

Post-Occupancy Evaluations for Affordable Housing Design: A Roundtable Discussion

to be featured in the forthcoming JCHS book:
The State of Housing Design 2027



Katie Ackerly
David Baker Architects



Regina Chen
MASS Design Group



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Architects FORA



**Cory Hawbecker
Holst**



Jake Rosen
**Resources for Community
Development**



Aaron Smithson
**(moderator) Harvard Joint
Center for Housing Studies**

Agenda:

12:30 - 12:40: Introduction

12:40 - 1:00: Panelist Presentations

Show us one thing you learned from a human-centered Post-Occupancy Evaluation that surprised you—and one specific design decision you would change because of it.

1:00 - 2:00: Discussion + Q&A

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“POEs assess how well buildings match users’ needs and identifies ways to improve building design, performance, and fitness for purpose.”

(David Baker Architects)



Holst



Resources for Community Development



MASS Design Group



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3) Amenities & Shared Spaces

- neighbor relationships, amenity usage, informal interactions
- e.g. “Where do you most often encounter your neighbors?”

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- e.g. “Do you like living here? Does it feel like home?”

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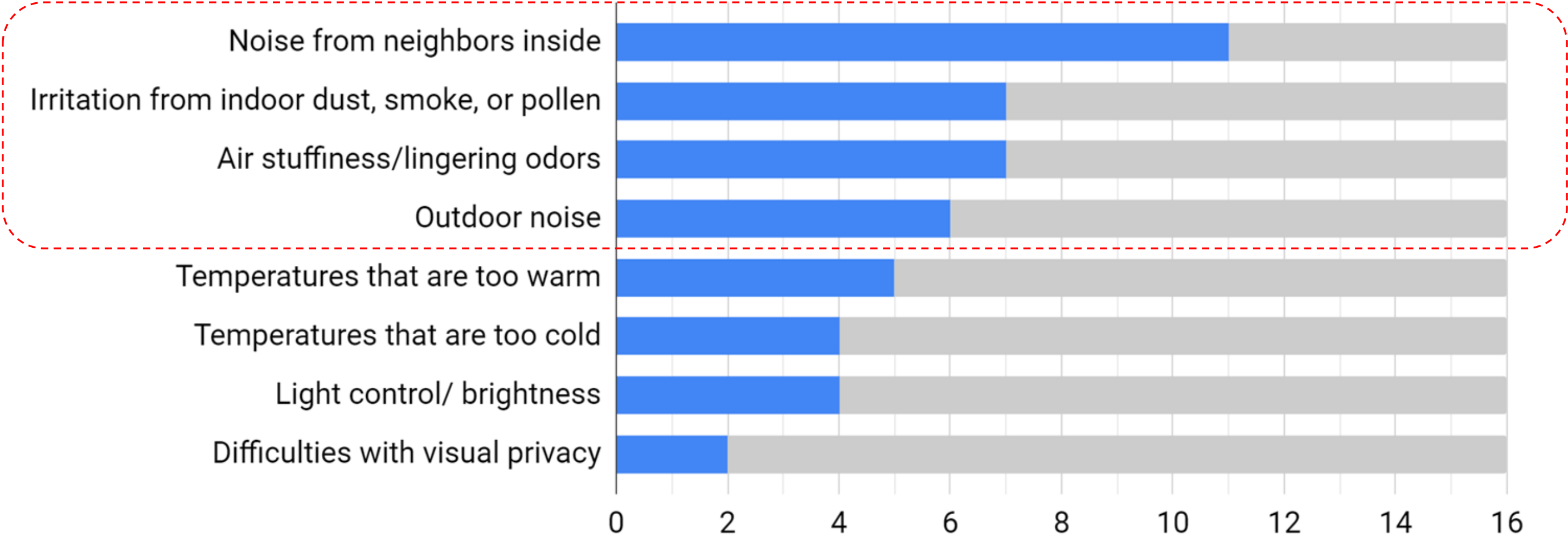
5) Retention & Longevity

- intentions to stay, long-term affordability, aging
- e.g. “Do you imagine yourself living here for a long time?”



Staff Survey : Are you aware of any of the following concerns for residents?

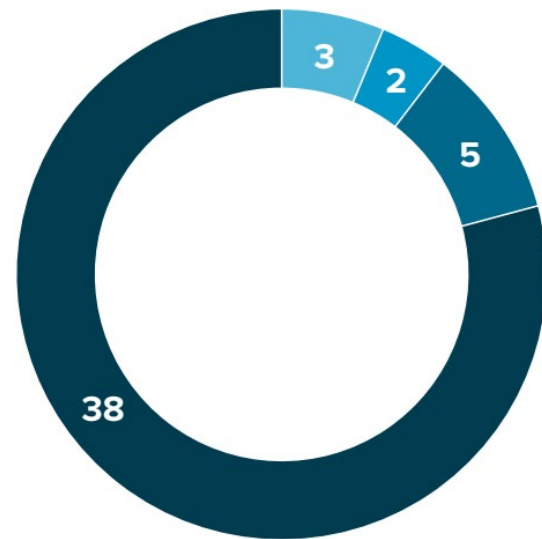
Number of buildings surveyed: 16



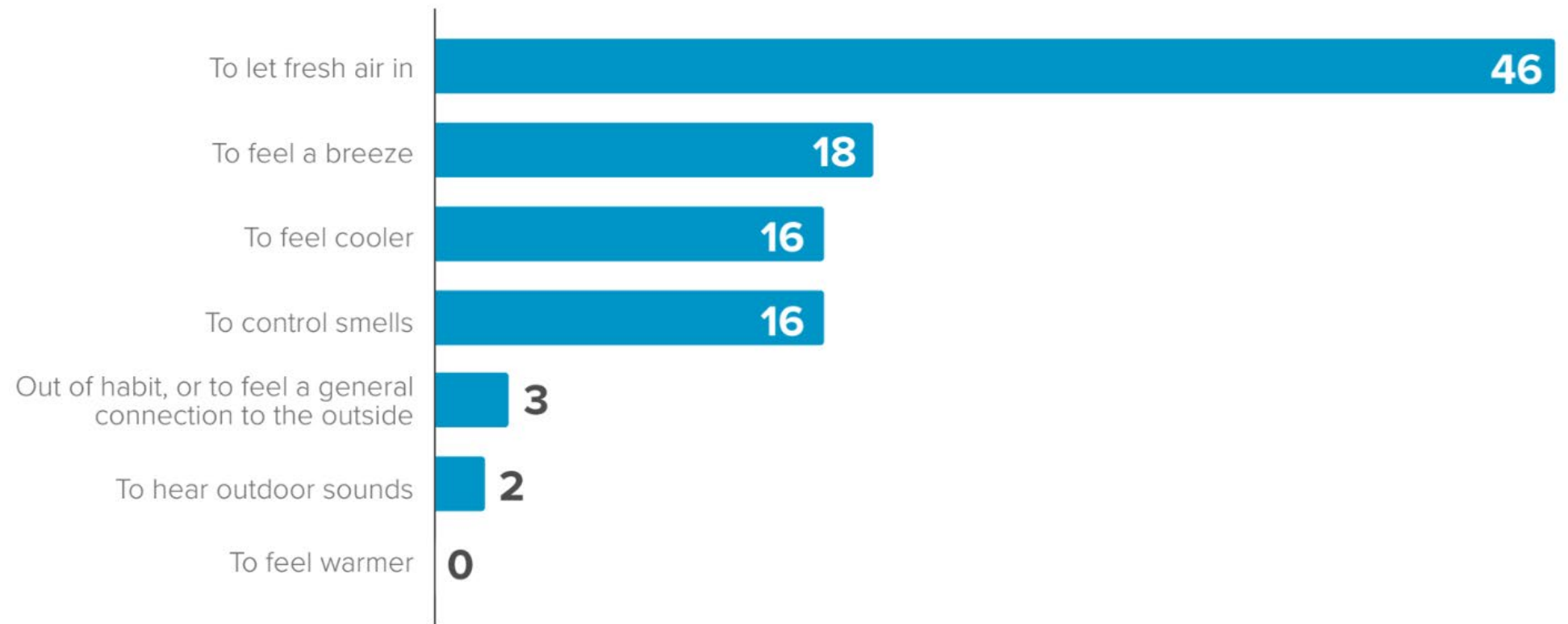
Resident Survey | 222 Taylor, San Francisco

How often do you open your windows?

- Rarely
- Sometimes
- Frequently
- All the time



Select the most common reasons you open your windows.

