

# How Useful Outdoor Spaces Can Boost Your Business

## Top 10 Opportunities for Site-Related Solutions

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Associates, Inc.



■ PLANNING ■ LANDSCAPE ARCHITECTURE  
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# Introduction

## Top 10 Opportunities for Site-Related Solutions

### *Adding Value to Your Senior Living Communities*

I bank with SunTrust. In 2016, they rolled out a campaign with the slogan “How can we help you shine?” I like that.

It all boils down to customer-centric service!

So, I thought, “How can this principle apply to what we do for our clients?” The result was a Blog Series that we have compiled into this helpful e-book focusing on creative solutions – how your site can work for you. How can it make your business shine?

We have compiled a list of the Top Ten Site-Related Problems encountered by owners and facility managers, and how these can be transformed into Opportunities to enhance their business.



# Chapter 1:

## Bolstering First Impressions

### *Key Components to Creating a Memorable Experience*

by Brad Smith

My business partner, Scott Girard, tells of how his old boss, Walt Disney, was a firm believer that the entire visitor's experience should be rooted in **The Story**. The Story will vary from the Magic Kingdom to Epcot, just as it will from your campus to that of your competitor. What is The Story you are telling? What is the experience you are creating with your product offering? What is unique about your Senior Living Community?



**“You never get a second chance to make a first impression!”**

That first impression may begin with a visit to your website, or it could be through the initial phone call. But since we're focusing on site planning and design, let's limit our discussion to the physical components of your campus.


The Arrival Sequence is the most important site-related solution for establishing a positive and memorable first impressions.

There are six key components to the *Arrival Sequence*. These are the progressive experiences that the visitor to your campus transitions through as they drive up to your campus, park and walk to the front doorway.

- \* **The Frontage:** This is the drive by your site. Along the way, they will probably see your signage, and recognize that this is the place. Think through what they see, and what their perception is.
- \* **The Gateway:** You should have a clear architectural statement of arrival and entrance onto your campus.
- \* **The Arrival Court:** The place where guests arrive and park their cars.
- \* **The Transition:** From vehicular to pedestrian circulation.
- \* **The Node:** Something along the way that says, "This is a special place."
- \* **The Doorway:** The destination – transitioning from outdoors to interior space.

Each of these six components have several associated design considerations. In addition to the 6 Stages of the Arrival Sequence, we have identified 3 other key components that are contained in our First Impressions Checklist:

1. **The Outdoor View:** pleasing views of outdoor spaces that are viewed from the inside of the building.
2. **Al Fresco:** Outdoor dining venues are essential ingredients to a viable senior living environment.
3. **Usable Space:** How often have you seen nice looking outdoor spaces that nobody uses?



We have compiled a helpful checklist for Senior Living Campuses titled ***Bolstering First Impressions*** that you will find at the end of this e-book. The checklist will walk you through the thought process as you craft the Arrival Sequence you desire.

# Chapter 2:

## Stopping the “Landscape Leakage”

***What is the biggest cause of wasteful capital expenditures for your landscape?***

by Brad Smith

We had a client who asked us to come in and help them stop their “Landscape Leakage”. It seemed that every time they turned around, they were spending more money on their landscapes. Although they had a fairly well-refined approach to the development of their buildings across their portfolio, this was definitely not the case with their landscapes.

In this instance, their buildings were repetitive, while their site plans varied. So, one of the first things we recommended was to develop a series of prototypes, which could quickly and easily be modified, based on the solar orientation, USDA hardiness zone, etc. The planting layout remained the same around the buildings, but the material selections varied, depending on site conditions. This eliminated the need for custom designs on each site, and reduced design fees.





Probably the most important consideration is the old adage: “Right plant – Right place”. Placing plants into conditions for which they are not well suited amounts to courting disaster. They won’t thrive in that environment, so don’t plant them in the first place!

Another money-waster is not taking into account the fact that landscape design involves the fourth dimension of TIME. Plants grow! Why plant something that is genetically predisposed to grow to a height of say 25-30’ tall by 15-25’ wide, and try to maintain it into a tight 3’ x 3’ hedge? You will never win that battle! Not only will you be constantly pruning the plant (think: Labor Costs), you will actually be shortening the life of the plants by constantly beating on them with shears.



There are three budgets associated with your landscape:

1. The Design Budget (the fee you pay for the design of your landscape)
2. The Construction Budget (the cost to install the design)
3. The Ongoing Operations & Maintenance Budget (the cost to maintain those “Living Assets” in your landscape)



Over the life of the landscape, that third budget will be the largest expense by far, so why not plan at the onset to reduce it as much as possible through the concept of Applied Foresight? This is why we developed our proprietary LandEconomics software— a tool that allows us to accurately identify the ongoing costs associated with a given design, based on the metrics of your landscape design. [Click here to learn more.](#)

What are your considerations when planting? What's your budget and what are the environmental factors? There is SO much to think about in planting design - how do you know what you don't know?

## **Bonus Material:**

Check out the helpful “Considerations in Planting” at the end of this e-book.

