



Enhancing Design for Health of Aging Population

05/14/2024

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Introduction



Introduction



Introduction



Current State of the Sector

Facilities of the Past



Design of Nursing Homes and Care Facilities Pre-70's

Change with Medicare/Medicaid

ENJOY YOUR RETIREMENT

Residences of the Present



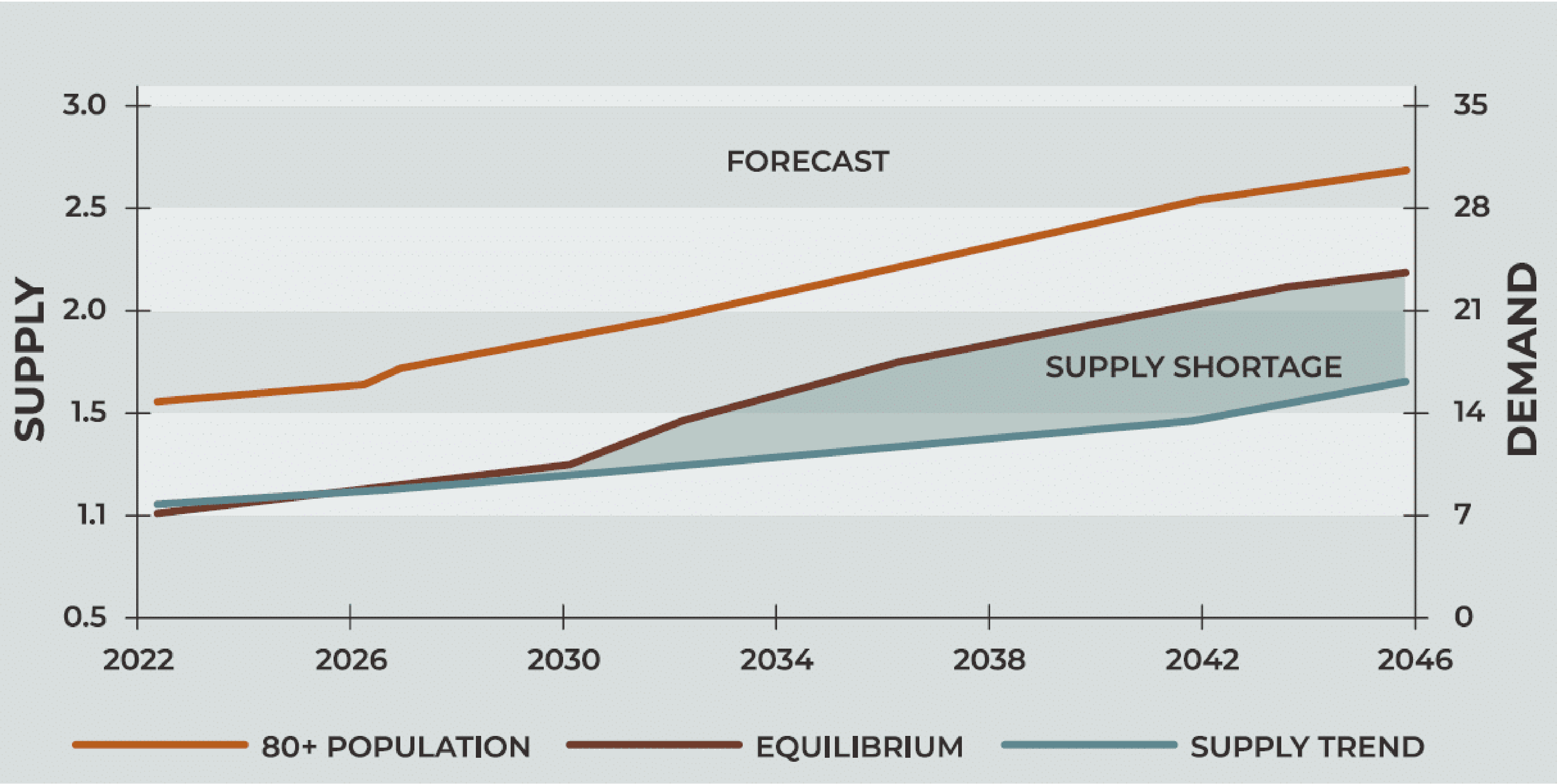
Residences of the Present



Residences of the Present



Growing Need

