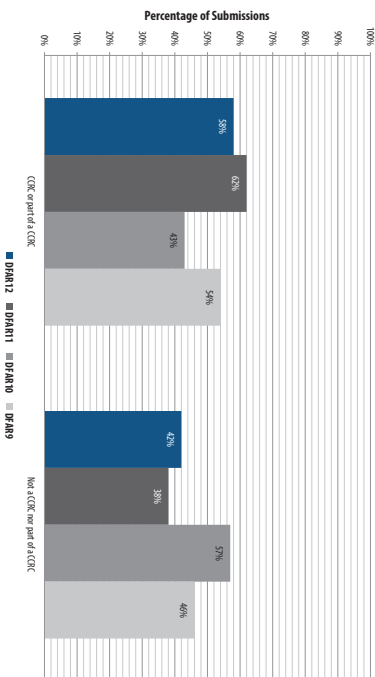
Median Site Area, by Site Location



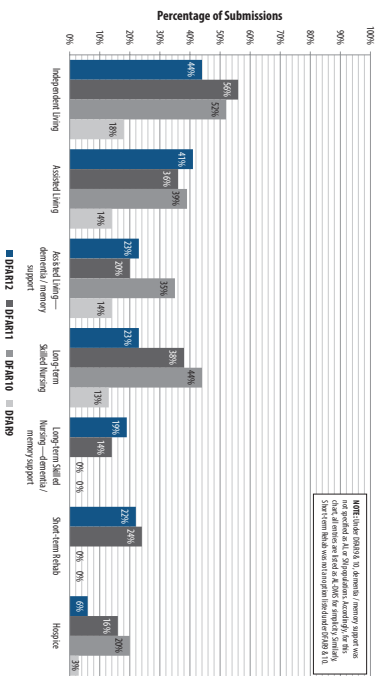
Average Number of Parking Spaces Per Resident, by Site Location



CRRC / Part of a CRRC

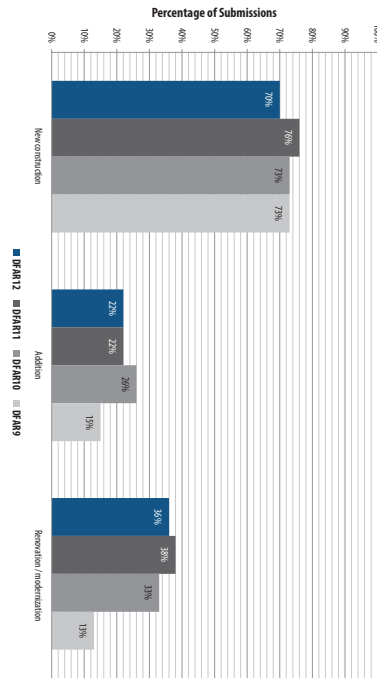


Facility Types

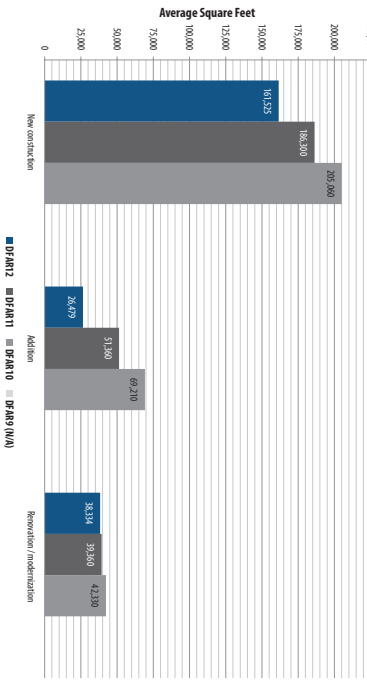


NOTE: CRRC stands for Community Residential Care. CRRC is a type of residential care facility that provides 24-hour care and supervision for individuals with mental health conditions. CRRCs are typically located in rural or semi-rural areas and are often used to provide care for individuals who are unable to live independently. CRRCs are a type of residential care facility that provides 24-hour care and supervision for individuals with mental health conditions. CRRCs are typically located in rural or semi-rural areas and are often used to provide care for individuals who are unable to live independently.

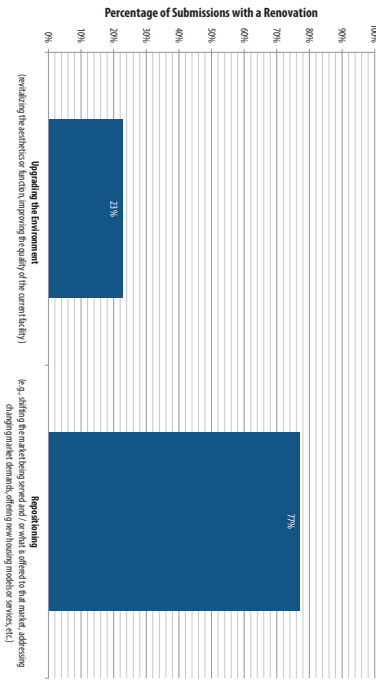
Projects by Construction Type



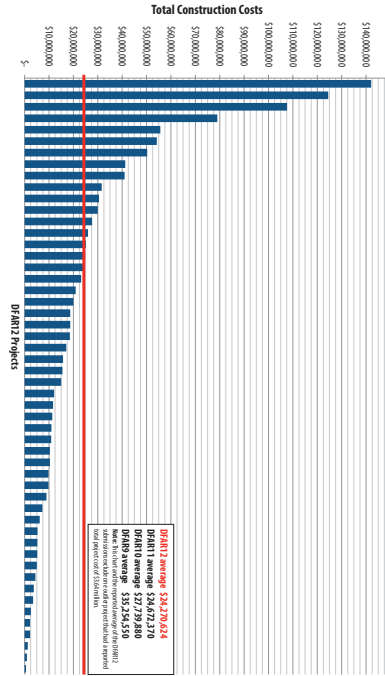
Project Size, by Construction Type



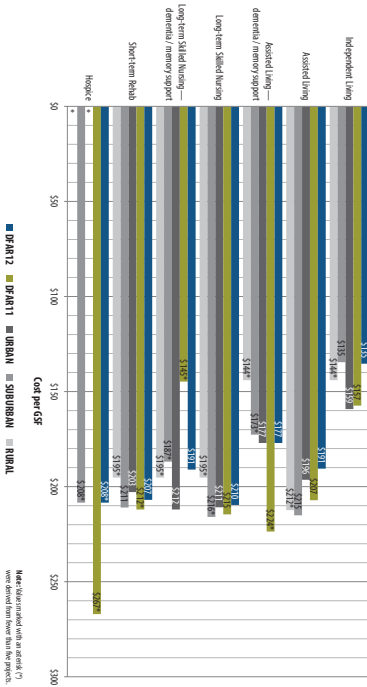
Purpose of the Renovation



Project Costs



Median Cost Per Gross Square Foot, by Facility Type and Site Location



Residential to Common Space Ratios, by Facility Type

Facility Type	Residential to Common Ratio (based on average net square footage)	DP#R12	DP#R11
Independent Living	2.78:1	2.71:1	2.71:1
Assisted Living	1.41:1	1.55:1	1.55:1
Assisted Living — dementia / memory support	1.26:1	1.26:1	1.26:1
Long-term Skilled Nursing	0.95:1	0.93:1	0.93:1
Long-term Skilled Nursing — dementia / memory support	1.26:1	0.99:1	0.99:1
Short-term Rehab	0.74:1	0.67:1	0.67:1
Hospice	0.60:1*	1.30:1	1.30:1

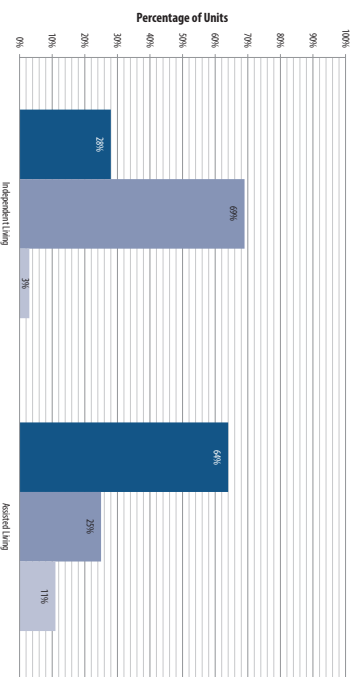
*Note: Data for hospice projects were available for the analysis.

