CRAZY RICH
LESSONS FROM SINGAPORE

Design for Aging

AIA Knowledge Community

The mission of the AIA **Design for Aging** (DFA) Knowledge Community is to foster design innovation and disseminate knowledge necessary to enhance the built environment and quality of life for an aging society.

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Earn 1 AIA LU/HSW

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Submit your questions through the Q&A pod at the bottom of your screen.

Content-related questions will be answered during the Q&A portion as time allows. Any questions not answered during Q&A, will be answered and posted online within two (2) weeks.

Tech support questions will be answered by AIA staff.

AGENDA

- Introduction

- Singapore

- Kampung Admiralty

- Smart Cities

- Bringing Intergenerational Living to the U.S.

LEARNING OBJECTIVES

1. Learn how Kampung Admiralty revitalized the traditional "village" typology to create an innovative and new kind of senior living community in Singapore.

2. Identify the specific program elements combined in Kampung Admiralty that make it a stellar example of successful urban planning, social engineering, and biophilic design.

3. Hear about how the world's smartest city helps take care of its aging population through use of cutting-edge technology and innovative problem solving.

4. Analyze how the lessons learned from Kampung Admiralty can be translated to the United States

SPEAKER INTRO

HOW THE SECTOR HAS EVOLVED

GREATER INDEPENDENCE

Cottage

The Villages

Senior Condo

Congregate Care

Retail CCRC

College CCRC

HUD Section 8

Hospitality CCRC

Co-Housing

1935: Social Security

Home for the Aged

Assisted Living

1900   1925   1950   1975   2000   2025

CCRC

1965: Medicare/
Medicaid

1993: Dementia Village

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Special Care

MORE SPECIALIZED CARE

Sheltered Care

Green House®

Nursing Care
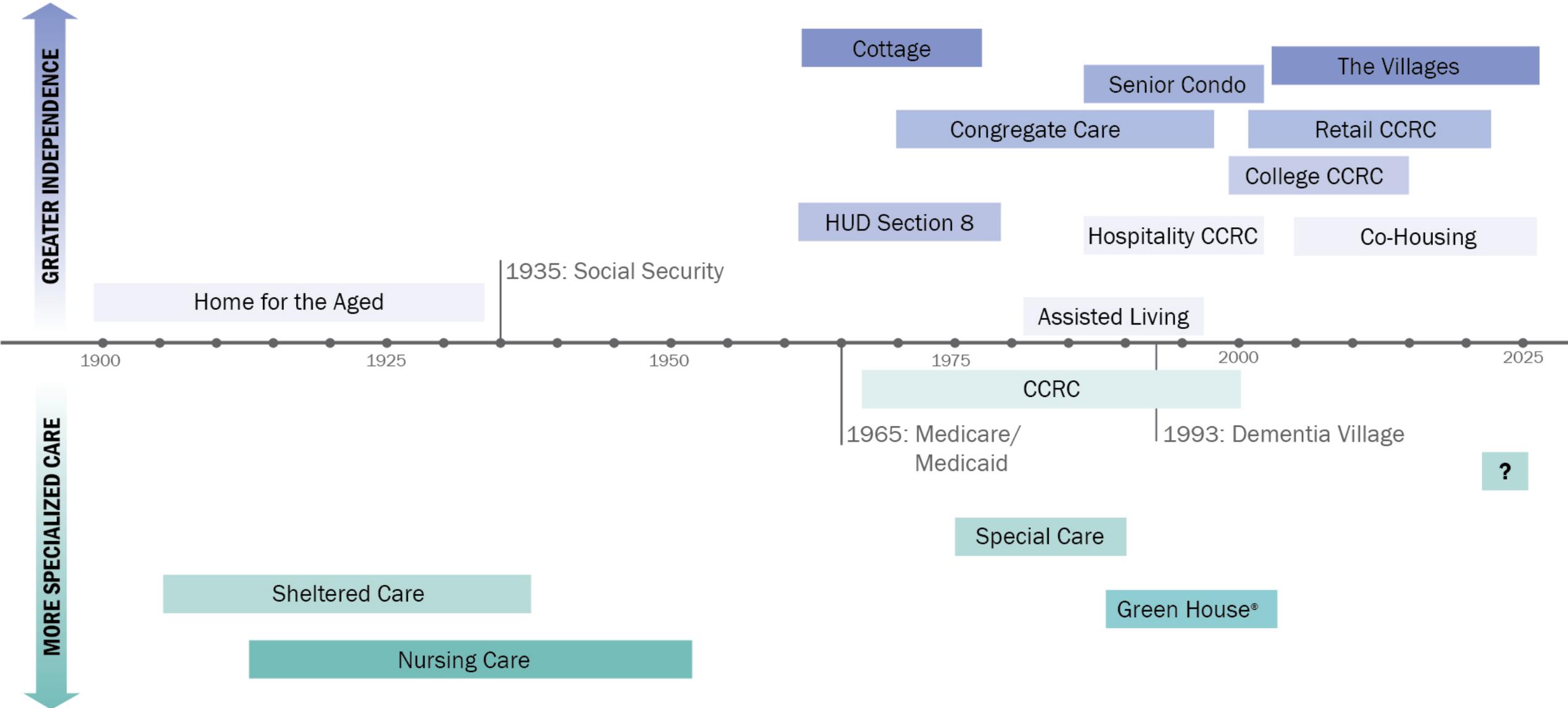
RE-THINKING DESIGN FOR OLDER ADULTS

