

HOUSING CALIFORNIA EDUCATORS: DESIGN STRATEGIES AND GUIDANCE

cityLAB ^{UCLA}



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CITIES+SCHOOLS
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School Boards
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cityLAB, founded in 2006 and housed in UCLA’s Architecture and Urban Design Department, is the university’s interdisciplinary hub for design-driven urban research. The lab leverages design, research, policy, and education to create more just urban futures with real impacts for communities in Los Angeles and beyond. Specifically, cityLAB explores the challenges facing the 21st century metropolis, expanding the possibilities for our cities to grow more equitably, livably, sustainably, and beautifully, with affordable housing at the center of its efforts.

ABOUT THIS PROJECT

Since 2020, cityLAB at UCLA and the Center for Cities + Schools at UC Berkeley have worked in partnership with the California School Boards Association (CSBA) to educate, train, and advise local educational agencies (LEAs) on the workforce housing development process. In 2022 our team released the landmark report [*Education Workforce Housing in California: Developing the 21st Century Campus*](#), the how-to handbook [*Education Workforce Housing: The Handbook*](#), and began a series of 101 training cohorts (“101 Workshop Series”) to help LEAs interested in building education workforce housing (EWH) achieve their development goals. In April 2025, we released [*Housing California Educators: Insights from Nine Education Workforce Housing Developments*](#).

This report, *Housing California Educators: Design Strategies and Guidance* outlines architecture and design considerations related to education workforce housing in further detail. It is presented alongside *Housing California Educators: Development Strategies and Guidance*, a report on the development process.

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EXECUTIVE SUMMARY

In response to cost of living challenges that have made it increasingly difficult for teachers and staff to live near their places of work, local educational agencies (LEAs) across California have begun developing Education Workforce Housing (EWH) projects to provide quality affordable living options for their employees. In this report, we extract best practice architectural strategies from nine EWH projects (seven built and two under construction at the time of this study) and the preliminary feasibility work prepared by award-winning local architects for 12 LEAs through the cityLAB-UCLA, Center for Cities + Schools, and CSBA EWH 101 Workshop Series.

Together, the 20 design recommendations outlined in this report represent a comprehensive, clear, and concise set of guidelines to ensure that the next generation of EWH projects in California are excellent developments that meet the goals of their LEAs, address staff needs, strengthen their communities, and remain valuable real estate assets for decades.

Best practices from the nine case study projects are:

CATEGORY 1. SITE DESIGN

- Use Building Arrangements that Maximize Light and Air
- Prioritize Contextual Approaches to Building Scale
- Activate the Street
- Organize the Project Around Exterior Shared Space
- Prioritize Walkability and Green Space
- Design At-Grade Parking for Minimal Disturbance

CATEGORY 2. BUILDING DESIGN

- Provide Generously-Sized Units and Maximize the Number of Two Bedrooms
- Design Efficient Unit Plans
- Maximize Window Area and Access to the Outdoors
- Utilize Single-Loaded Corridors Where Possible
- Provide Multiple Interior Tenant Amenities
- Align Building Mass with Neighborhood Scale
- Design Facade with Neighborhood Character in Mind

CATEGORY 3: CONSTRUCTION

- Use Construction Techniques That Keep Costs Down
- Invest in Sustainability and Construction Quality

Best practices derived from the Education Workforce Housing 101 Workshop Series are:

CATEGORY 4: LOOKING AHEAD

- Vary Housing Typologies
- Create a Walkable Community with Mini-Neighborhoods
- Utilize Passive Energy Strategies
- Co-Locate Community or District Benefits
- Prepare for Phasing

TABLE OF CONTENTS

RESEARCH TEAM	I
About the Authors	
About this Project	
ACKNOWLEDGEMENTS	II
Community Partner	
Funding Support	
Additional Research Support	
EXECUTIVE SUMMARY	III
TABLE OF CONTENTS	IV
LIST OF FIGURES	V
INTRODUCTION	I
A. OVERVIEW AND DESCRIPTIONS	3
1. SITE DESIGN	
A) Building Arrangement	
B) Exterior Shared Space and Community	
C) Landscaping and Circulation	
D) Parking	
2. BUILDING DESIGN	4
A) Housing Units	
B) Circulation	
C) Interior Shared Space and Community	
D) Massing and Facade	
3. CONSTRUCTION	5
A) Construction Type	
B) Construction Quality	
B. BEST PRACTICES	7
1. SITE DESIGN	
Use Building Arrangements that Maximize Light and Air	
Prioritize Contextual Approaches to Building Scale	
Activate the Street	
Organize the Project Around Exterior Shared Space	
Prioritize Walkability and Green Space	
Design At-Grade Parking for Minimal Disturbance	
2. BUILDING ORGANIZATION	12
Provide Generously-Sized Units and Maximize the Number of Two-Bedroom Units	
Design Efficient Unit Plans	
Maximize Window Area and Access to the Outdoors	
Utilize Single-Loaded Corridors Where Possible	
Provide Multiple Interior Tenant Amenities	
Align Building Mass with Neighborhood Scale	
Design Facade with Neighborhood Character in Mind	
3. CONSTRUCTION	19
Use Construction Techniques That Keep Costs Down	
Invest in Sustainability and Construction Quality	
4. LOOKING AHEAD	21
Vary Housing Typologies	
Create a Walkable Community with Mini-Neighborhoods	
Utilize Passive Energy Strategies	
Co-Locate Community or District Benefits	
Prepare for Phasing	
C. CONCLUSION	26