# Chapter 3: Avoiding the “Crazy Cycle”

## *Reactive Maintenance vs. the Concept of Applied Foresight*

by Brad Smith

The Crazy Cycle is all too common:

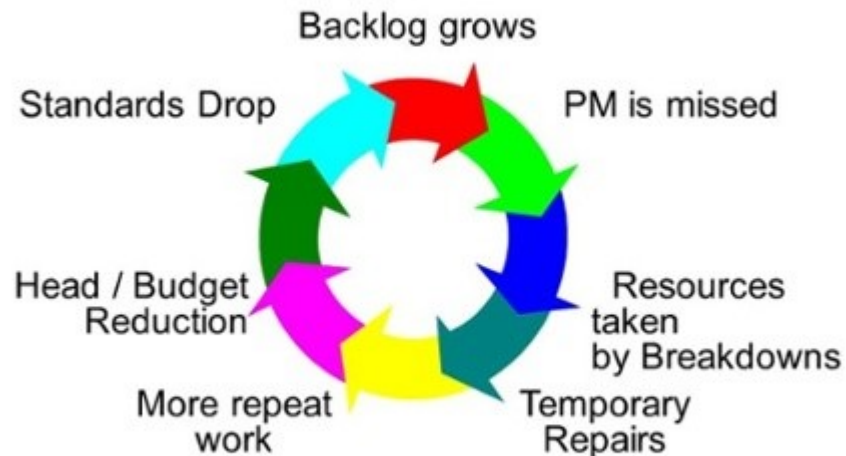
1. The ribbon is cut for the new project. Unfortunately, this day is the best the landscape will ever look, although it should be the worst. Landscapes grow-in and mature over time.
2. The landscape begins to decline over time, usually due to either a lack of proper maintenance, or because of “Wrong Plant – Wrong Place”.
3. Eventually, the boss yells and screams about how bad the landscape looks.
4. Money is thrown at the problem, you have the landscape guys “spruce it up a bit”, and everyone calms down – for a while.

The cycle repeats itself again . . .



Here's a nice graphic we found that describes the cycle (this can also apply to your physical plant in addition to your landscape):

### The Vicious Cycle of Reactive Maintenance



Dave Alexander - August 2010

Slide 3

Why go through that kind of downward spiral?

**"... design is really just applied foresight. It's what you do now carefully and responsibly to achieve what you want later."**

From Chapter 6 of the book *Natural Capitalism*,<sup>1</sup> on "Tunneling Through the Cost Barrier":

<sup>1</sup> Hawken, P., Lovins, A.B. & Lovins, L.H. (1999) *Natural capitalism: Creating the next industrial revolution*, Boston; Little, Brown

Authors Hawken and Lovins go on to explain that “*A well-trained engineer will be guided by the following three precepts:*

- *The whole system should be optimized.*
- *All measurable benefits should be counted.*
- *The right steps should be taken at the right time and in the right sequence.”*

If these precepts are followed, you can save money!

Here’s the point: By using applied foresight, you can design landscapes that not only thrive, but are optimized to save costs over time. The plants and trees on your campus are indeed Living Assets, and their value increases over time (just like any good investment). There is a certain amount of labor and materials (water, fertilizer, etc.) that are required to ensure that they do mature and flourish, but you should only be applying that specific amount. Any more, and you are being wasteful; any less, and you are placing your Living Assets at risk.

## **Bonus Material:**

Look for our free Checklist to Optimize Your Landscape Design at the end of this e-book

# Chapter 4: Incorporate a Healing Garden Space Into Your Campus

by Brad Smith and  
Dr. Lori Reynolds

Being outdoors, enjoying contact with nature, and just breathing fresh air can be a restorative experience. Any campus can benefit from thoughtfully- and purposefully-designed outdoor spaces.

As registered design professionals, we are charged with protecting the public's health, safety, and welfare. At Brad Smith Associates, we focus on Senior Living, which brings the dimension of Enabling Gardens into our focus. Whether Independent Living, Assisted Living, or Memory Care, each population being served has its own unique set of needs. It's certainly not a case of "one size fits all".

We are so pleased to have such a knowledgeable colleague in geriatrics and occupational therapy! Dr. Lori Reynolds has been a valuable support to us through her research and consulting. The balance of this chapter was written by her.



While the current focus tends to be on the interior environment, with resort-style designs and hospitality services, there is an emerging recognition of the importance of outdoor environments.

Despite the acknowledged the value of outdoor spaces, “many facilities tend to concentrate their landscape efforts on ornamental landscaping, rather than developing functional spaces residents can actually use” (*Rodiek, Boggess, Lee, Booth, & Morris, 2013, pg 23*)

To maximize the benefits versus the costs, intentionally-designed therapeutic outdoor spaces are needed. Gardens designed for the population to use, with variability in ways to enjoy the outdoor spaces will encourage use and promote the health benefits nature affords.

While significant improvements have been made in the design of interior spaces for senior living, we must guard against any feeling of institutionalization in which individuals are isolated from their community and prevented from interacting with nature.

“ Even in facilities that intentionally seek to provide a supportive environment, an essential but often overlooked need is the opportunity for residents to spend time outdoors in safety and comfort.”

(Rodiek, et. al, 2013)



### **The Value of Gardens, and the Importance of Nature**

A Garden is not simply a space for active gardening (a place where vegetables are grown). Gardens provide much more than mere aesthetics.

In the context of this e-book, "garden" is defined as a therapeutic space that is intentionally designed for a specific population, place, and for positive health outcomes, whose design is informed by research.