Residential Unit Space Breakdowns, by Facility Type

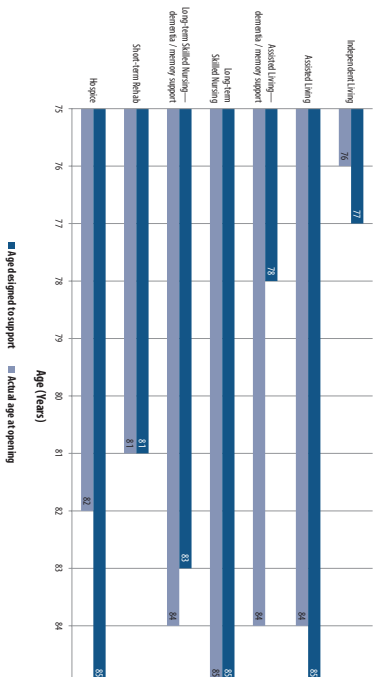
UNIT TYPE	DFAR12		DFAR11		DFAR10		DFAR9	
	UNIT DISTRIBUTION	AVERAGE UNIT SIZE	UNIT DISTRIBUTION	AVERAGE UNIT SIZE	UNIT DISTRIBUTION	AVERAGE UNIT SIZE	UNIT DISTRIBUTION	AVERAGE UNIT SIZE
Independent Living	22%	441 SQ FT	4%	4061 SQ FT	20%	651 SQ FT	5%	504 SQ FT
Studio	34%	641 SQ FT	41%	629 SQ FT	28%	769 SQ FT	4%	841 SQ FT
One bedroom	13%	818 SQ FT	8%	961 SQ FT	9%	—	9%	—
Two bedroom	19%	1071 SQ FT	30%	1058 SQ FT	36%	1181 SQ FT	37%	1184 SQ FT
Three bedroom	12%	1429 SQ FT	15%	1371 SQ FT	13%	1515 SQ FT	13%	1465 SQ FT
Four bedroom	03%	2487 SQ FT	2%	1020 SQ FT	4%	1082 SQ FT	1%	2220 SQ FT
Assisted Living	50%	394 SQ FT	46%	354 SQ FT	11%	381 SQ FT	20%	358 SQ FT
One bedroom	28%	525 SQ FT	35%	591 SQ FT	49%	581 SQ FT	62%	581 SQ FT
Two bedroom	4%	627 SQ FT	4%	627 SQ FT	14%	818 SQ FT	20%	818 SQ FT
Three bedroom	0%	—	0%	—	0%	—	03%	1464 SQ FT
Four bedroom	0%	—	0%	—	10%	—	0%	—
Assisted Living — dementia / memory support	87%	441 SQ FT	84%	344 SQ FT	80%	316 SQ FT	80%	311 SQ FT
Private room	5%	497 SQ FT	8%	971 SQ FT	20%	411 SQ FT	20%	752 SQ FT
Shared room	8%	347 SQ FT	9%	407 SQ FT	0%	—	0%	—
Long term Skilled Nursing	92%	264 SQ FT	91%	274 SQ FT	78%	297 SQ FT	9%	291 SQ FT
Private room	8%	428 SQ FT	8%	327 SQ FT	22%	369 SQ FT	3%	421 SQ FT
Shared room	03%	274 SQ FT	1%	506 SQ FT	0%	—	0%	—
Long term Skilled Nursing — dementia / memory support	83%	259 SQ FT	80%	281 SQ FT	N/A	N/A	N/A	N/A
Private room	16%	306 SQ FT	0%	—	N/A	N/A	N/A	N/A
Shared room	1%	207 SQ FT	0%	—	N/A	N/A	N/A	N/A
Short term Rehab	83%	209 SQ FT	88%	249 SQ FT	N/A	N/A	N/A	N/A
Private room	11%	675 SQ FT	12%	472 SQ FT	N/A	N/A	N/A	N/A
Shared room	2%	419 SQ FT	0%	—	N/A	N/A	N/A	N/A
Respite	41%	384 SQ FT	80%	311 SQ FT	N/A	N/A	N/A	N/A
Shared room	4%	457 SQ FT	0%	—	N/A	N/A	N/A	N/A
Standard room	0%	—	0%	—	0%	—	0%	—

* Values noted with an asterisk (*) were derived from floor plan area projects.
 ** Values noted with a dash (—) were derived from floor plan area projects.
 *** Private room consisted of a single occupant.
 **** Shared room consisted of two occupants.
 ***** Shared room consisted of three occupants, with a shared bed area and shared bathroom.
 ***** Under DFAR 9 & 10, Skilled Nursing was not distinguished between private and shared rooms. Accordingly, for this chart, all entries have been under "shared private".
 ***** Under DFAR 9 & 10, Skilled Nursing was not distinguished between Assisted Living and Long term Skilled Nursing. Accordingly, for this chart, all entries have been under "Long term Skilled Nursing — dementia / memory support".
 ***** The space related entry — dementia / memory support.

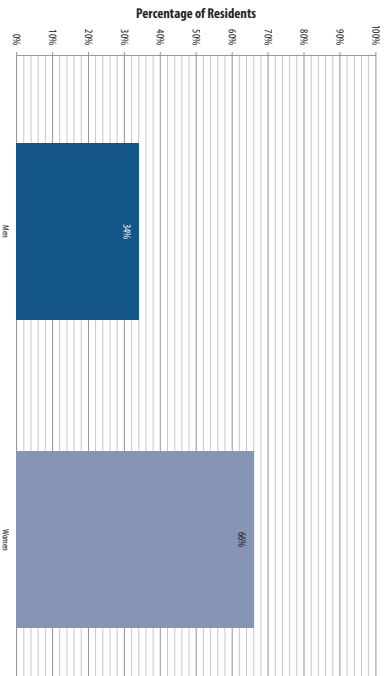
Average Accessibility of Units



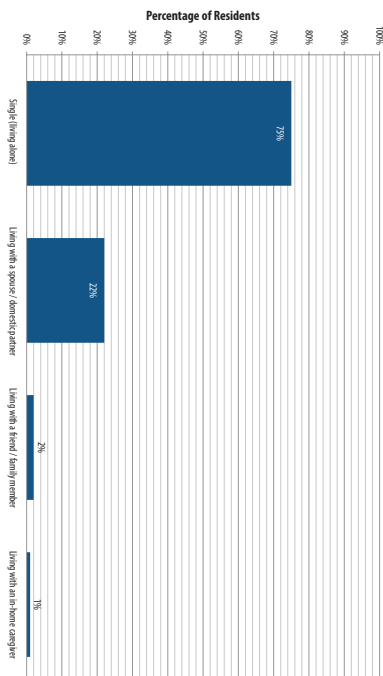
Average Resident Age, by Facility Type



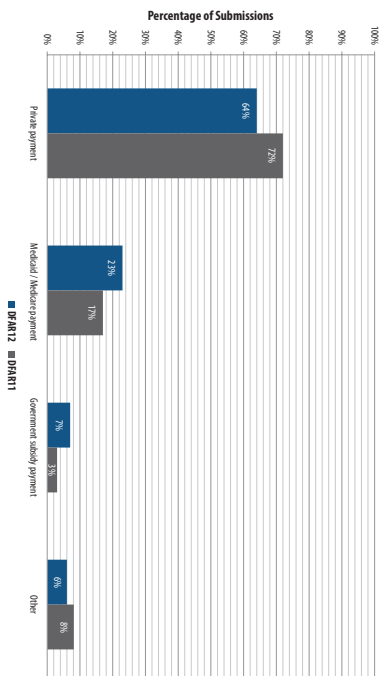
Average Resident Gender Breakdown



Average Resident Cohabitation Status



Source of Resident Payments



Project Themes

Though the 34 DFAR12 projects recognized by the jury are quite diverse, several common and often interrelated project themes were identified based on the similarities among the submissions' building components, project descriptions, and goals. The following describe the jury-recognized DFAR12 projects' common themes.

The common themes described by the jury-recognized DFAR12 projects include:

- Ecological sustainability (97% of the projects recognized by the jury)
- Using research in the design process (79%)
- Collaborative designing (76%)
- Connection to nature (65%)
- Contemporary (56%) vs. traditional (44%) interior aesthetics
- Household model and person-centered care (50%)
- Extensive amenities (41%)
- Connecting to the greater community (29%)
- Promoting a sense of community (26%)
- Fitting the local context (26%)
- Flexibility (24%)
- Holistic wellness (15%)

Ecological Sustainability

Ninety-seven percent of the jury-recognized DFAR12 projects (and 91% of all submissions) report having green / sustainable features. However, only 8 of the jury-recognized DFAR12 projects (24%) actually discussed ecological sustainability within their project description text.

DFAR12 projects recognized by the jury that specifically described how their submission is ecologically sustainable include:

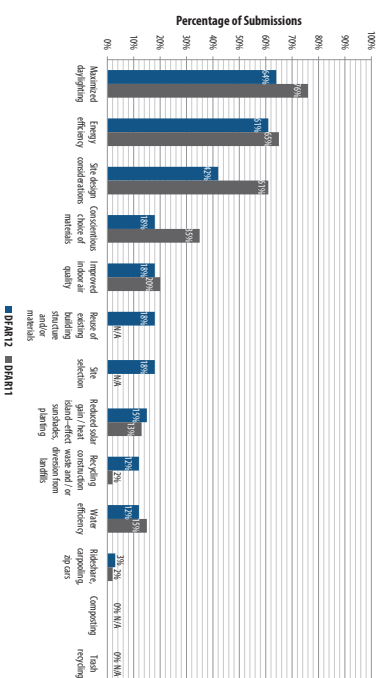
- Armed Forces Retirement Home
- Atria Valley View
- Cohen Rosen House
- The Deupree House and Nursing Cottages
- Good Shepherd Cottage, Santa Teresita, Inc.
- The Mather
- Merritt Crossing
- The Summit at Central Park

Thirty-eight percent of the jury-recognized DFAR12 projects (and 33% of all submissions) are, or are registered to be, certified as ecologically sustainable by an independent organization (e.g., LEED). This percentage of projects is slightly higher than the previous cycle, where 32% of all DFAR11 projects

were green certified. However, these rates are up from DFAR10's 19% of submissions. Of the certified jury-recognized DFAR12 projects, 12 out of 13 pursued LEED ratings. One project pursued the "Design to Earn the ENERGY STAR" (DEES) program.

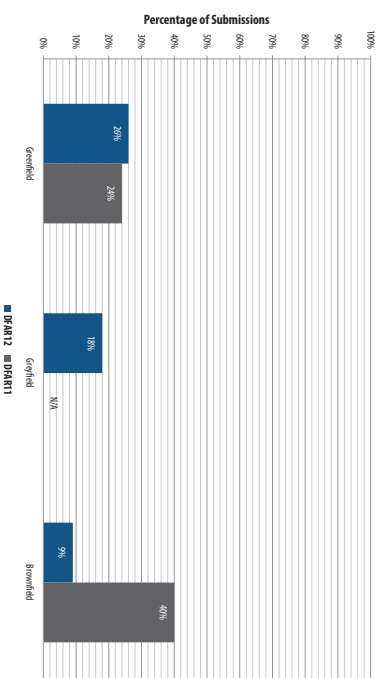
The green features with the greatest impact on the jury-recognized DFAR12 projects' designs include: maximized daylighting (64% of the green DFAR12 projects recognized by the jury); energy efficiency (61%); and site design considerations (42%)—the same top 3 influencers as for DFAR11.

Jury-Recognized Projects' Most Impactful Green Features



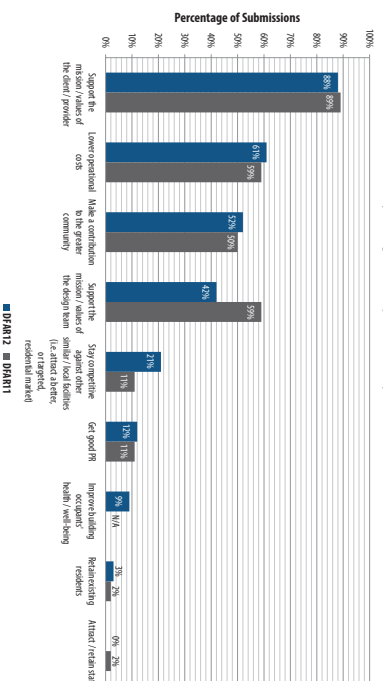
In addition, for the jury-recognized DFAR12 submissions, 26% are built on greenfield sites (no previous development other than agricultural or natural landscape); 18% are on greyfields (an underused real estate asset or land, such as an outdated / failing retail and commercial strip mall); and 9% are on brownfields (land previously used for industrial or commercial use, often requiring remediation of hazardous waste or pollution).