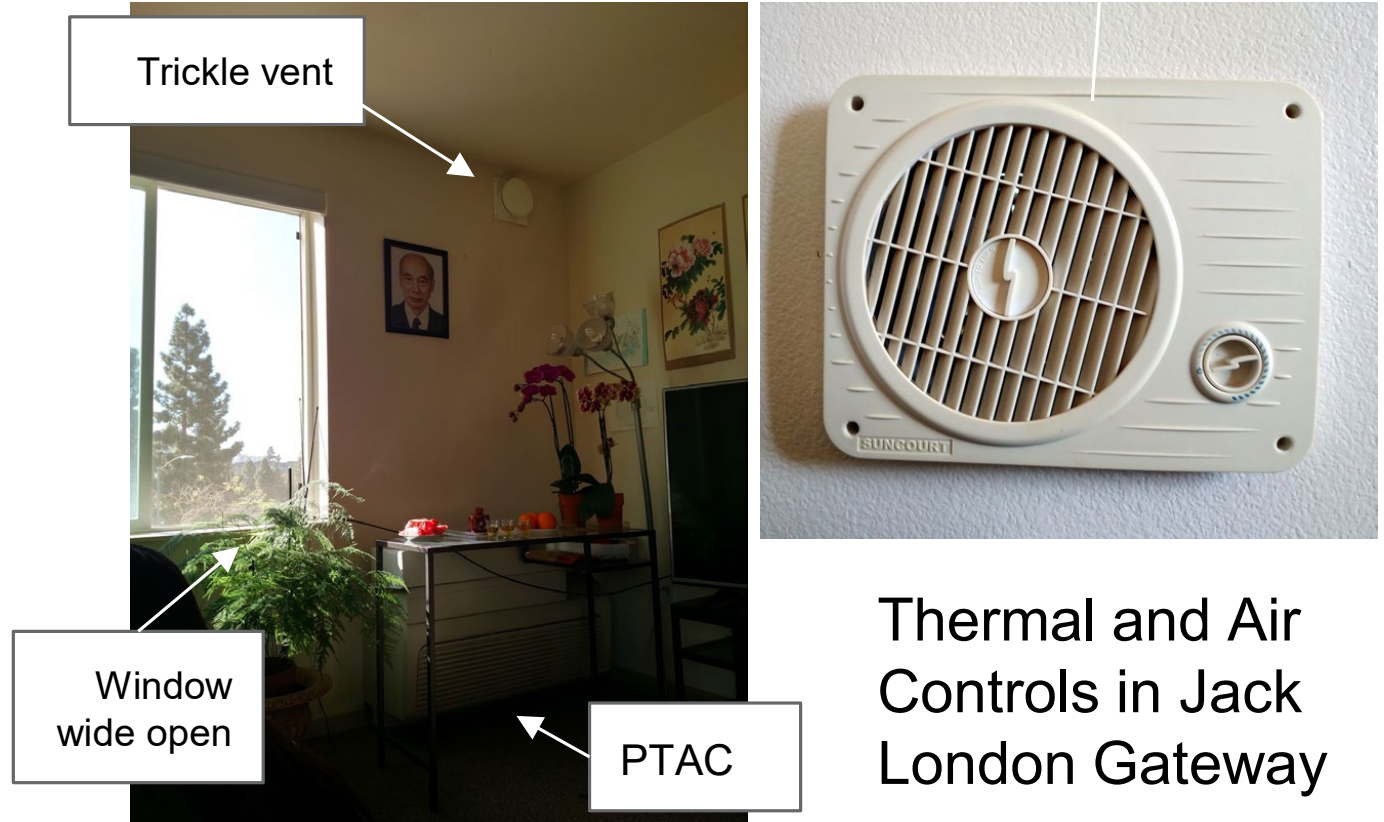
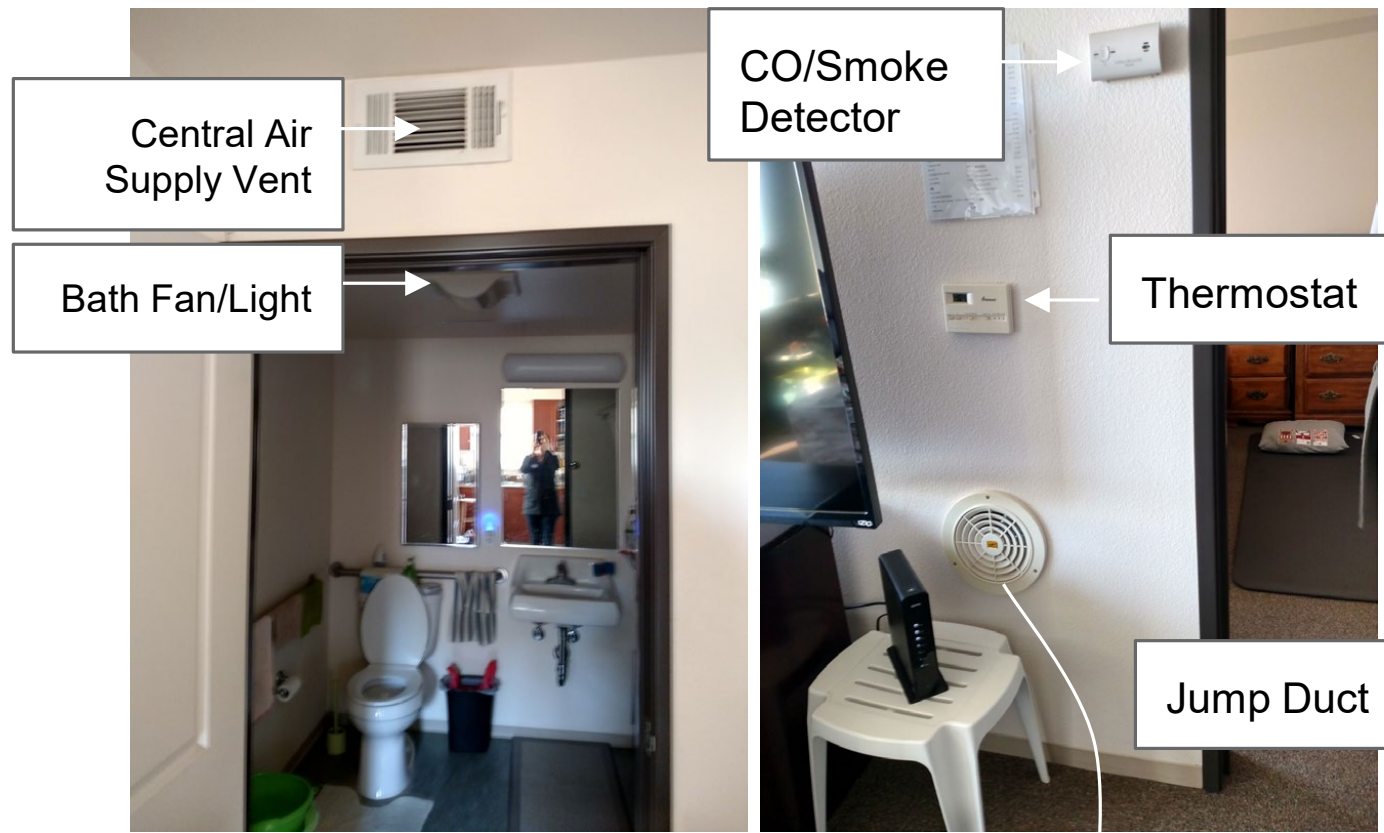