The many well-documented Health Benefits of Nature include:

1. Reduction in stress and depression, improvement in mood (*Beute & de Kort, 2014*)
2. Reduction in agitation and aggression among those with Alzheimer's (*Murphy, Miyazaki, Detweiler, & Kim, 2010*)
3. Restoration of concentration/focused attention (*Berman, Jonides, & Kaplan, 2008*)
4. Lowered heart rate and blood pressure (*Brown, Barton, & Gladwell, 2013*)
5. In healthcare settings: less pain meds and shorter lengths of stay (*Park & Mattson, 2009*)

Balanced circadian rhythms and promotion of vitamin D synthesis from sunlight (*Beute & de Kort, 2014*)

Among over 100 ALF providers, 82% reported: “The design of outdoor space should be one of the most important considerations in the design of new residential care facilities” (*Rodiek, 2005*)

In addition to these health benefits, there are many important **perceptions** that seniors have about nature, which are reported:

- Among all ages, research shows that individuals prefer nature scenes vs built ones. (*Hartig et. Al., 2003; Van Den Berg, Berg, Hartig, & Staats, 2007*)
- 100% of older adults living in four senior living facilities in the Midwest, South, and Southwest (both urban and suburban located) say nature is important to people (*Reynolds, 2011 & Reynolds, 2016*)
- A senior living resident said that without access to nature: “***I think it would just destroy who I am, and I don’t think I would live long.***” (*Reynolds, 2011*)



In a study by Reynolds (2011), seniors perceive a high perceived value of nature:

- One resident said: "Nature is alive and offers a kinship to living creatures and plants that is not possible with inanimate objects."
- Another resident said about plants: "It's like taking care of babies... they're my babies!"
- Plants serve as legacy to life experiences and individuals no longer living. In legacy, staff in senior living often keep plants in remembrance of residents who have passed away. (Reynolds, 2011)

There is a distinct relationship continuum for people who enjoy an active relationship with nature, which progresses from Independent Living to Assisted Living to Skilled Nursing Care. At one end is an active relationship with nature, which over time evolves along the continuum, ultimately into a passive relationship. This evolved passive relationship is one of adaptation to the changes associated with aging in which individuals simply prefer viewing nature from indoors, or while outdoors.

*“Our interaction with nature does not end just because we age” - Carman, 2011*



## RESIDENTS IN INDEPENDENT LIVING

At the end of the continuum, many individuals have an active relationship with nature and enjoy outdoor activities. Among the independent living population, the availability of walking trails and outdoor spaces rank in top five of most desired features. Typical outdoor activities include:

- \* Walking and biking
- \* Swimming
- \* Fishing
- \* Gardening
- \* Dining and socializing
- \* Exercise, including Tai Chi, Pickleball, etc.





## RESIDENTS IN ASSISTED LIVING

Because individuals now entering assisted living are older and frailer than in previous years, their relationship with nature is more passive. Research shows their activity in garden spaces to be primarily sitting to socialize, viewing the garden, and enjoying the sun. As a result of this changing relationship with nature, landscape design should focus on :

- \* Porches at the front of a facility for connection to the community
- \* Bird Feeders for watching and feeding the birds
- \* Garden beds close to the building for viewing from indoors
- \* Plants that attract butterflies and birds
- \* Patio/porch gardens for viewing





## **RESIDENTS IN MEMORY CARE**

The key thing to landscape design in memory care is to create a "backyard" feeling, with elements that promote engagement in activities once performed in one's own backyard and walking paths to support pacing behaviors. Research shows that designs that support the needs and behaviors of individuals in memory care reduce dementia-related behaviors that can be difficult for staff to manage.

1. Vignettes that promote engagement in familiar activities
2. Provide looped walking path for pacing behavior
3. Provide view while deterring elopement
4. Provide safe space that allows autonomy
5. Pondless Water Feature

# Chapter 5: The Key to Bricks and Mortar

***Developing a well-conceived approach to outdoor spaces on campus***

by Scott Girard

According to my trusty Merriam-Webster dictionary, the term 'bricks & mortar' is defined today as: "*relating to or being a traditional business serving customers in a building as contrasted to an online business.*" The more traditional definition of the term would simply be: "*buildings – typically houses and businesses.*" With all due respect to Messrs. Merriam and Webster, my old boss Walt Disney had perhaps a broader definition for the term.





Being both a father and a master storyteller, Walt possessed a grand vision for a new kind of amusement park where parents and children could have fun together. In the mid-1950's as he was developing the master plan for Disneyland he conceived a park with five magical lands – Main Street U.S.A., Adventureland, Frontierland, Fantasyland, and Tomorrowland.

Each land included numerous buildings which contained shows, exhibits, restaurants, and retail shops. In Walt's mind he viewed the master plan of the park as one large entity with the buildings being an eclectic collection of 'bricks,' and the exterior space (area development) that linked all the buildings as the 'mortar.' In short, the 'mortar' is the glue that would bind the project together.



Walt decided at a very early stage of the development of Disneyland that an architect's responsibilities would end at the threshold of their building. The design of all exterior space and its varied components i.e. paving, landscaping, lighting, ponds, waterfalls, etc. would be the domain of the landscape architect. This organizational precept provided for a smooth and cohesive design process that resulted in an enjoyable environment where multiple and varied components were in perfect concert with one another.

