

Intergenerational-Care Replication Summit 2023

Architectural Roadmap for Intergenerational Care Success

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Day 1

Architectural Roadmap for Intergenerational Care Success.

Intergenerational Care

There are two common models for implementing intergenerational care;

- Senior living facilities engaging in frequent child daycare visiting programs.
- St Ann's model: both generations cared for under one roof, accompanied by additional interactive programs.

For many families, daycare is not just a helpful tool, but a necessity; and many need care for their children and their aging parents. Intergenerational care not only provides the essential care, but also an aspect of 'nurture' found in this shared generational care. As old as time, the young have looked for wisdom from the aging, as the aging have found joy in the liviness of the young. Not having access to this type of human interaction can start the cycle of what we call 'aging in place'. A residence of this kind can rapidly lead to illness, depression, and an overall deterioration of life. It is crucial that architects take humanity, our natural habits, and traditional needs into account in order to develop a successful design, which in turn, leads to a happier resident.

Pre-Design

Intergenerational care is not simply a matter of following design guidelines, but is a radically inclusive process that requires a "re-thinking" of the way a typical project is designed and built. Here at St Ann's and at the Bucyrus Campus, Sr Edna and her team were at the forefront. This type of intergenerational care requires that projects are designed collaboratively. All stakeholders should draw upon collective wisdom and insight, and go far beyond space and program needs. Your design team must interact extensively with your community through workshops, public reviews, and consultations with your "community leaders". It is critical to the success of a project such as this, that all involved clearly understand any issues or steps taken along the way. Clear communication is essential, as some involved in the project may be new to the process.

Building the Right Team.

Creating a successful Space Design project begins with **you**, the owner, for whom this project is being designed. Because the process is intended to be radically inclusive, it is important that a committed and engaged team is put into place. Your team will need to steer the project and facilitate all the necessary connections with the “**end user community**”, as well as any other institutional entities, i.e. financiers and/or neighbors that have a stake in the outcome of the project. Sr Enda and her selected team is an example of how this has been mastered, they were at the forefront from the start and followed through from concept to completion.

In order to position the project for a successful outcome, your team must place a priority on the design and provide an appropriate introduction to the collaborative process, schedule, and budget. To that end, schedules will need to **accommodate a longer than normal design process**. This will provide stakeholders, architects, engineers, and any additional consultants the time to find the rhythm of a truly inclusive and collaborative process that addresses the complexity inherent in an intergenerational care design.

Further, since design guidelines will impact the project costs, program and budget must be realistically balanced from the outset. It is important to recognize up front that, generally speaking, more money will need to be allocated to building interiors, and the overall cost of an intergenerational care project will be **more dollars per square foot than a typical building**.

Even with careful planning, it is not unusual for building projects to run up against conflicts between budgets and programmatic needs. As it was at St Ann's; during the request for proposals of construction, I informed all the interested construction contractors that the owner (Sr Edna) will set aside a contingency fund for overruns, but the contractor needs to do the same. Although this is something that contractors do not do, but rather come back at the end of a project with cost overruns. To prevent this from happening, I informed them that they must include a “**Sr Edna factor**”, meaning they would not be allowed to request overrun costs at the end. Thankfully, it worked reasonably well. In today's world of construction **value engineering** has become a standard part of the design and construction process. It is critical, however, when value engineering a project, that the owners become **the guardians of the project principles**. To be successful, **all decisions must adhere to your intergenerational care principles**.

The Design Team

Crucial to the success of an intergenerational care design project is having the correct design team. As was mentioned, architects and other designers involved, must be experienced in working with user groups in an inclusive and collaborative way. This is because of the special nature of working with individuals with special needs. **Communication skills are paramount.** It is difficult enough to communicate spatial concepts and design ideas when everyone speaks the same language, therefore Architects and associate designers should be required to present their ideas **clearly**; a collaborative process with an emphasis on three dimensional drawings and models. In addition to general concerns of communication and graphics, design teams that seek to do intergenerational care design require certain specific categories of expertise. All intergenerational care design teams should have experts in Wayfinding Electric lighting, Daylighting, Acoustics, EMI and Color technique in which a building design is optimized through a review of performance (function) and costs. Often this process identifies and removes unnecessary expenditures and/or identifies less expensive acceptable alternatives that are substituted in the design.

Possible Design Professional Team Members:

- Finance/Fundraiser, Legal, Owner's Representative, Senior and Childcare Specialists
- Architect, Structural Engineers, Interior Designers, Landscape Architect, Pool design
- HVAC, Electrical and Plumbing Engineers, Land Surveyor, Civil Engineer, Acoustic Engineers
- Building Contractor, Energy/Green Building Consultant, Construction Manager or a Design Build Scenario, etc.

