

## **Working Together Across Generations: An Experiment in Open Space Design**

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Most outdoor environments are not built to accommodate an aging population, nor do they include input from older adults. As populations around the world grow older, we need to design communities that promote healthy and engaged aging. Furthermore, the design needs of older adults are not usually incorporated into design education. As part of this research we set out to pair design students with community-dwelling older adults to incorporate age-friendly design into a proposed initiative to develop a 10-mile long linear park and trail located underneath a major transportation infrastructure, Miami Metrorail, known as “The Underline.” The Underline is a proposed urban trail, neighborhood park, and living art destination that aims to create a safer, healthier, more connected, mobile, and engaged community (<https://www.theunderline.org>). Although The Underline’s vision statement indicates it to be “open to all and serve all” the conceptual drawings released by the county’s selected designer demonstrate very little consideration for older adults and their open space needs. This interdisciplinary and intergenerational collaboration emerged organically out of a request to include local community stakeholders in a design charrette (or mini-workshop) on age-friendly design planned for the Association for Gerontology in Higher Education (AGHE) meeting held in Miami, Florida in March 2017. The project evolved into an intergenerational experiment on age-friendly design for students enrolled in a landscape architecture and urban design studio at Florida International University, who would otherwise not be exposed to or get hands on experience on the topic of designing for aging populations in their education.

Our collaboration was founded on the theoretical underpinning of both design anthropology and participatory action research, actively engaging stakeholders in the research process with the goal of taking action or making change. According to Otto and Smith (2013) anthropology “can endow design with “a unique sensitivity to the value orientations of the various groups affected by design projects” particularly for disempowered groups. We used the World Health Organization’s age-friendly initiative as a framework (WHO 2007; Stafford this section). An age-friendly city promotes awareness and understands the value and needs of older adults. Another principle of this initiative is social participation. An age-friendly community should have affordable and conveniently located events, activities, and opportunities for social engagement tailored to all ages, including older adults. Among the principles laid out by the age-friendly cities initiative are respect and social inclusion. Additionally, older adults should be included in the decision-making process for all aspects and area of community. We therefore asked how can we design to create opportunities for social engagement for older adults in a public open spaces *with* the input of older adults.

## **Approach**

Students enrolled in a Landscape Architecture Design Studio with profesor Ebru Ozer were assigned, as their design project for the semester, a particular section of the Underline that was adjacent to a neighborhood with a high density of older adults. In order to orient students who had little to no exposure to aging, we developed a lecture series focusing on key topics relevant to the project.<sup>1</sup>

With the aid of a planner of the local area agency on aging, Marsha Jenakovich, who is also an anthropologist, we had identified the area along the Underline with the highest concentration of older adults. This happened to be the area adjacent to the Coconut Grove Metrorail Station. We recruited older adult volunteers through local community networks, particularly the area agency on aging and the local age-friendly city committee. Students were paired with older adults to spend an afternoon exploring the neighborhood surrounding the Coconut Grove Metrorail Station and the existing paved path directly under the elevated metro rails. They were instructed to jointly take pictures of the existing site conditions, focusing on specific design elements that might impact the use of the proposed space by older adults, using a modified PhotoVoice technique.

PhotoVoice is a collaborative process in which community members use photography to document an issue from their own perspective. It enables individuals to record and reflect their community strengths and concerns, as well as promote dialogue about issues through large and small group discussion of their photographs (Wang, Cash and Powers 2000: 82). We then followed-up with a focus group held jointly with the older adults and the students to identify the design issues. Students and older adults were asked to select 1-2 pictures that were representative of pre-determined design elements (i.e. circulation, material use, furnishing, canopy cover, etc.) and their use by older adults. For the focus group we adopted the SHOWED technique recommended for PhotoVoice projects as the interview guide (Gagne, Bowers and Russinova 2010): "What do you SEE?"; "What is really HAPPENING? "How does this relate to OUR LIVES or the lives of older persons?"; "WHY does this situation, concern, or strength exist?"; "How could this image EDUCATE others, the community, and policy makers?"; "What can we DO about the problem, resource, or situation?" Students also participated in the AGHE

meeting charrette as the design “experts.” The meeting was attended by gerontologists, local stakeholders, and older adults. As part of the study of this project, we also kept notes on the design reviews that students presented in and held a group interview with the students after they had received their final grades.

### Findings

The most frequent theme emerging from the focus group discussion was safety as a concern at the Underline site. Safety in this context took many meanings, including safety from cars, crossing streets safely, or just walking along the corridor. It also referred to safety from crime and from tripping hazards. The participants suggested the site needed better visibility, increased lighting, security cameras and security officers.