Whether you are positioning a new development or re-positioning an older property, this profoundly successful design approach is easily transferrable to senior housing facilities and campuses. From the arrival sequence to outdoor dining venue(s) to **usable** outdoor spaces and gardens, the results of thoughtful and research-based design for these 'mortar' components will add value to your project.

The tidal wave of roughly 75 million baby boomers is affecting the senior living market in remarkable ways, and will continue to do so for decades to come. The boomers are arriving with a passion for an active lifestyle, a demand for entertainment and dining options, appealing cultural activities, and a profound sense of service. And above all, they desire a nature-rich environment that is secure and possesses components and activities to which they can both relate and engage.



So when you overlay the various and important ‘mortar’ component areas with the emerging and trending market demands, you can see the valuable foresight in Walt’s precept for the ‘mortar’ in your project. And this is the very area in which we specialize.

If you want to read more about Scott's Story, click the link below to download our free e-book "The Story: Connecting the Dots Between Themed Developments and Senior Living."

[“The Story”](#)



**Download**



# Chapter 6: Elevated Culinary Experiences

## *On-site food production, creative food & beverage events*

by Brad Smith

I enjoy watching Master Chef. Gordon Ramsey likes to talk about taking ordinary ingredients and “elevating” them to a “Master Chef worthy dish” that could be found in one of his world-class restaurants. This is what is happening in the world of senior living today! And, that’s one of the perks of working in this niche – whenever we are on site, we are treated to some enjoyable meals. Dining at senior living venues no longer involves a cafeteria-style tray with globs of mystery meat and vegetables in their respective compartments.

Al Fresco dining is a fun design challenge for us, and a great way to get people outdoors. Residents enjoy it. Outdoor bistros, summer kitchens for outdoor cooking, poolside bar and grill arrangements – the possibilities are endless



Boomers are discriminating and demanding. They aren't like their parents, who were much more compliant. They want choices: multiple dining venues, and their Starbucks too! This has created a major paradigm shift in the way in which foodservice is handled.

We've compiled a very cool e-book that highlights many of these changes – both in terms of emerging technologies, and design responses to the shifting demands in marketplace. Borrowing from Tina Turner, we call it **“What's Food Got To Do, Got To Do With It?”**

In the e-book, we'll show you fun trends like the use of food trucks for special events, and even the idea of an Egg-Fest for you Big Green Egg lovers! Here's an interesting example:

The Carter-Hoffmann GardenChef, used for sprouting herbs and micro-greens. Their website says, *“Bring the garden in and make your kitchen a showplace with GardenChef growing cabinets! They're ideal for growing herbs and microgreens right in your kitchen. They come equipped with a fully-automated ecosystem that allows you to program lighting, watering and monitor water quality for the perfect environment! Save money over the cost of buying greens, and having to discard ones that go bad; customize your menu as you like.”*



[Carter-Hoffman GardenChef](#)

We're seeing a lot of interest in bringing the Farm-to-Table movement into Senior Living. Growing food for the chef to use on-site is big. It's relatively easy to grow your own rosemary, basil, and thyme. What's even better is to do it using Vertical Aeroponic Technology. Our colleague, Candace Stottle, of Urban Smart Farms, is doing some cutting-edge work at the Orange County Convention Center.



Urban Smart Farms is the largest indoor vertical aeroponic farm inside of a public venue in the United States: the Orange County Convention Center in Orlando Florida. There you can experience technology that supports NASA and looks similar to Disney's Epcot, The Land.

Orlando has become the most visited city in the US, surpassing NYC in 2016 with numbers beyond 68 million. This kind of traffic gives The Farm an enormous platform to educate and share the technology that could feed our cities, supply fresh local and healthy food to food chains and families.



Imagine being able to feed a family of 4 with one 5-foot vertical tower that has a foot print of 2 ½ feet in diameter and can sit on almost any patio. Aeroponic growing delivers rich, all-natural nutrient water (safe for our toddlers) directly to the root system of crops. Oxygenating that water allows them to grow in a third of the time and without worry of the common ground pest. Utilizing 95% less water, our California friends and relatives will be happy to know that the towers' closed-loop agricultural system has minimal waste, zero run off and no need to fuss over herbicides and pesticides.

The Farm grew a combination of 74,000+ leafy greens, 20 varieties of lettuces, hearty greens, herbs and edible flowers situated in the Westwood Lobby of the Orange County Convention Center in one year. With only a 2000+ square foot farm of (81) 8-ft towers and a full propagation area and micro tables, they experienced minimal losses of less than 2%.



Centerplate Corporation, the Food & Beverage Management Company for Orange County receives all the crops for Orange County's convention groups. Centerplate has been a staunch advocate and leader for sourcing product locally and supporting local businesses while meeting their sustainable goals for their clients.

The Farm has been scaled up to support Centerplate's culinary team, but vertical farms in urban environments can be found across the country from small micro farms to large production green houses. More than 42 micro farms can be found in Los Angeles with one company called LA Urban Farms. Chicago International Airport has a micro farm inside Terminal B and supplies the airport restaurants inside the terminal as well as retailing clamshells to foot traffic in the airport.



Schools, Hospitals, Assisted Living Facilities and public parks are all focusing on the highest and best use for their green space. Urban farming provides opportunity beyond the obvious of harvesting local crops, supplying jobs, inspiring entrepreneurs for start ups, and encouraging communities to take part in their health in meaningful, tangible ways. They provide the opportunity to eat locally-grown produce from

The Farm's vertical towers with their ionic mineral nutrients and provide a 30% faster yield and 30% more nutrients, compared to the same product grown organically in the ground.

