

# Laying the Groundwork for Dementia Friendly City Centers: Community Visioning Outcomes



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*Oklahoma State University*



# TODAYS SESSION

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# TODAYS SESSION PURPOSE

- To describe a participatory planning process and the supporting highlights of information used to develop Dementia Friendly City Centers.
- To illustrate with a case example involving reclamation of underused/vacant shopping center, Oklahoma City example.

# TODAY'S SESSION LEARNING OBJECTIVES

Learning Objectives: *Following this session, participants will take away*

1. Site Insights: Reclaiming urban settings AND adding value to the setting's sustainability and fiscal viability.
2. Project Insights/Background, Funding, Overview.
3. Evidence Based Design Criteria in Memory Care: Insights Applicable to Dementia Friendly City Centers.
4. Achieving "Greater Expectations" for Memory Enhancement in Aging by Engaging Participants from Concept to Completion.
5. Next Steps in *this* Dementia Friendly City Center

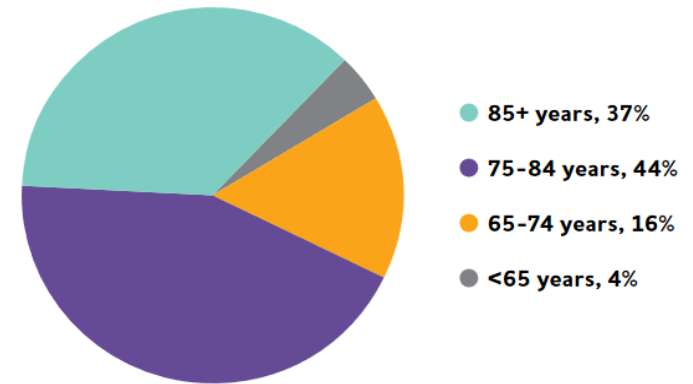
# INTRODUCTION

- 1 in 3 Americans is 50+
- By 2030, 1/5 will be 65+
- 14% of people 71+ has dementia (ADAMS)
- 10% percent of people 65+ has Alzheimer's dementia, and incidence increases w/ age (Alzheimer's Assn, 2018)
- *In Oklahoma*, there are approximately 61,00 older adults with Alzheimer's, predicted to grow by 26.7% by the year 2025.

Source: US Census

**FIGURE 1**

Ages of People with Alzheimer's Dementia in the United States, 2018



Created from data from Hebert et al.<sup>A3.30</sup>

Percentages do not total 100 because of rounding.

# ONE CULTURE OF DEMENTIA CARE



Shared bedrooms of  
double-loaded corridors

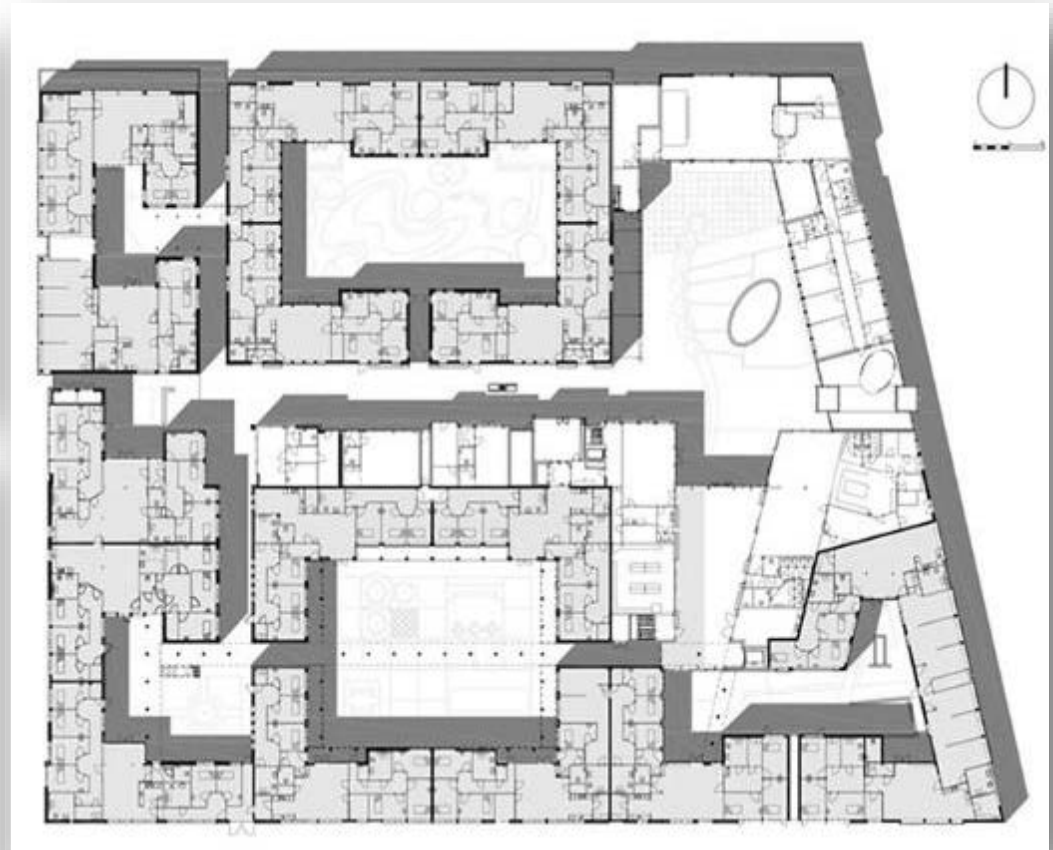


Activity station A



Activity station B

# DEMENTIA VILLAGE MODEL OF CARE



Hogewey (Dementia Village)  
Near Amsterdam, the Netherlands

# A DEMENTIA VILLAGE IN OKLAHOMA?

- Adaptive reuse of existing buildings is one solution and thoughtfully developed will contribute to environmental sustainability.
- Unused and underused buildings represent a valuable resource with benefits which include strengthening existing communities.



# RETROFITTING DISTRESSED MALLS



Interior urban malls are being repurposed to exterior walking mall settings with indoor/outdoor opportunities for engagement.