The topic of low-energy buildings has received widespread and growing interest through the recent years thanks to energy saving policies of developed countries. The design of a low-energy building is addressed with energy saving measures and renewable energy generation, this requires performing dynamic simulations and analyzing multiple scenarios to attain the best possible solution. The optimality of a technical solution may be subject to contrasting constraints and objectives. For this reason, designers may employ mathematical optimization techniques, a non-familiar topic to most building designers, thus another professional consultant may be necessary.

Working with Your Design Professional

There are two kinds of surprises in life: good surprises that bring a smile to one's face, and those of the opposite variety, life's unwanted surprises that have the power to throw a proverbial monkey wrench into the works, disrupting one's best-laid plans. When it comes to doing business, nobody wants to experience the latter.

Architectural/Engineering firms provide professional design services that define the client's project for the contractor. However, clients who have never worked with an A/E firm are naturally unfamiliar with the standard business processes that optimize their ability to produce quality deliverables that are on time and on budget. In an effort to circumvent unwanted surprises, here are a few helpful tips to keep in mind when working with an A/E firm to deliver a desirable project.

Scope of Architectural Design Services

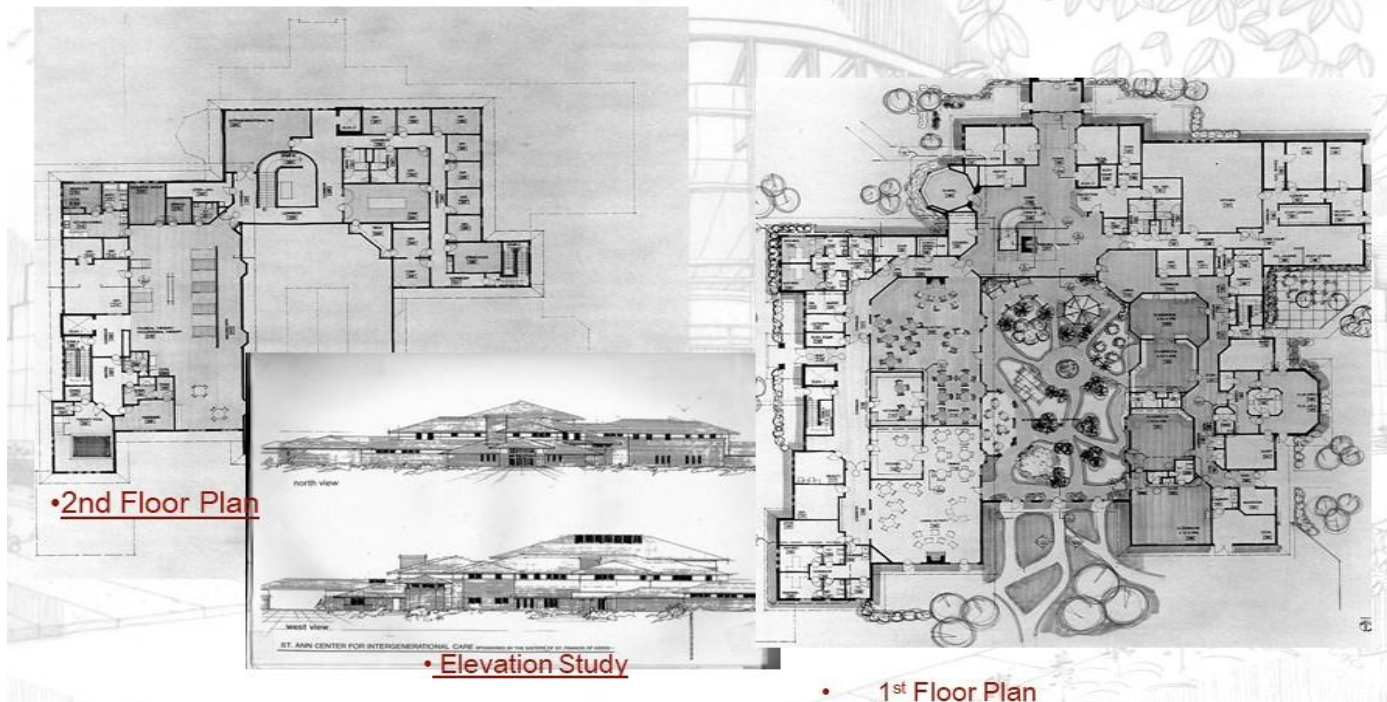
- **Pre-Design** (Some A/E firms insert this phase)
- **Phase 1..... Schematic Designs. (SD) (Conceptual, Schematic) 15%**
- **Phase II..... Design Development. (DD) 20%**
- **Phase III..... Construction Documents. (CD) 40%**
- **Phase IV..... Bidding Negotiations (BN) 5%**
- **Phase V..... Construction Administration and Close out (CA) 20%**
- **Post Construction Evaluation: Ask your design professional if you could see their results and comments when completed.**