Find their [website](#) and visit them anytime at 9800 International Drive, Orlando Florida, just a hop skip and a jump from Sea World, make it a destination and live long and prosper.

You can learn more about Urban Smart Farms and food trends in Senior Living Communities when you download our free e-book “What’s Food Got To Do With It?” below.

“What’s Food  
Got to Do  
With It?”



**Download**

# Chapter 7

## Leveraging the Return on Perception

### *Increased sales & marketing*

by Brad Smith

The Urban Land Institute (ULI) did a study several years ago on how holistic urban designs can generate higher returns on investment for both investors and the public at large. I believe the same is true for Senior Living Communities.

*Well planned and designed campuses not only enhance well-being for your residents, their families, and your staff - they also contribute directly to your bottom-line. -*

Brad Smith, Landscape Architect & Planner

The ULI states that Return on Perception™ (ROP), measures the quantitative benefits of quality design such as accelerated home sales or rapid asset appreciation, as well as indirect benefits such as the creation of strong community identity or civic pride.

Does that sound like something that might interest you as the CEO of an organization providing Independent Living, Assisted Living, or Memory Care Assisted Living? I would think so.



*"The introduction of ROP to the decision process allows stakeholders to integrate the indirect social, political, cultural, and environmental benefits with the direct benefit of high financial returns into a single analysis and to evaluate the impact of different choices." -*



Dennis Jerke, primary author of "Urban Design and the Bottom Line".

Here's how it works in a nutshell:

- **Economic Value:** taxable value, adjacent property values, and occupancy rates are analyzed for the project.
- **Environmental Value:** sustainable site development practices (rainwater harvesting, regenerative systems, low-impact development) are incorporated into the planning and design of the project, and the value of these ecosystem services are taken into account.
- **Social Value:** context sensitivity, opportunities for socialization and the fostering of community are integrated and assessed.
- **Sensory Value:** green space, art in the landscape, water features, etc. are included in the project, and the appeal of the project is measured.

The bottom line is that good planning and design does in fact add value to a property, and this value can be quantified using the Quadruple Net Value Analysis. This is known as the Return on Perception.





In addition to the quantified data contained in the ULI's book *Urban Design and the Bottom Line: Optimizing the Return on Perception*, there is a strong body of research pointing to the fact that a new paradigm in facility design for senior living pays significant dividends:

- Therapeutically designed garden spaces that are tailored to a specific level of care and which are flexible to varied types of use:
  - Increases use
  - Improves emotional and physical health of residents
  - In memory care, reduces behaviors that are difficult for staff to manage
  - Improves resident satisfaction with the senior community

- Therapeutically designed garden spaces:
  - Provide marketing advantage
  - Provide revenue potential
    - 97% of residents who are VERY SATISFIED with their community are willing and likely to refer to others through word of mouth
    - Based upon a national average for rent in ALF of \$3520: A 4% increase in new residents could increase annual revenue to over \$170,000 per year for a 100 resident community

*(Rodiek, et. al., 2013)*

### **Is your company perceived as a leader in the market?**



This whole matter of perception will ultimately be driven by your customers. What do they think of you? How well do you know them and their needs? Are you aligned with their success factors and quality expectations? Most importantly, how do they communicate about you

throughout your industry? Are they "Raving Fans"?

Let's change the way you look at landscape design.

# Chapter 8

## Enhanced Well-Being

***Better outcomes for residents, their families and your staff***

by Brad Smith

Well-being is defined as *a good or satisfactory condition of existence; a state characterized by health, happiness, and prosperity*. When we say “It is well”, we’re talking about a rightness, a peace, things being as they ought to be.

Since this e-book is about Site Related Solutions, and how the outdoor environment can and should play an integral role in your senior living community, let’s zoom out to look at the big picture for a moment. How can the outdoor spaces on your campus actually help bolster a sense of well-being?



## Statistics that Demand a Response

According to the [AARP's Livable Communities](#) website, **by 2030 one out of every five people in the United States will be 65-plus.** Until that time, the Baby boomer generation will reach retirement age at the rate of 8,000 a day <sup>[1]</sup>, making a huge impact on how we plan and design. About one in four older adults has a cognitive, hearing, mobility, or vision difficulty. By age 85, however, more than two in three adults face at least one of these difficulties.<sup>[2]</sup>



<sup>[1]</sup> "An Earth-Shattering Ka-Boom" The Generation that Changed Everything it Touched – Including Old Age. e-book by **Governing**Generations, [http://media.navigatored.com/documents/GOV14\\_Generations\\_Book.pdf](http://media.navigatored.com/documents/GOV14_Generations_Book.pdf) accessed 11/17/14.