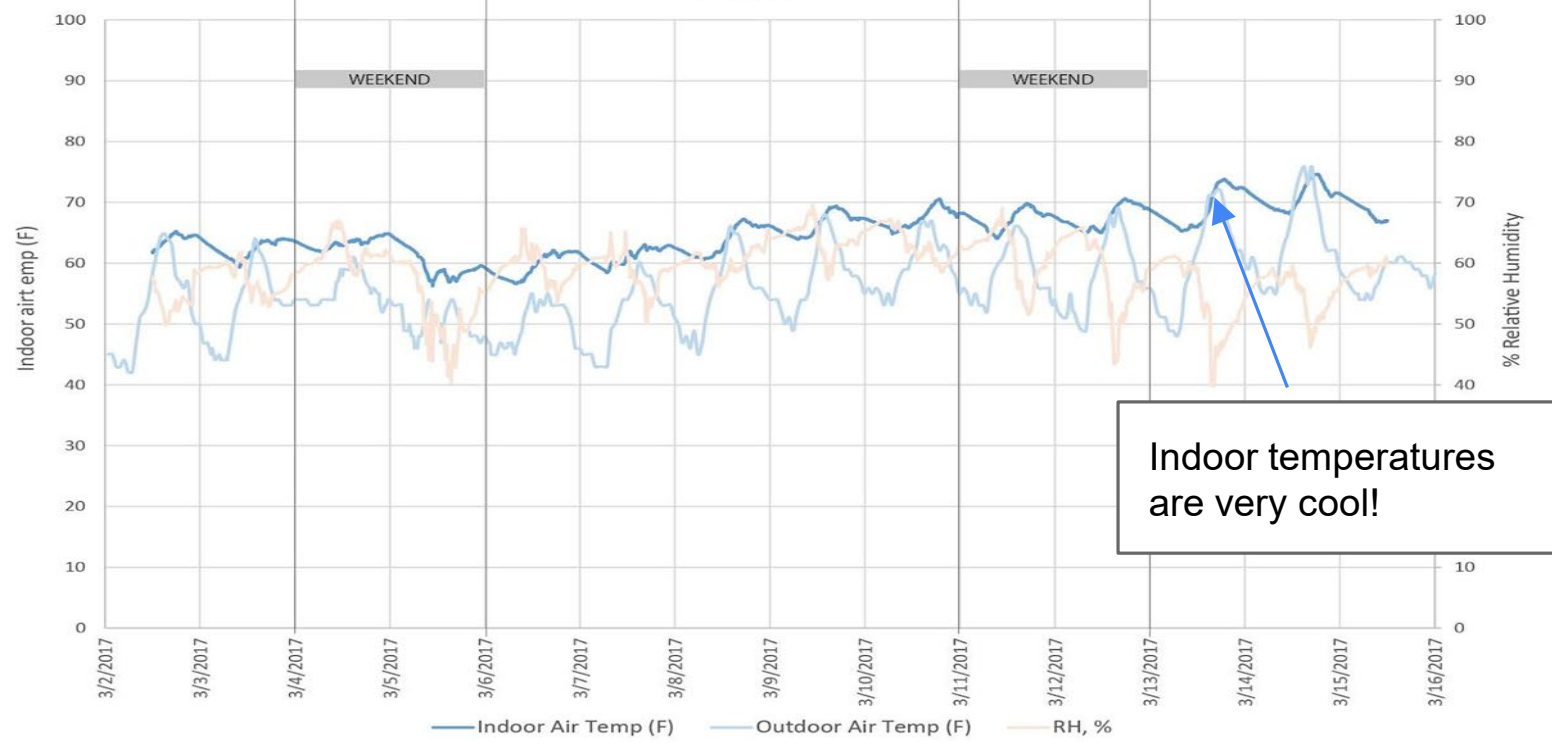
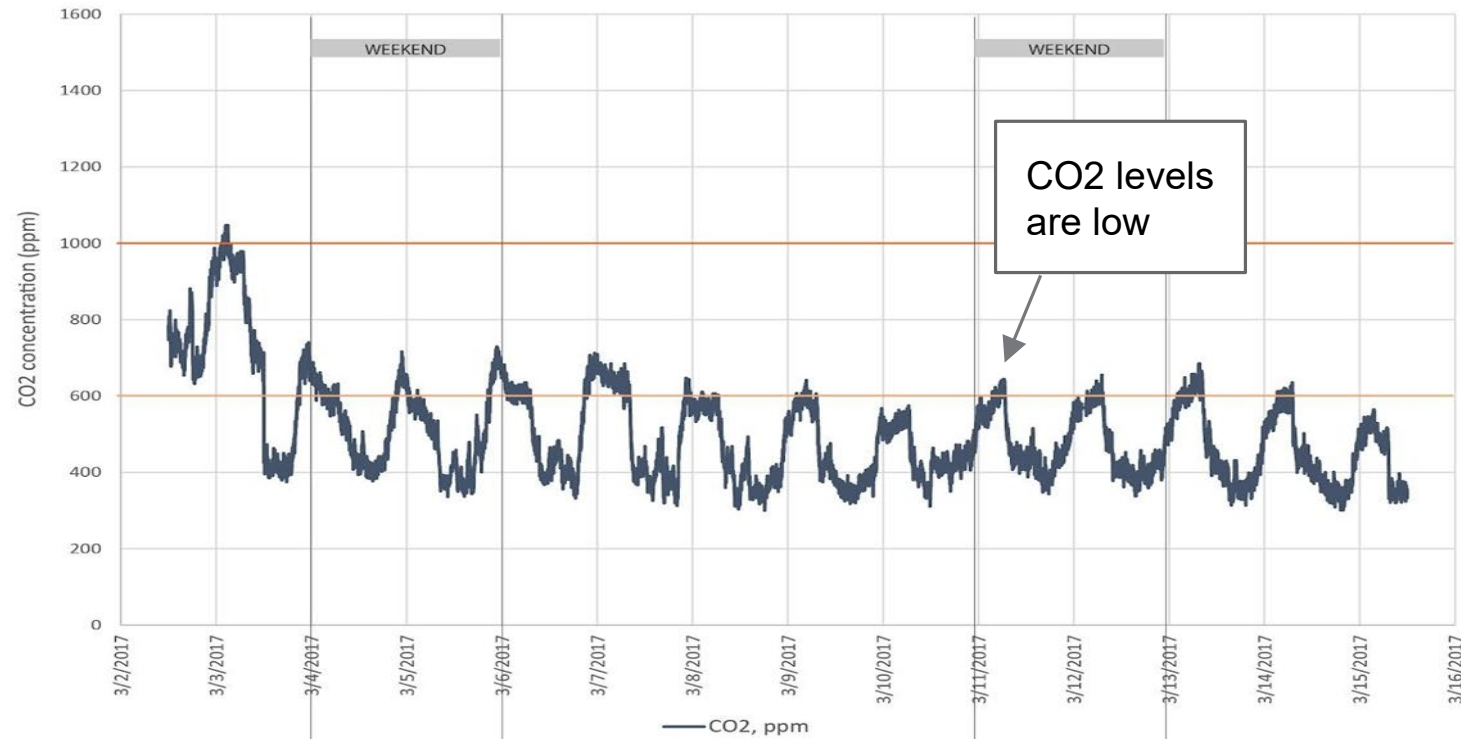