*An older adult's attempt to cross one of many unsafe road intersections along the Underline when the green traffic light indicates the right-of-way for pedestrians.*

The second concern raised was the noise and congestion. The trail runs along one of the busiest highways in South Florida, called US 1, and under an elevated railroad structure. Older adults identified the resulting congestion and noise as one of the factors

that would limit their use of space. The group discussed using design solutions, such as barriers and foliage to control some of the noise.



*A lack of varying land uses and memorable landmarks make the existing path monotonous and difficult to navigate for older adults*

The third concern was related to orientation. There is no clear vision of where the path was leading. Since the existing path is curvilinear, the sight distances are short. There is no signage at present. The older adults expressed they would be unsure where to enter the site or where to exit. Another concern raised by the pictures and discussions was the lack of amenities, such as bathrooms. Some older adults may need to use the bathroom facilities more frequently. Currently there is only one bathroom with one stall at the end of a corridor within the Metrorail station. Students expressed the remote location of the bathroom as feeling unsafe and the current design of the way to the bathrooms as unappealing. The bathroom may not be ADA accessible given its size and location. Moreover, it is only accessible to those with tickets to ride the train.



*The only bathroom facility at the Metrorail station was closed due to maintenance during the time the students and older adults performed the PhotoVoice study*

Finally, given the current conditions of the space, there is not a clear destination and no reason to go there, unless you are riding the train. The space is of limited utility at present. There is an empty square with palm trees in front of the station, riddled with tripping hazards and no appropriate seating.



*An existing empty palm tree plaza adjacent to the path offers backless seating, scarce shade, and uneven paving*

### ***Student End Projects: Proposed Design Solutions***

Students were instructed to incorporate age-friendly design considerations and propose solutions to the issues identified in the utilization of the site for their design proposals. As part of the design studio, students normally do archival research about the site and perform inventory analysis. They may visit the site and do passive observation of the sight. In this study, they also had the potential users as partners from the very beginning. Students also had some background in the form of the lectures to consider in their design thinking. Several solutions were proposed to address the concerns of safety when crossing the streets. One solution was incorporating rest islands for safer pedestrian crossing at major intersections. This proposed solution also took into consideration not disrupting current traffic flow on this major roadway.

## EXISTING



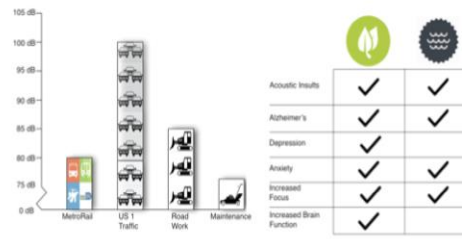
## PROPOSED



*Rest islands and on-street graphics for safer pedestrian crossings*

To address the issue of noise and congestions, one student proposed use of colors, sound, and plant material to improve health, reduce noise, and promote exercise. The proposed design is not only addressing noise issues, but using foliage and water as a way to therapeutically address health concerns that older adults may have.





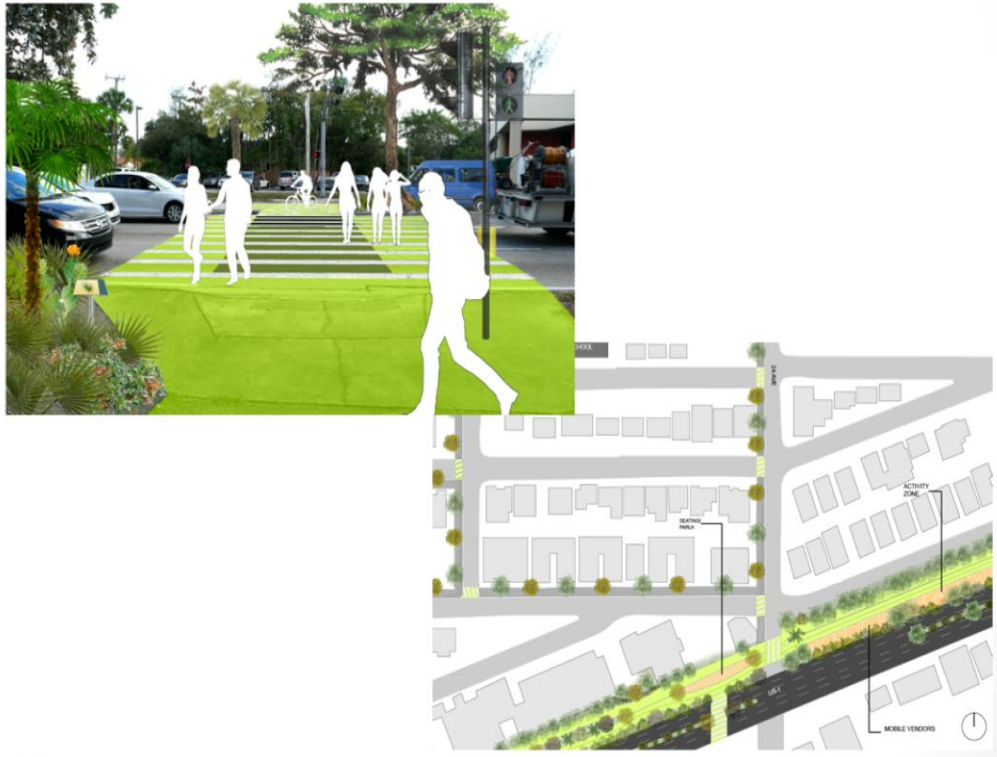
*Therapeutic gardens and sound of water as healer and noise barrier*