LIST OF FIGURES

FIGURE 1: THE NINE CASE STUDY PROJECTS	2
FIGURE 2: PROJECT SIZE RANGES	3
FIGURE 3: THE NINE CASE STUDY PROJECT SITE PLAN DIAGRAMS	6
FIGURE 4: SAGE PARK “CRACKED O” SITE PLAN	6
FIGURE 5: SHIRLEY CHISHOLM VILLAGE’S CONTEXTUAL APPROACHES TO BUILDING SCALE	7
FIGURE 6: THE MAIN STREET-FACING FACADES OF 705 SERRAMONTE AND 1701 SAN PABLO	8
FIGURE 7: SHARE OF SITE AREA DEDICATED TO SHARED OUTDOOR SPACE	9
FIGURE 8: EXAMPLES OF EXTERIOR SHARED SPACE	9
FIGURE 9: SHIRLEY CHISHOLM VILLAGE SITE PLAN RENDERING	9
FIGURE 10: THE ACACIA COURTYARD	10
FIGURE 11: EXAMPLES OF LANDSCAPING AND CIRCULATION	10
FIGURE 12: THE ACACIA LANDSCAPING APPROACH	10
FIGURE 13: SURFACE PARKING APPROACHES IN CASA DEL MAESTRO AND SAGE PARK	11
FIGURE 14: UNIT MIX	12
FIGURE 15: STRONG UNIT PLANS	12
FIGURE 16: SAGE PARK UNIT PLANS	13
FIGURE 17: COMPARISON OF CIRCULATION	14
FIGURE 18: SAGE PARK’S CIRCULATION STRATEGIES	14
FIGURE 19: INTERIOR SOCIAL SPACE	15
FIGURE 20: MASSING DIAGRAMS	16
FIGURE 21: CASA DEL MAESTRO CONTEXT MATCHING	17
FIGURE 22: ROOF PITCH AND ORIENTATION VARIETY	17
FIGURE 23: EWH BUILDING FACADES	18
FIGURE 24: TYPE V CONSTRUCTION AT THE SEVENS IN MOUNTAIN VIEW	18
FIGURE 25: TYPE 5-OVER-1 IN THE ACACIA; MODULAR CONSTRUCTION IN EASTMOOR	19
FIGURE 26: SAGE PARK SOLAR SHADING	20
FIGURE 27: MIXED HOUSING TYPOLOGIES	21
FIGURE 28: EXAMPLES OF PROPOSED WALKABLE COMMUNITIES	22
FIGURE 29: EXAMPLES OF PASSIVE ENERGY STRATEGIES	23
FIGURE 30: EXAMPLES OF CO-LOCATING COMMUNITY BENEFITS	24
FIGURE 31: EXAMPLES OF PHASING	25
FIGURE 32: SAGE PARK SHARED OUTDOOR SPACE	26

INTRODUCTION

Education Workforce Housing (EWH) can be a powerful tool to help improve student educational outcomes, enhance Local Educational Agency (LEA) staff quality, and contribute to neighborhood and staff stability. To effectively achieve these goals, EWH projects need to be well designed and tailored towards LEA employees to ensure the state’s educators want to live in them. Furthermore, since LEAs are community-facing public entities, EWH projects need to present a positive face to their surrounding communities, benefit their neighborhoods, and bolster each LEA’s relationships with its constituents. Lastly, owing to the labor and monetary investment required to make EWH projects happen, the buildings need to be high-quality, long-term assets that continue to pay dividends to their LEAs for decades to come. This report outlines a suite of architectural considerations for creating EWH developments that meet these goals and inform the next generation of educator housing projects in California.

Many of the LEAs we’ve worked with over the years have expressed fears that “affordable” housing is inherently unappealing and might be construed as demeaning to their employees. This is a common misconception about affordable housing, perhaps based on subsidized housing developments built many decades ago. More recent affordable housing is rarely recognizable as such and defies outdated stereotypes.

As we show in the coming pages, California’s completed educator housing developments prove these fears are unfounded. The existing projects are appealing both visually and in terms of the quality of life that they offer—substantial waiting lists are typical—and some demonstrate particularly compelling architectural strategies that we highlight and suggest as models for future projects. As more LEAs look to build EWH projects, there is significant potential to improve on current best practices to create even better buildings.

High-quality design, efficient and thoughtful building organization, long-lasting construction methods, provision of ample social space, careful

project siting, and intentional alignment of the building with the needs of its residents will be paramount as the EWH movement continues to gather momentum. These strategies can all be employed in cost effective and efficient ways to ensure that LEA goals of affordability, timeliness, and quality are all effectively met. Multiple districts now see quality EWH as a competitive advantage for attracting the best educators for their students.

Another misconception about EWH is that “good design” is a luxury that primarily concerns visual appeal. Good design means that the project meets the goals of the LEA: it suits its workforce’s needs; it contributes to its neighborhood; it meets sustainability targets; its residents are proud of their home; it meets financial expectations; it builds community among tenants. LEAs should demand good design from talented, experienced teams of architects and developers.

The following pages highlight the 20 most salient takeaways from our multifaceted study, which draws from interviews with architects, developers, and school board members; survey data gathered from current residents in three select projects; architectural analyses conducted by the cityLAB-UCLA team; and preliminary feasibility studies completed in the EWH 101 Workshop Series by a cadre of strong local architects.

This report is organized by three sequential and overarching categories of architectural decisionmaking: 1) Site Design, 2) Building Design, and 3) Construction, each of which contain a number of subcategories (numbered 1A, 1B etc.) of specific components of EWH housing design. These are defined and summarized in Section A. In Section B, we first discuss each of the aforementioned design decisions in detail and lay out a number of best practices supported by relevant project examples. Next, we highlight lessons learned from the design research prepared for 12 LEAs during recent cohorts of the EWH Workshop Series. In Section C, we conclude the report with an eye towards the next generation of Education Workforce Housing.



Figure 1: The Nine Case Study Projects

We hope that LEA administrators use this report to become better informed clients who guide their design teams towards high-quality building outcomes. We hope staff and community use this report to create strong expectations for housing that matches their interests. And we hope that architects and developers take the projects in this report as the foundation for an even stronger next generation of EWH.

The report builds on our recent publication co-written with the Center for Cities + Schools, "[Housing California Educators: Insights from Nine Education Workforce Housing Developments](#)" and is focused on the same set of nine case study projects.

EWH CASE STUDY PROJECTS:

- **Casa del Maestro** (Santa Clara Unified School District)
- **Sage Park** (Los Angeles Unified School District)
- **705 Serramonte** (Jefferson Union High School District)
- **The Alameda** (Salinas High School District)
- **Eastmoor Heights** (Jefferson Elementary School District)
- **Shirley Chisholm Village** (San Francisco Unified School District)
- **The Sevens** (Mountain View Whisman's portion)
- **The Acacia** (Palo Alto Unified School District & Others)
- **1701 San Pablo** (Berkeley Unified School District)

A

OVERVIEW AND DESCRIPTIONS

The nine case study projects represent a variety of approaches to housing (Figure 2). The sites on which they sit range from .78 acres to 4.95 acres (median of 1.80). They are built at residential densities between 18.2 and 147 dwelling units per acre (median of 30.2). They hold between 50 and 135 units (median of 110). They are between two and six stories tall (median of 4 stories). Their bedroom types and unit sizes vary. And their site plan organizations span from tightly packed bar-shaped buildings to loosely distributed building clusters.