# RETROFITTING DISTRESSED MALLS



Forecasts are that 10% of the nation's 1,000 enclosed malls will fail by 2022, eventually converting to uses other than retail.

# RE-USING ABANDONED OFFICE PARKS



Rendered above: the redesigned atrium and surrounding grounds – creating a town center where none existed. Large format opportunities for re-greening, sustainable stormwater management, etc.

Credit: Somerset Development. The exterior of the 2M SF Bell Works in Holmdel, NJ.  
Architect: Eero Saarinen, early 1960s

# CONVERGENCE OF NEEDS

NEED FOR  
IMPROVED AND  
EXPANDED  
DEMENTIA  
PROGRAMS AND  
SERVICES

NEED FOR  
SUSTAINABLE  
BUILDING  
PRACTICES  
AND REGREENING  
OUR CITIES DUE TO  
GLOBAL CLIMATE  
CHANGE

NEED FOR  
REPURPOSING  
DISTRESSED  
MALLS  
DUE TO CHANGES  
IN CONSUMER  
SPENDING

NEED FOR  
INTERGENERATIONAL  
MODELS FOR  
HEALTH AND  
WELLNESS



Dementia Friendly  
CITY CENTER

Source: Convergence Workshop. November 9, 2018. Oklahoma City, OK.  
Oklahoma State University and the American Society of Interior Design (ASID) Foundation.

# LOSSES ASSOCIATED WITH DEMENTIA



*All types of dementia involve mental decline that is severe enough to interfere with usual activities and daily life, including language, visiospatial function and executive function.*

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Environments for living are made up of building blocks (let's call them 'scales') that fall along a continuum of living.



**BEDROOM**



**BUILDING**



**NEIGHBORHOOD**



**TOWN**

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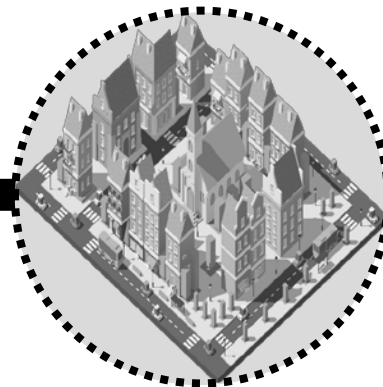
During the 30 year existence of dementia-specific environments in the US, the majority of thinking has been about the scales of the bedroom, the living spaces that constitute the building around it, and policy level discussions about our towns and cities.



**BEDROOM**



**BUILDING**



**NEIGHBORHOOD**



**TOWN**

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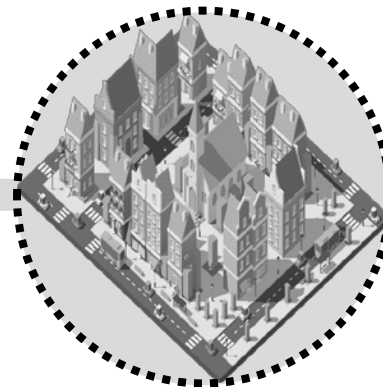
The old culture was, in many respects, one of alienation and estrangement. Dementia itself was surrounded by evasion and denial. Many caregivers have been cut off from their own inner source of vitality and compassion and drawn into practices that they knew intuitively were wrong (Kitwood, 1997).



**BEDROOM**



**BUILDING**



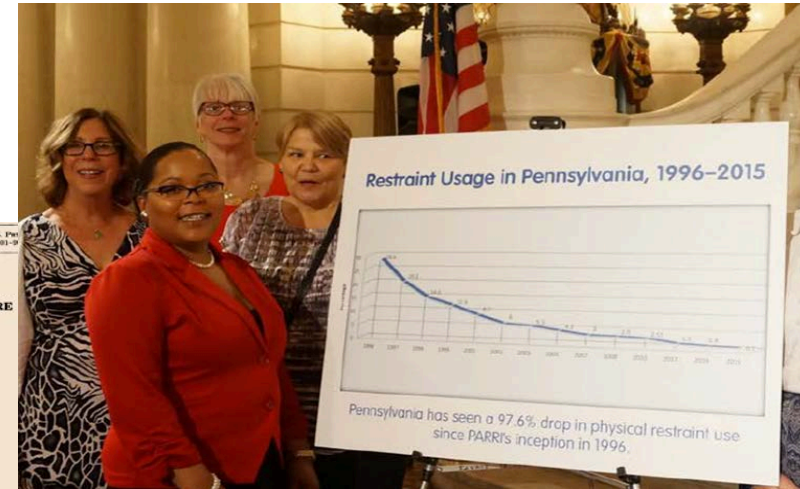
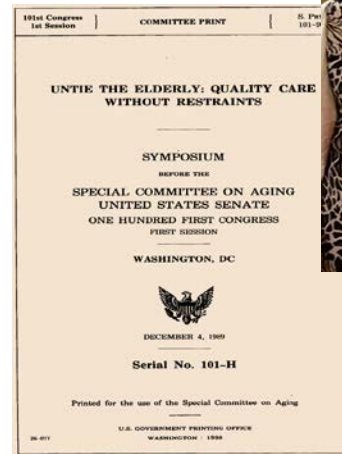
**NEIGHBORHOOD**



**TOWN**



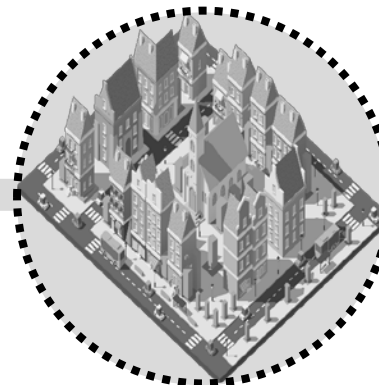
As recently as 1991, a University of Pennsylvania School of Nursing study reported that on any given day, 500,000 older Americans in hospitals and nursing homes were tied to beds or chairs.<sup>1</sup>



**BEDROOM**



**BUILDING**



**NEIGHBORHOOD**



**TOWN**

<sup>1</sup>Untying the Elderly, The Washington Post, February 12, 1991

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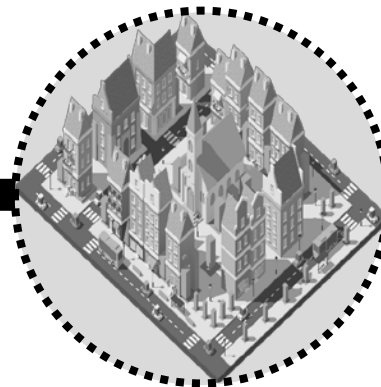
In the early 1990's, the first dementia-specific residential communities are developed by NFP providers. These home-like environments reflect the benefits of living spaces designed at a residential scale, instead of an institutional one. NFP and FP care providers have continued to develop communities with this model for the last 30 years.