To address the lack of amenities, a student proposed on-site facility boxes for easy access to bathrooms and urgent care. This proposal took into consideration the requirement that structures under the Metrorail are detached from the existing transportation infrastructure.



*Amenity boxes are inserted under the elevated rails for the needs of all age groups*

To address concerns about orientation, one student proposed widened crosswalks with continuous pathways that were easily identified by a vibrant color connecting to and through the Underline, as well as well-shaded sidewalks for improved accessibility.



*Widened crosswalks and tree-lined sidewalks safely connect points of interests with an appealing color scheme*

Finally, student proposed design solutions took into consideration the physical needs of older adults in seating options, as well as promoting socialization across the generations in outdoor spaces.



*Playground framed with age-friendly seating offers opportunities for intergenerational interactions*

## **Reflections**

In addition to describing what they saw in the pictures during the first focus group held with both older adults and students, we asked them to reflect on the process of taking pictures together and on engaging older adults as users during the design process. As one older adult noted: "When you look back at the pictures, you see there is a lot there." One student stated that: "Taking pictures gave a reason to be more critical than just walking through...it made you pay attention." Another reflected that walking around with an older adult helped to see realistic design, for example issues of scale, and another stated it helped them think about how to connect all the areas and amenities of the site. In conclusion, in

the words of one student: “PhotoVoice and physically interacting with older adults gave you a stake – putting a face to it....Having a client...”

Prior to participating in this project, only one out of the six students who participated in this design studio reported having regular contact with an older adult. Overall, the project enhanced their design experience. At the end of the project, one student stated: “If I had not gone out with older adults, I would use designs and materials that would not be helpful to them,” while another noted that “As a young person, I can sit on a low bench...but it is different to see how it didn’t work for an older person.” Another added that “Having older adults in mind added a level of complexity, but also required simplifying.” (e.g. If adding a second level consider not just stairs, but also ramps). One student admitted that without the experience of going out to the site with older adults, “Designing for older adults would have been an afterthought...” Finally, one noted the value of going out to the site with older adults by stating: “Design school is super abstract...going out with someone to point out more concrete elements, made things less abstract.”

Students believed that they pushed themselves harder and worked at a higher level because they felt more accountable to their clients, the older adults. Interestingly, students also noted that they would not have taken this studio had they known that the class project was focusing on aging. However, overall, students found the experience very valuable and were glad that they studied the topic. The resulting proposed solutions were of higher quality than expected of first year graduate students in landscape architecture design. Students were more efficient in identifying the design problems and finding solutions by virtue of going out with older adults and jointly identifying issues. Expanding anthropology’s role in design and design education and participation of older adults in age-

friendly design during early phases of design process is valuable. We therefore have to expand our vision, focus on furthering our interdisciplinary efforts beyond traditional fields, and embed opportunities for students to be exposed to the issues of an aging society more broadly through their educational experiences and in ways that students are receptive.

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Notes

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<sup>1</sup> Galen Crazz, Ph.D., AmSAT, NSTAT, Professor, Department of Architecture, University of California, Berkeley discussed and demonstrated the design of urban streetscape furnitures for healthy sitting/standing options during a lecture on Body Conscious Design. Paulo Chaves, M.D., Ph.D., Director, Benjamin Leon Center for Geriatrics Research and Education, FIU gave an overview of main health issues impacting persons as they age. Edgar Ramos Vieira, P.T., Ph.D., Doctorate of Physical Therapy Program Director, Associate Professor of Physical Therapy & Neuroscience, FIU, discussed with the students normal and abnormal changes that impact risk of falls as a person ages. Alan De La Torre, Ph.D., Research Associate, Institute on Aging, Portland State University discussed urban design parameters for age-friendly outdoor spaces and their connectivity. Iveris Martinez, PhD, anthropologist & gerontologist, outlined the negative impact of social isolation on health and the importance of purposively designing spaces for social engagement. Peggy Perkinson, PhD, anthropologist & gerontologist, instructed the students on the use of PhotoVoice methodology.