Rather than a silver bullet solution or an idealized standard project, these projects demonstrate the breadth of EWH housing models built to date. However, in the design and development process, each team made decisions about a similar set of factors to move from early design sketches to completed buildings. These decisions are outlined and discussed below.

	Minimum	Maximum	Median
Site Area (acres)	0.78	4.95	1.80
Density (dwelling units per acre)	18.2	147	30.2
Number of Units	50	135	110
Number of Stories	2	6	4

Figure 2: Project Size Ranges

1. SITE DESIGN

Description: Designing the site plan is one of the most important aspects of housing development. How building footprints are organized on a site, and how exterior shared space, landscaping, circulation, and parking are balanced in the remaining unbuilt area, sets the organizing principles of any residential project.

1A) BUILDING ARRANGEMENT

Description: A site plan demonstrates how one or multiple buildings are arranged on a given site. To maximize the amount of light and air that enters the continent units, many housing projects are arranged in such a way that they resemble alphabetic letters when seen from above. The configuration of buildings as letters organizes circulation like hallways, and gives apartments access to light, air, outdoor areas, and streetscapes.

Data: Five of the nine case study projects have courtyard-centric footprints shaped like O's, C's, or U's but broken up into multiple smaller structures (Casa del Maestro, Sage Park, Eastmoor, The Sevens, and 705 Serramonte). The remaining 4 projects are singular bar buildings organized as either I, U, H, E, or J shapes.

1B) EXTERIOR SHARED SPACE AND COMMUNITY

Description: Provision of exterior shared space, whether a courtyard or playground or garden, is an important component of a high-quality housing project that helps foster community. This is especially true in California's temperate climate.

Data: Eight of the nine EWH projects are organized around significant exterior shared spaces. Playgrounds and courtyards are the most common exterior amenities for building

residents. Two of the nine projects also include exterior amenities accessible to the general public: a park (Shirley Chisholm Village) and a vegetable garden (Sage Park). The nine projects range from designating 0% (Alameda) of their site for exterior shared uses to a maximum of 53% in the welcoming site plan of Shirley Chisholm Village. The median value is 40%.

1C) LANDSCAPING AND CIRCULATION

Description: Well landscaped sites provide usable green space for residents, create shade for outdoor activity, improve the reception of a project from the street, and can help make a project more sustainable. Similarly, sites with defined circulatory paths that organize how people move through the project improve tenant experience and can create welcoming, well-defined, and accessible exterior areas. Landscape and circulation occur within a project's designated exterior spaces, but frequently extend beyond them. For example, some projects include a set of trees around the perimeter of their site or paved pathways and planter beds among the parking spots.

Data: Eight of the nine projects use landscaping and defined circulatory paths to invite residents to enjoy the outdoor areas.

1D) PARKING

Description: Parking is an important and costly consideration in housing development. The number of spots provided in a project is contingent on its parking ratio, i.e., how many parking spots are provided per unit. While some urban projects served by public transit are not required to provide parking, projects in more suburban or rural areas generally provide spots for residents. Most multi-family housing developments also include several visitor parking spots.

Data: Across the nine projects, parking ratios range from .31 (Shirley Chisholm Village) to 2.00 (The Alameda) with a median of 1.52. At-grade parking spots cost significantly less than spots in structured parking, but they take up valuable space on site. Three of the nine projects include a structured parking garage below the residential units (Shirley Chisholm Village, The Acacia, 1701 San Pablo).

2. BUILDING DESIGN

Description: With the organization of the buildings on site determined via the site plan, attention will turn to designing the physical structures themselves. Decisions about unit types and layouts, circulation strategies, unit identities and entries, interior shared spaces, building size and shape, and facade design all represent important components of the EWH design process.

2A) HOUSING UNITS

Description: Desired unit mix and unit layouts will depend upon results from an LEA's staff survey and early site-yield studies. The nine case study projects suggest that one- or two-bedroom units are more applicable for projects aimed at staff recruitment, while two- or three-bedroom units are more applicable for those aimed at staff retention (the latter employees are more likely to have larger households).

Data: Across the nine projects, one-bedroom units (49%) and two-bedroom units (35%) account for the majority of apartments on offer. Studios account for 7% of units and three-bedroom units account for 9%.

2B) CIRCULATION

Description: There are two primary approaches to organizing building circulation: single-loaded and double-loaded corridors. Single-loaded corridors maximize light, air, and visual connections which help build community, but double-loaded corridors with units on both sides are more spatially efficient and can produce more dense buildings.

Data: Three of the nine projects use a version of single-loaded corridors (Casa del Maestro, Sage Park, Eastmoor) while the others use double-loaded corridors.

2C) INTERIOR SHARED SPACE AND COMMUNITY

Description: Successful housing projects set aside interior space for amenities that both improve the lives of tenants and foster community. These amenities are non-rentable, meaning they do not produce rental income that pays for project costs, but they are essential to building a project where your staff will feel appreciated.

Data: Across the nine projects community rooms, co-working spaces, laundry rooms, and fitness centers are the most common interior amenities.

2D) MASSING AND FACADE

Description: A building's 3D size and shape, referred to as a building's massing, and the arrangement of exterior materials and windows, or the building's facade, create the appearance of a building and how it is perceived by neighbors and residents. Both of these important characteristics are informed by all of the architectural and development considerations listed above.

Data: Six of the nine projects are four stories or less. All nine include some level of formal variety like angled roofs, wall recesses, elevated bridges, and breaking the structure into multiple buildings. These strategies mediate building size and help EWH developments fit into their existing neighborhoods.

3. CONSTRUCTION

3A) CONSTRUCTION TYPE

Description: The height of a building impacts the types of materials used in its construction, as does the selected parking approach, intended construction timeline, and development budget.

Data: Five of the nine projects use Type V construction, the least expensive and most common construction type. Three of the projects use Type V over Type I, where a masonry parking podium sits at ground level, below 3-5 stories of Type V wood construction (Shirley Chisholm Village, 1701 San Pablo, and the Acacia). One project uses modular construction where pre-fabricated units are built offsite and then installed on site (Eastmoor).