… Who wants to enter the golden years surrounded by only old people?

-- Karrie Jacobs, *The New York Times*

BENEFITS FOR ELDERS

- Improved self-esteem

- Provides a sense of purpose

- Diminishes loneliness and boredom

- Receive assistance with everyday tasks or chores

- Encourages activity and improved fitness

- Builds lasting and stable friendships

- Provides love, affection, and comfort
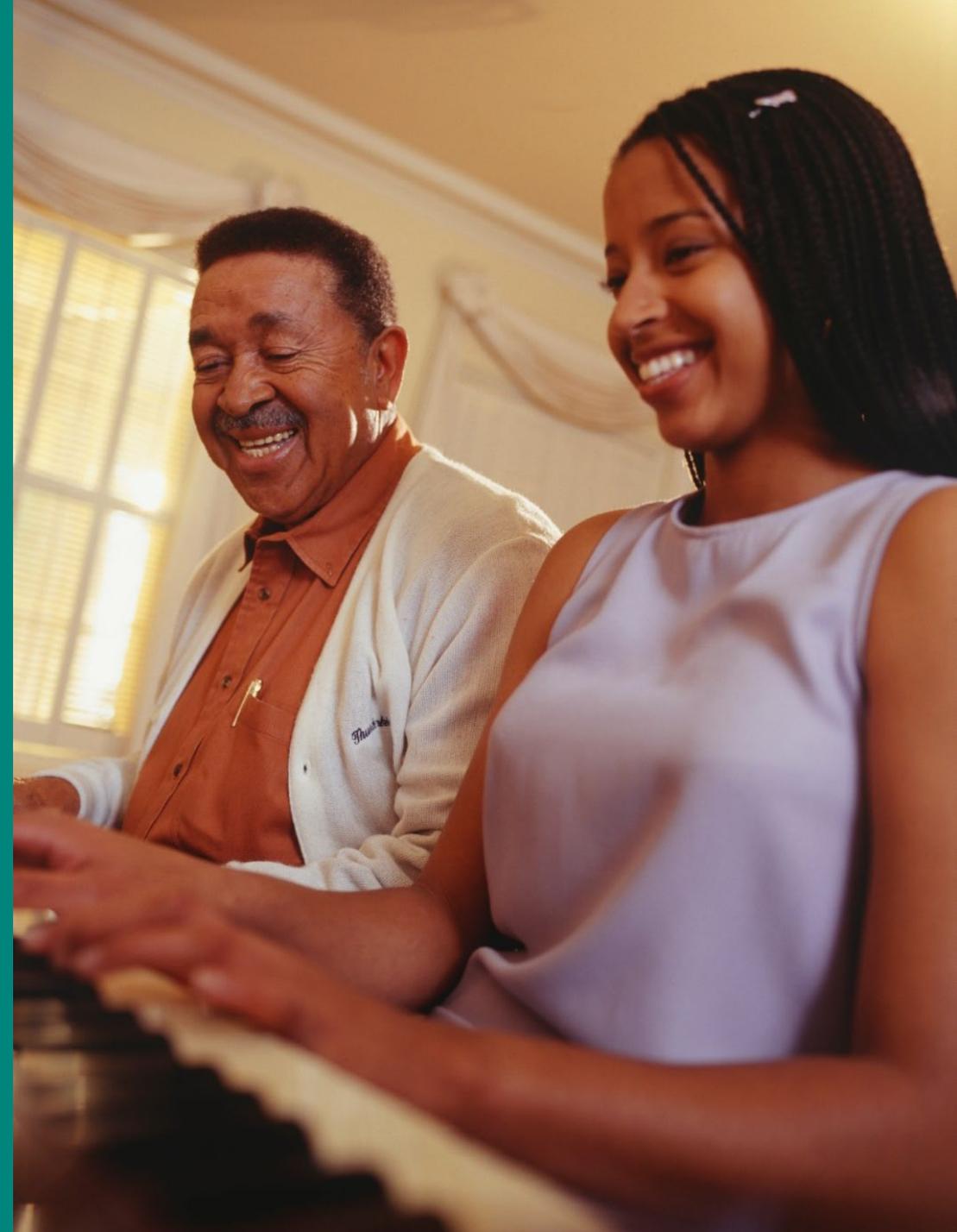
BENEFITS FOR YOUNGER ADULTS AND KIDS