<sup>[2]</sup> Joint Center for Housing Studies of Harvard University, [Housing America's Older Adults - Key Facts](http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs_housing_americas_older_adults_2014_key_facts.pdf), [http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs\\_housing\\_americas\\_older\\_adults\\_2014\\_key\\_facts.pdf](http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs_housing_americas_older_adults_2014_key_facts.pdf) accessed 11/17/14



For research-based landscape architectural planning and design, appropriate responses include:

1. **Providing pleasant outdoor public spaces for people to gather.** Sidewalks, outdoor seating, safe pedestrian environments, shade. <sup>[3]</sup>
2. **Make opportunities for social participation.** Loneliness, sadness, and isolation can be debilitating health conditions. <sup>[4]</sup>
3. **Foster a sense of control by providing access to a garden space.** People seek nature-dominated settings to reduce stress. Make the garden visible from interior gathering areas. <sup>[5]</sup>
4. **Include rehabilitation activities when possible.** Design so that physical therapists, occupational and horticultural therapists can work outdoors with recovering residents. <sup>[6]</sup>

<sup>[3]</sup> From AARP's Livable Communities The 8 Domains of Livability <http://www.aarp.org/livable-communities/info-2014/slideshow-eight-domains-of-livability.html#slide1> accessed 11/17/14

<sup>[4]</sup> Ibid

<sup>[5]</sup> Therapeutic Landscapes, Clare Cooper Marcus & Naomi A. Sachs, John Wiley & Sons, 2014, pg.24, 24.

<sup>[6]</sup> Marcus & Sachs, pg. 26

5. **Positive distraction through contact with nature.** Provide many opportunities for stimulation by sight, smell and sounds of the garden. [7]
6. **Facilitate attention restoration through the design of outdoor garden spaces.** Coherence (*orderly & organized*), complexity (*a rich setting with many opportunities for sensory engagement*), legibility (*memorable components*), and mystery (*compelled to explore and discover*) all are important ingredients. [8]

### **Our Knowledge and Experience:**

Brad Smith Associates, Inc. has provided landscape architectural services for a number of senior living communities throughout the state of Florida and extending as far as Hawaii. Typically, these facilities are comprised of buildings that capture outdoor space in courtyard areas that are either semi-enclosed, or are totally surrounded. These spaces provide the perfect opportunity for residents, visitors and staff to connect with nature, and enjoy spending time in pleasant outdoor areas.

We understand the unique development and design responses associated with Senior Living environments – including Independent Living, Assisted Living, Skilled Nursing, and Dementia-Care. Attention must be taken to consider issues such as reflected heat, wind patterns, intense glare, protection from the elements, and providing choices.

[7] Marcus & Sachs, pg. 27

[8] Marcus & Sachs, pg. 28-29

Way-finding and orientation are very important in these types of facilities. We recognize the importance of providing common spaces for semi-public elements, locating seating for individuals as well as small groups. We also appreciate the need for adequate contemplative garden space.

Proper signage, lighting, and seating should also be provided to meet the specific needs of residents, visitors, and staff. Well maintained fountains and pools of water can add to the enjoyment of outdoor spaces. Most of the outside areas should be able to be observed from the lobby or key interior areas. Walkways should provide non-slip surfaces when wet. Areas should be included where one may be able to have a small vegetable or flower garden. Raised planter areas can ensure that gardening is not too strenuous. Covered areas should be interspersed throughout the landscape to provide shade and protection from rains.



Image from UGArdener (JR P); flickr

***Applications:***

Much has been written about the therapeutic value of “healing gardens”. Here are a few examples beneficial and therapeutic environments we have developed on senior living campuses:

- Reading patios
- Lanais and entry gardens
- Remedial therapy (exercise stations, rehabilitation, mobility skills, etc.)
- Raised working beds for growing cut-flowers
- Aquatic gardens, rain gardens and water features
- Green roofs
- “Obstacle courses” – training in simple tasks such as negotiating curbs, steps, etc.
- Walking courses, sitting areas, and other opportunities for safe ambulatory experiences