3B) CONSTRUCTION QUALITY

Description: Construction quality depends on the quality of your development team and the materials and fabrication systems they propose. The architect draws the construction documents and sets the material specifications working alongside the developer to make sure the project remains on budget. With the final drawings in hand, a construction company or set of contractors will build what is drawn. One way to measure construction quality is to look at its level of environmental performance. A second is to look at the finish quality of the chosen building materials. A third is to track maintenance costs over time.

Data: Two of the projects achieved a LEED designation, meaning they were built with an emphasis on environmental sustainability (Casa del Maestro and Sage Park). Per our tenant survey, 50% of residents were either somewhat or extremely satisfied with the materials in their units. Lastly, Casa del Maestro's recent facility assessment, which found minimal need for repair even after 20+ years of continued operation, demonstrates how investment in high-quality construction can produce a long-term asset for an LEA.

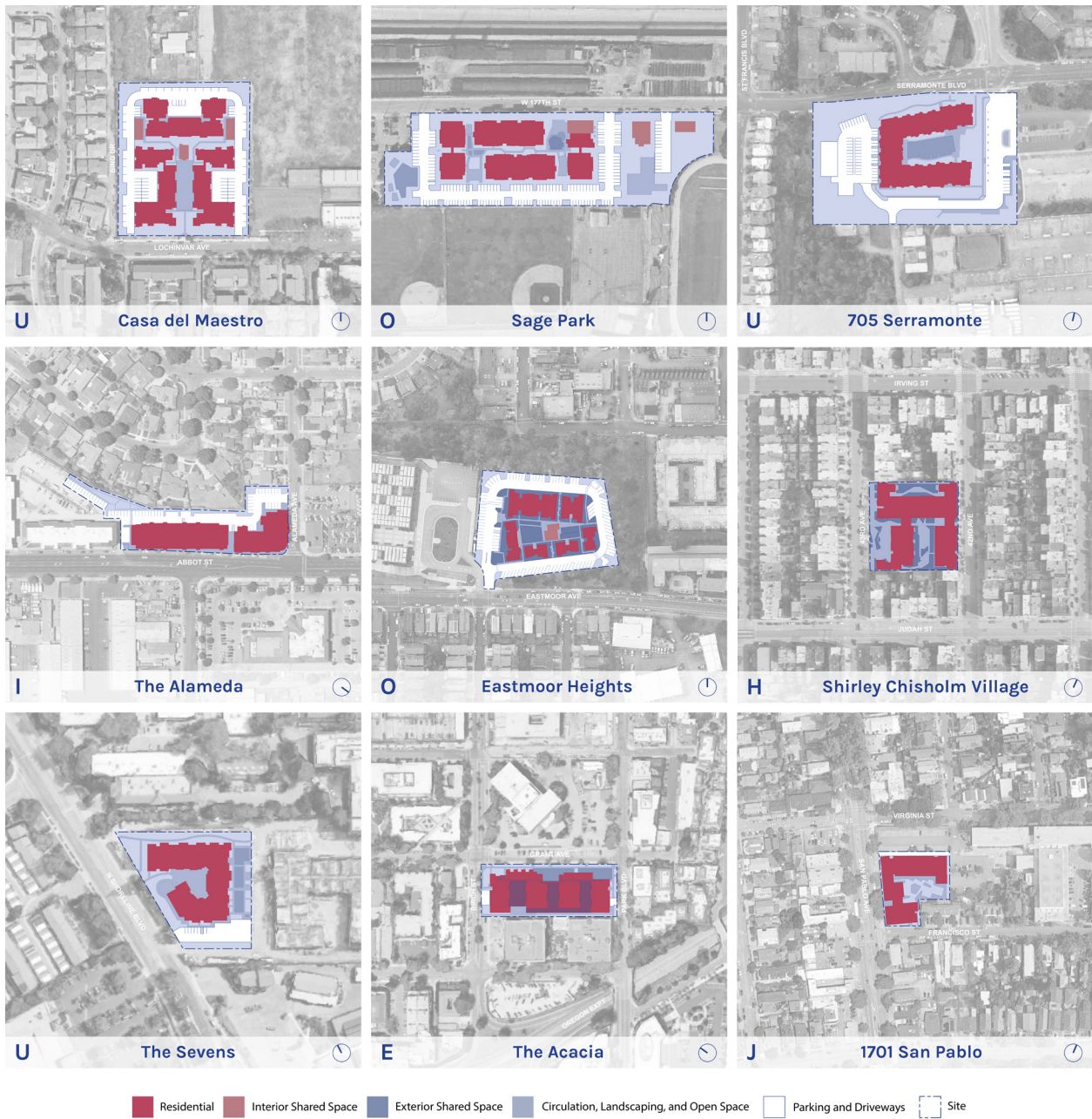


Figure 3: The Nine Case Study Project Site Plan Diagrams

Figure 4: Sage Park “Cracked O” Site Plan



1. SITE DESIGN

Designing the site plan for a multifamily housing project is often the most important step in the design process. Thoughtful site plans lay the foundation for high-quality housing developments. Looking across the nine case study projects, we observe a number of best practices related to characteristics of strong site design.

1A) BUILDING ARRANGEMENT

USE BUILDING ARRANGEMENTS THAT MAXIMIZE LIGHT AND AIR.

Strong EWH projects are organized in the form of letters of the alphabet as these building arrangements efficiently bring light and air into all parts of a residential development. As living rooms and bedrooms are required by California law to be accessible to the exterior, these building organizations also maximize design flexibility. Figure 3 shows the site plans of each of the nine developments alongside their associated letter. Common building arrangements include: I-shaped bars (The Alameda), O-shaped buildings with central courtyards (Sage Park), H-shaped buildings with mirrored courtyards (Casa del

Maestro), and E-shaped buildings with two courtyards (The Acacia), though these are just some of the many possibilities.

PRIORITIZE CONTEXTUAL APPROACHES TO BUILDING SCALE.