Jury-Recognized Projects' Site Classification



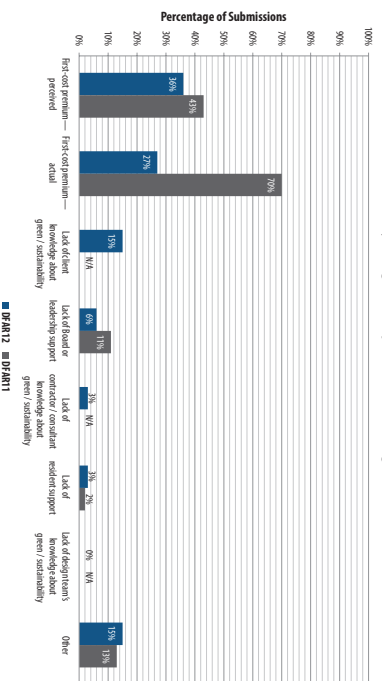
When asked about the primary motivation for including ecologically sustainable features, responses were similar to those from DFAR11. Supporting the mission / values of the client / provider was the most popular response among all jury-recognized DFAR12 submissions. Other common responses included: lowering operational costs, making a contribution to the greater community, and supporting the mission / values of the design team.

Jury-Recognized Projects' Primary Green Motivations



The DFAR12 submission form also asked about the challenges faced by the projects when the design team attempted to incorporate green features. Seventy percent of the green jury-recognized DFAR12 projects reported that they had difficulties. Perceived first-cost premiums were the greatest deterrent, followed by actual costs—a reversal from DFAR11, where actual costs had a greater impact than perceived costs.

Jury-Recognized Projects' Green Challenges



In Their Own Words

Cohen Rosen House

"To achieve LEED Silver certification, many parts and pieces of the home, from concept to construction to operation, come together. Innovations in design (green roofs) and thoughtful follow through during construction (recycling materials) are just as integral as the staff's cleaning and maintenance methods (low VOC products). This commitment to sustainability further paints the picture of a priceless whole in view of its parts."



From green roofs to clerestory windows for extensive natural light indoors, the LEED Silver Certified Cohen Rosen House incorporates many green design features. Photography: Alain Jaramillo

Using Research in the Design Process

Based on past submissions and the growing practice of evidence-based design, DFA decided that for this cycle of the design competition, applicants should be asked specifically about how their projects use research. We found that 79% of the jury-recognized DFAR12 submissions reported using some form of research during the design process.

Of those that conducted research (formally or informally) during the design process: 89% incorporated building occupant feedback, from existing and / or prospective users; 22% created 3D views or computer models to better explore the proposed design; 22% made observations of existing spaces to understand operational issues and / or building users' needs, desires, and expectations; 19% made use of existing data (i.e., post-occupancy evaluation findings or benchmark data); 7% built full-scale mock-ups so that design details and actual layout could be assessed prior to construction; 4% performed sun-angle computer modeling to better understand how daylight could permeate the building; and 4% piloted a built environment by building a case study setting and allowing it to function, while recording associated outcomes to inform the final design and replication of the setting.

DFAR12 projects recognized by the jury that described using research in the design process include:

- Armed Forces Retirement Home
- Ashbury Place at Arbor Acres
- Brandman Centers for Senior Care
- Cohen Rosen House
- Cosby Spear Highrise
- Creekside Homes at Givens Estates
- The Deupree House and Nursing Cottages
- The Friendship House at Royal Oaks
- Good Shepherd Cottage, Santa Teresita, Inc.
- Laclede Groves
- Legacy Place
- Marian's House
- Mary Helen Rogers Senior Community
- The Mather
- Mather More Than a Cafe
- Moorings Park
- Orchard Cove
- Rockhill Mennonite Community
- Rose Villa Pocket Neighborhoods & Main Street
- Rydal Park Repositioning
- Sharon Towers Dining Renovation
- St. Ignatius Nursing & Rehab Center
- Sun City Tower Kobe
- Tohono O'odham Elder Home
- The Townhomes on Hendricks Place
- The Village at Rockville
- Worman's Mill Village Center

In Their Own Words

Creekside Homes at Givens Estates

"We hosted a series of face-to-face and web-based meetings with prospective residents to introduce the concept and solicit reactions... [In addition, to] allay the owner's concern about the height of the homes, the architect provided photorealistic computer generated renderings of the homes nestled in the existing trees and terrain."



To help the owner of Creekside Homes at Givens Estates understand the scale of the proposed design, the architect provided a rendered image of the project well before anything was built.

Marian's House

"The designers applied 25 years of experience designing special care environments with a recently completed post-occupancy evaluation of 5 buildings built over a 20 year period. [The study] confirmed many powerful findings about the role of outdoor space, the central image of the kitchen, and the importance of sightlines for unobtrusive surveillance of the environment. Just as powerful was seeing how innovative concepts from 20 years ago were either still relevant or [how the] spaces were adapted to new needs as programs evolved."

The Mather

"The entire development of The Mather is a result of market surveys, lifestyle surveys, [and] discussions with existing residents and future prospects to understand their wants and desires for a new community."

Moorings Park

"A digital virtual tour was created in great detail during the design process, not after, to further vet the design and provide the design team, stakeholders, residents, and operational management a clear picture of the space qualities ... [The] clinic exam room was mocked-up full scale and then revised upon user input from physician and nurses."

Rose Villa Pocket Neighborhoods & Main Street

"The design team conducted 5 separate focus groups comprised of senior management, staff members, independent living residents, adult children of residents, and family members. Each group responded to a series of open-ended questions regarding existing facilities and programs, as well as potential areas of improvement."

St. Ignatius Nursing & Rehab Center

"Early in the design process, the client researched the decentralization of dining and providing choice for meal options. A small dining room was set up as a study. After a period of time the staff found that residents' health had dramatically improved with significant weight gain with a number of residents able to be taken off of their feeding tubes. This was the encouragement the facility needed to pursue the project with the ultimate goal of decentralizing dining and offering choice throughout the facility."

Collaborative Designing

More than ever, working with collaborators (i.e., those outside of the traditional architectural design team) has become a popular and effective way to improve project outcomes. In fact, 76% of the jury-recognized DFAR12 submissions reported collaborating during the design process (compared to 25% of DFAR11 projects).

Of those projects that used a collaborative process, 92% incorporated feedback from existing and / or prospective building occupants. Forty-two percent worked with the client / owner's senior management team during the design process. Nineteen percent tapped into the expertise of another organization, such as the Marian's House team working with the Alzheimer's Association to expand the offerings of their community-wide resource center, or the Legacy Place team who commissioned a consultant to learn from a similar project in Great Britain that was also designed for a population of Jehovah's Witnesses.

DFAR12 projects recognized by the jury that described a collaborative design process include:

- Arned Forces Retirement Home
- Asbury Place at Arbor Acres
- Brandman Centers for Senior Care
- Camphill Ghent
- Cosby Spear Highrise
- Greekside Homes at Givens Estates
- The Deupree House and Nursing Cottages
- The Friendship House at Royal Oaks
- Good Shepherd Cottage, Santa Teresta, Inc.
- Ladlade Groves
- Legacy Place
- Marian's House
- Mary Helen Rogers Senior Community
- The Mather
- Mather More Than a Cafe
- Moorings Park
- Orchard Cove
- Rockhill Mennonite Community
- Rose Villa Pocket Neighborhoods & Main Street
- Rydal Park Repositioning
- St. Ignatius Nursing & Rehab Center
- Sun City Tower Kobe
- Tohono O'odham Elder Home
- The Townhomes on Herdricks Place
- The Village at Rockville
- Worman's Mill Village Center

In Their Own Words

Asbury Place at Arbor Acres

The project used “an inclusive process that also involved all the vested stakeholders: residents, operations, senior management, activities, physical therapy, nursing, Board of Directors, finance, social workers, marketing, physical plant, housekeeping, and dining services.”

The Deupree House and Nursing Cottages

“The project team had the added benefit of a Culture Change Planner, who directed the provider to visit communities where culture change models had been incorporated into the campus.”

Laclede Groves

“The project commenced with [a] strategic planning workshop that was structured to help the client determine strategic ways to develop new opportunities and to create, reposition, and reinvent existing services and environments for seniors. Meetings engaged executive teams, board members, and key staff in a process that integrates forward-thinking design, thoughtful economic analysis, and thorough market assessment to create sustainable strategies.”

Rydal Park Repositioning

Designing was an “interactive team process involving all stakeholders including administration, architect, development consultant, staff, selected residents, resident committees, and zoning and code officials.”

Orchard Cove

“Specifically focused resident committees were formulated by the Orchard Cove administration with the sole purpose of getting [the] participation of respected individuals who had been acknowledged as fair and well informed people, best suited to represent the community in their respective areas of expertise. The committees included: library, dining, acoustics, fitness / wellness, interior design, and artwork. This process resulted in capitalizing upon the excellent ideas and insights that the existing residents already had and allowed us to gain their trust soon after the first phase was completed. By working closely with the various resident committees, the majority of the residents felt that they had been listened to, and the final preferred solution was often close to [being] unanimously embraced.”



Incorporating feedback from building occupants, like these residents of Orchard Cove, adds to a collaborative design process—this has become a popular and effective way to improve project outcomes. Photography: DIMelia Shaffer

Insights and Innovations

While exploring the ways in which the designers worked with stakeholders, we started to see a trend: Seven projects (2.1% of the DFARI 2 projects recognized by the jury) discussed using a charrette during the design process. The submissions that described using a charrette include: Armed Forces Retirement Home, Asbury Place at Arbor Acres, The Dupree House and Nursing Cottages, Laclede Groves, Legacy Place, Rockhill Menomonee Community, and Rose Villa Pocket Neighborhoods & Main Street.