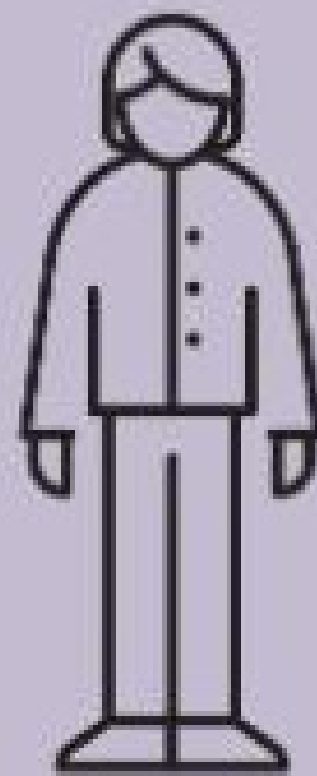


Growing Need

Rising demand and shrinking families will increasingly strain family caregivers and those they care for.

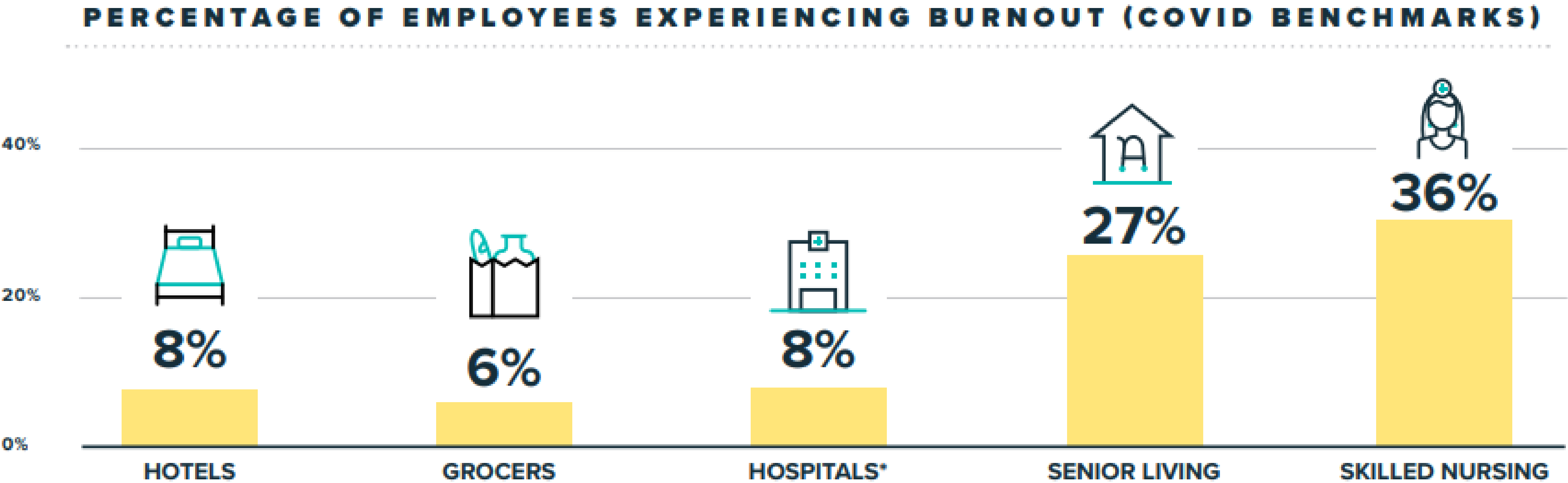


In 2010, there were **7.1 potential family caregivers** for every person 80+.



By 2030, there may be only **4.1 potential caregivers** for every person 80+.

Growing Need



*Hospital data includes all staff members. Burnout index is likely higher in hospital staff working in COVID units.