- Younger adults have an opportunity to serve others

- Builds lasting and stable friendships

- Provides love, affection, and comfort

- Improved self-esteem

- Improved understanding of elders to combat ageism

- For kids, reinforces the idea that they can contribute to the community in a meaningful way by helping those who need assistance

- Improved school performance and attendance

- Less likely to start using drugs and alcohol

A MORE RESILIENT SOCIETY

- Building relationships across generations helps to combat loneliness and social isolation

- Providing more choice for all ages

- Building better communities

- Families can live reasonably close together and get to each other without driving long distances or flying

SINGAPORE: A FEW BACKGROUND FACTS
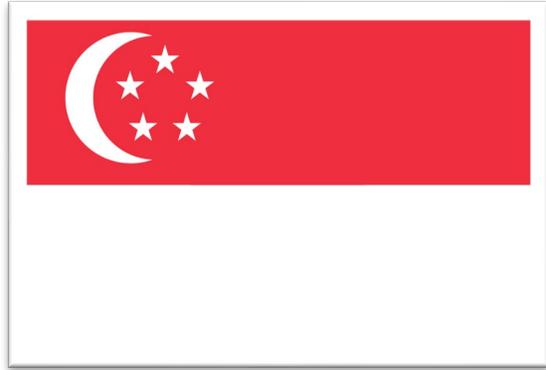
- Singapore is a city and a country, having gained independent sovereignty in 1965

- Unitary parliamentary republic led by a Prime Minister and a President

- Population = 5.8 million

- Heavily urbanized peninsula of 276 square miles (almost the same size as NYC)

- Diverse ethnic groups and religions live harmoniously

- World's most expensive city to live

- Smartest city in the world since 2019

- Limited natural resources drive sustainable approaches to all aspects of living

TYPICAL HBD FLATS

HDB FLAT

AIR-CON LEDGE

KITCHEN

BEDROOM   BEDROOM

BATHROOMS

SHELTER

LIVING ROOM / DINING ROOM   BEDROOM

STORAGE   RECESS AREA

HBD housing in Bishan Town. Photo by Terence Ong

Many HDB flats have a store room, which, in all apartments built since 1996, has become a bomb shelter with reinforced concrete walls and a massive steel door to protect the occupants in case the Republic is attacked. Illustration by Josh Kramer

HOUSING TODAY

SKYVILLE

INTERLACE BY OMA

ORCHARD ROAD

KAMPUNG ADMIRALTY

KAMPUNG ADMIRALTY

- First purpose-built public intergenerational project

- Awarded "World Building of the Year" in 2018

- Seven government agencies involved in development

- Intergenerational, community-based programs

- Exemplary sustainable and biophilic design throughout

ALL-IN-ONE VILLAGE

This integrated development next to Admiralty MRT combines housing, health-care and care facilities, and shops amid lush greenery in a bid to be a 'modern kampung'