Note: very similar results from Lakeside Senior Housing, Oakland

Resident Interviews and data collection | Jack London Gateway, Oakland



CO2 and temperature data for two weeks in Unit 420

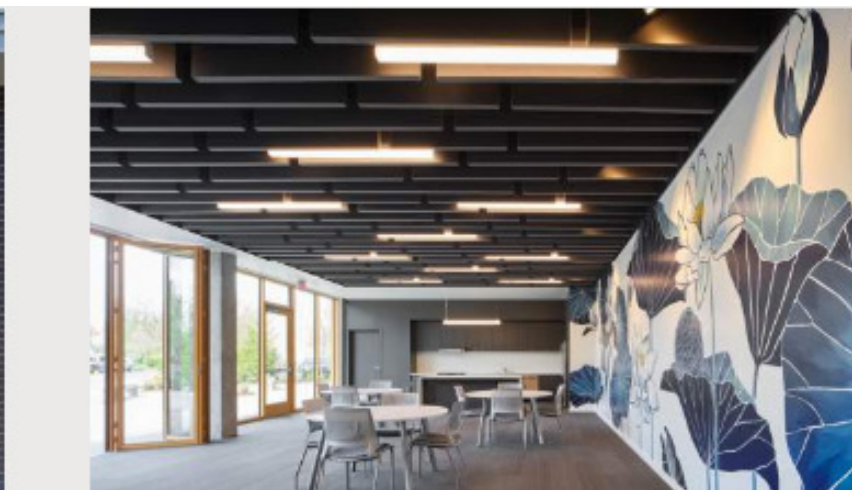
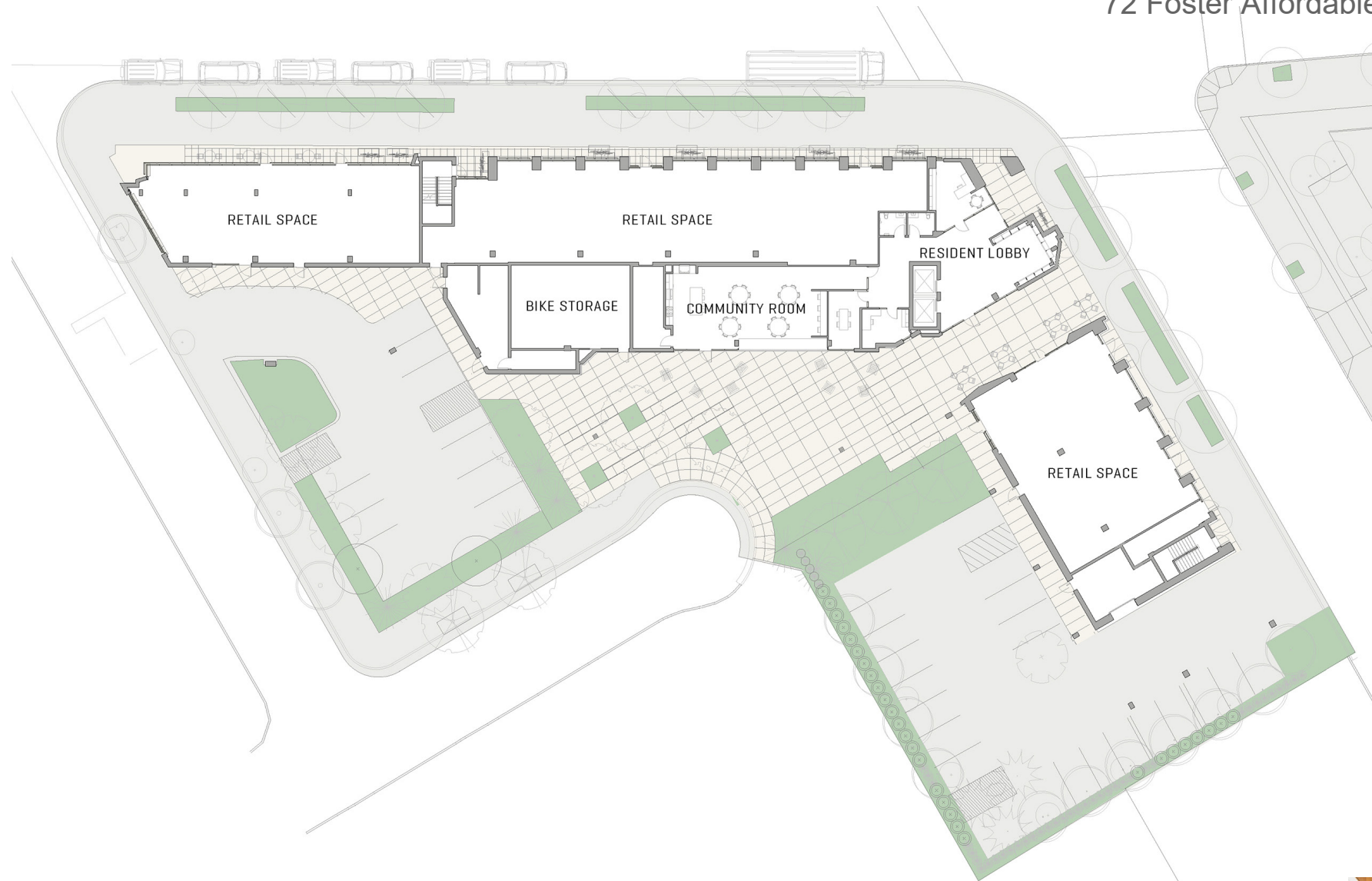


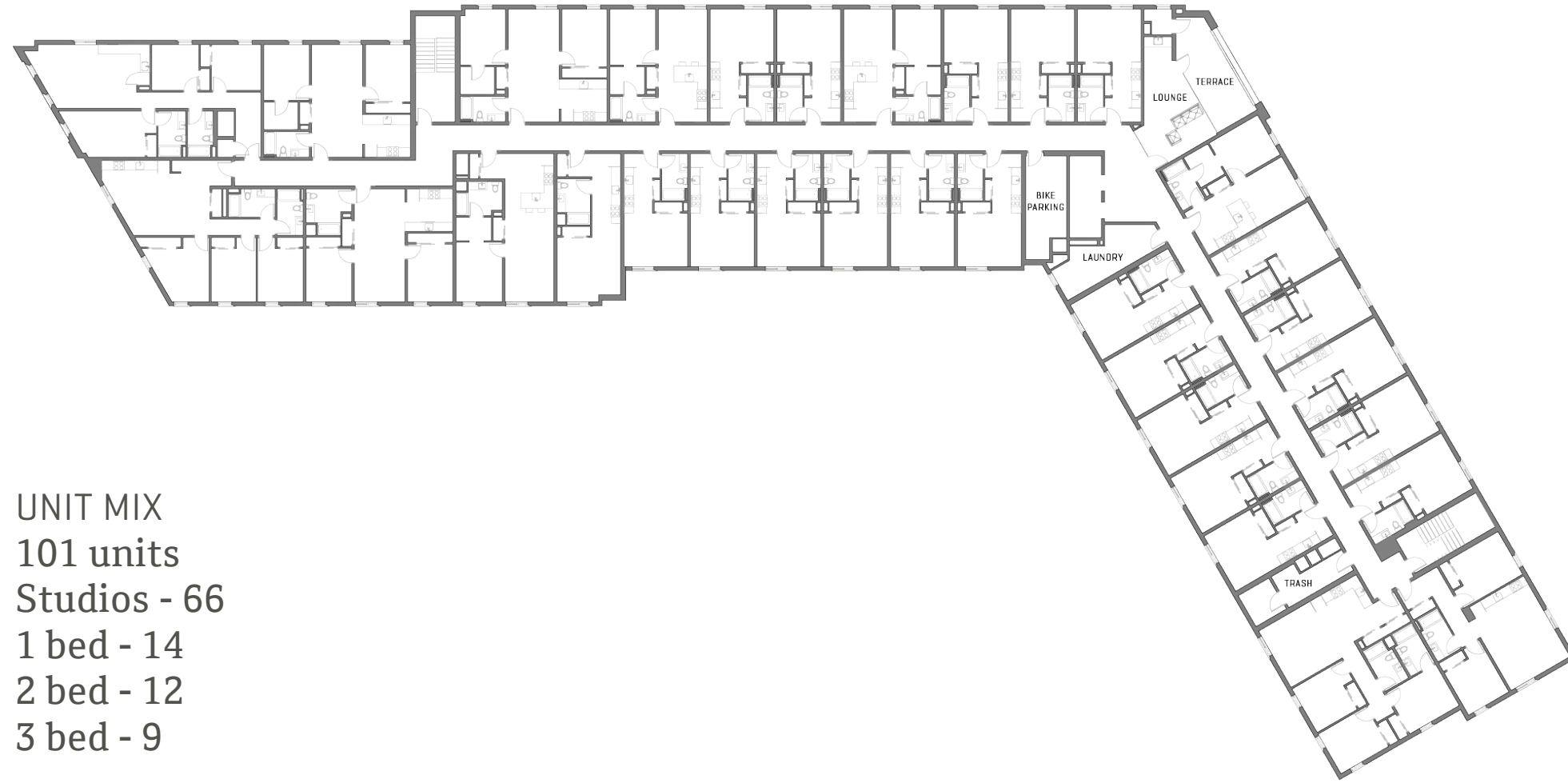
Thermal and Air Controls in Jack London Gateway