**What is the cost of turnover?
How much does it cost the
company to on-board an
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**31% of the salary at minimum and
130% at maximum**

What is the cost of turnover?
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company to on-board an
employee?

\$19,840 to \$83,00 PER EMPLOYEE

0.31 times the salary at minimum
and 1.3 times at maximum

Research Highlights

ADL - Activities of Daily Living

Bathing , showering, dressing, getting in and out of bed/ chair, walking, using the toilet, or eating



ADL - Levels of Care

Senior Living

Assisted Living

At Home Care

In- Home Care

Adult Day Programs

ALL Take into Account Activities of Daily Living

Or SHOULD



Activities of Daily Living Considerations - Barrier Free

~~Barrier Free~~

to

Universal Design

Selection of Door Hardware

Places of rest

Acoustics

Switch Types

Zero Step Entrances

Door Hardware and Places of Rest



Selection of Door
Hardware
Places of rest
Acoustics
Zero Step Entrances

Mobility & Balance

Zero Step Entrance

Handholds

Door Swing Direction

Flooring Texture

Increase Area Visibility



Zero Step Entrance
Handholds
Door Swing Direction
Flooring Texture
Increase Area Visibility



WHY?

Less stress

Lower Aggravation

Increased Independence



Changing of the Eyes

Trouble distinguishing colors

More time to adjust to changing levels of light

Depth Perception

Drier Eyes - Lack of Clarity

Light Darkness

Sensitivity



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Aid in Visibility - Lighting



WHY?

How much do you think updating the lighting design could reduce fall rates?

Fall prevention

Strain on Eyes

Ease of Navigation

Ability to See More Clearly

Complete more tasks

WHY?

A study of four residences, nearly 750 residents
1000 days

43% reduction of falls

Wayfinding

Create Choices

Create Returns

No Dead-Ends

Develop Unique Areas



Wayfinding



A



B



C



D

Wayfinding

Apply red–black coloration on a white background;

Make the size of the target element large, and place such an element at the center of the space

High contrasting colors will allow information to be read faster

Shade, light, and reflection should be used cautiously to avoid affecting older adults' perception of colors;

Severe cognitive capacity impacts the ability to capture attention - use of contrasting and attention-capturing colors.

WHY?

Ease of self navigation

Lack of frustration

Choice - decisions - freedom

Opportunities

Privacy but ways to bring residents together

Flexibility

Technology Integration



Opportunities - Neighborhoods

Decrease risk of hypertension, coronary artery disease, cardiac failure, depression, anxiety

Socialization increases memory, healthy behaviors, and mental health

**43% of
seniors
regularly
experience
loneliness**



Why

Staff Retention

IF....

...THEN

Residents are less stressed, could be more independent, are safer in your facility

Staff are safer
Less ADL's to help residents do,
Burnout Prevention

IF 36% OF STAFF ARE
EXPERIENCING BURNOUT

\$357,000 to \$1,400,000 LOST TO TURNOVER

LET'S SAY HALF OF THOSE LEAVE
THE JOB.....