**BEDROOM**



**BUILDING**



**NEIGHBORHOOD**



**TOWN**

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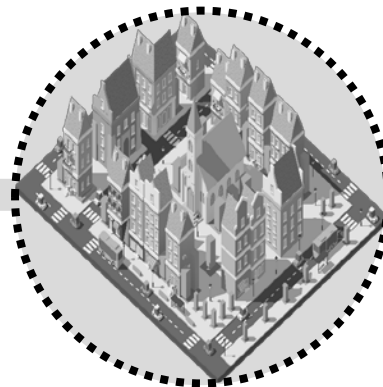
2015 and 2016 saw the advent of the Dementia Friendly America initiative, and the Dementia Friendly Community principles from Alzheimer's Disease International, which focus on policy level improvements to our towns and cities.



**BEDROOM**



**BUILDING**



**NEIGHBORHOOD**



**TOWN**

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However, there has been little progress in connecting dementia-ready buildings to the communities around them. *This leaves a significant gap in the continuity of environmental scales, resulting in a 'boxing', or segregation, of older adults with dementia.*



**BEDROOM**



**BUILDING**



**NEIGHBORHOOD**



**TOWN**

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In 2009, the Hogewey Dementia Village outside of Amsterdam, the Netherlands, opened its doors after years of testing new practices in its existing, institutional building. Could the dementia village concept be the missing link to combat isolation among those with dementia?