In residential neighborhoods, EWH developments are often broken into a handful of smaller structures to better fit into their context. For example, Jefferson Elementary’s Eastmoor Heights is located in a residential area across the street from a number of small, 2-story, single-family homes. For the 56-unit development to appear more in keeping with its surrounding community, the design team “cracked” the “O”-shaped building open, making it feel more porous and accessible while matching the scale of nearby housing. Sage Park has a very similar organization which helps the 90-unit project feel suburban-scaled and appropriate to its surroundings (Figure 4). Lastly, even the large, tall Shirley Chisholm Village incorporates a thoughtful approach to scale: while connected on upper floors, at the ground floor the development is broken into three structures with the spaces between them serving as walkways that welcome people in (Figure 5).

Figure 5: Context-Based Scale at Shirley Chisholm Village



ACTIVATE THE STREET.

Building arrangements that emphasize connections between the building and the street help improve a project's integration with the surrounding community. Eight of the nine projects use this strategy, ensuring that they have at least one facade directly abutting the street. In many cases, the street facade includes either public-facing elements or shared resident space, both of which help ensure the portion of the building that faces the street remains vibrant and occupied at all times. For example, 705 Serramonte includes housing units, the gym, and the lobby within its uninterrupted building facade facing Serramonte Boulevard (Figure 6). 1701 San Pablo uses a similar strategy, with its ground floor holding the lobby, a co-working

space, and other shared spaces parallel to San Pablo Avenue. Shirley Chisholm Village takes this one step further by providing a public-facing park open to the surrounding community along its 43rd Street facade.

1B) EXTERIOR SHARED SPACE AND COMMUNITY

ORGANIZE THE PROJECT AROUND EXTERIOR SHARED SPACE.

Organizing developments around generous exterior shared space serves as an anchor for amenities and social connection among residents. Eight of the nine developments have either one major shared exterior area or a



Figure 6: The Main Street-Facing Facades of 705 Serramonte and 1701 San Pablo



number of smaller distributed spaces for tenants to enjoy. Furthermore, these shared spaces take up large portions of the available site: four of the projects set aside over 40% of their site area for shared spaces and circulation, and an additional two offer exterior shared spaces equivalent to 40% of their site area elevated onto their second floor. Although these outdoor spaces take different forms—most commonly courtyards, playgrounds, and barbeque areas—projects are strongest when they provide a mix of programs that invite residents outside (Figure 8). Figure 7 (right) shows the percent of exterior site area remaining in each project after removing building footprint, parking area, and on-site streets.

Figure 7: Percent of Site Area Dedicated to Shared Outdoor Space

The Alameda	Eastmoor Heights	Casa del Maestro
14%	36%	37%
1701 San Pablo	The Acacia	The Sevens
39%	40%	43%
705 Serramonte	Shirley Chisholm Vil.	Sage Park
44%	48%	53%



Figure 8: Examples of Exterior Shared Space

Since exterior shared spaces hold most of the noteworthy amenities in EWH projects, developments that offer more of their site for shared exterior uses are especially desirable. This is also a key distinction between EWH and private, for-profit apartments, since the latter often prioritize leasable square footage inside units at the expense of all shared spaces. For example, the site plan of Shirley Chisholm Village holds three large exterior shared spaces with

Figure 9: Shirley Chisholm Village Site Plan Rendering



Top left to right: 705 Serramonte, Shirley Chisholm Village, Sage Park. Bottom left to right: Eastmoor Heights, The Sevens, The Acacia

specific programmed uses from a playground to a barbeque pit (Figure 9). Sage Park is similar in committing a large share of its site area to shared amenities, but it offers a number of unique exterior uses: outdoor fitness equipment is organized alongside benches, tables, and a community garden which serves both tenants and the surrounding neighborhood.

The Acacia and 1701 San Pablo are unique as both projects include well-appointed exterior spaces on the roof of a second floor podium. The Acacia has a playground, multiple lounge areas, and ample tables and chairs (Figure 10). 1701 San Pablo has an exterior courtyard with a children’s play area, exterior fitness space, vegetable garden, lounge, and food prep area. The provision of these high-quality exterior shared areas will improve tenant experiences.



Figure 10: The Acacia Courtyard

1C) LANDSCAPING AND CIRCULATION

PRIORITIZE WALKABILITY AND GREEN SPACE.

Designing intentional and pleasant circulatory paths and ample landscaping are effective strategies for maximizing the benefits of outdoor space. While large grassy areas are attractive, exterior areas with walking paths, unique ground surface materials, sitting areas, planted areas, gardens, and other similar details make for more engaging and cohesive shared spaces (Figure 11).

Figure 11: Examples of Landscaping and Circulation



Figure 12: The Acacia Landscaping Approach



705 Serramonte is surrounded by drought-tolerant landscaping planted beneath red wood chips that complement the facade and the pathways that wind around the building. Casa del Maestro includes similarly drought-tolerant plants, as well as mature trees to produce shade while marking an outdoor area that is attractive to residents. Sage Park includes a series of planter beds that create smaller green spaces alongside a central walkway, called the “paseo,” that winds through the whole of the development. Sage Park also includes landscaped bioswales around the outside edge of the development to catch and filter water from the street.

Shirley Chisholm Village employs a similar “paseo” strategy with smaller trees, planter beds, and landscaped areas coming together to produce a pedestrian-friendly environment. The forthcoming Acacia project includes exterior landscaping with planter beds, benches, sitting areas, and vegetation defining various social spaces (Figure 12).

Top left to right:
Shirley Chisholm Village, Casa del Maestro, Sage Park
Bottom left to right:
Sage Park, 705 Serramonte, The Sevens

1D) PARKING

DESIGN AT-GRADE PARKING FOR MINIMAL DISTURBANCE.

To support an active, pedestrian-oriented street presence, projects should prioritize keeping the primary street-facing facade free of visible parking, instead concentrating stalls along the rear or less prominent edges of the site (Figure 13). The number of parking spots provided per housing unit varies widely across the nine projects dependent on their local context.

For example, in San Francisco Unified's Shirley Chisholm Village, 42 garage parking spots serve 135 units, while in the more suburban Jefferson Union High School District's 705 Serramonte, 200 surface parking spots serve 122 units. However, irrespective of parking ratio, seven of the projects provide parking at-grade while hiding the majority of stalls from view to maintain a more attractive exterior appearance.



Figure 13: Surface Parking Approaches in Casa del Maestro (top) and Sage Park (bottom)



2. BUILDING ORGANIZATION

Beyond site planning, building organization plays a central role in determining the quality of EWH housing. The projects examined demonstrate common strategies in unit planning, circulation, shared interior space, and facade articulation.