COST OF FALLS TO ORGANIZATIONS

\$158,000-\$712,000 per year

Residents

BRAIN HEALTH

FREEDOM

EASE

HAPPINESS

PHYSICAL HEALTH

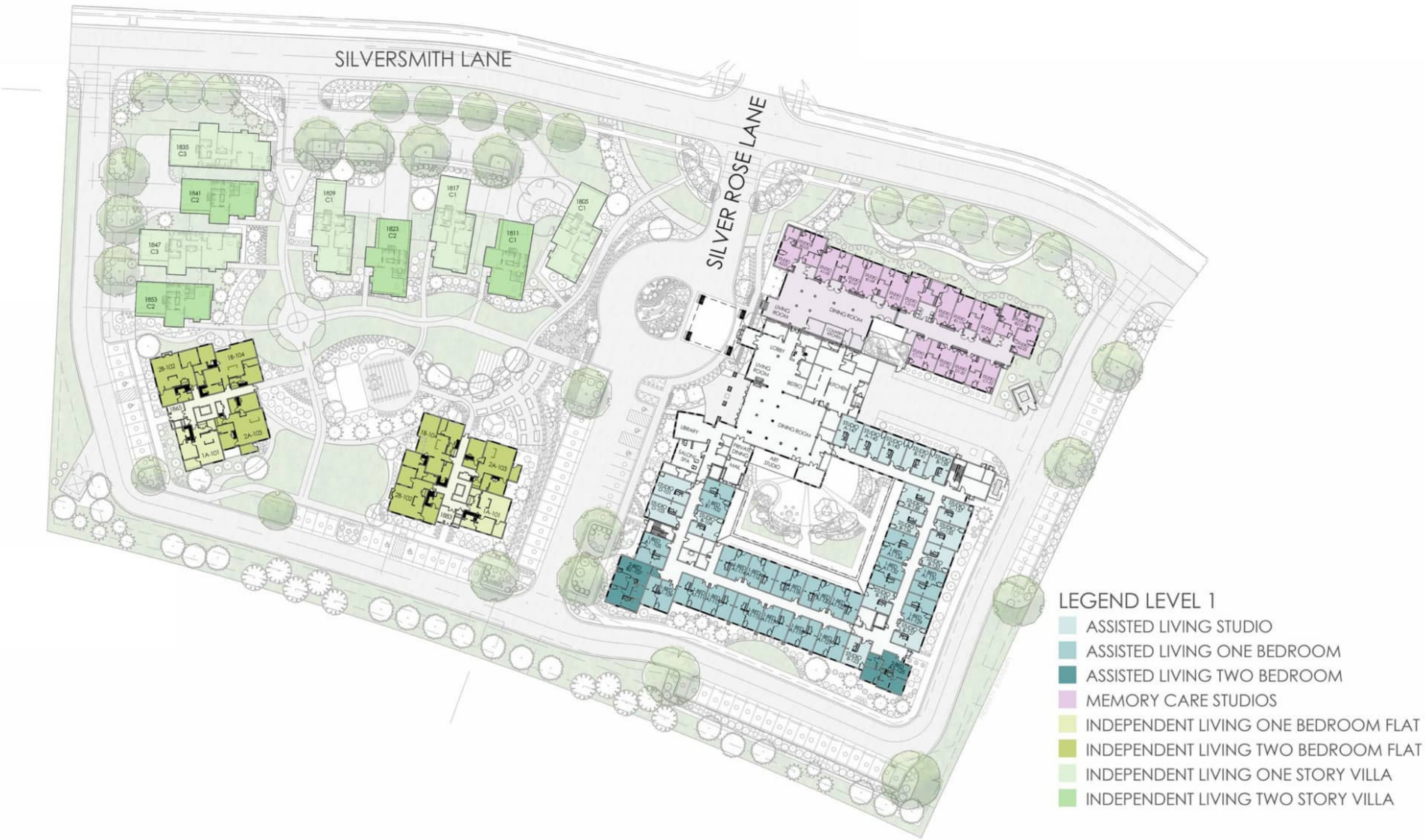
INDEPENDENCE

LOWER AGGRESSION



How

Location



RFP

INVEST IN YOUR TEAM



SET STANDARDS OF DESIGN & CARE

AVOID SELECTING ON FEE PROPOSALS

LOOK FOR QUALIFIED DESIGNERS

CARE ABOUT THE RESEARCH

PARTICIPATE IN THE RESEARCH

ASK YOUR DESIGN TEAM TO DO MORE

FIND A CONSTRUCTION PARTNER WHO WILL

SUPPORT THE END GOAL

CREATE A TEAM THAT SUPPORTS QUALITY OF DESIGN

AND CONSTRUCTION

*HOW CAN THE DESIGN INDUSTRY HELP YOUR
ORGANIZATION CREATE AN ENVIRONMENT THAT
IS BETTER FOR THE RESIDENTS, THE STAFF, THE
COMMUNITY, AND STILL SUPPORT YOUR BUSINESS
CASE?*