**BEDROOM**



**BUILDING**

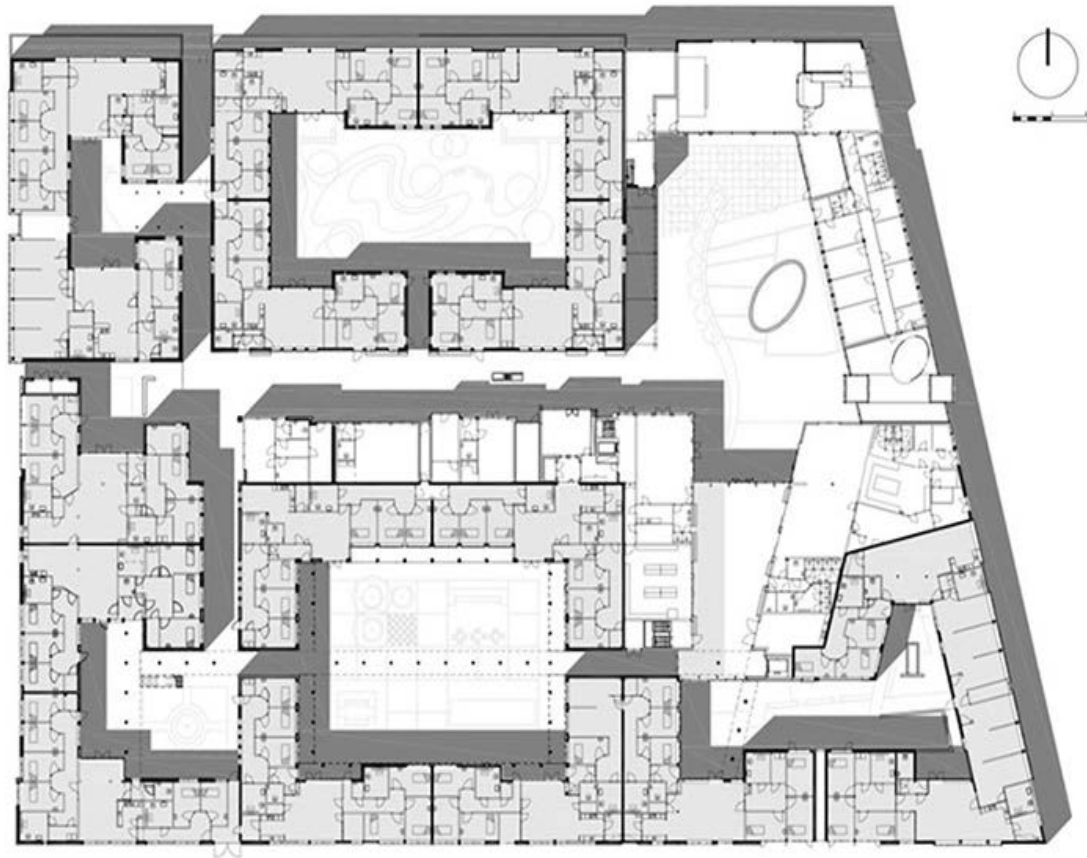


**NEIGHBORHOOD**



**TOWN**

# HOGEWAY DEMENTIA VILLAGE



# HOGWEYK DEMENTIA VILLAGE



# HOGWEY DEMENTIA VILLAGE





# MIXED AGE COMMUNITIES

GOALS FOR TODAY'S DEMENTIA COMMUNITIES

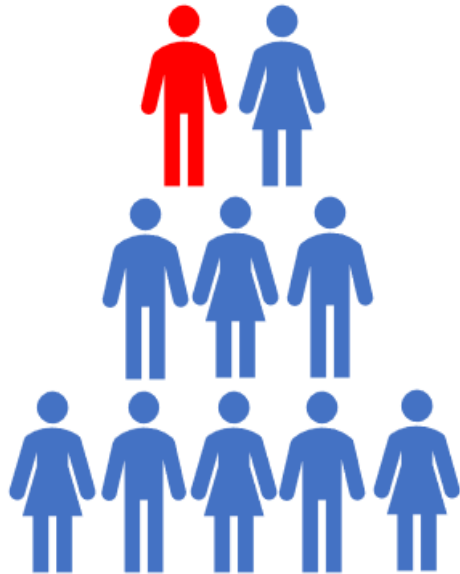


# CREATING CONNECTIONS

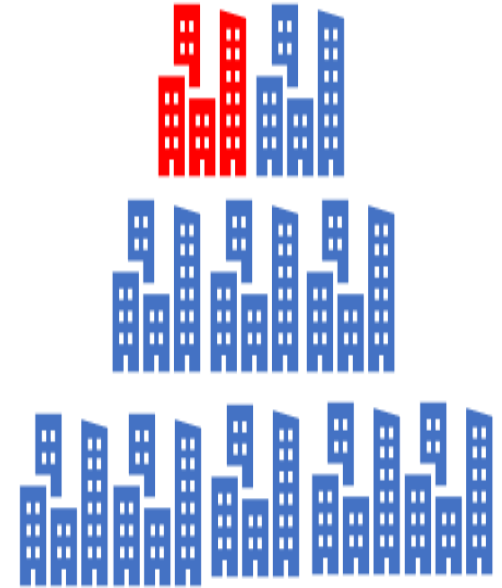
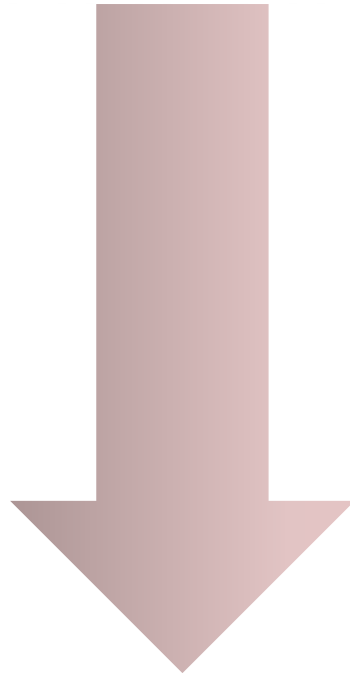
GOALS FOR TODAY'S DEMENTIA COMMUNITIES



# CONVERGENCE OF NEEDS



5 million people in America currently have some form of dementia, a number expected to rise to 13.8 million people by 2050 (Greenlee, 2013).



Forecasts are that 10% of the nation's 1,000 enclosed malls will fail by 2022, eventually converting to uses other than retail.

# DEMENTIA FRIENDLY CITY CENTER

A new kind of spatial landscape which requires new tactics of inhabitation, new theories toward dwelling and new attitudes toward illness (Lonsway, 2007).

Lonsway, B. (2007). The Experience of a Lifestyle in The Themed Space: Locating Culture, Nation and Self. Lexington Books: 2007.

# DEMENTIA FRIENDLY CITY CENTER

## Mission:

An environment designed to promote a comfortable and productive model for everyday life for those living with dementia and their families. The DFCC can be used to encourage a focus on wellness over illness, promoting an environment which allows individuals the ability to construct their own everyday narrative.

# DEMENTIA FRIENDLY CITY CENTER



Sustainability



Therapeutic Environment

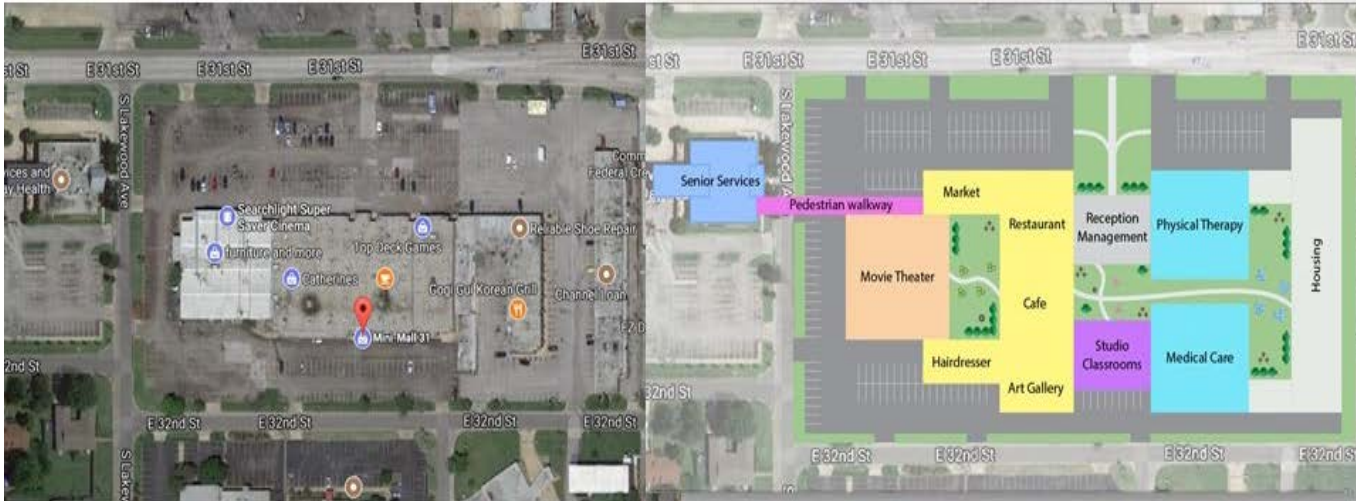


Wayfinding



Universal Design

# CASE STUDY SITES



Case Study 1



Case Study 2

Gabi Pereira  
OSU Faculty

# STUDENT DESIGN CHARRETTE



This case study site is an 800,000 sq. ft. enclosed mall opened in 1974 and closed in 2017.