GROUND FLOOR

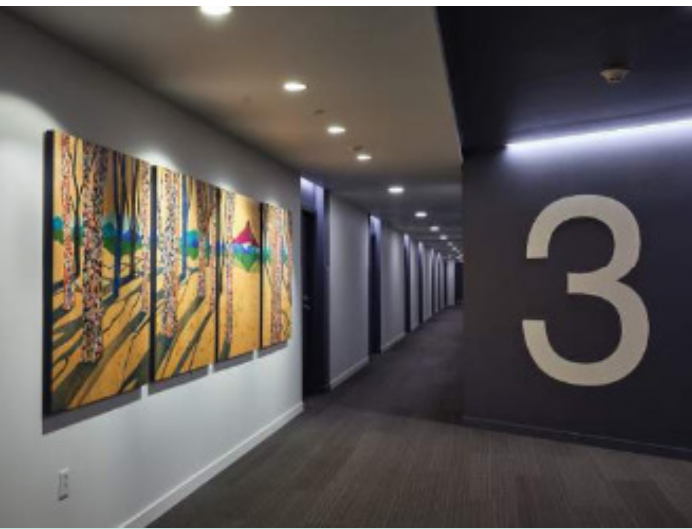
72 Foster Affordable Housing

H O L S T

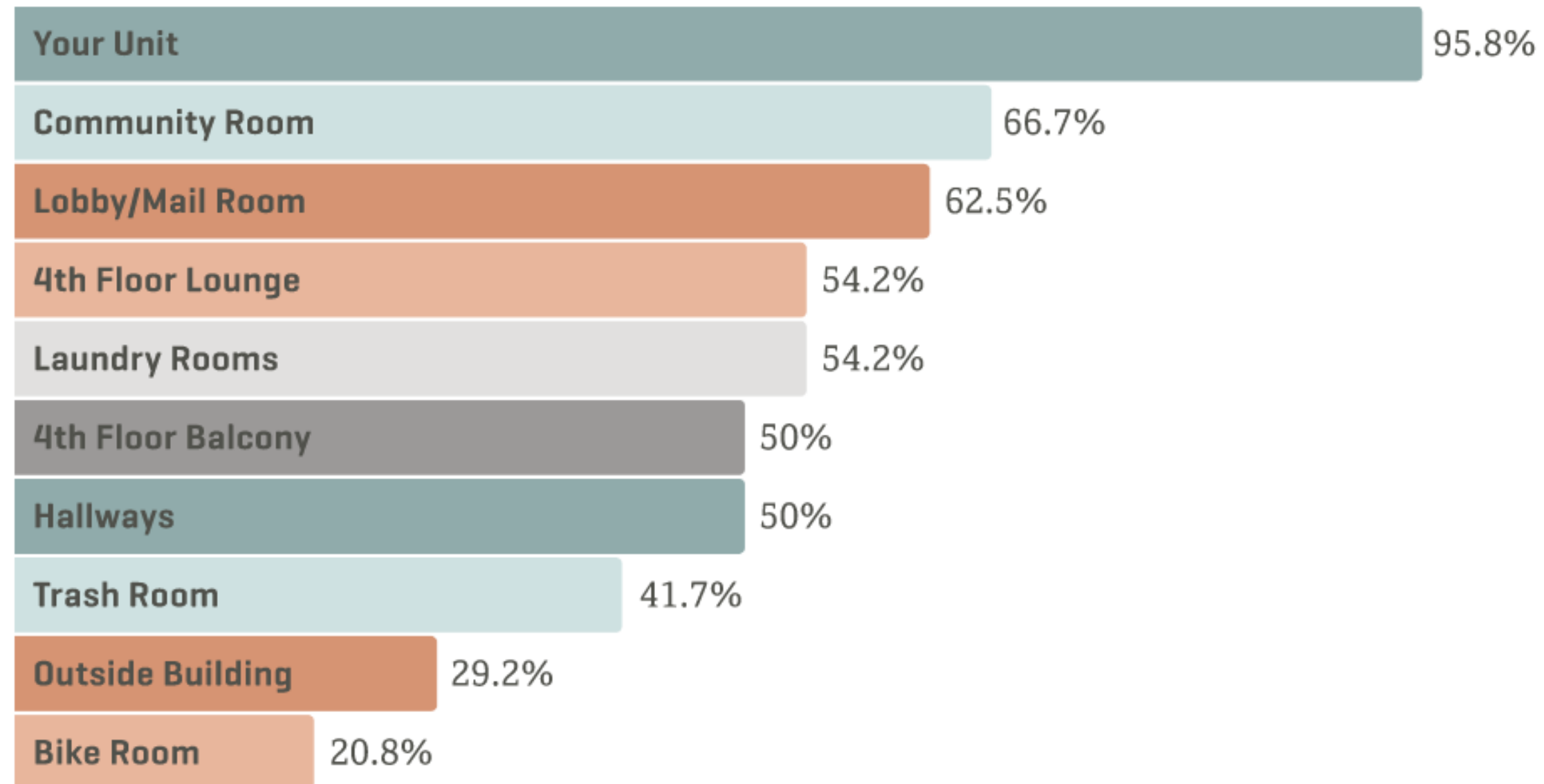




UNIT MIX
101 units
Studios - 66
1 bed - 14
2 bed - 12
3 bed - 9



WHICH AREAS OF THE BUILDING DO YOU FEEL SAFE IN?



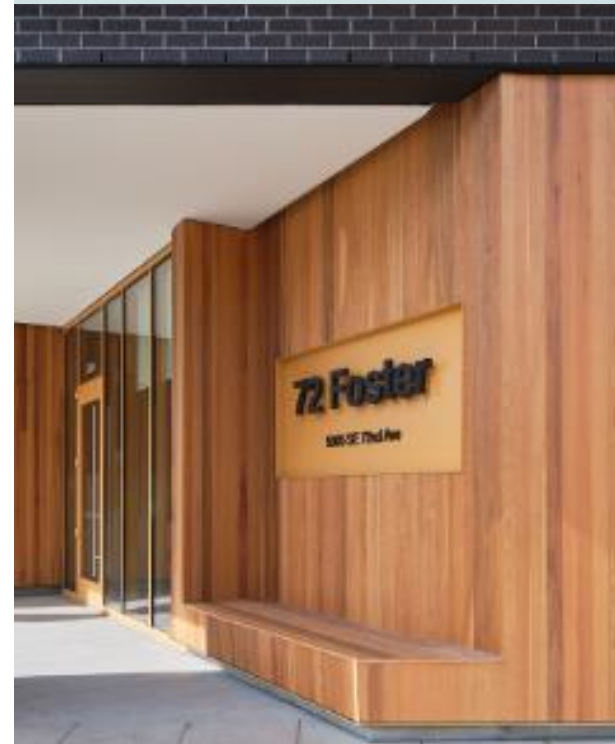
“The theft is really an unbelievable hurdle for us right now. Once someone gets their bike stolen that’s the end of biking”



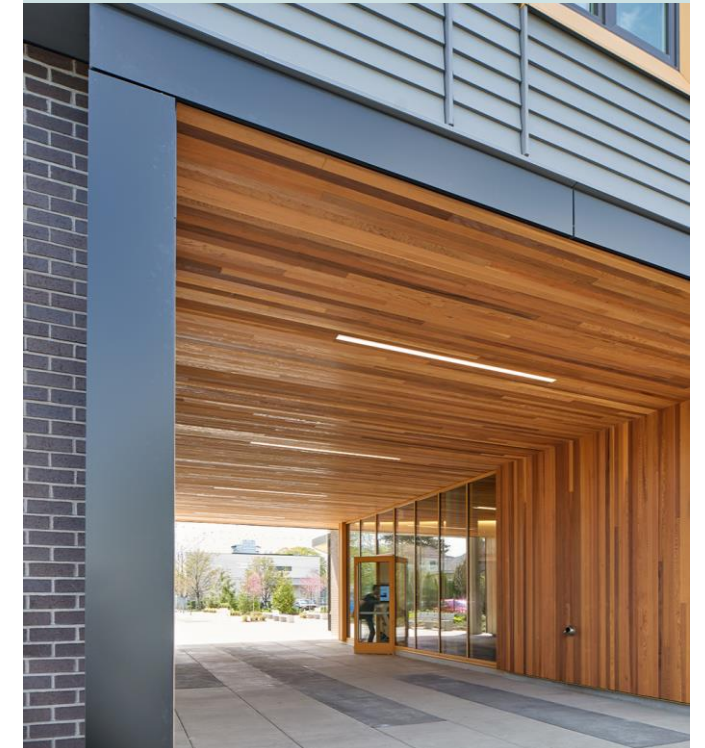
“There’s break-ins at the building from every entrance.”



“Front bench is hidden and is seldom used by residents actually waiting for a ride.”



“There has been several incidences where cars will come flying through here and I have been talking to the neighborhood association about some of those planters or something.”



“I love dead end corridor and sets apart family units, but residents brought up concerns. Understand chances of emergency happening is very slim; but also these people have experienced things that you wouldn't think.”



“There aren't stairs to use from level 01 to go up and down, so you have to use elevators, which have continual issues.”



“Request for trash cutes on both sides of the building. Residents have to drag their leaky trash across the building and gets on carpet and then they get in trouble.”



“The space is rarely used. We had outdoor seating up there but had to be taken away because people were misusing the space.”