Community farm
Residents can grow vegetables, herbs and ornamental plants

Eldercare and childcare centre
■ Located side by side to promote bonding between generations
■ The eldercare centre has space for about 100 seniors, and the childcare centre will offer 200 places

Admiralty Medical Centre
■ Spans two levels with an area of 8,500 sq m
■ Offers outpatient consultation, day surgery, rehabilitation and diagnosis

Community park
■ Features fruit trees such as rambutan and kaffir lime
■ Includes a three-generational playground for both young and old

Studio apartments
■ Two blocks with about 100 units, up for sale in the July Build-To-Order exercise
■ New features: induction stoves, "resilient flooring" with a parquet design and retractable racks for easier drying of laundry

Hawker centre
■ Will have 50 cooked food stalls and about 900 seats

GREEN FEATURES

Pneumatic waste conveyance system
■ Household trash will zoom through vacuum pipes underground into a sealed container which will be collected by trucks

Bioswales
■ Rainwater will be filtered through these sloping stretches of plants and soil on the ground floor

Solar panels
■ The apartment blocks will be topped with solar panels to power common lighting, for instance

Community plaza and shops
■ An airy space for community activities, from National Day dinners to cultural performances
■ Grassroots organisations will provide feedback on what the 20 shops and two or three food and beverage outlets should offer

Supermarket
■ After feedback from residents that supermarkets in the area were too small, the new one will cover 1,000 sq m

Basement carpark and bicycle parking
■ Two basement floors will house the carpark and a mechanical bicycle parking system which can store 500 bicycles