<https://www.dropbox.com/s/szi1l5igiozd91i/This%20Short.mp4?dl=0>



# CONVERGENCE CHARRETTE

Three day Student Design Charrette, Spring 2018

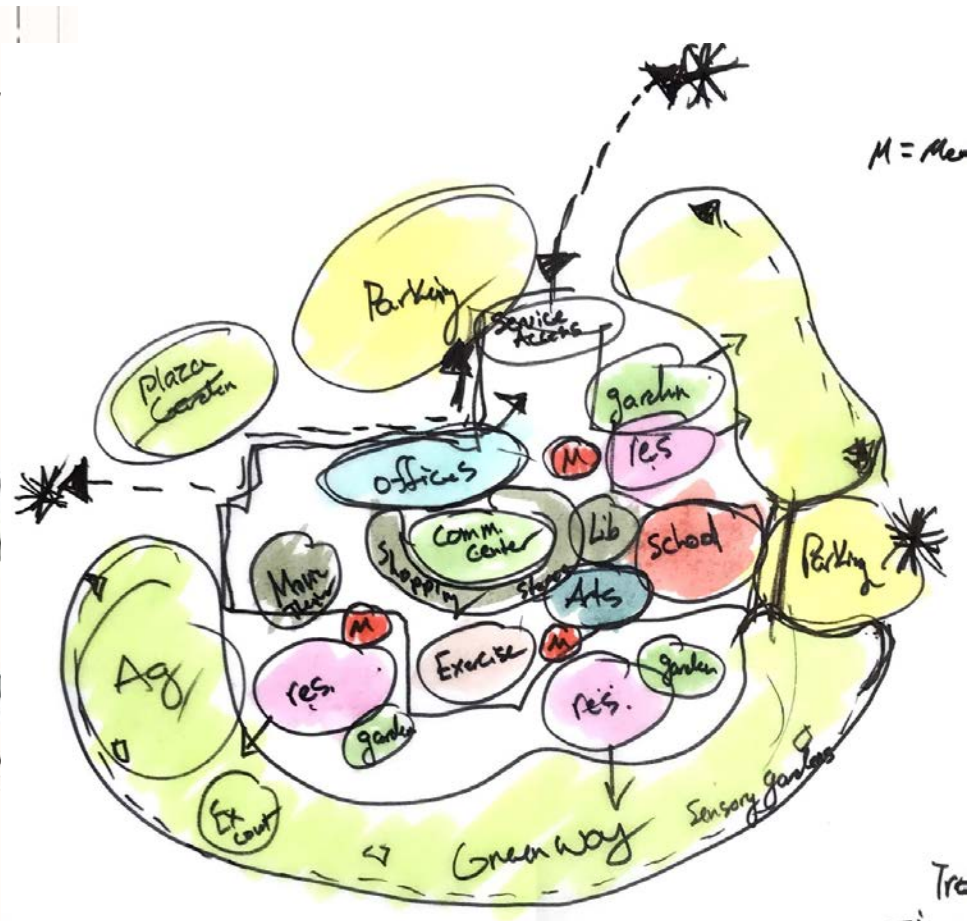
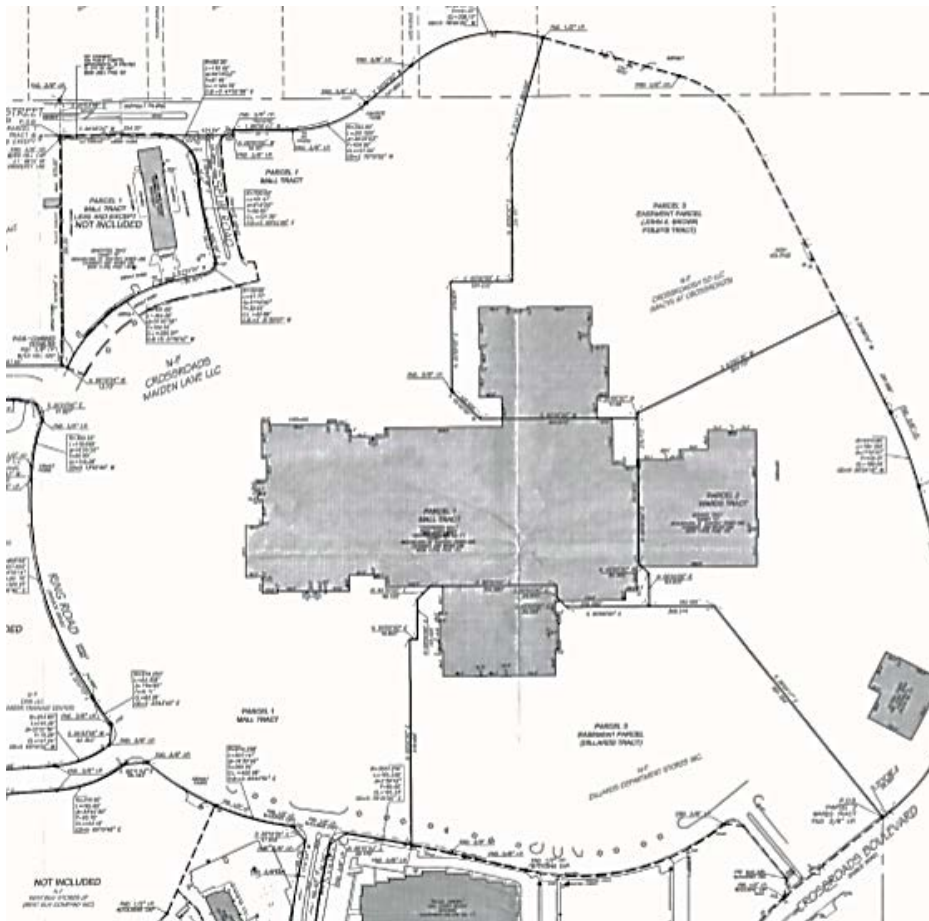
Friday	6:00-8:00pm	Project Introduction
Saturday	9:00-4:00pm	Team work
Sunday	1:00-4:00pm	Presentations/Awards

- Students from Architecture, Landscape Architecture, Interior Design, Gerontology, Nutrition, Human Development and Family Science, Education
- 27 Students in 5 teams
- M=25% F=75%
- Sophomore 33%
- Junior 33%
- Senior 25%
- PhD 9%