Charettes are not an innovative technique per se but the prevalence of these sessions and the effectiveness described by the submissions indicate that charrettes are being used as a powerful tool to improve project outcomes and gain stakeholder buy-in. In addition to the traditional architectural design team, charrette participants included: the client / owner / developer; board members, executives / administrative staff, marketing staff, care team and operational staff, design consultants, civil engineers and contractors, residents (existing and prospective), and / or residents' families.

The submissions described charrettes that allowed the participants to “create a shared vision, understand needs, desires, and trade-offs, and effectively build group consensus” (Laclede Groves). Sessions were held so that participants could “collectively agree on the approach and design for the project” (Legacy Place), and to “clearly define relevant design and development issues, structure alternative solutions, and [create] a graphic presentation of preliminary project designs” (Rose Villa Pocket Neighborhoods & Main Street). The charrettes provided “a forum in which all voices could be heard and future options considered within the context of financial capacity and land development constraints” (Asbury Place at Arbor Acres). The charrette conducted for the Armed Forces Retirement Home project even included the construction of full-scale mock-ups for people to respond to.



Several projects described using a charrette (like the one for Laclede Groves pictured here) during the design process to improve project outcomes and gain stakeholder buy-in. Photography: Daniel Crell / Perkins Eastman

Connection to Nature

Sixty-five percent of the jury-recognized DFAR12 projects described a connection to nature. This was similar to DFAR11, both in the percentage of projects (at 67% for DFAR11) as well as the types of natural amenities described. For DFAR12, projects noted views to parklands, oceans, gardens, and orchards. Buildings were planned around natural site features, like wetlands and mature trees. Submissions described providing access to shared gardens as well as private outdoor spaces (i.e., residential unit patios / balconies). Projects include walking paths, raised planter beds, and rooftop gardens. Some submissions even described their use of natural materials, colors, and textures.

Many projects also noted their indoor / outdoor connections, and at fresco dining and social / event spaces. One project, Tohono O'odham Elder Home, even offers outdoor cooking spaces to accommodate the cultural background of its residents, who spent their lives cooking outdoors and wished to continue doing so. Many projects include abundant natural light, both in common spaces and within residential units. Two projects (Cohen Rosen House and Legacy Place) specifically noted the inclusion of daylight to regulate circadian rhythms and minimize the effects of 'sundowning' in their buildings' dementia populations.

DFAR12 projects recognized by the jury that described the theme of connecting to nature include:

- Armed Forces Retirement Home
- Atria Valley View
- Camphill Ghent
- Cohen Rosen House
- The Deupree House and Nursing Cottages
- The Friendship House at Royal Oaks
- Good Shepherd Cottage, Santa Teresita, Inc.
- Haven Hospice Custard Care Center
- Legacy Place
- Marian's House
- Mary Helen Rogers Senior Community
- The Mather
- Merritt Crossing
- Moorings Park
- Rockhill Mennonite Community
- Rose Villa Pocket Neighborhoods & Main Street
- The Summit at Central Park
- Sun City Tower Kobe
- Tohono O'odham Elder Home
- The Village at Orchard Ridge
- White Oak Cottages at Fox Hill Village
- Worman's Mill Village Center

In Their Own Words

Armed Forces Retirement Home

The project offers "a view of the ocean from every apartment and a balcony that is cantilevered toward the ocean. The balcony is large enough to have a couple of chairs and a small table for eating or socializing."

Atria Valley View

"The building concept incorporates the use of natural materials and introduces details rich with earth-tone colors and textures."



Atria Valley View connects with nature by providing views and access to the outdoors, and through the use of natural materials, colors, and textures.

The Friendship House at Royal Oaks

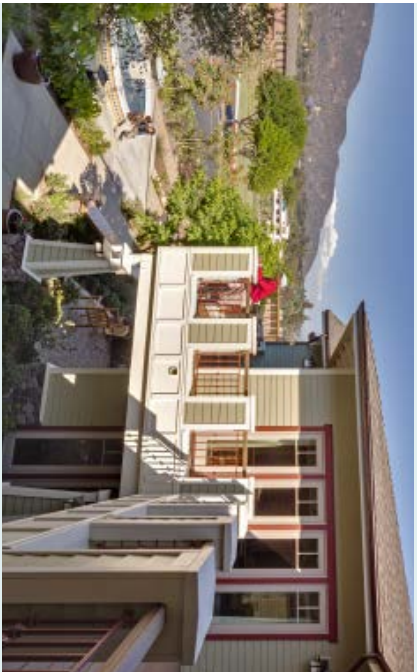
"Outdoor garden courtyards with an emphasis on visibility promote 'fun' therapy. In lieu of going to a therapy room, residents are encouraged to take a walk in the garden which incorporates specific therapy elements such as changes in surface materials, steps, and other associated activities as deemed necessary for each resident along their walk through the garden."

The Village at Orchard Ridge

"The master plan capitalizes on orchards bordering the community not only by taking advantage of appealing long-range views, but also incorporating an apple tree grove into the Village Green ... [The project also] responds to the challenging site by maintaining acres of existing wetlands and wooded area as a campus amenity."

Good Shepherd Cottage, Santa Teresita, Inc.

“The building provides a vibrant and engaging lifestyle by focusing on direct access to social areas that have abundant natural light and multiple connections to the outdoors ... The patios and outdoor gardens on the first floor become places for residents to interact. The second floor has accessible common decks with view of the San Gabriel Mountains.”



At Good Shepherd Cottage, Santa Teresita, Inc., rooms have indoor-outdoor connections—residents have access to the outdoors on both the ground floor and upper levels, with views to the surrounding landscape.

The Mather

“A rare commodity in an urban setting is the availability of a welcoming garden or outdoor terrace. A truly unique feature of The Mather is the availability of outdoor dining terraces, walking paths in an informal multi-faceted garden with climbing roses, quiet sitting enclaves, and resident planting beds.”



Even projects in urban locations can offer outdoor connections, like The Mather’s rooftop patio and gardens.

White Oak Cottages at Fox Hill Village

“Natural light is always important in any residential project, but takes on a higher level of importance for those with dementia and Alzheimer’s, and is often a struggle on projects employing the Green House® and small house models because of the relatively high ratio of resident rooms to commons. It can be difficult to get multiple exposures in the commons spaces, limiting the quality of natural light in those spaces. In this project, the building was articulated in such a way as to allow large exposures into the main common spaces, and additional skylights were used in those other public or semi-public spaces that otherwise lack access to more conventional sources of natural light.”



White Oak Cottages at Fox Hill Village allows daylight to permeate via large windows, bay windows, clerestory windows, skylights, and the careful articulation of the exterior wall.

Contemporary vs. Traditional Interior Aesthetics: What “Home” Looks Like Today

It is now just as common to find a senior living community with a contemporary interior aesthetic, as opposed to a traditional setting, which was the standard not too long ago. Fifty-six percent of the jury-recognized DFAR12 projects were classified as having a contemporary interior aesthetic; 44% had a traditional interior aesthetic. This is slightly different than the jury-recognized DFAR11 submissions, which had slightly more traditional projects (52%) than contemporary (48%).

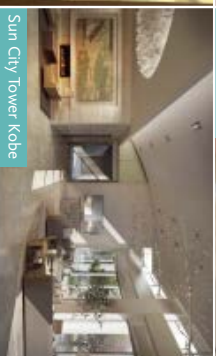
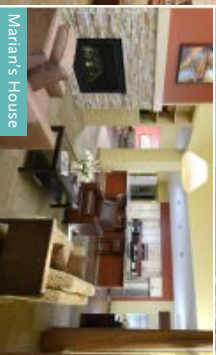
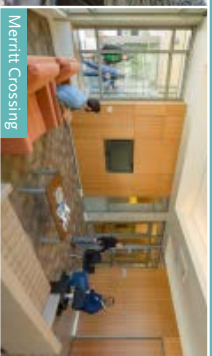
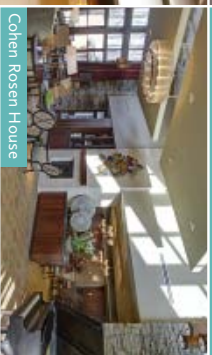
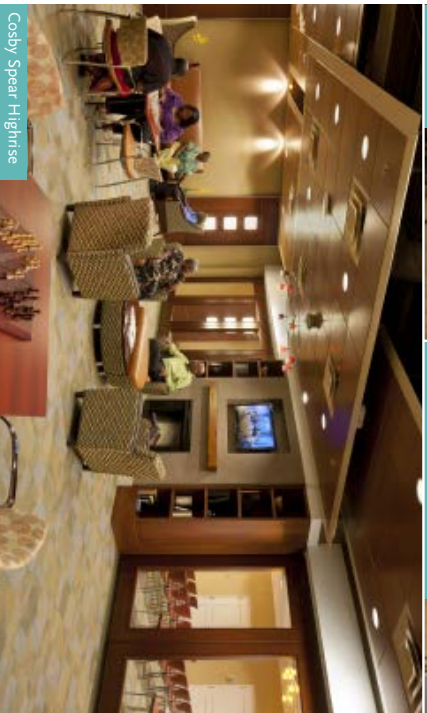
A contemporary interior aesthetic may be recognized by such features as clean lines, geometric patterns, and minimal details. A traditional interior aesthetic, on the other hand, is more likely to include crown and base molding, rolled arm furniture, pleated curtains, and more ornate details and patterns.

Interestingly, for both DFAR11 and 12, we saw that the aesthetic style tended to vary based on the facility type. Projects aimed at a younger market (i.e., Independent Living residential buildings and community centers / common spaces) were typically designed with a contemporary interior aesthetic. Assisted Living, Skilled Nursing, and Hospice projects, on the other hand, more often had a traditional style. In fact, for the jury-recognized DFAR12 projects, IL / Commons projects had a ratio of 7:3 contemporary to traditional, whereas AL / SN / Hospice projects had an inverse ratio of 3:7.

Not only is the market responding to contemporary interior aesthetics, but these settings are now considered to be as “home-like” as traditional-style projects. In fact, 5 of the jury-recognized DFAR12 projects actually noted in their project descriptions that their submission has a homey feel alongside a contemporary aesthetic (Marian’s House, Cohen Rosen House, Legacy Place, Brandman Centers for Senior Care, and The Friendship House at Royal Oaks). It is clear that no matter what a person’s personal aesthetic preference is, there are high-quality senior living environments from which to choose.