Source: HDB

KAMPUNG ADMIRALTY

CHILD DAYCARE

PUBLIC PLAZA

HAWKER CENTER

KAMPUNG ADMIRALTY

FITNESS EQUIPMENT

PLAYGROUND

COMMUNITY GARDEN

GREEN TERRACE
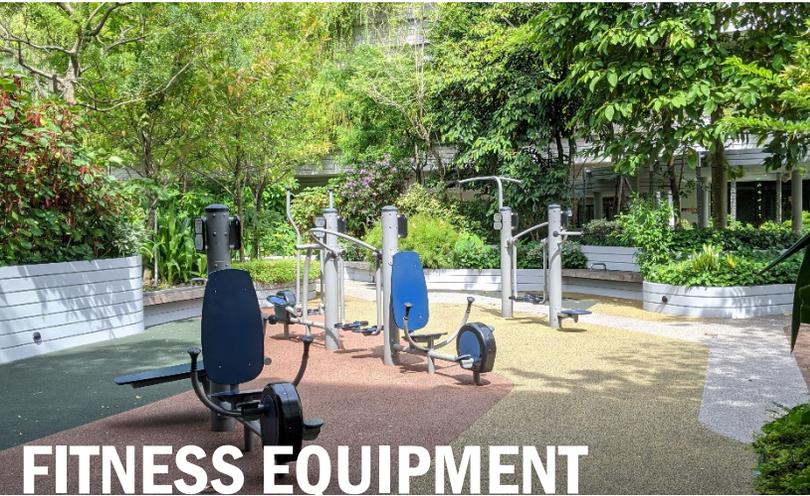
THE APARTMENTS

- 100 units in two towers, only two unit types

- Buddy Benches

- Moveable Cabinets + Work Surface

- Retractable Drying Rack

- Barrier Free Design

- Induction Cooktop

- Slip Resistant Flooring

- Relatively modest, durable finishes

- Private Elevators to public amenities

- Windows have low sills for more light and better visibility
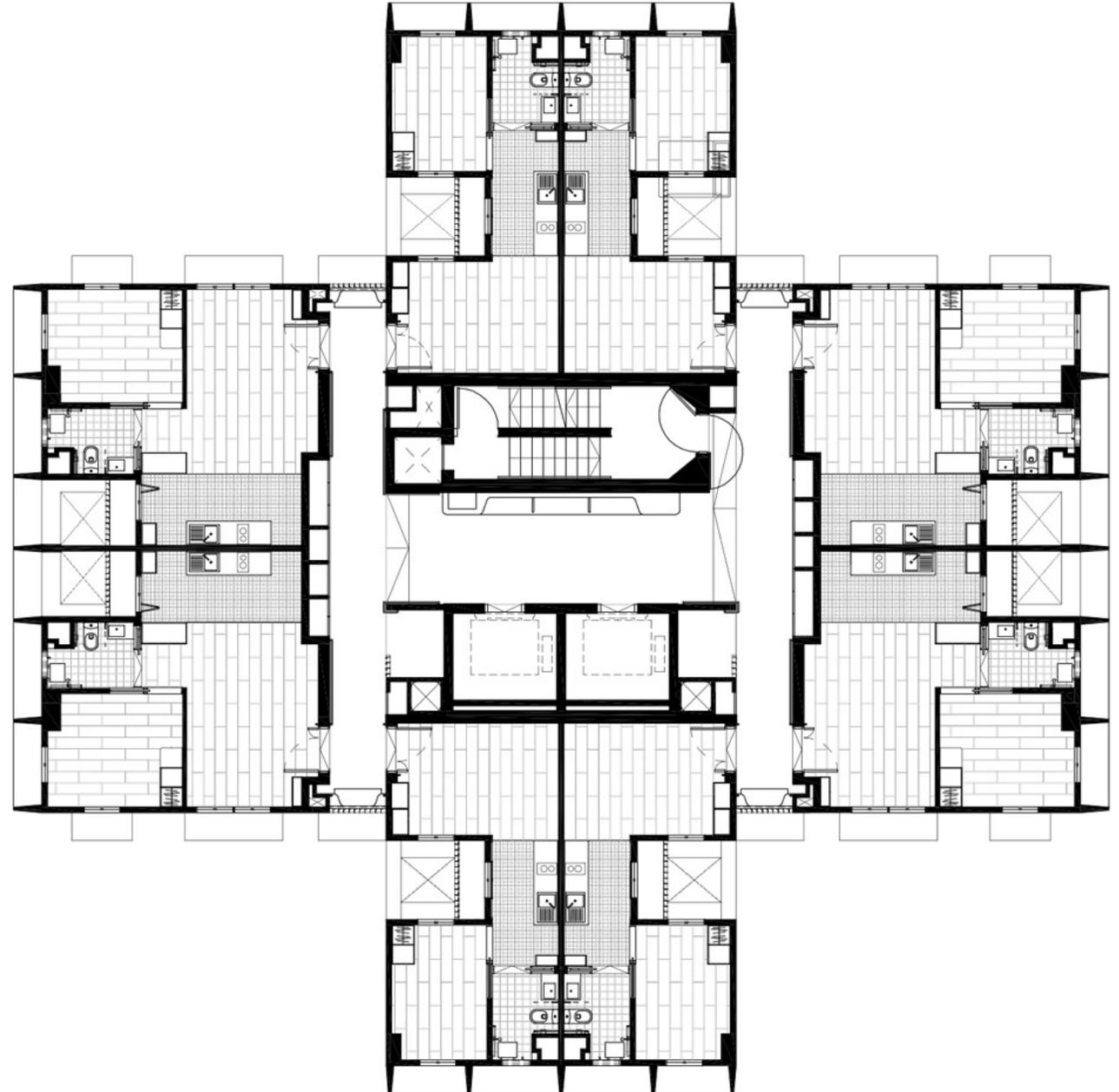
APARTMENT IMAGES

ACTIVE AGING HUB

- Four primary goals for users:

  - Stay in good health

  - Stay independent

  - Stay connected and purposeful

  - Build a Kampung community through volunteering

- Physical Therapy

- Medical office on site offers various preventative screening

INTERGENERATIONAL PROGRAMS

- Active Aging Hub and child daycare share two levels and have daily intergenerational programs and activities

    - Reading and storytime together

    - Seniors supervise children on the playground

    - Seniors test new video games and then teach children how to play

COMMUNITY PARTICIPATION

- Partnership with community for active programs: dance, tech, art

- Hawker Center: bringing families and neighbors together to share meals, which are inexpensive, varied, healthy

- Ground floor retail and adjacent transit center ensure steady flow of visitors and connects residents to community