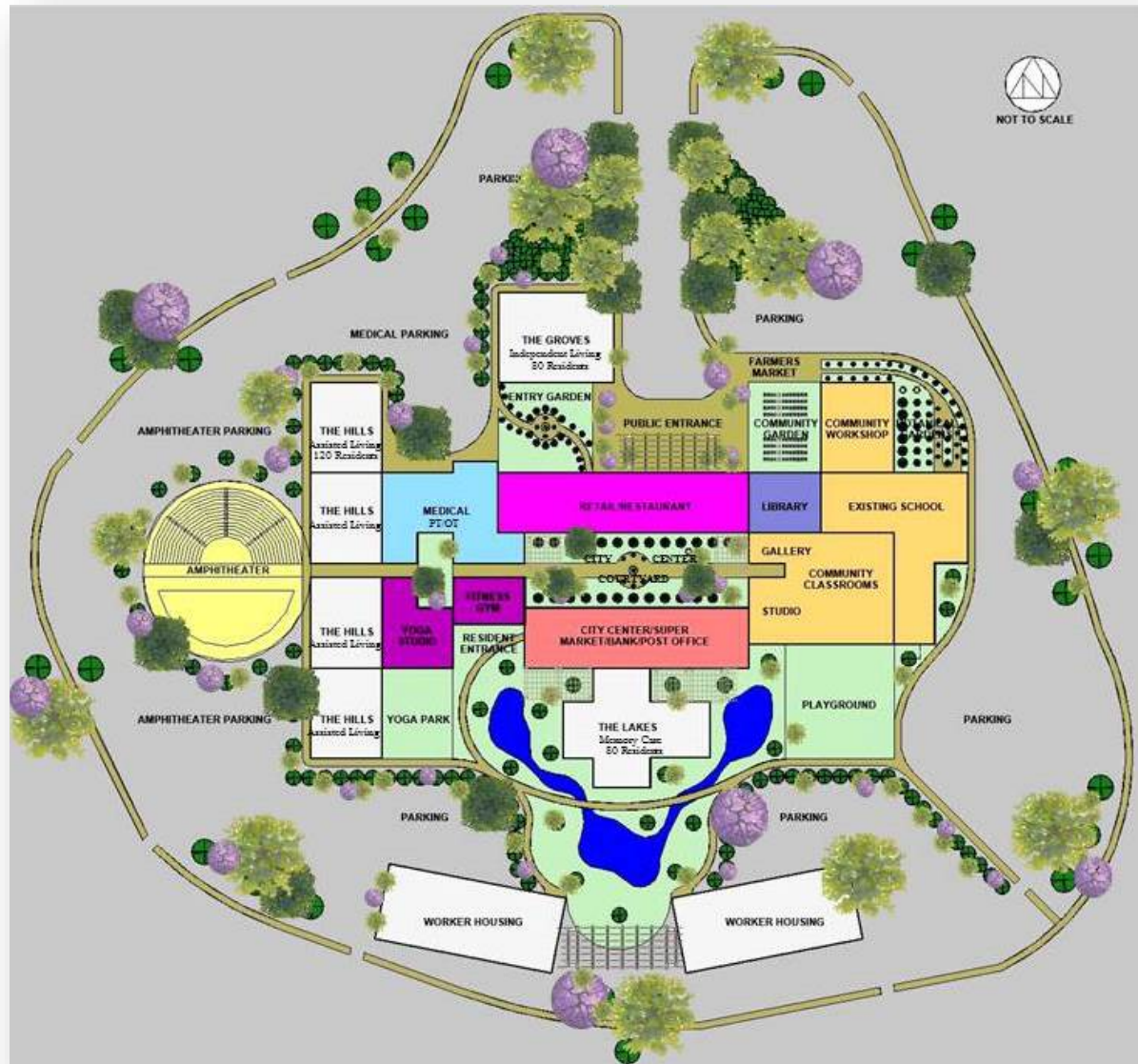
# STUDENT DESIGN CHARRETTE



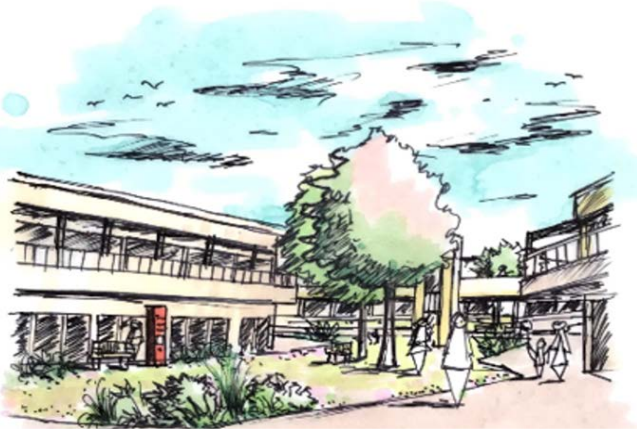
# SITE COMPONENTS



# CONCEPTUAL SITE PLAN



# CONCEPTUAL SITE SKETCHES



View of City Center



City Center Section

A mixed-use public /private partnership for residents with dementia, their families and the general community.



Yoga park



Community Garden

# CONVERGENCE COMMUNITY WORKSHOP

November 2018-Oklahoma City, OK

A community visioning workshop focused on sustainable practices for mixed-use community based dementia programs and services. Education about needs and concerns of individuals living with dementia and their families to support a strong community awareness about the impact of dementia



# INVITED WORKSHOP SPEAKERS



**Jennifer Sodo, AIA**

Perkins Eastman Senior Living Studio



**Dr. Lorraine Hiatt**

Improv-Aging Environmental Gerontologist



**Dr. Jennifer Senick**

Rutgers University



**Dr. Nisha Fernando**

University of Wisconsin



**Jeff Anderzhon, FAIA**

Eppstein Uhen Architects

# COMMUNITY WORKSHOP ATTENDEES

65 community members from memory care and medical fields, architects, landscape architects, state health employees, social workers, and family caregivers attended the all day workshop. Also in attendance were OSU students, faculty and alumni, as well as members of an International Delegation visiting the College of Human Sciences from Fu Jen Catholic University in Taiwan.