Purpose Driven Documentation

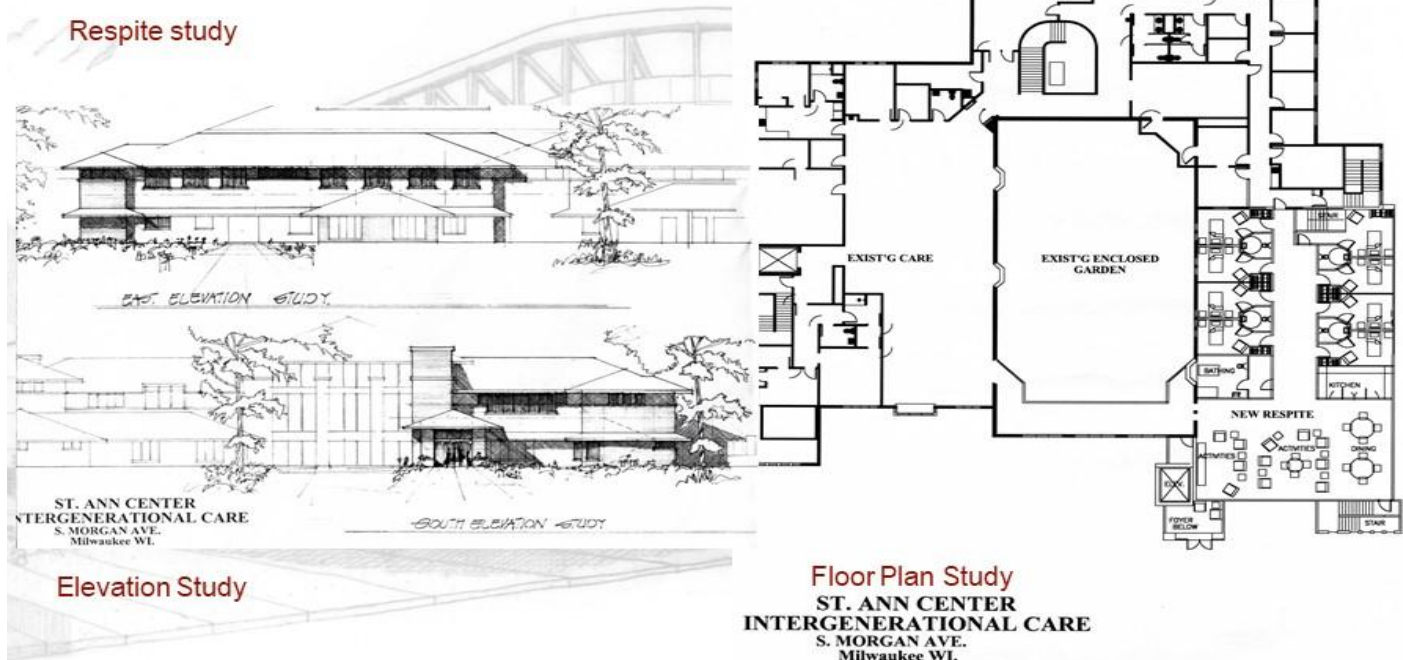
If my 40+ years in the industry has taught me anything, it is **the importance of a client knowing what to expect** when embarking on a project with an A/E firm. Being knowledgeable of an A/E firm's business process is key, and involves the client having a clear understanding of what they do and don't do, which is imperative when it comes to documentation. Similarly, the A/E firm must strive to understand the client's business and processes. A new client is often unaware that when an A/E firm produces construction documents, **those documents serve one purpose only**, and that is to facilitate construction—whether it's the construction of infrastructure, facilities, or processes. They are not meant to serve as maintenance documents or design standards. And they are specific to one location for one distinct purpose.

In terms of your expectations, I also believe it's important you are aware that delivering a project is not an exact science. Throughout the life cycle of a project, there are a myriad of judgment calls and decisions to be made by many people, and there is almost always more than one way to accomplish something. If that approach happens to be different from someone else's methodology, it doesn't mean that they're wrong, or you are wrong, it simply means it is a different approach.