2A) HOUSING UNITS

PROVIDE GENEROUSLY-SIZED UNITS AND MAXIMIZE THE NUMBER OF TWO-BEDROOM UNITS.

Surveys of LEA staff across different districts point to the need for multi-bedroom units to meet staff priorities and further LEA's recruitment and retention goals. For example, in Jefferson Union High School District's 2017 staff survey, none of the 169 interested respondents wanted studios. The District's 705 Serramonte project was sized based off of these survey results with the development team proposing 122 units with a unit mix of 0% studio, 48% 1-bedroom, 45% two-bedroom, and 7% three-bedroom units.

705 Serramonte's unit mix is representative of many other EWH projects, though some include a few studios (Figure 14). In addition to trending towards units with multiple bedrooms, the nine EWH projects all include fairly large units with ample floor areas. Across the nine case studies, the average unit sizes are 494 square feet (sf) for studios, 681 sf for one-bedrooms, 942 sf for two-bedrooms, and 1,153 sf for three-bedrooms.

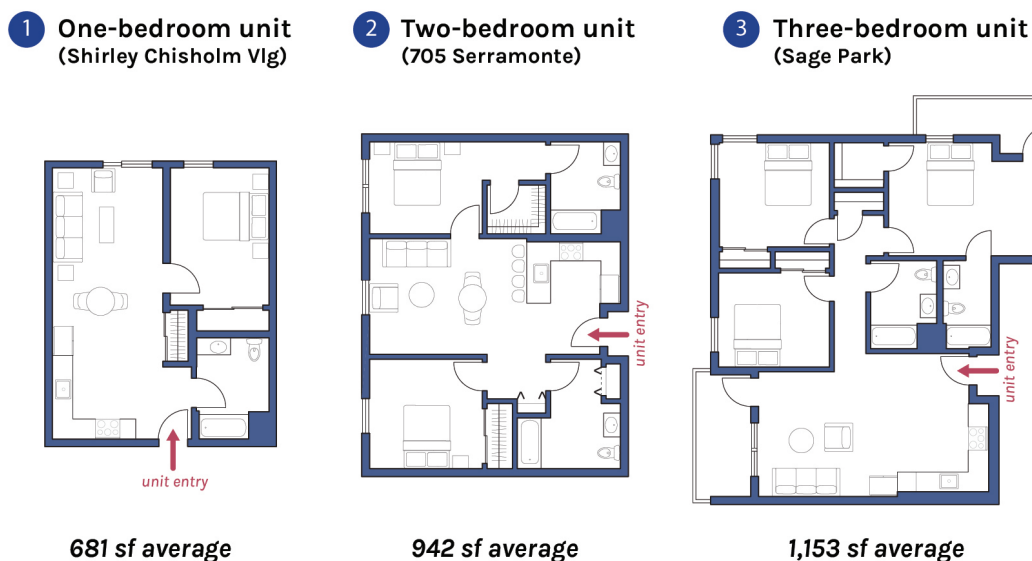
DESIGN EFFICIENT UNIT PLANS.

The diagrams in Figure 15 represent a selection of well-designed unit plans from EWH projects. In these plans, the standard building blocks of an apartment: bedroom, bathroom, kitchen, living room, are arranged to limit wasted space. By minimizing the square footage of hallways and maximizing the square footage of living spaces, these units efficiently take a tight footprint and make it feel generous and open.

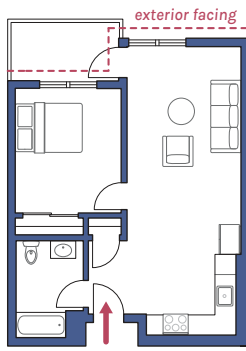
Figure 14: Unit Mix

Unit Type	The Alameda	Eastmoor Heights	Casa del Maestro	1701 San Pablo	The Acacia	The Sevens	705 Serramonte	Shirley Chisholm Vil.	Sage Park
Studio %	4	0	0	0	22	13	0	18	0
1 bed %	44	54	57	54	56	60	48	32	32
2 bed %	52	36	43	24	22	27	45	43	35
3 bed %	0	10	0	22	0	0	7	7	33

Figure 15: Strong Unit Plans

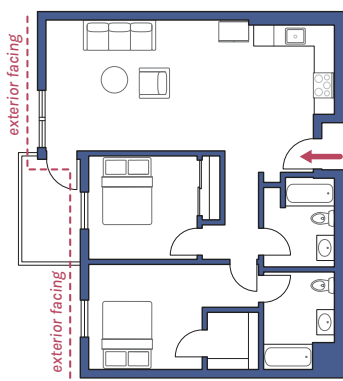


1 One-bedroom unit



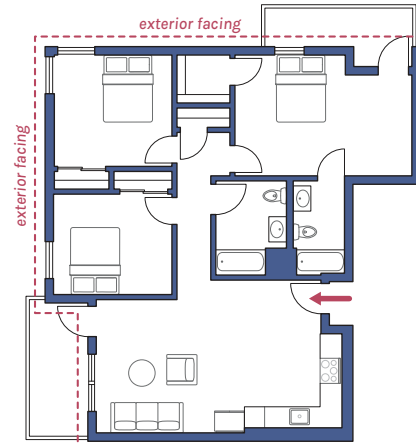
638 sf average

2 Two-bedroom unit



970 sf average

3 Three-bedroom unit



1,114 sf average

Figure 16: Sage Park Unit Plans

MAXIMIZE WINDOW AREA AND ACCESS TO THE OUTDOORS.

In addition to efficient layouts, high-quality EWH units often prioritize access to natural light, ventilation, and private outdoor space. Sage Park's units best demonstrate these design features and can act as a good example for other EWH developments (Figure 16). The project's units include expansive exterior-facing walls and large windows that bring daylight into living rooms and bedrooms, along with attached private patios. Furthermore, clever patio placement allows for sunlight and air to enter each apartment from a secondary direction. For example, a north-facing apartment receives additional light and ventilation from the west through their patio door. The two-bedroom units are organized with their long axis along the primary window wall, further increasing light and airflow. Finally, all 30 of Sage Park's three-bedroom units are located at building corners, providing multiple patios and two long, bright window wall exposures.

2B) CIRCULATION

UTILIZE SINGLE-LOADED CORRIDORS WHERE POSSIBLE.