- Social surveillance: Feeling safe

- Rooftop community garden and public park attract neighbors

AIA DESIGN FOR AGING

INTEGRATED FITNESS

- Fitness equipment strategically placed along walking paths

- Benches and tables to rest

- Ramps require walking with additional effort (but less than stairs)

NATURE & BIOPHILIA

- Integrated planting and green plaza help reduce heat island effect

- Native plantings increases local bio-diversity

- Bioswales/water filtration system

- Ecopond

- Medical center looks into garden to help calm nervous patients

- Community garden

- Public park

KAMPUNG ADMIRALTY: MEETING THE RESIDENTS

KAMPUNG ADMIRALTY: KEY TAKEAWAYS

- Urban setting

- Transit-oriented mixed-use means visiting the building is not a "destination," it's part of people's every day movements

- Programming, programming, programming!

- Strategic partnerships

- Promote Human interaction across all ages, but can't force it

- Innovative design features to help improve people's health

- Connection to nature

- Synergy between government initiatives and private sector

SMART NATION

Singapore established the Smart Nation Vision in 2014 to address the challenges of an aging population, urban density, and energy sustainability

Three Pillars of a Smart Nation

DIGITAL SOCIETY   **DIGITAL ECONOMY**   **DIGITAL GOVERNMENT**

DIGITAL SOCIETY | DIGITAL ECONOMY | DIGITAL GOV'T

https://youtu.be/vMqkKYb7VYc

MAINTAINING INDEPENDENCE THROUGH SMARTER SMART CITIES

HBD's Elderly Monitoring System is part of the Smart Enabled Home initiative. The system learns the daily habits of seniors through the help of motion sensors and alerts family or other caregivers in times of need or when irregular patterns in behavior are detected (ie if no movement is detected for a period of time).

INTERGENERATIONAL LIVING IN THE US

UNIVERSITIES & SENIOR HOUSING

Merrill Gardens at the University in Seattle, Washington
By Runberg Architecture Group

Mirabella at ASU in Tempe, Arizona
By Ankrom Moisan

Lasell Village in Auburndale, Massachusetts
By Perkins Eastman

BRIDGE MEADOWS

Portland, Oregon

By Carleton Hart Architecture

- Academic Success
- Permanency
- Housing Stability
- Health & Wellbeing
- Increasing Resiliency
- Social Connectedness

AGRIHOOD
Santa Clara, California

By Steinberg Hart

ANITA MAY ROSENSTEIN CAMPUS
Santa Clara, California

By Leong Leong and KFA Architects & Planning

INTERGENERATIONAL SCENARIOS

BASELINE

URBAN SENIOR LIVING

MIXED USE SENIOR LIVING

MIXED USE SENIOR LIVING

(IDEAL INTERGENERATIOANL MODEL)