DFAR12 projects recognized by the jury that were categorized as having a contemporary interior aesthetic include:

- Brandman Centers for Senior Care
- Campbell Ghent
- Cohen Rosen House
- Cosby Spear Highrise
- The Friendship House at Royal Oaks
- Laclede Groves
- Legacy Place
- Marian’s House
- Mather More Than a Cafe
- Mary Helen Rogers Senior Community
- Merritt Crossing
- Moorings Park
- Orchard Cove
- Rockhill Mennonite Community
- Rose Villa Pocket Neighborhoods & Main Street
- Sharon Towers Dining Renovation
- The Summit at Central Park
- Sun City Tower Kobe
- Tohono O’odham Elder Home



DFAR12 projects recognized by the jury that were categorized as having a traditional interior aesthetic include:

- Armed Forces Retirement Home
- Asbury Place at Arbor Acres
- Atria Valley View
- Creekside Homes at Givens Estates
- The Deupree House and Nursing Cottages
- Good Shepherd Cottage, Santa Teresita, Inc.
- Haven Hospice Custeard Care Center
- The Mather
- Rydal Park Repositioning
- St. Ignatius Nursing & Rehab Center
- The Townhomes on Hendricks Place
- The Village at Orchard Ridge
- The Village at Rockville
- White Oak Cottages at Fox Hill Village
- Worman's Mill Village Center



The Townhomes on Hendricks Place



The Village at Orchard Ridge



St. Ignatius Nursing & Rehab Center



Atria Valley View



The Deupree House and Nursing Cottages



The Mather



Good Shepherd Cottage, Santa Teresita, Inc.



Haven Hospice Custeard Care Center



The Village at Rockville

Household Model and Person-Centered Care

Because building occupants' mental, social, emotional, and physical wellbeing—and, therefore, quality of life—are affected by operational and design decisions, it is important to provide person-centered care and create physical environments that empower people.¹ Fifty percent of the jury-recognized DFAR12 submissions described a physical environment that supports person-centered care and / or includes a Household in the project. However, only 12 of the jury-recognized DFAR12 projects (35%) actually discussed person-centered care and / or Households within their project description text (comparable to 33% of the jury-recognized DFAR11 projects).

“Person-centered care promotes choice, purpose, and meaning in daily life. Person-centered care means that nursing home residents are supported in achieving the level of physical, mental, and psychosocial well-being that is individually practicable. This goal honors the importance of keeping the individual at the center of the care planning and decision-making process.”²

DFAR12 projects recognized by the jury that specifically described person-centered care and / or Households include:

- Armed Forces Retirement Home
- Garphill Ghent
- Cohen Rosen House
- The Deupree House and Nursing Cottages
- The Friendship House at Royal Oaks
- Good Shepherd Cottage, Santa Teresita, Inc.
- Haven Hospice Custeard Care Center
- Legacy Place
- Rockhill Mennonite Community
- Tohono O'odham Elder Home
- The Village at Orchard Ridge
- White Oak Cottages at Fox Hill Village

Based on plan analysis, 11 of the jury-recognized DFAR12 submissions include a Household, typically defined as 8–12 private residential bedrooms organized around a shared living / dining / kitchen area. Five additional projects were classified as “Neighborhoods,” where 2–3 groups of eight to 8–12 private residential bedrooms are organized around a shared living / dining / kitchen area. (One project that indicated they had a Household did not submit a floor plan so, therefore, could not be analyzed.)

In terms of the size of the Households, we found that the average* was 8,693 square feet. The range* was 6,780–11,080 square feet. Regarding the number of residents per Household, we found an average* of 11 people, with a range* of 9–14 residents. The overall average* square footage per resident was 763, with a range* of 484–996 square feet per person. As would be expected, we saw in the larger Households that there typically was a smaller square footage per resident—that Household size does not stay relative (i.e., the building did not necessarily have a larger square footage per resident when there was a greater number of residents).

*Excluding outliers

In Their Own Words

Legacy Place

“These small houses are designed to reflect the look, feel and scale of a traditional residential home . . . This was accomplished by creating small houses and locating the community in an already established residential neighborhood.”



Legacy Place reflects the feel and scale of a traditional residential home and is located within an existing neighborhood.

Rockhill Mennonite Community

“A small house design for 10 residents in each Household encourages socialization and family living while promoting independence. The [project includes] small Households with gracious living units and an emphasis on community and socialization instead of traditional apartment living with services.”



Households like this one at the Rockhill Mennonite Community typically offer 8–12 private residential bedrooms organized around a shared living / dining / kitchen area.

Insights and Innovations

The typical Household floor plan offers short walking distances, opportunities to participate in the day-to-day life of the home (e.g., cooking, folding laundry, etc.), and family-like social interactions. One industry complaint that is sometimes heard, however, is that even though Households are made up of the standard house “kit-of-parts” (i.e., the spaces found in most Western-style homes), their arrangement does not support the traditional public-to-private hierarchies expected in our culture. For instance, in most American homes, bedrooms are not located off of a living room—they are instead clustered with other private spaces, accessed by semi-private hallways. Yet this is often not the case in Household design, where it is not unusual to find a bedroom opening to the living or dining room.

However, this may be beginning to change, as seen in the Households included in the jury-recognized DFAR12 projects: The Deupree House and Nursing Cottages, Legacy Place, Rydal Park Repositioning, and White Oak Cottages at Fox Hill Village. All 4 of these projects arranged their Household floor plan so that “the private areas, such as the bedrooms and spa, [are] separated from [the] more public spaces of hearth room, dining, and kitchen areas” (The Deupree House and Nursing Cottages).

Legacy Place notes that its Household is “consistent with a traditional home where you enter into the more public living and dining area, then move through the more private bedroom area.” The Rydal Park Repositioning project is “similar to a well designed home [in that] there is a public to private gradient consisting of an entry, ‘threshold’ adjacent to more public areas such as kitchen, dining and living rooms, proceeding to private bedroom areas.” White Oak Cottages at Fox Hill Village similarly aimed to provide a layout that “is more like the arrangement you would find in a typical house, where bedrooms rarely are accessed directly off of the main living spaces.”



Several DFAR12 projects, like The Deupree House and Nursing Cottages, are reworking the layout of the Household for a better hierarchy of public-to-private spaces. Bedrooms no longer open into common areas, like living or dining rooms.

Extensive Amenities

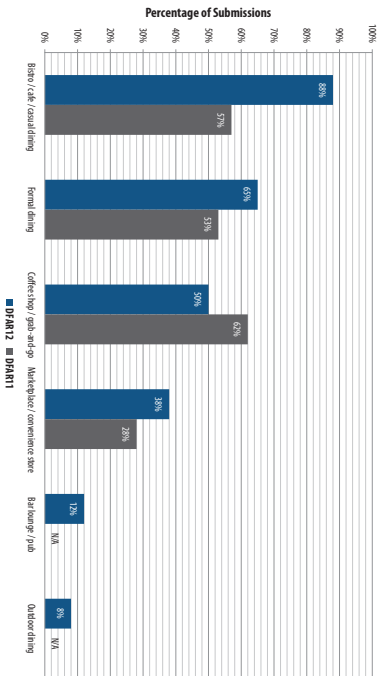
Forty-one percent of the DFAR12 projects recognized by the jury discussed the extensive amenities offered on-site (comparable to the 38% of jury-recognized DFAR11 projects). Furthermore, when the projects with residential components were asked what was more critical to the success of the project—improving common spaces / amenities or improving units / private spaces—63% stated that the common spaces were more important (again comparable to DFAR11's 59%).

DFAR12 projects recognized by the jury that described extensive amenities include:

- Armed Forces Retirement Home
- Asbury Place at Arbor Acres
- Atria Valley View
- The Deupree House and Nursing Cottages
- Laclede Groves
- The Mather
- Moorings Park
- Orchard Cove
- Rydal Park Repositioning
- Sharon Towers Dining Renovation
- The Summit at Central Park
- Sun City Tower Kobe
- The Village at Orchard Ridge
- Worman's Mill Village Center

Taking an overall look at the amenities described by the jury-recognized DFAR12 projects, we see that 76% specifically described formal and informal dining venues, including: casual dining spaces (e.g., bistros and cafes), formal dining rooms, coffee shop / grab-and-go venues, and marketplace / convenience stores. Several projects also described Household-like dining spaces.