The two most common circulation typologies in multifamily buildings are single-loaded and double-loaded corridors. With single-loaded corridors, every unit has direct exposure to the outdoors on at least two sides, which supports greater daylight access, cross-ventilation, and the potential for a stronger sense of community through increased visual connection to other parts of the building. Casa del Maestro exemplifies this approach, with units accessed directly from the street or from an exterior second-floor walkway.

In contrast, double-loaded corridors have other advantages: they are more spatially efficient with units arranged on both sides of an interior hallway which allows for greater weather protection, but this also causes each unit to only receive light and air on one side. Often used for hotel corridors, this approach leads to darker interiors, more limited ventilation, and an enclosed building with comparatively restricted visual connection. 705 Serramonte employs a fully double-loaded circulation system along the central spine of its U-shaped form (Figure 17).

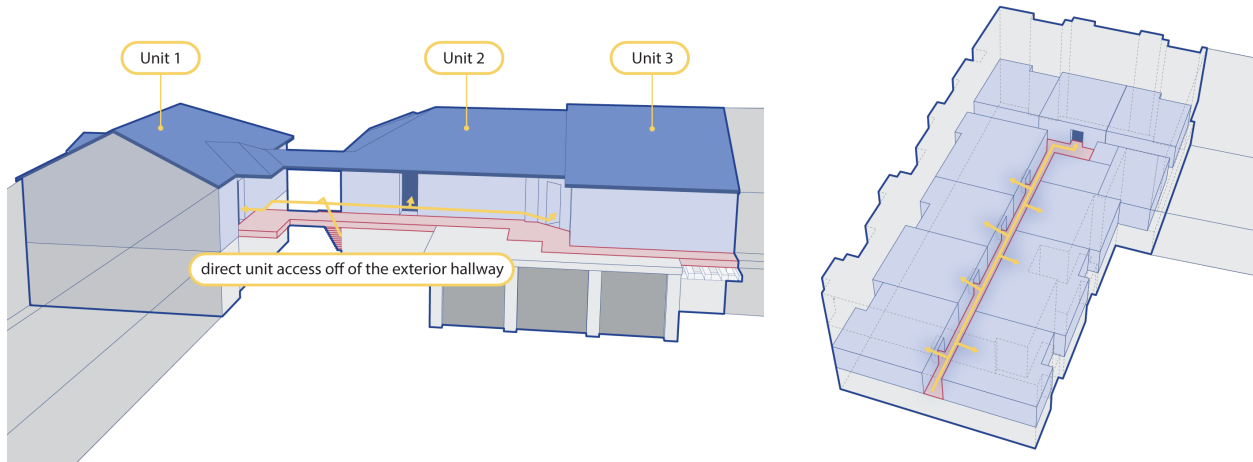
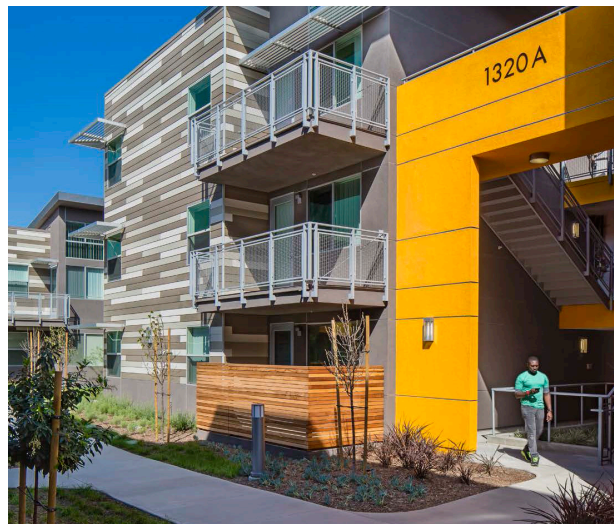


Figure 17: Comparison of Circulation
 Casa del Maestro on left, 705 Serramonte on right

While double-loaded corridors remain common in EWH projects due to their efficiency, a number of built projects incorporate strategies to offset their more negative impacts. For example, Shirley Chisholm Village connects its three main structures via glass-lined bridges which bring additional light into its double-loaded corridors. 705 Serramonte recesses each apartment entry from the hallway allowing space for residents to place plants, artwork, and other items in their entryways that can make units feel more personalized and welcoming.



Sage Park offers the most interesting circulation model of the nine projects. Although all six of Sage Park's constituent buildings are double-loaded, each incorporates design strategies to improve tenant experience. Some corridors are interrupted by open-air bridges, others end in small communal exterior patios, and others are broken up by open-air staircases placed at their center (Figure 18). These stairways are open to the exterior, oriented towards the shared courtyard, and capped by characteristic tilted roofs with skylight openings. By utilizing a mix of strategies, Sage Park combines the efficiency of double-loaded corridors with the light, air, and openness benefits associated with single-loaded corridors, creating a strong model for other EWH projects.

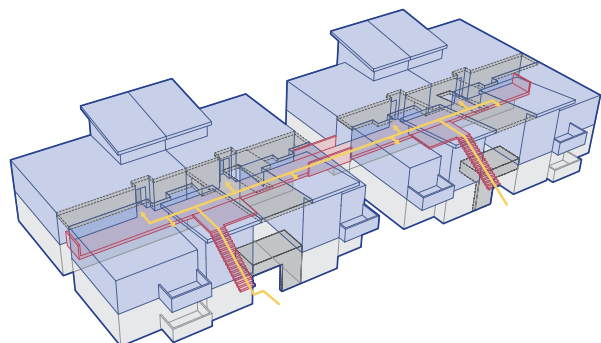


Figure 18: Sage Park's Circulation Strategies
 Diagram shows circulation in Sage Park with open bridges and exposed ends that span between stairs.



Figure 19: Interior Social Space. Top left to right: 705 Serramonte, The Sevens, Eastmoor Heights. Bottom left to right: Sage Park, 705 Serramonte, Casa del Maestro.

2C) INTERIOR SHARED SPACE AND COMMUNITY

PROVIDE MULTIPLE INTERIOR TENANT AMENITIES.