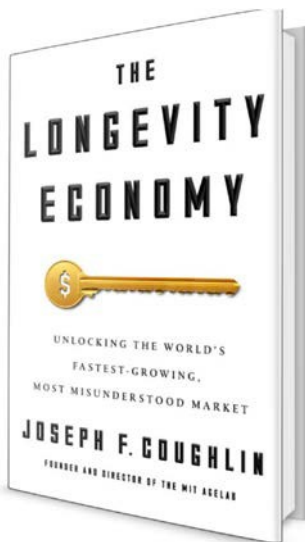
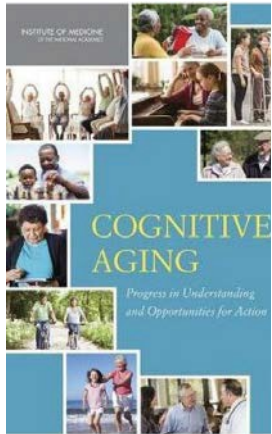




# CONVERGENCE VISIONING WORKSHOPS

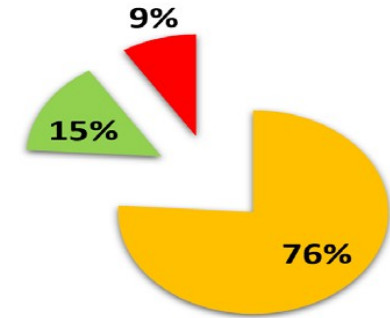
## NEWER ROLES FOR OFFERING EVIDENCE-BASED DESIGN

- Illustrate Realistic data on Memory Variations/Functions
- Offer Tool Kit of Programs vs. “Themed” Design
- Capital/operating cost insights



“TRANSCENDENT DESIGN” (Coughlin, 2017)

Design that amazes rather than burdens negative imagery and is valued across markets of users<sup>1,3</sup>



■ Operations

■ Consumables

■ Initial Construction

Life cycle costs suggest that investments in age friendly design, including care partner safety mitigate costs of staffing/operations and some nursing home needs/dependency.

# CONVERGENCE VISIONING WORKSHOP

## Examples Of Data, Criteria and Outcomes Sought

- Safety (Falls, Exits, Objects)
- Movement
  - Lower, Upper Body, Balance, Sit-Stand
  - Wayfinding
  - Roaming/Wandering
- Sensory Optimization
- Social Choices
- ADL\* Assistance and Bio-Care
- Stress Mitigation
- Serendipity
- Fresh Air

Roles for Environmental Social Scientists: *Project Justification*

	Global Memory		
	Some Memory Fragmenting	Moderate Memory Loss	Profound Memory Needs
More Capable			
Average			
More Assists			

# CONVERGENCE COMMUNITY WORKSHOP

## 1. Participants' Knowledge

- Development
- Aging/Health Services

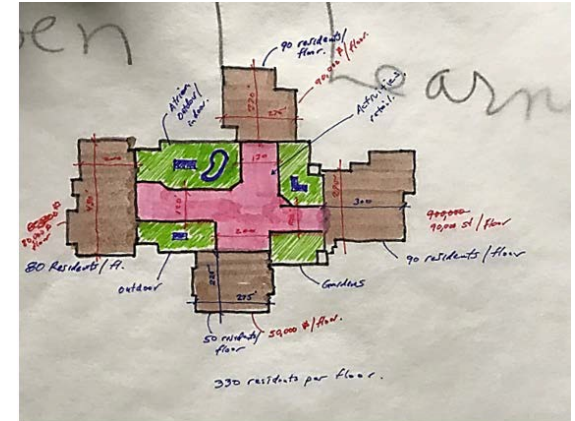
## 2. What vs. How Projects...

- Get Built
- Are Viable

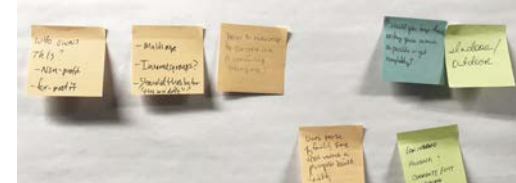
## 3. Value of Imagery, Even "Imagined Imagery"

## 4. Gaps in Insights

- Memory "Enhancement" vs. "Care"
- Urban Considerations: Scaling
- Capital and Operation\$ Costs



## URBAN REDEVELOPMENT REPURPOSING COMMERCIAL MALL ENVIRONMENTS

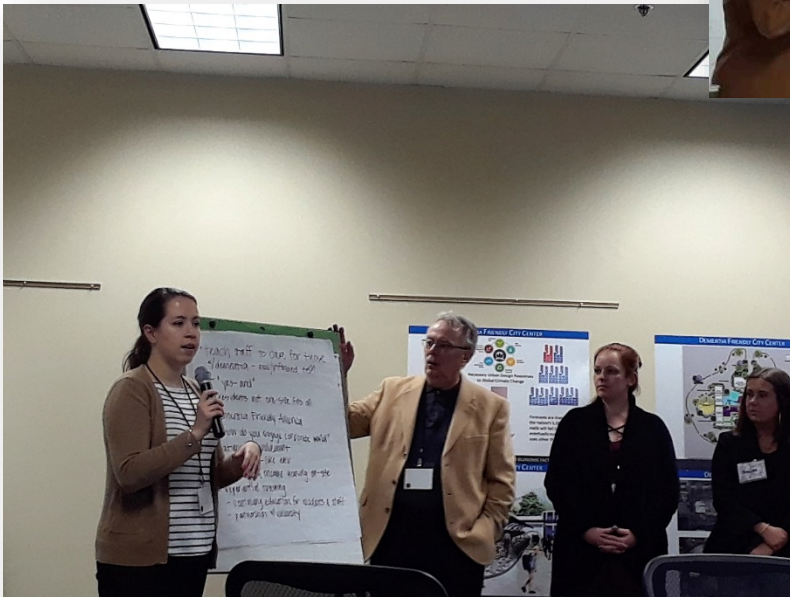


# BREAKOUT SESSIONS

- 4 breakout groups led by workshop speakers
- Working Lunch
- Note Takers to capture dialog