Resources for Community Development

Non-profit affordable housing developer based in Berkeley, CA

65+ properties across the Bay Area

POE's inform our internal design standards & help real estate development project managers better advocate on behalf of residents



Ohlone Gardens

100% affordable housing in El Cerrito, CA

57 apartments, mostly families

Completed 2015

Very low resident turnover

High resident satisfaction rate per portfolio-wide pulse survey

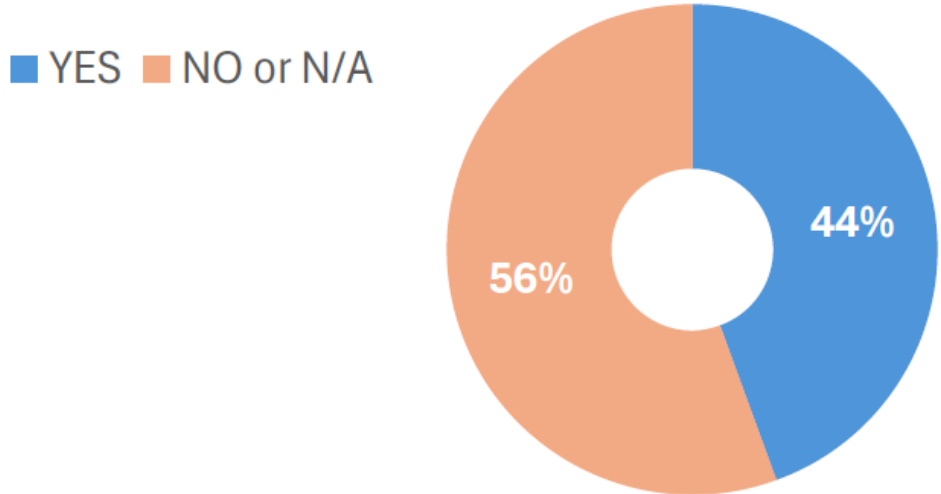
POE surveyed 30% of households



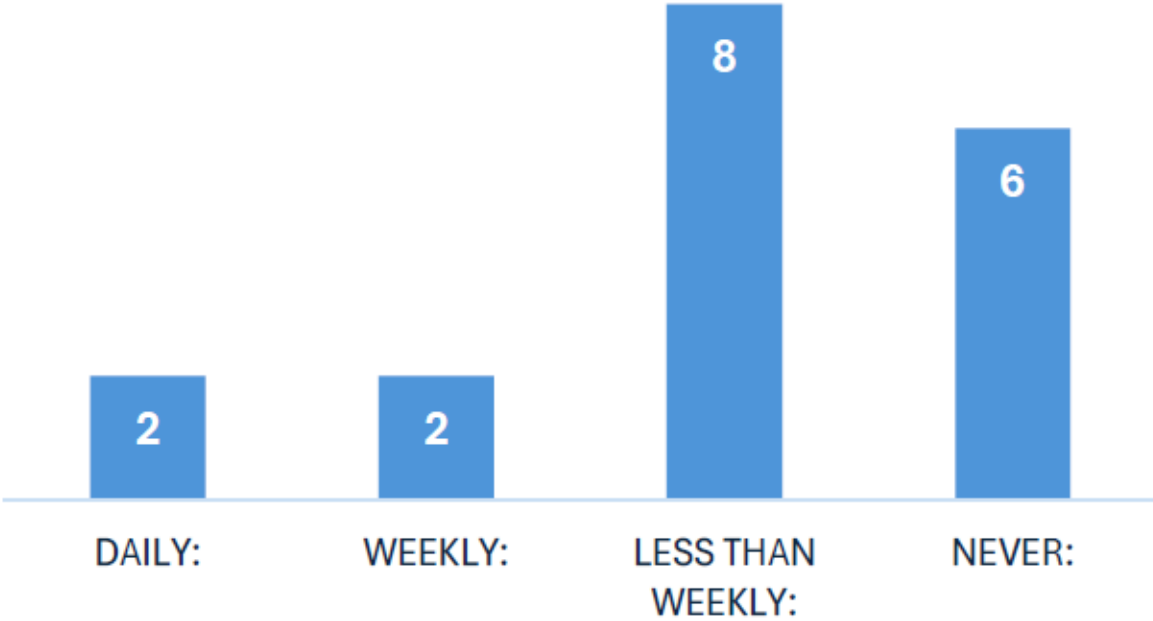
Ohlone Gardens - POE Finding

We need to figure out community amenity spaces.

Would you want fob access beyond the hours that the community room is currently open?



How often do you and your family use the courtyard?.



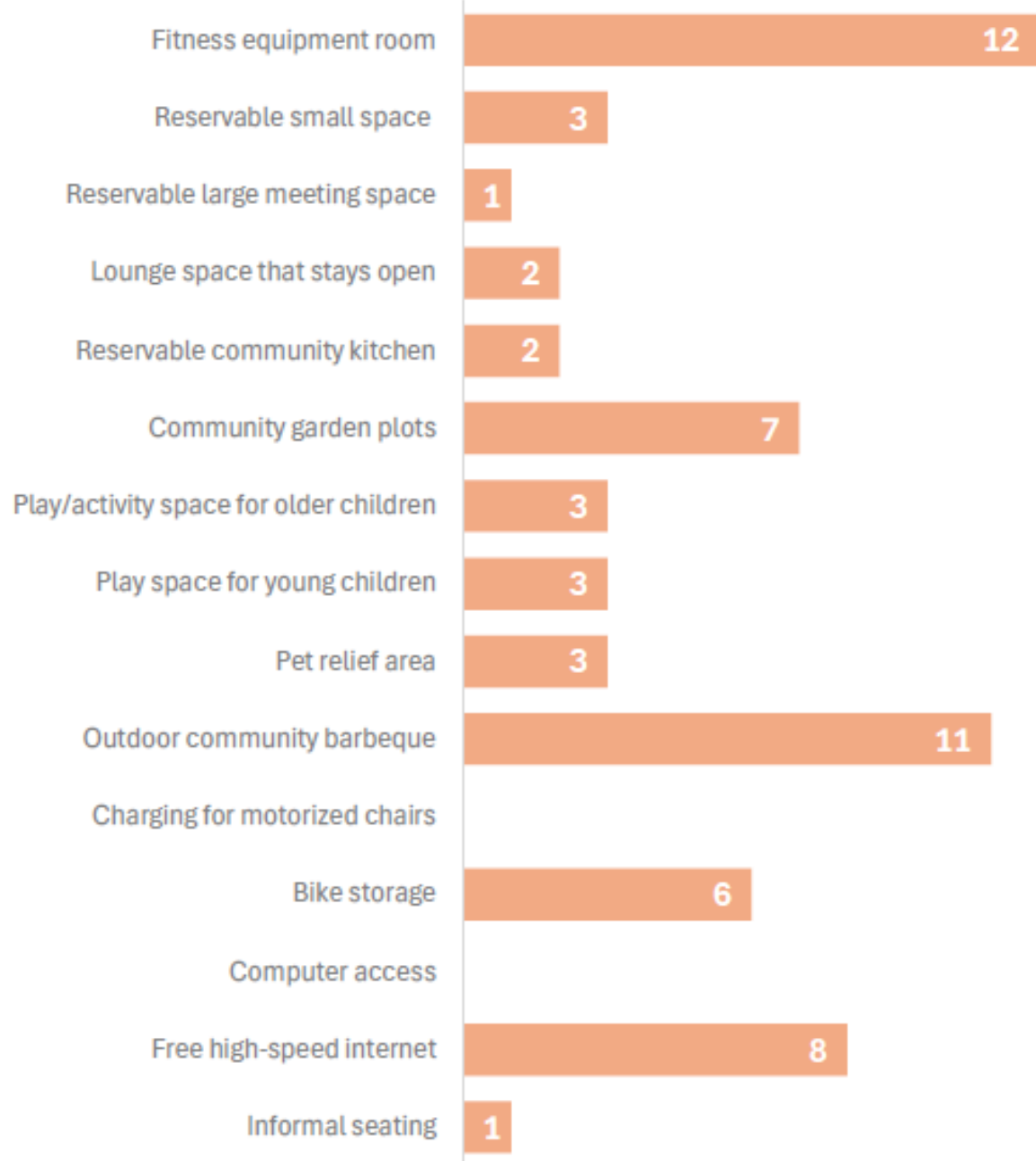
Ohlone Gardens - POE Impact

Limited area for community amenities might be better allocated to more, smaller, somewhat specialized spaces.

"Now that the kids have grown up, there could be a different space for older kids. Some kids like basketball and a hoop would be nice."



If this building were designed again, what on-site amenities would be most meaningful to you? (pick your top 5)



Engage FORA: Holistic, Continual, & Evolving



SOLAIRE APARTMENTS

/ 130 Units, 127 du/ac
/ Affordable + Permanent Supportive Housing
/ Completed 2024



How easy is it to navigate the building?

What are the challenges moving from space to space?