ST ANN INTERGENERATIONAL CTR.



ST ANN INTERGENERATIONAL CTR.



STEIN CAMPUS

Architecture 2000

Day 2

Architectural Roadmap for Intergenerational Care Success.

Plan and Execute

Well-planned projects are always more successful than unplanned projects, and investment in a detailed project plan at the beginning will pay dividends throughout a project's life cycle.

“The Project Management Institute” suggests that projects are 2.5 times more successful when using proven project management practices. However, even a well-planned project can fail if the project plan is not fully implemented and maintained throughout the project. Therefore, **it is necessary to insert project team review periods** along the way to guarantee there is a constant alignment between you and your design professionals. The design professionals count on you to thoroughly review, question and confirm that they are on track with the previously defined project scope. **This is an instance where an owner's rep. is very helpful.** Failure to conduct thorough reviews can result in extra work correcting something that could have been addressed earlier in the process.

Projects that have intermediate stage reviews provide breakpoints to check alignment. These stages are often referred to as **Conceptual Design or Schematic Design, Design Development, Construction Documents and Bidding Construction Observation.** Often, percentages of design completions are assigned for these reviews. (See typical scope of architectural design services above)

CHANGE HAPPENS

One of the most important things we need to understand is that change occurs as a normal part of a project, and you cannot manage change unless you plan for it. At your project kick-off meetings you need to discuss how to handle potential change whether it be big or small. Discuss and outline the types of changes that can arise. This includes changes in scope you require, changes in schedules, deliverables, field conditions (the weather), staffing, fees, codes, standards and regulations, value engineering, design innovation and more.

To plan for change, my recommendation to clients is to budget a contingency of between 5% to 10% of **the total budget**, and build time into the project schedule. When change is recognized, you should talk about it with your design professional, and develop a response to that change. Sometimes adjustments are within our control, and the ball is in your court in terms of expending extra money or time. Other times, it is out of our hands, and that is when you discuss with your design professionals how you are going to manage any modifications necessary, while ideally staying within the parameters of the budgeted funds and time etc.

Correct information from you is critical. For example, if you provide them with drawings for an existing building that you are making an addition to, they will rely on that information as being accurate. If the information turns out to be incorrect, your design professional will be impacted, in turn, also your budget and time frame. An alternative approach is to have the design professionals build in 'time and fee' into their budget to verify any existing building information. Another example, designs are developed in a sequential manner. Once a decision is made, that decision is documented and the design proceeds on that basis. If that decision is subsequently changed, the impact could be significant depending on how much design work has progressed since the original decision was made.

Risk Management

Risk can come from many sources including owner requested changes, design modifications such as site, building conditions, operational continuity, equipment supply, material supply, just to name a few. Ask your design professional to help you identify / manage these risks. Most, but not all, are out of the control of you and your design professional. It is important for the entire team to take a proactive approach anticipating what might not go as planned, identify ways to minimize those risks, and identify potential actions that can be taken. These steps will reduce the incidence of changes later in the project, inevitably saving both time and money. However, **it is not a suggested strategy to cut your contingency if you are over budget, find another way.**

Request for Proposal (RFP) to Architects and Other Professionals

Include estimated overall building size with anticipated programs area sizes (child section, senior section, kitchen, pool, art room, retail, clinics, conference area, administrative offices, respite area, and room sizes etc., welcome center, parking on site and or under building and land area if necessary.