# BREAKOUT SESSION DEBRIEF



- Breakout session reports
- Identification of principle themes
- Identification of next steps

# WORKSHOP THEMATIC OUTCOMES

## Urban Re-greening through Sustainable Building Practices

- Energy generation, graywater systems, green roof tech, waste management, maintenance

## Therapeutic Environments for Health and Wellness

- Spirituality, walking trails, pool/fitness, pet therapy, multi-sensory gardens, library, community classrooms

## Re-purposing Commercial Mall Environments

- Shopping/dining options, accessibility, visibility, security, seating, community outdoor venue, ownership, federal/state/local partnerships

## Improved and Expanded Dementia Programs and Services

- Intergenerational education, medical, OT, PT, social services, volunteerism, community education, PACE and other day programs, research, technology, regulation

# CURRENT STUDENT DFCC DESIGN WORK



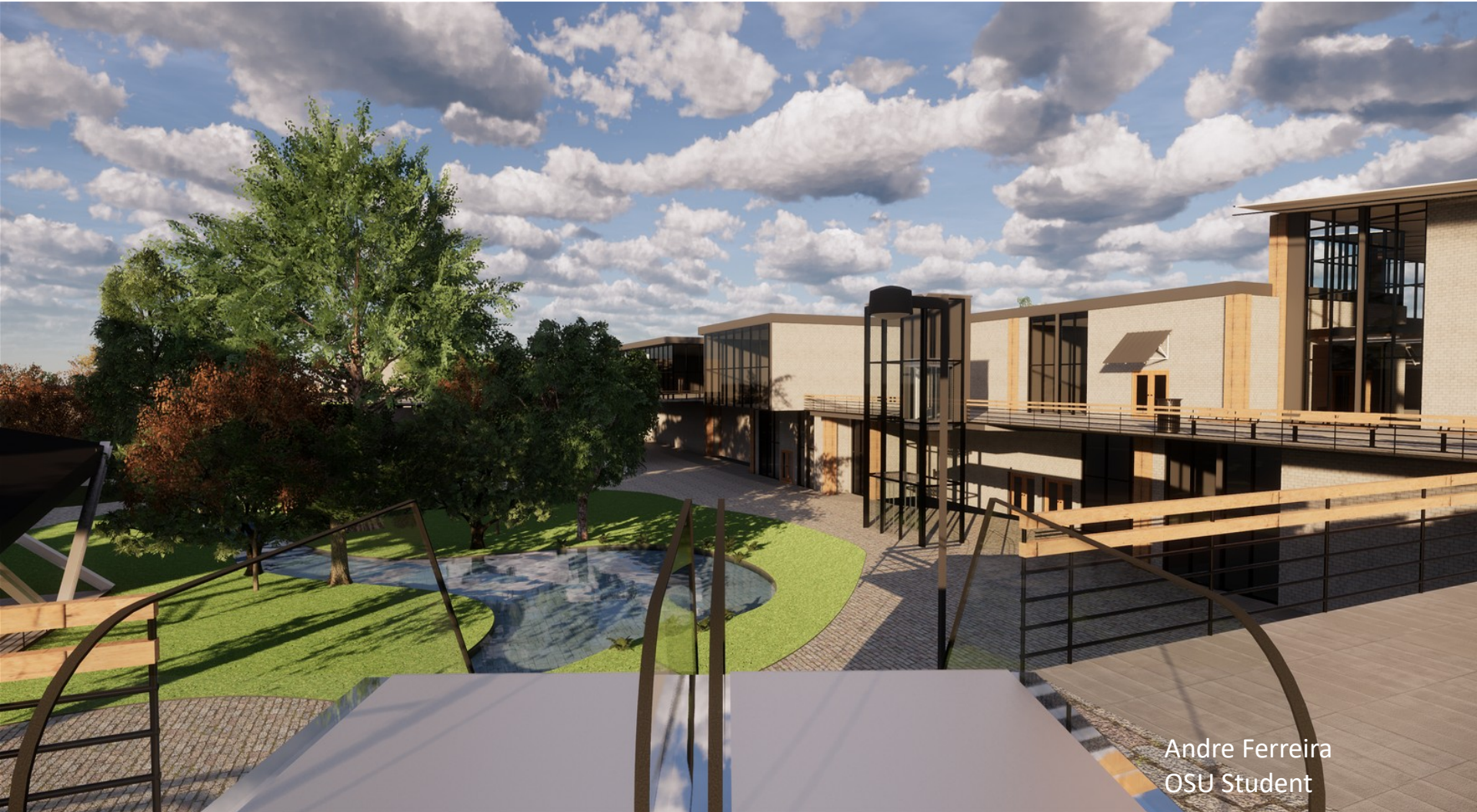
Andre Ferreira  
OSU Student

# CITY CENTER ENTRANCE

Andre Ferreira  
OSU Student



# CITY CENTER SHOPS



Andre Ferreira  
OSU Student

# CITY CENTER PLAZA



Andre Ferreira  
OSU Student

# CITY CENTER ALLEYWAYS



Andre Ferreira  
OSU Student

# CITY CENTER DINING AND CAFE



Yang Pei  
OSU Student

# CITY CENTER ART STUDIO/GALLERY



Yang Pei  
OSU Student

# CITY CENTER FARMERS MARKET



Yang Pei  
OSU Student

# NEXT STEPS

- Stakeholder Focus Groups (4+)
  - Caregivers
  - Medical Professionals
  - Design Professionals
  - Social Services Professionals
- On-line survey for larger community
- Continue with student designs and the development of a tool kit for other communities and entities interested in improved dementia programs and services, therapeutic environments for health and wellness and urban re-greening through sustainable building practices.
- Follow-up community education event (2020)

# SPECIAL THANKS TO OUR FUNDERS



**9 Month Grant**



*OSU Humanities, Arts and Design Program*

**1 year Grant**



INITIATIVE

*Non-Profit for Innovative Aging Research*

**2 Year Grant**





Thank You!  
Questions?

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