“Stairs are used a lot, especially by residents on second floor and dog owners”



“I would like if there was an elevator away from the lobby so I don't have to be on display and cross so many people”



“Windows make it lighter, safer, easier to see who is coming”



FORA

On future projects, we aim to:

Provide multiple options for moving throughout the building

Including **multiple stairways**, **elevators**, **entrances**, and **clear sightlines** into common rooms and around corners to enhance feelings of safety and comfort.



FORA

BRIGHTON, MASSACHUSETTS, USA
J.J. Carroll Redevelopment

MASS Project Team: Johanny Bonilla, Emma Colley, Francisco Colom Jover, Emily Ebersol, Jonathan Evans, Patricia Gruits, Ian Kenney, John Maher, Ashley Marsh, Ana Fernández Martínez, Sarah Payton, David Saladik, Chris Scovel, DaMario Walker-Brown, Annie Wang



Loneliness in Seniors

“43% of seniors in the US
experience loneliness.”

Perissinotto CM, Stijacic Cenzer I, Covinsky KE. Loneliness in Older Persons: A Predictor of Functional Decline and Death. Arch Intern Med. 2012;172(14):1078–1084. doi:10.1001/archinternmed.2012.199

“People who are socially disconnected are between **two and five times more likely to die from all causes**, compared with matched individuals who have close ties with family, friends, and community.”

Putnam, Robert D. Bowling Alone: The Collapse and Revival of American Community. New York: Simon & Schuster, 2000



Harvard study, almost 80 years old, has proved that embracing community helps us live longer, and be happier

Second in an occasional series on how Harvard researchers are tackling the problematic issues of aging.

When scientists began tracking the health of 268 Harvard sophomores in 1938 during the Great Depression, they hoped the longitudinal study would reveal clues to leading healthy and happy lives.



Community is an antidote to loneliness and isolation.

Social Ties Boost Survival by 50 Percent

A meta-study covering more than 300,000 participants across all ages reveals that adults get a 50 percent boost in longevity if they have a solid social network

By Katherine Harmon on July 28, 2010

A long lunch out with co-workers or a late-night conversation with a family member might seem like a distraction from other healthy habits, such as going to the gym or getting a good night's sleep. But more than 100 years worth of research shows that having a healthy social life is indeed a key to staying physically healthy. Overall, social support increases survival by some 50 percent, concluded the authors behind a new meta-analysis.

The New York Times

PERSONAL HEALTH

Social Interaction Is Critical for Mental and Physical Health



APRIL 19, 2018

Having friends increases your life expectancy

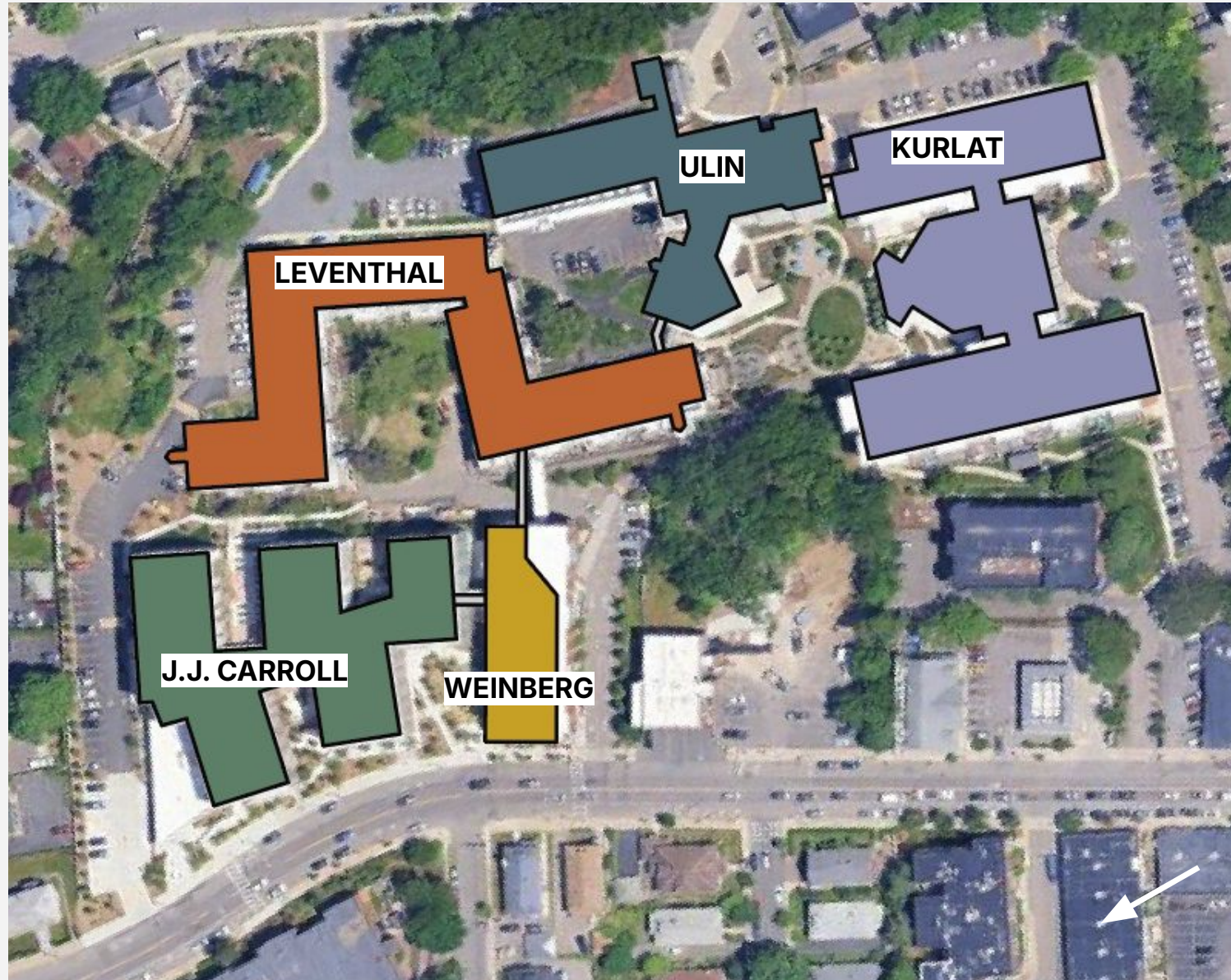
Surprising new research, covered in this week's New York Times, has found that the brain waves of close friends actually resemble each other. Researchers could predict whether two people were closely connected or not based on scans of their brains when reacting to video stimuli. Friends often enjoy similar jokes, hobbies or have other things in common; this research suggests they are also actually physically in sync with each other. Researchers do not yet know whether this bond forms as a result of the friendship, or existed before it began.

“Good relationships don’t just protect our bodies; they protect our brains,” said Waldinger in his TED talk. “And those good relationships, they don’t have to be smooth all the time. Some of our octogenarian couples could bicker with each other day in and day out, but as long as they felt that they could really count on the other when the going got tough, those arguments didn’t take a toll on their memories.”

METHOD

Create a model of **housing** that
empowers residents to live in **community**.

2Life Communities & the Brighton campus



2Life Communities is a nonprofit organization committed to ensuring that all seniors have the opportunity to thrive regardless of their income level or background.

Their Brighton Campus, situated in Boston's Brighton neighborhood, is their largest community, featuring 905 units across five interconnected buildings: Kurlat, Leventhal, Ulin, Weinberg, and J.J. Carroll.