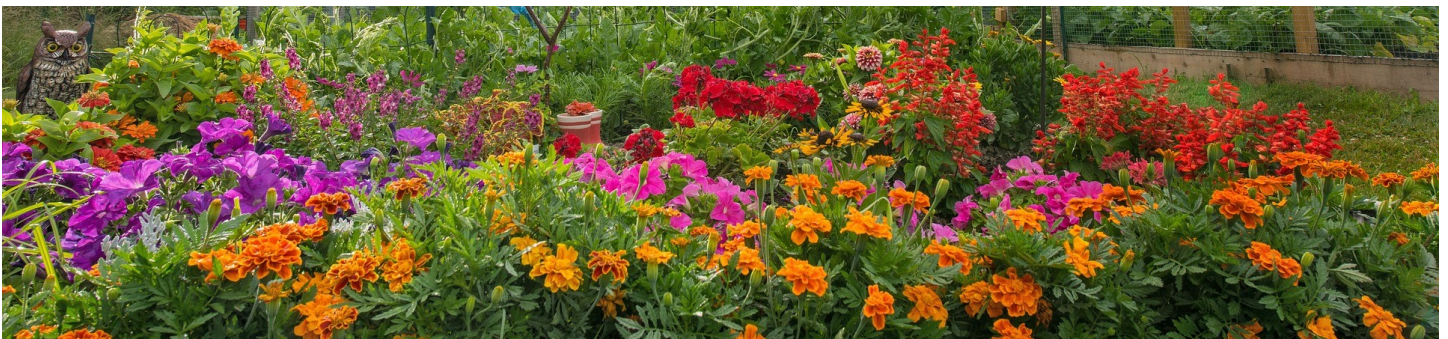




### ***Appropriate use of Plantings and Garden Features:***

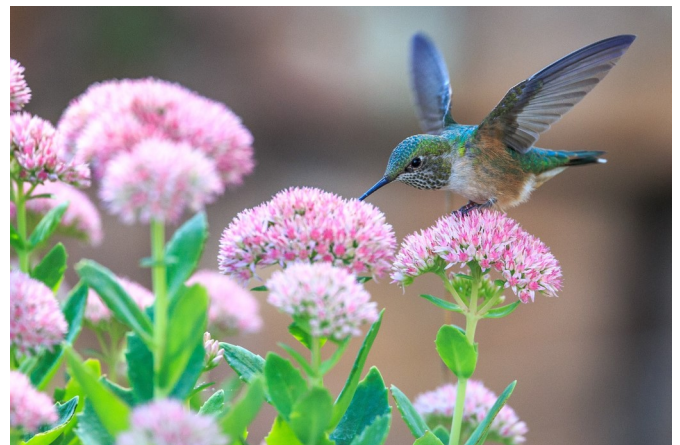
Lessons <sup>[9]</sup> we have learned over the years that apply to plantings in senior living communities include:

1. Avoid root systems that can create potential safety hazards.
2. Avoid plants that produce excessive litter, thorns, and spines.
3. Take care with low-branching trees; keep them away from paths.
4. Avoid poisonous plants, heavy pollen-producing plants, and those with strong odors (*even overpoweringly sweet fragrances*).
5. Provide defensible spaces.



<sup>[9]</sup> These lessons have come through years of practical experience, but have also been influenced by Marcus and Barnes' work - *Healing Gardens: Therapeutic Benefits and Design Recommendations*, Wiley Press, 1999.

6. Use lush, colorful planting that is varied and interesting to reinforce the image of a garden. Ensure appropriate horticultural requirements are met in selecting the right plants for the right places.
7. Provide multi-seasonal interest in the landscape through the use flowering plants to announce the seasons and provide a sense of cyclical rhythm throughout the year.
8. Use trees whose foliage moves easily and creates noise even in slight breeze. Place the trees in locations that will create patterns of color, shadow, light and movement.
9. Use plants and other features (*such as feeders and birdbaths*) to attract birds and butterflies.
10. Use a harmonious variety of plant textures, forms and colors. Plant them in a pleasing and mindful arrangement that attracts notice.
11. Create a planting buffer between public garden spaces and private offices or patient rooms bordering the garden.
12. Select paving surfaces that accommodate wheel chairs or gurneys. Make at least the main paths wide enough for residents in wheelchairs to pass one another– at least six feet wide. Avoid highly reflective surfaces.



13. If possible include a water feature. Moving water creates a soothing sound and can create a psychological screen that helps the restoration process. Consider exposure to wind and competing noises when selecting locations for water features.



14. Nighttime lighting allows the garden to be used or viewed after dark. Use low path lighting and low voltage landscape lighting with fixture shields so that glare does not shine into adjacent rooms. Highlight the effect of the lighting, rather than the source.

15. Provide meandering paths where possible to encourage strolling and reflection on elements in the garden. Where possible, provide a variety of vistas, levels of shade and textures of planting.



16. Movable chairs or benches placed at right angles provide for more social interaction. Provide seating for varying levels of sociability. Place some seating at the entrance to the garden for those with limited time (*such as staff on a short break*). Seats should have backs and sturdy arms, and should be made of material that is durable yet pleasing to touch. Movable furnishings should be lightweight.

17. Provide a variety of shelter and exposure so that the garden may be used in different season. People will seek out sunny spots on a cool day and shady areas on a hot day. Covered areas, especially at the entrance to the garden, could allow the garden to be used during a rainstorm. Make rainfall become an exciting event!
18. Take advantage of natural views from the site. If there is no ready view, design a series of experiences and focal points as one moves through the space.
19. Provide one or two memorable features by which people can identify the garden. Sculpture, sound, water, a profusion of flowers, or an edible vegetable garden will provide strong memories of the garden and the renewal found there.
20. Give residents the opportunity to work in the garden. Consider movable pots, and perhaps an herb garden.

Once the garden is designed and built, it must be well maintained<sup>[10]</sup> and, to be truly useful, must be known to residents and staff. Directional and way-finding signage to the garden is a key component to ensure use of the garden. Signage should be posted on the exterior areas of the campus as well as inside the facility. Finally, the garden should be kept open and available to all who wish to enter.

So yes, getting outside, or even just viewing a landscape from indoors, can have a huge impact on one's sense of well-being.

# Chapter 9

## Reduced Agitation and Behavior Problems

### *How Research-Based Design Can Help*

by Brad Smith

There is a wide body of research pointing to the fact that Environmental Design does play a part in reducing aggression, agitation, social withdrawal, and even depression among memory care residents. [In an article published in \*The Gerontologist\*](#) back in October of 2003, Dr. John Ziezel and his colleagues found that environment indeed has the potential to contribute to improving Alzheimer's symptoms. Their research implied that "A balanced combination of pharmacologic, behavioral, and environmental approaches is likely to be most effective in improving the health, behavior, and quality of life of people with Alzheimer's Disease."