Owner's Representative

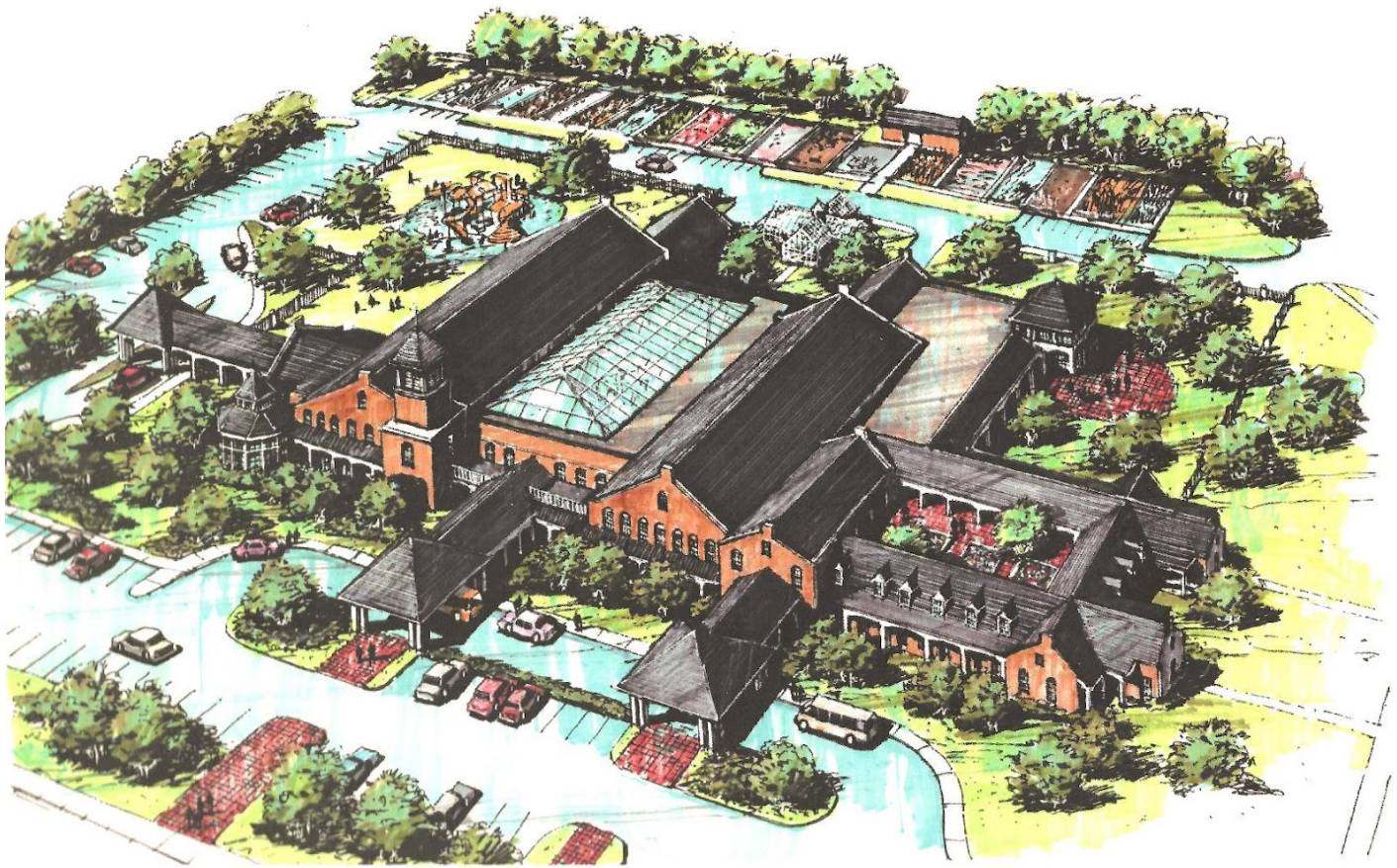
Taking on a new design and construction project brings with it risk types that you may not be familiar with. Regardless of time and costs involved, no two projects are the same. A new construction project will bring with it an educational curve that you most likely are not familiar with. With an owner's rep. as a partner, and team member, you can overcome this "Risk". The owner's rep should be engaged as part of the project team from the beginning. Allowing them to work alongside you while identifying project objectives and budget through the design phase, construction phase, and on to the occupancy of your dream come true. Having an owner's rep. also allows you and other members of your team the ability to continue with their "day jobs".

Simple ideas with BIG impact

- **Adaptive Reuse of existing structure building types that can be refurbished to suit.**
- **Building types such as unused where house's, unused public schools, shopping malls, and office spaces.**
- **Build fewer walls and spend less on physical construction**
- **Maximize the use of prefabrication and modular systems.**
- **"Perceptive space" important for sight and circulation movement**
- **Budget for more technology**
- **Be smarter and more efficient with caregiver space.**
- **Variety in acoustic and visual connectivity to either moderate or encourage interaction.**
- **Invest in spaces for staff respite.**

Possible programs and services to provide.

- Health and Wellness, Exercise, Cognitive activities, memory games, Discussion groups,
- Daily living skills, Personal finance skills, Interpersonal and social interactions, independent living skills,
- Social skills, Spirituality, Musical entertainments, Arts, and crafts,
- Community based outings, Community participation Recreation and leisure,
- Aquatic therapies, Dental service, Outpatient services, Beauty clinic,
- Off Campus tours and activities Movies and local festivals.
- Age-appropriate Youth general education activities and sports.



BUCYRUS CAMPUS

Zimmerman Design Studio