TRADITIONAL APPROACH

MIXED-USE PODIUM

+

SENIOR LIVING ABOVE
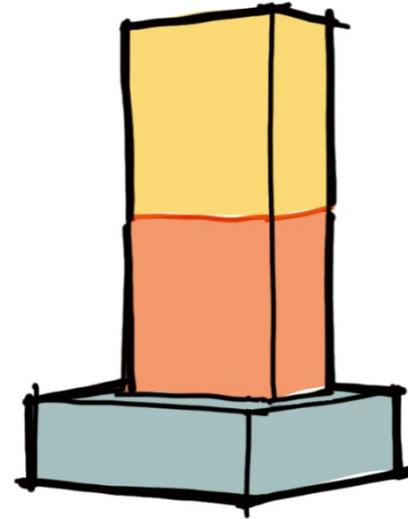
MIXED-USE PODIUM

+

SENIOR LIVING

+

HOSPITALITY / HEALTH CARE/ OR OTHER USE
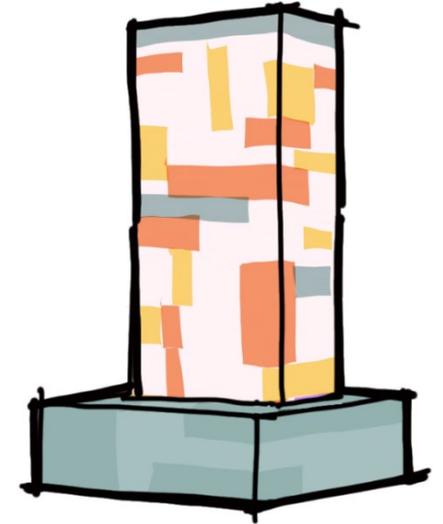
MIXED-USE PODIUM

+

SENIOR LIVING / RESIDENTIAL / HOSPITALITY / HEALTH CARE/ OR OTHER USE

ALL USES ARE SEPARATE BUILDINGS, MAY BE CONNECTED

CORE PRINCIPLES FOR DEVELOPING INTERGENERATIONAL COMMUNITIES

- Urban

- Nearby medical facilities

- Nearby schools

- Access to recreation activities, other entertainment, as well as community basics such as grocery store, shopping, restaurants

- Public transportation

- Parks, walking trails, dog parks, and open space

- Universal design

- Strong programming

NEXT STEPS... PLEASE PARTICIPATE IN OUR RESEARCH SURVEY

20-QUESTION INTERGENERATIONAL SURVEY:

https://www.surveymonkey.com/r/IGTF

THANK YOU
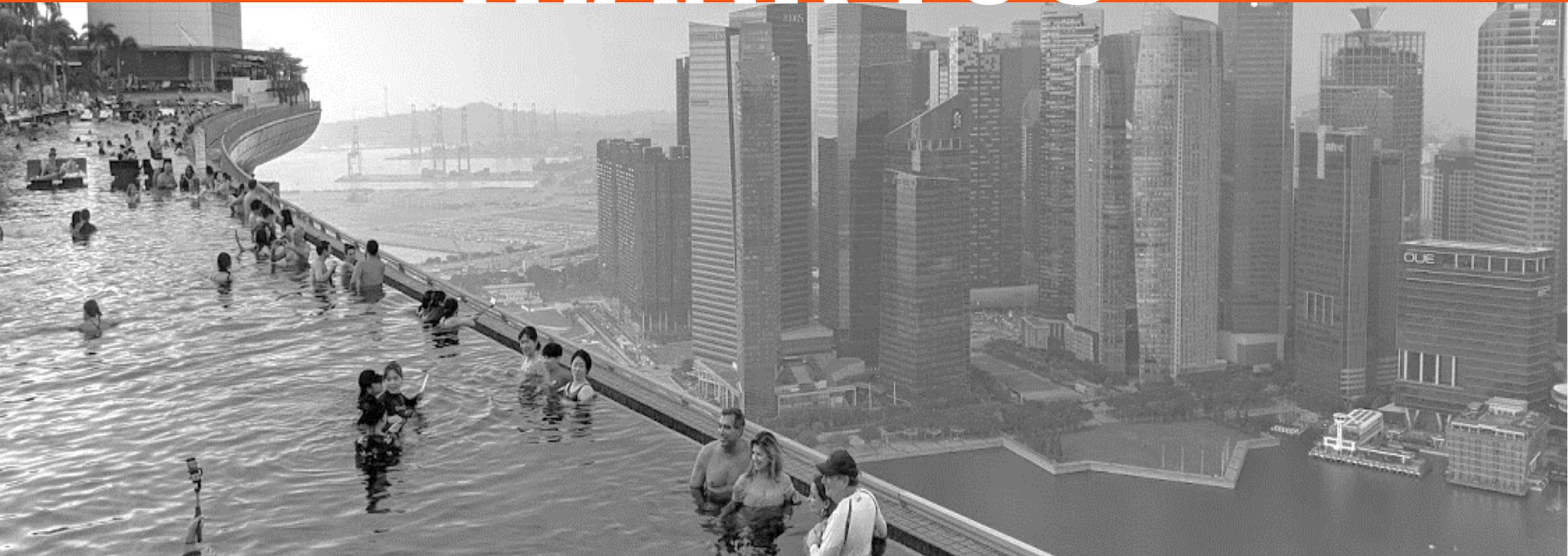
Time for Questions and Comments

??? - !!!

FEEDBACK SURVEY

We encourage all attendees to complete the post course survey at **https://www.surveymonkey.com/r/M3BXYK2** by **Friday, October 20, 2023,** at 5pm ET.

Please email knowledgecommunities@aia.org if you have any questions.

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