Jury-Recognized Projects' Dining Amenities



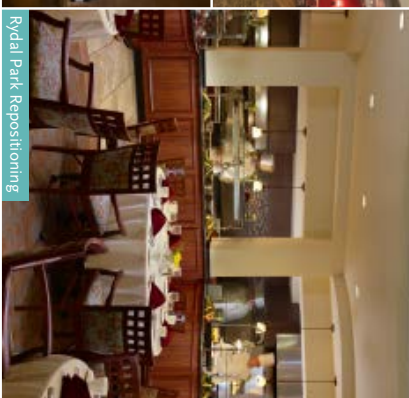
DINING AMENITY SPACES



Asbury Place at Arbor Acres



Sharon Towers Dining Renovation



Rydal Park Repositioning



Orchard Cove



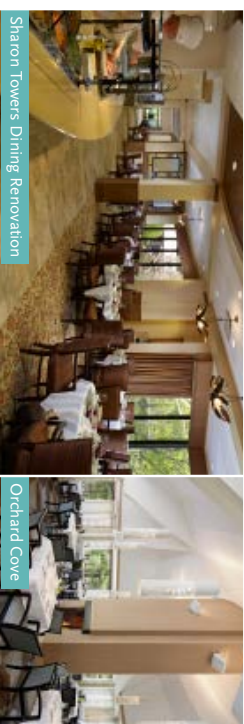
The Village at Orchard Ridge



Sharon Towers Dining Renovation



Laclede Groves



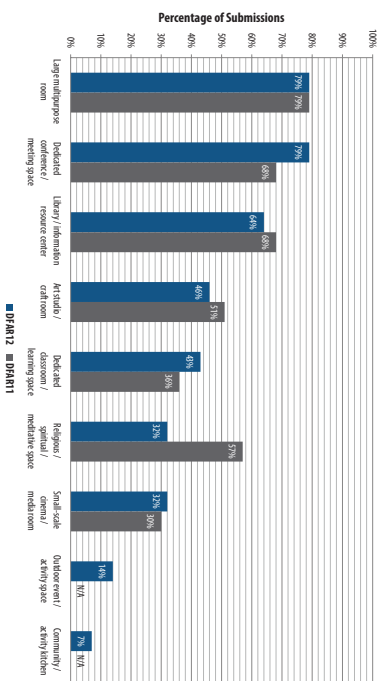
Sharon Towers Dining Renovation



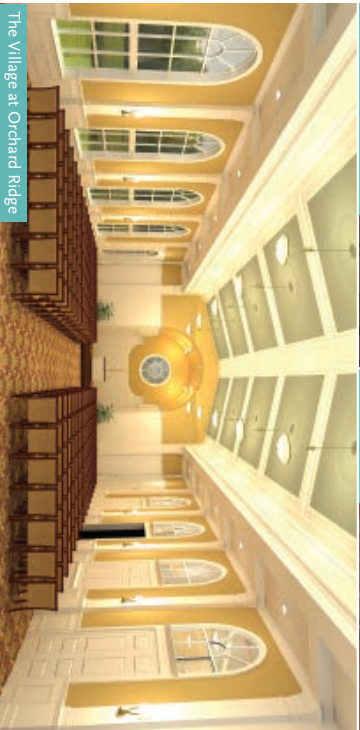
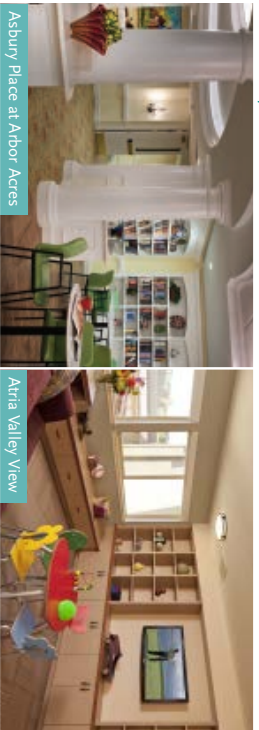
Orchard Cove

Eighty-two percent of jury-recognized DFAR 12 projects described spaces where learning, meetings, activities, and hobbies occur. These learning / activity spaces included: large multi-purpose rooms, dedicated conference / meeting spaces, library / information resource centers, art studios / craft rooms, dedicated classroom / learning spaces, religious / spiritual / meditative spaces; and small-scale cinema / media rooms. Several projects also described Household-like community / activity spaces.

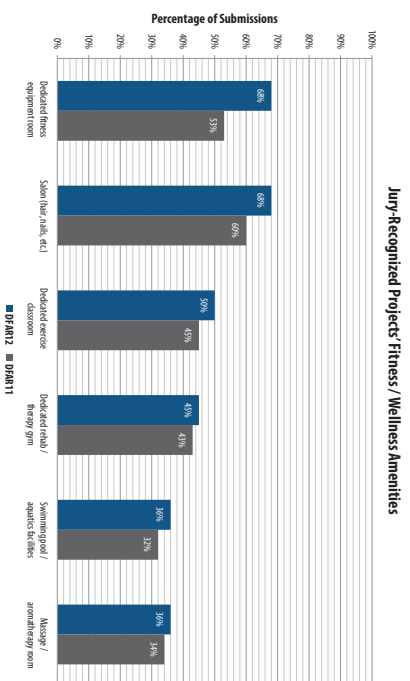
Jury-Recognized Projects' Learning / Activity Amenities



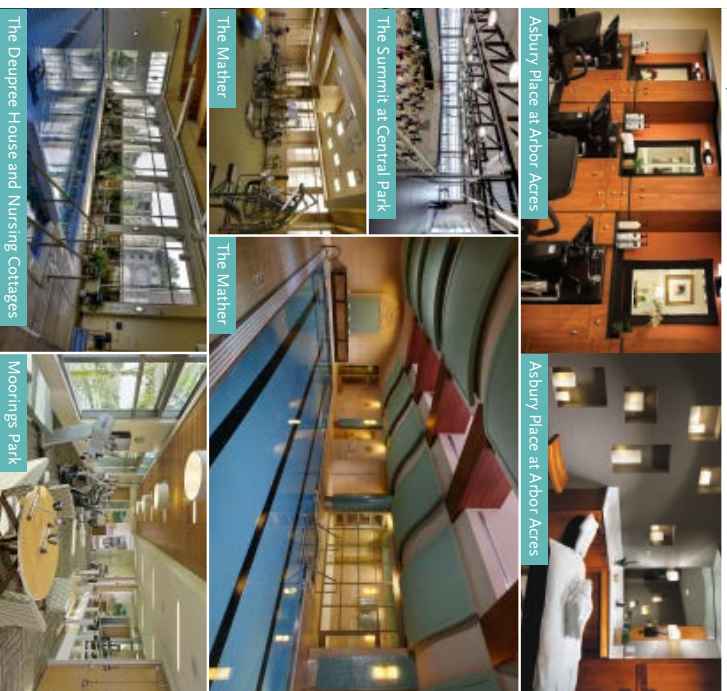
LEARNING / ACTIVITY AMENITY SPACES



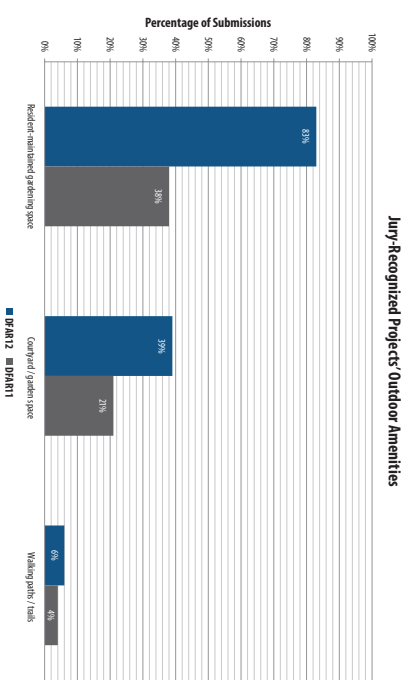
Sixty-five percent of jury-recognized DFAR12 projects described fitness / wellness amenities, including: dedicated fitness equipment rooms, dedicated exercise classrooms, dedicated rehab / therapy gyms, swimming pools, dedicated aquatics facilities, salons, and massage / aromatherapy rooms.



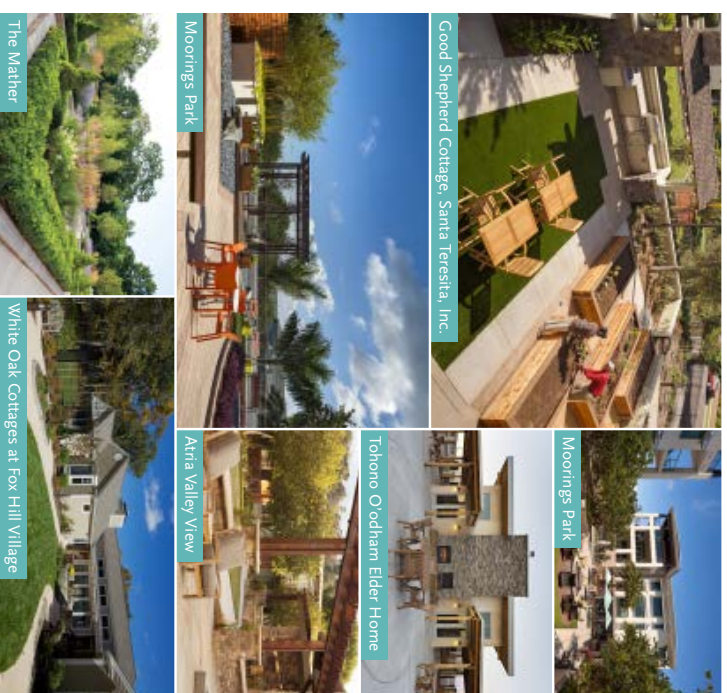
FITNESS / WELLNESS AMENITY SPACES



Fifty-three percent of jury-recognized DFAR12 projects described outdoor amenities, including courtyards / gardens and resident-maintained gardening spaces.



OUTDOOR AMENITY SPACES



Connecting to the Greater Community

At only 29% of the jury-recognized DFAR12 projects, fewer submissions placed an emphasis on connecting to the greater community, compared to DFAR11 (at 42%). However, the projects that do focus on being a part of and / or taking advantage of the surrounding neighborhood do so through: close proximity to area services and amenities, easy access to public transit, providing programming to members of the greater community, offering mixed-use developments, and / or being embedded within existing neighborhoods.

Three projects also described creating partnerships with other service providers / organizations: Marian's House worked with the Alzheimer's Association and other senior care agencies when developing their dementia training / resource center; the Mary Helen Rogers Senior Community was planned in conjunction with another senior living building; located about a block away, to offer shared programming; and Worman's Mill Village Center is creating a town center for the surrounding naturally occurring retirement community and will provide dining, retail, and other services for anyone living nearby.

Perhaps not surprisingly, 70% of the projects that connect to the greater community are located in urban settings; the remaining 30% are suburban.

Many additional submissions offer community connectivity through conscientious siting: out of all of the DFAR12 submissions, 69% have sites within 1,000 feet of public transportation, such as a bus stop or rapid transit line; and 52% are within 1,000 feet of everyday shopping and / or medical services.

DFAR12 projects recognized by the jury that described connecting to the greater community include:

- Brandman Centers for Senior
- Marian's House
- Mary Helen Rogers Senior Community
- Mather More Than a Cafe
- Moorings Park
- Rydal Park Repositioning
- The Summit at Central Park
- Sun City Tower Kobe
- The Townhomes on Hendricks Place
- Worman's Mill Village Center

Insights and Innovations

Two projects stood out for the innovative way they are delivering services to the greater community: Mather More Than a Cafe and Marian's House.

The Mather More Than a Cafe project consists of 4 decentralized programs, located in several Chicago neighborhoods. "The cafes serve as neighborhood-based administrative outposts as well as senior services centers. Along with the social component of the cafe, the senior services provided include computer classes, medical assistance, financial counseling, and exercise classes." The cafes encourage healthy eating, socialization, and are a place to find support so that people who are aging-in-place can remain in their homes.