Here are some interesting findings that apply to the design of outdoor areas:

1. Camouflaged exits reduce elopement attempts (*Dickinson & McLain-Kark, 1998*).
2. Walking paths with multisensory activity nodes decrease exit seeking, improve mood, and engage family members (*Cohen-Mansfield & Werner, 1998*).
3. Sensory comprehension reduces verbal agitation (*Burgio, Scilley, Hardin, Hsu, & Yancey, 1996; Cohen-Mansfield & Werner, 1997*).
4. Therapeutic garden access reduces elopement attempts and improves sleep (*Stewart, 1995*).
5. Increased safety leads to greater independence (*Sloane et al., 1991*), which in turn is associated with fewer falls (*Capezuti, Strumpf, Evans, Grisso, & Maislin, 1998*).

It's important to keep in mind a simple, but important consideration: **It's the residents' home!**



The sights, smells, sounds and textures should be familiar. We are not designing something for the glossy magazines; we are designing a home garden space. We need to be thinking about how to manage sensory overload, while reinforcing the familiar.

Walking paths should be continuous, with destinations along the way. We should provide opportunities for personalization of the outdoor spaces. Residents should be given free access to the outdoor garden space, but the area should be enclosed with an 8' non-scalable fence or enclosure. The garden should be usable. The scale should be residential.

## Bonus Material:

Our **Checklist of Lessons Learned About Memory Care Design** can be found at the back of this e-book.

# Chapter 10

## Reflecting Your Brand

### *The importance of wayfinding and the pedestrian environment*

by Brad Smith

Branding and Wayfinding go hand in hand. We have one client who has an older CCRC that is being renovated to remain viable in the marketplace. A bold \$100M master plan is underway that is rooted and grounded in listening to the residents and staff members – and the broader community. The Executive Director is eager for the new logo, look and feel to make its way onto the campus's signage package. It goes back to our discussion on Bolstering First Impressions (Chapter 1 of this E-book). The property identification signage at the Entry Portal, the directional signs, and even the stop signs should be coordinated to reflect the corporate color scheme, logo, and brand.

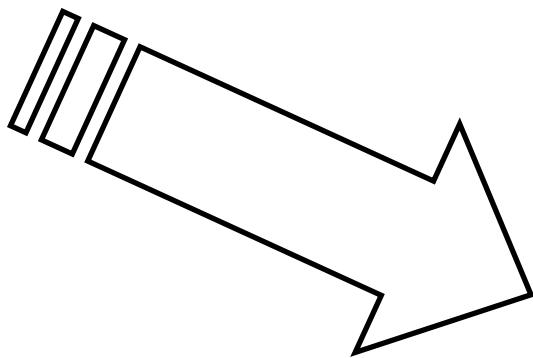




Signage and graphics not only provide functional purposes by directing visitors as they make their way through your campus, they also reinforce the “sense of place” that is experienced while on site.

Think back to our discussion about the transition from vehicular transportation to the pedestrian environment. Typically, cars are directed to efficiently to their destinations, but once one exits the vehicle and becomes a pedestrian, too often – all bets are off. Sidewalks are not contiguous. They are too narrow. Pedestrians take their life in their hands while coming into conflict with drivers.

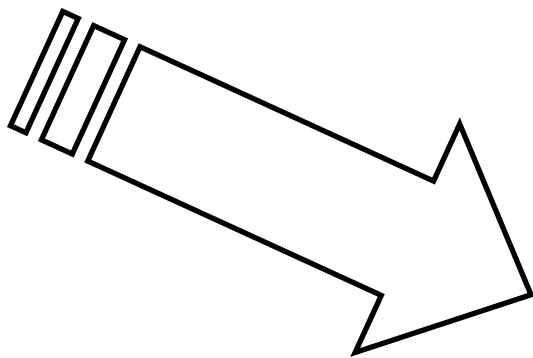
Dan Burden, a leader in the Walkable Communities movement, and an international expert in walkability, bikeability, traffic calming, and road diets says:



**"... Walkable communities are more livable communities and lead to whole, happy, healthy lives for the people who live in them."**

*“Walkability is the cornerstone and key to an urban area's efficient ground transportation. Every trip begins and ends with walking. Walking remains the cheapest form of transport for all people, and the construction of a walkable community provides the most affordable transportation system any community can plan, design, construct and maintain. Walkable communities put urban environments back on a scale for sustainability of resources (both natural and economic) and lead to more social interaction, physical fitness and diminished crime and other social problems. Walkable communities are more livable communities and lead to whole, happy, healthy lives for the people who live in them.” - Dan Burden*

The same can be said of senior living communities and campuses as Dan said about an urban area. I like this quote of his too:



**"Cars are happiest when there are no other cars around. People are happiest when there are other people around."**



Careful attention needs to be given to how we plan and design the pedestrian environment and open spaces throughout our senior living communities. It's part of making them Blue Zones.

**Here's our bonus for you:**

The Walkable and Livable Communities Institute (WALC Institute), an organization dedicated to Improving Health and Well-Being Through Better Built Environments is pleased to present the [AARP Pop-Up Demonstration Took Kit](#). Check it out.

Think about how you can adapt this approach to integrate your senior living community and increase engagement within the context of the broader community at-large. The possibilities are endless . . .

I hope you've found this e-book has provided workable solutions to help your Senior Living Community shine. We would love to help you add value to your community.

Our design team is ready to partner with you on your next project. Click the link below to begin with a free consultation.

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# Special Bonus Material

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