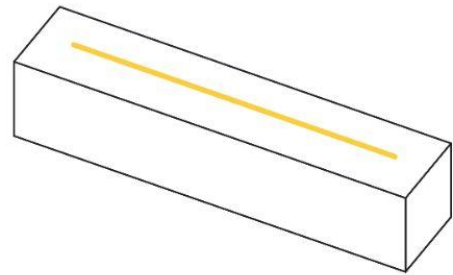
Engagement on the campus



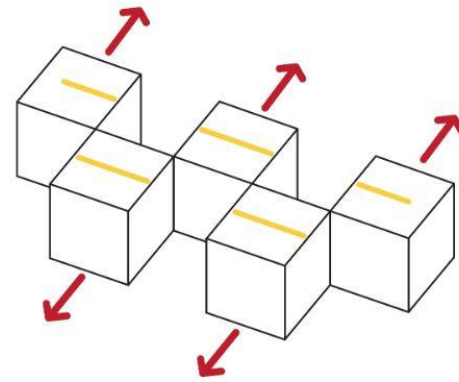


Residents described how much they appreciated the **small scale of the existing building** - how they shared a 'front door' with only 3 or 4 other residents and how they all knew their neighbors well



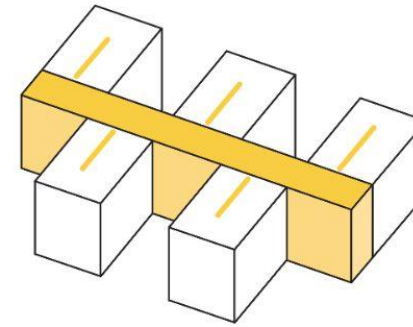


1
Start from the most efficient scheme

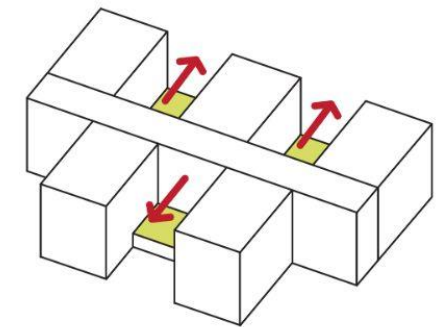


2
Break down into smaller 'neighborhoods'

Reduce length of corridors
Provide access to natural light
Provide views to outside
Reduce scale of the building



3
Connect 'neighborhoods' through a central shared space



4
Provide opportunities for outdoor living

J.J. Carroll House



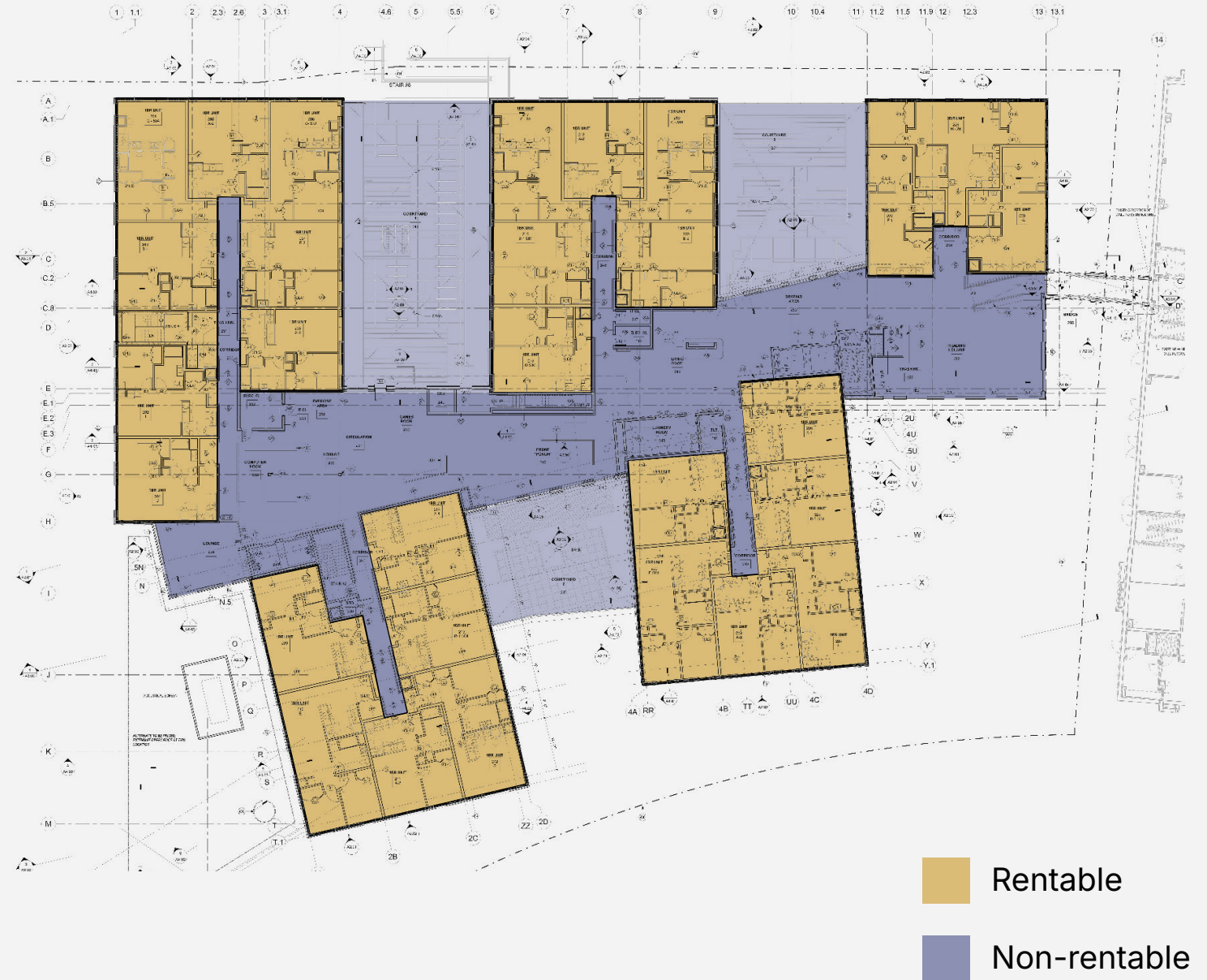
J.J. Carroll House is 2Life's latest addition to the Brighton Campus, developed in partnership with MASS Design Group in Boston, MA.

Opened in early 2024, the building has 142 units alongside a variety of common spaces designed to encourage frequent and meaningful social interactions among residents, staff, and neighbors.

The need

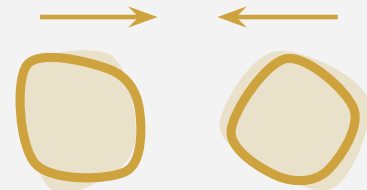
As senior housing evolves, designers and developers will need to balance profitability—often linked to unit count—with strategic investments in shared spaces that support residents' health and well-being.

Their key challenge is determining how to make design interventions that meaningfully improve residents' experiences and health outcomes while still maximizing rentable space.

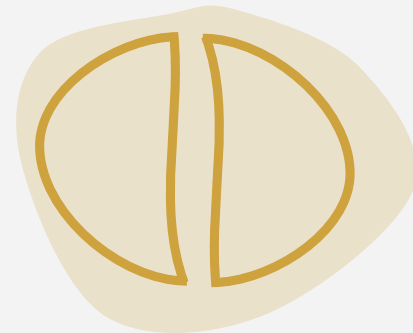


Design elements

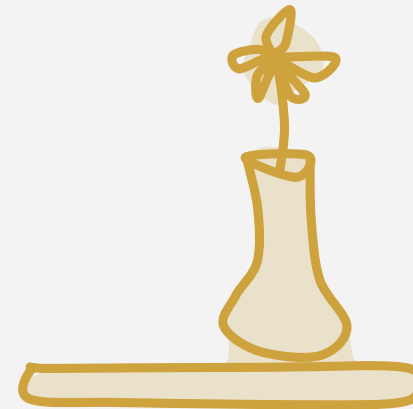
Based on existing literature, we developed a list of measurable design elements that are present at J.J. Carroll and can encourage social interaction.



**PROXIMITY &
ACCESSIBILITY**



**SPATIAL
ORGANIZATION &
PROGRAMMING**



**OWNERSHIP &
BELONGING**



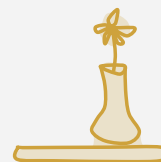
**COMFORT &
EXPERIENCE**



PROXIMITY & ACCESSIBILITY



SPATIAL ORGANIZATION & PROGRAMMING



OWNERSHIP & BELONGING



COMFORT & EXPERIENCE

Average **distance from apartments** to common space

Average **distance from elevators** to common space

Average **number of turns** required to reach common space

Average **number of doors** required to open

Visibility into common space

Average availability of **railings** on path to common space

Availability of **wayfinding** directing to common space

Co-location with **amenity**

Co-location with **circulation**

Area of common space per resident

Net to gross ratio

Availability of **privacy** in common area

Resident art on display

Opportunities for **personalization**

Focal points as conversation starters

Views of nature

Size and number of windows

Comfortable furnishings

Movable furniture

Variety of seating options

Ability to open windows

Ability to control light

Purpose of the study

This Post-Occupancy Evaluation will address two major needs:

- Identify **actionable design strategies** to foster community and belonging in multifamily housing
- Provide guidance to **balance profitability with strategic investments** in health and wellbeing



BRIGHTON, MASSACHUSETTS, USA

J.J. Carroll Redevelopment

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