Marian's House is a guesthouse for people with dementia who are living at home with a caregiver. The building is embedded in an existing residential neighborhood and looks like any other house along the street. However, it offers a dementia day center, an on-site caregiver's suite, and several bedrooms that allow for respite care (or, when not in use, for overnight stays by people with dementia, can act as guest bedrooms for the caregiver's suite). In addition to allowing for one-on-one interaction and specialized group activities, the spaces in Marian's House also double as an after-hours resource center, providing training and support for family caregivers.



Marian's House is specially designed for both one-on-one interaction and group activities. Day center spaces are designed to double as an evening resource center for classes and discussion groups.

In Their Own Words

Moorings Park

"The Center for Healthy Living will be open to the greater community for a monthly membership fee."

Sun City Tower Kobe

The project offers an "urban solution that fosters community, internally and externally. Integration into the surrounding community and sustainable transport were very important. This is a high-density project on a transit hub including two city bus lines. [It is also] conveniently [close] to rail and taxi. The provider offers hourly daytime shuttles to cultural and commercial areas, and the nearby train station."

The Townhomes on Hendricks Place

"The neighborhood of 12 attached, two-story cottage-style townhomes offers residents the opportunity to live, work and play within blocks of their new homes. ... An interconnecting sidewalk network provides residents with direct pedestrian access to the Center Green and to Litzig Borough's sidewalk and trail network. The townhomes are in close proximity to the Main Street shops and restaurants, Litzig Springs Park, farmers' markets and other amenities including physicians' and dental offices each located less than a block away. ... the townhomes continue the community's practice of seamlessly blending into the town, rather than trying to recreate the small town feel on a separate campus. ... The goal of strengthening connections to the town rather than creating the more typical inward-focused campus resulted in a number of measures to blend the townhomes into the existing context."

Promoting a Sense of Community

When senior living projects provide spaces that encourage residents to leave their private homes and interact with others, it encourages relationships to form and promotes a sense of community. Social interactions among residents help minimize isolation, improve quality of life, and even foster a sense of security as residents look out for each other. In fact, research has shown that social activities and productive engagement are as influential to elder survival as physical fitness activities.³

Among the DFAR12 submissions, 26% of the jury-recognized projects described ways in which their project improved or supported the sense of community. Though slightly less than DFAR11 (at 33%), this cycle's projects included similar features to bring people together. A sense of community is promoted by common spaces that encourage socialization—both informal / spontaneous social interaction spaces (e.g., residents running into each other in the lobby or at the mailboxes), as well as formal / planned social interaction spaces (e.g., the interactions that occur in an activity room or theater). Also described were communal dining venues, wide hallways with places to sit and chat, spaces that encourage and support visitors, and providing a circulation system that promotes socialization, with short walking distances and ease of access to common areas to encourage use.

DFAR12 projects recognized by the jury that described promoting a sense of community include:

- Gosby Spear Highrise
- Good Shepherd Cottage, Santa Teresa, Inc.
- Haven Hospice Custard Care Center
- Laclede Groves
- Mather More Than a Cafe
- Rose Villa Pocket Neighborhoods & Main Street
- Rydal Park Repositioning
- Sharon Towers Dining Renovation
- Sun City Tower Kobe

In Their Own Words

Cosby Spear Highrise

Through the new design, residents "are finding increased interaction with family, friends, and service providers. Now fully operational, the new open social spaces and programming are bringing residents out of their [private residential] units and allowing them to engage as never before. ... Such openness increased social interaction among residents and adds to the value of the programming."



Spaces that encourage residents to interact outside their private home, like this cafe in the Cosby Spear Highrise project, promote social interactions and a sense of community.

Good Shepherd Cottage, Santa Teresita, Inc.

"The creation of engaging space addresses the common challenge of isolation in the elderly. The building provides a vibrant and engaging lifestyle by focusing on direct access to social areas that have abundant natural light and multiple connections to the outdoors. The floor plan, with a central communal living room, provides options for both group and private activities. The patios and outdoor gardens on the first floor become places for residents to interact ... A natural flow between indoor and outdoor space and open relationships with surrounding campus buildings creates a sense of interconnectivity."

Haven Hospice Custeard Care Center

"Multiple family members often participate in the hospice experience together. They are joined together during this difficult time and find themselves sharing a similar experience with other patient's families at the same time. The building was designed with this phenomenon in mind. Four distinct yet centrally located living rooms create casual settings where related and 'unrelated' families can sit, chat, or help console one another. A community dining area allows social interaction between family members and staff. All can share the family kitchen and children's play area. And of course the outdoor spaces, whether enclosed porches or landscaped courtyards, are common destinations that can be shared as well."

Mather More Than a Cafe

To help residents hear one another in the cafes "the acoustic environment was improved to eliminate the echoes and background noise that dominates the larger regional centers." In addition to providing good acoustics that allow for conversations, "a variety of seating options were included on the periphery for those preferring to talk with staff at the lunch counters or observe from a distance," thereby recognizing people's varying needs for interaction versus privacy outside one's home.



The dining spaces in the Mather More Than a Cafe projects have good acoustics, making it easier to hear conversations. Poor acoustical design (a common problem in dining settings) can make it difficult for older adults to hear and be heard, and can potentially contribute to social discomfort, fear, embarrassment, depression, or isolation. On the other hand, spaces that support conversation promote a sense of community.

Rose Villa Pocket Neighborhoods & Main Street

"Creating a smaller 'community within a community' resulted in the introduction of pocket neighborhoods. Each pocket neighborhood consists of 7 cottage homes organized around an intimate garden setting that promotes a close-knit sense of community and neighborliness through an increased level of contact. Neighbors are naturally acquainted through the daily flow of life, by the simple fact of shared space and small-scale living. The courtyard space provides a natural setting for outdoor picnics and group gatherings."



At Rose Villa Pocket Neighborhoods & Main Street, the sense of community is supported by the day-to-day interactions that occur between people. Residents share common courtyards and paths, which increase the likelihood of running into one's neighbors.

Fitting the Local Context

For this cycle, fewer projects—26% of the jury-recognized DFAR12 projects—described how they fit the local context (compared to 54% of DFAR11 projects recognized by the jury). Of those submissions that do respond to their surroundings, half of the projects implemented a design that blends into the surrounding neighborhood. The other half described their adoption of the local vernacular architectural style.

DFAR12 projects recognized by the jury that described how they fit the local context include:

- Asbury Place at Arbor Acres
- Haven Hospice Custard Care Center
- Legacy Place
- Marian's House
- Mary Helen Rogers Senior Community
- The Mather
- The Townhomes on Hendricks Place
- The Village at Orchard Ridge
- Worman's Mill Village Center

In Their Own Words

Marian's House

The project aimed to "create a daytime home for people with dementia that fits into the surrounding community. The house looks like the houses around it, with the narrow side turned to the street to visually reduce its larger size for passersby; it also sits back from the street abiding by the neighborhood's setback restrictions. The residential scale of materials, massing, and roof's allow this large house to feel homelike."



Marian's House (pictured to the left) had a goal of fitting into the surrounding neighborhood. Through careful siting, massing, and use of materials, this dementia day center does not stand out from the single-family homes around it.

The Townhomes on Hendricks Place

"The townhomes are designed to architecturally emulate the character of their surroundings ... [The project] complements the historical context of the surrounding downtown."

Mary Helen Rogers Senior Community

"For an affordable senior building in an area of high-end condominiums and market rate developments it was important that this project blend with the surrounding neighborhood and not stand out as a stigmatized low-income project. As such, it was designed with a contemporary flair that embodies the urban feel of the area and uses color and materials, such as the stone at the ground floor, which enriches the look and sophistication of the building, all within a very limited budget."



Fitting the surrounding context applies not only to suburban developments but to urban projects as well. The Mary Helen Rogers Senior Community achieved this by creating a contemporary facade that "embodies the urban feel of the neighborhood."

The Village at Orchard Ridge

"Historic Old Town Winchester is a unique highlight of the region and serves as the design inspiration for the town center which features a clock tower, chapel, and Village Green featuring fountains, gardens and walking paths. Varied facade treatments and awnings reflect the vernacular of neighboring towns. Regional products, including Virginia brick, help to keep the project in context with Western Virginia."



From Florida Cracker style to Virginian Colonial, embodied here by The Village at Orchard Ridge, several projects aimed to fit the local context by adopting the region's vernacular architectural style.

Worman's Mill Village Center

"To reinforce the Village Center concept, the buildings were designed to resemble the texture, scale, style, and materials of the historic downtown of the Middle Atlantic city in which this community is located."



The aesthetic of Worman's Mill Village Center is based on the historic downtowns of the mid-Atlantic region where this project is located.

Flexibility

Twenty-one percent of the jury-recognized DFAR12 projects described ways in which their submission incorporated built-in flexibility—a new theme (not seen to a great extent in the analysis for DFAR11). Projects described how they were designed to: support aging-in-place, with features such as extra wall blocking in shower areas for future grab bar installation; accommodate different levels of care in one setting for if / when the market shifts (e.g., switching from Assisted Living to Skilled Nursing); allow for an easy remodel that would combine two smaller residential units into one larger unit, or to have one larger unit split into two smaller units to address market demand; offer flexible commons spaces that serve different users / purposes depending on the time of day and on the program / building occupants' needs; and consider the future expansion of the project, minimizing the need for moving or replacing major equipment and / or systems.

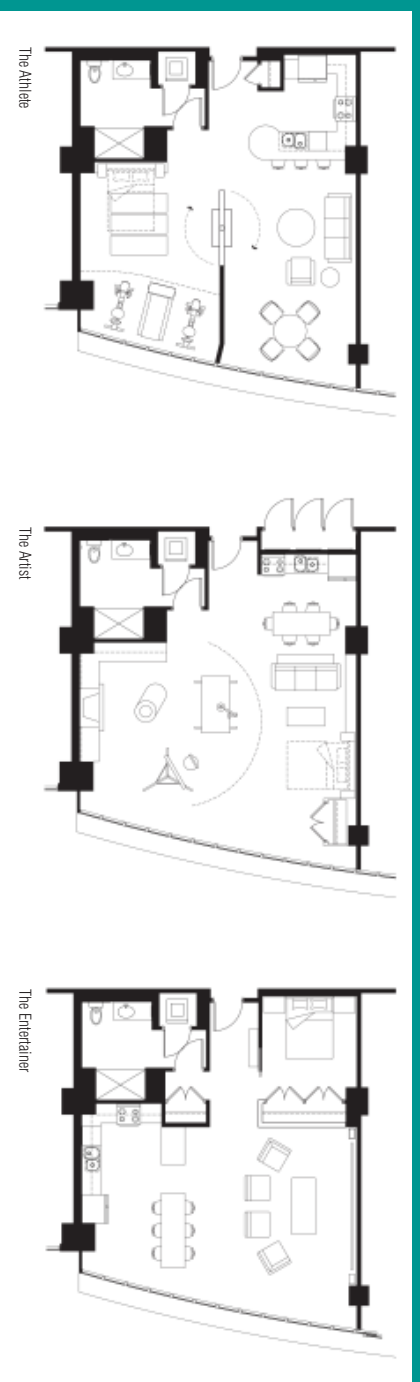
DFAR12 projects recognized by the jury that described a theme of flexibility include:

- Asbury Place at Arbor Acres
- Good Shepherd Cottage, Santa Teresita, Inc.
- The Friendship House at Royal Oaks
- Marian's House
- The Mather
- Moorings Park
- Sharon Towers Dining Renovation
- The Townhomes on Hendricks Place

Insights and Innovations

Taking the idea of flexibility to a new level, Moorings Park offers Independent Living apartments that “were designed to be completely customized by the owner—essentially blank slates to be configured and finished to suit the resident’s lifestyle.” Apartments can be personalized to accommodate such features as a large space for entertaining guests, or a high-end kitchen for

cooking. An artist can devote floor area to a studio; an athlete can have space for exercising. Many options abound and residents are able to “work backwards from their price point, matching lifestyle and entrance fee with square footage and interior design choices.”

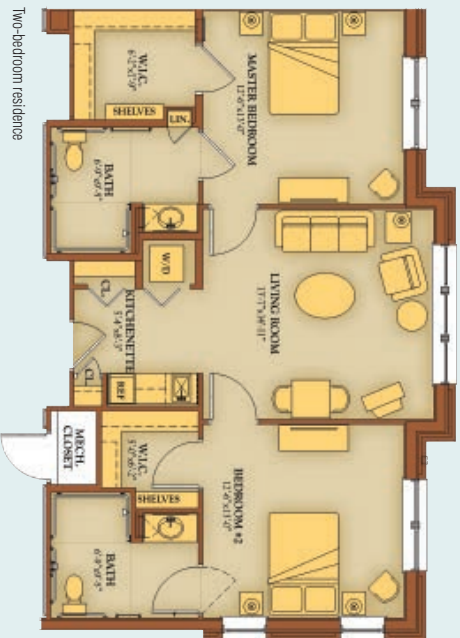


At Moorings Park, the Independent Living apartments can be fully customized to accommodate the interests of the resident. Interior settings can support a person's lifestyle, from providing a great kitchen and a space to entertain, to creating an artist's studio, or fitness space.

In Their Own Words

Asbury Place at Arbor Acres

The project built in “flexibility so that the two-bedroom units could be converted into a studio and one-bedroom unit in the future if needed.”



Two-bedroom residence



Unit plan to convert two-bedroom residence to two studio residences

Several projects integrate built-in flexibility—from accommodating a change in the level of care provided within the setting, to the design of the residential units, like these at Asbury Place at Arbor Acres, which can easily convert to larger or smaller apartments, depending on market demands.

Good Shepherd Cottage, Santa Teresita, Inc.

“In order to allow for future flexibility as the master plan is built out, the original design intent of the Cottage is that it can be used as Memory Care, Skilled Nursing, or Assisted Living.”

Marian’s House

“Some [of the] daycare spaces are designed [to] double as an evening resource center for classes and discussion groups. Media and technology have been integrated for participant use and for evening presentations and training videos / presentations. There is [also] flexibility of use with two respite bedrooms, which can be open to either the caregiver as private guest rooms or open to the daycare portion of the home when residents stay over.”

The Mather

“We have unique ‘flex’ spaces that can be sub-divided—using moveable glass partitions with curtains or large sliding doors—to serve as meeting venues, private dining rooms or the location of a bridge tournament or a game of Mahjong.”

Sharon Towers Dining Renovation

“The project required the addition of multiple, equipment-intensive programs within a limited space while planning for a future expansion ... [The project was planned] for future service area expansion without moving major equipment such as hoods and washing equipment. The ‘Center Stage’ buffet cabinet work and equipment is planned so that it can be easily relocated with the future expansion without major rework.”

The Townhomes on Hendricks Place

“While one of the primary design goals was to accommodate aging in place, those accommodations could not be at the expense of the residential aesthetic. Prospective residents were clear that they did not wish to live in a home where accessibility features were apparent. Therefore, wider doorways and similar measures, such as extra blocking in showers, allow for future accommodations, when needed by the residents living in the home.”

Holistic Wellness

According to the *National Whole-Person Wellness Survey*, there are 7 dimensions of wellness.⁴

Dimensions of Wellness	
Physical	Promotes involvement in physical activities for cardiovascular endurance, muscular strengthening, and flexibility. Advocates healthy lifestyle habits, encourages personal safety, and appropriate use of the healthcare system.
Social	Emphasizes creating / maintaining healthy relationships by talking, sharing interests, and actively participating in social events.
Intellectual	Encourages individuals to expand their knowledge and skill base through a variety of resources and cultural activities.
Emotional	Involves the capacity to manage feelings and behaviors, recognize and express feelings, control stress, problem solve, and manage success and failure.
Spiritual	Includes seeking meaning and purpose, demonstrating values through behaviors, such as meditation, prayer, and contemplation of life / death, as well as appreciating beauty, nature, and life.
Vocational (Occupational)	Emphasizes the process of determining and achieving personal and occupational interests through meaningful activities including life-span occupations, learning new skills, volunteering, and developing new interests or hobbies.
Environmental	Focuses on protecting and improving their personal environment and the environment at large for health and safety benefits for themselves and the generations that follow.

Fifteen percent of the jury-recognized DFAR12 projects described approaches and / or community features that support holistic wellness (similar to DFAR11's 17%). Wellness-related features described include: biodynamic farming on-site, gardens and paths that encourage walking and connecting to nature, medical clinics and therapy spaces, fitness / spa amenities, educational settings, spaces that support group gatherings and encourage a sense of community, dining venues that support healthy eating, and ecologically sustainable design practices (as previously described).

DFAR12 projects recognized by the jury that discussed providing environments for holistic wellness include:

- Asbury Place at Arbor Acres
- Camphill Ghent
- Moorings Park
- Orchard Cove
- The Summit at Central Park

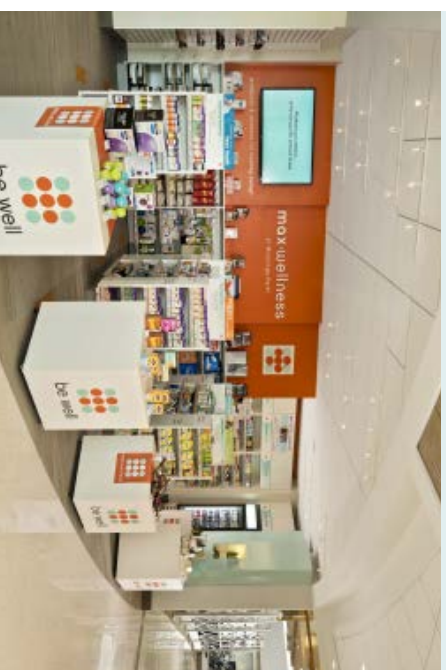
In Their Own Words

Orchard Cove

"The new fitness / wellness center has become one of the new hubs of the community ... The space is designed for residents to exercise [and] fosters a lifestyle geared towards wellness."

Moorings Park

"The Center for Healthy Living offers concierge medical services and amenities that include a spa, exercise studios, fitness / weight rooms, and a rehabilitation center. To encourage wellness dimensions beyond the physical, the Center also offers a meditation room, Zen garden, creative arts studios, and [a] lecture space for visiting speakers. Wellness programs are customized to fit each resident's specific desires."



At Moorings Park, the concept of whole-person wellness heavily influenced the design. There are "five areas of core wellness activities—a medical clinic, physical therapy, fitness, comprehensive spa, education and social interaction" spaces. The Center for Healthy Living even includes a wellness store.

Endnotes

1. Gabriel, Z., & Bowling, A. (2009). Quality of life from the perspective of older people. *Aging & Society*, 24, 675-691.
2. The Advancing Excellence in America's Nursing Homes Campaign. Retrieved March 17, 2014 from <http://www.nhqualitycampaign.org/star_index.aspx?controls=personcenteredcareexplorergal>
3. Glass, T. A., Mendes de Leon, C., Martotoli, R. A., & Berkman, L. F. (1999). Population-based study of social and productive activities as predictors of survival among elderly Americans. *BMJ*, 319, 478-483.
4. Maibier LifeWays, Dorisly Hoogson Parrish Yue, and Ziegler Capital Markets Group. (2006). *The National Whole-Person Wellness Survey*, Page 5.

Insights and Innovations

Holistic wellness is a personal objective for many people, with multiple senior living projects providing spaces and programming to support this goal. One project, in particular, was designed to a philosophy that takes holistic wellness to another level: Camphill Ghent was designed under the community's guiding philosophy of anthroposophy, which is dedicated to supporting the potential of all people regardless of physical or other disabilities. Grounded in the teachings of Rudolf Steiner, anthroposophy is based on the idea that inner development can positively change oneself and the greater world around us.

At Camphill Ghent "the Steiner principles affected the overall building geometry, creating many irregular angles in building form and corridor configuration. As a result, the design avoided flat ceilings and right angles where possible to create the sense of a living environment as opposed to a closed box." The buildings also "encourage movement and balance and the activity spaces are light-filled. The design enlivens surfaces with different textures, colors evoke certain emotions, and the design integrates color in an anthroposophic way: blue / violet evokes reverential feelings, green evokes new life, yellow / orange: light and brightness, red / blue: deep emotions / contemplation."



Along with community leaders, the designers of Camphill Ghent envisioned a nurturing, supportive residence for developmentally disabled seniors based on the philosophy of Anthroposophy. Photography: Sarah Meeling / Perkins Eastman