In addition to shared outdoor space, most EWH projects include multiple interior amenities, the most common of which are community rooms, fitness centers, laundry rooms, and co-working spaces (Figure 19). Housing development requires a constant balance between maximizing rentable space that generates income and providing non-rentable shared space that makes the building a desirable place to live and helps to actively foster community. For example, in 705 Serramonte the laundry rooms are organized around a long communal table, which can be turned into an impromptu lesson planning area for residents. The ground floor laundry room is also directly adjacent to an indoor playspace, separated by a window wall, which allows parents to do laundry and socialize while keeping an eye on their kids.

705 Serramonte also includes storage space for residents on every floor, a thoughtful touch that allows teachers to store classroom supplies more easily. In Sage Park, a standalone community building also serves as an exhibition space for the Gardena High School Art Collection. Both Casa del Maestro and Eastmoor include an interior community room adjacent to their main outdoor recreation area, creating a hub of social interaction. The Sevens represents a unique model where the EWH units are part of a much larger market-rate development. EWH residents have access to the full suite of amenities in the development like a pool and shared kitchen, but these are located in other buildings close by.

2D) MASSING AND FACADES

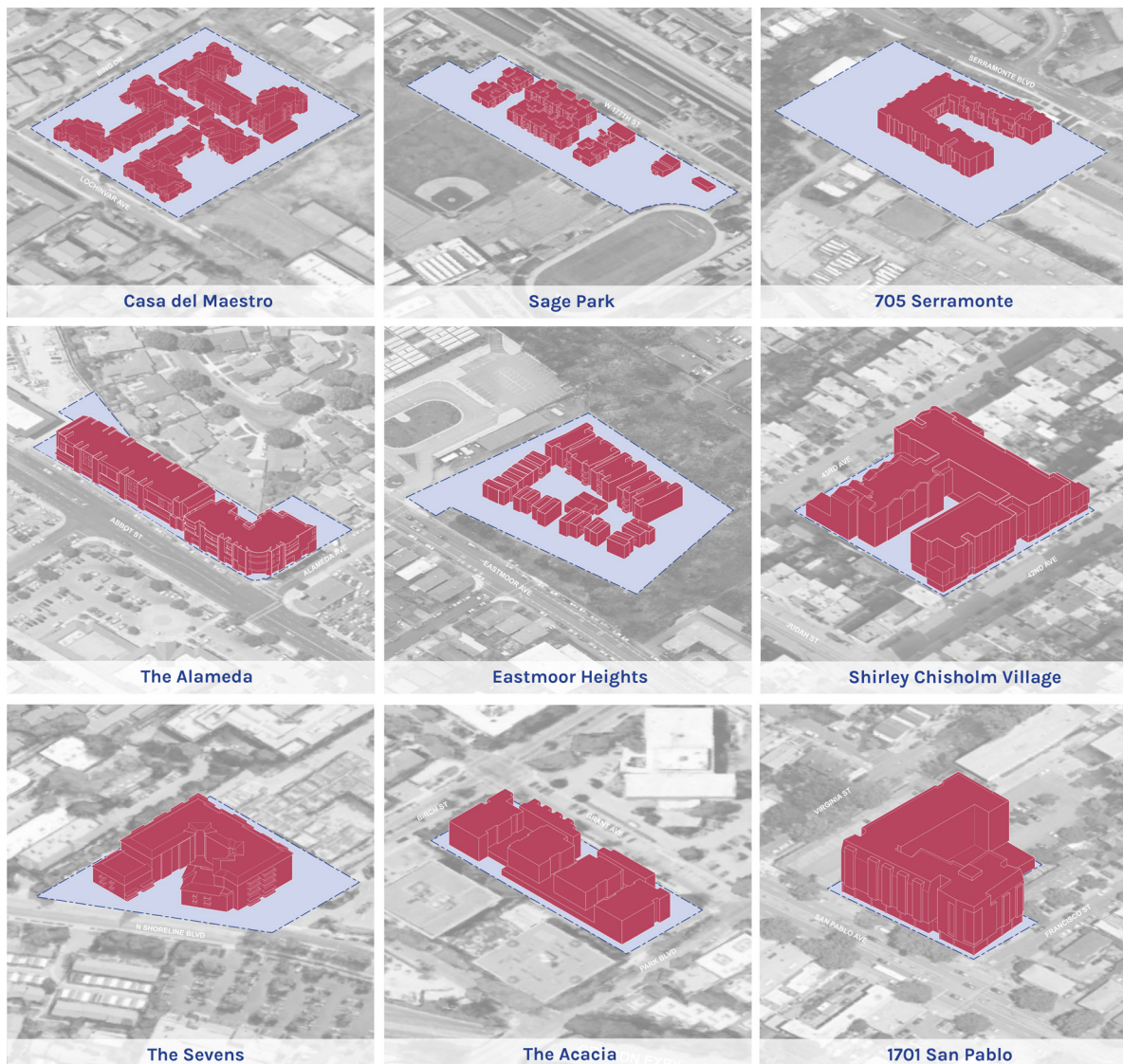
ALIGN BUILDING MASS WITH NEIGHBORHOOD SCALE.

Massing—which refers to the size, shape, and height of a housing development—should balance programmatic needs and zoning constraints while fitting the scale and character of the surrounding neighborhood. The nine case studies vary widely in their massing strategy (Figure 20). Some are long, narrow bars, abutting streets on somewhat constrained sites (Sage Park, Alameda, The Acacia). Others are more compact and densely concentrated, accommodating many units in a singular structure on a smaller site (Shirley Chisholm Village, The Sevens, The Acacia and 1701 San Pablo). Others are lower in scale and arranged across multiple buildings on a generous site (Casa del Maestro, Sage Park, 705 Serramonte, Eastmoor Heights).

Because school districts are important stewards of their local communities, it's important for EWH projects to reference the size and scale of their surrounding built fabric. For example, Casa del Maestro is designed like a series of attached single family homes with porches, roof profiles, private garages, and exterior materials that reference nearby buildings (Figure 21).

Some of the larger projects use similar massing strategies to break down the overall scale of the building and feel more integrated into their neighborhoods (Figure 22). For example, Jefferson Elementary School District's Eastmoor project is made up of multiple small unit stacks, each with a slightly different roof pitch and orientation to ensure the project does not appear as one monolithic structure. In San Francisco Unified's Shirley Chisholm Village, a more traditional pitched roof design gives the building a residential character that allows it to appear as a group of standalone townhomes.

Figure 20: Massing diagrams



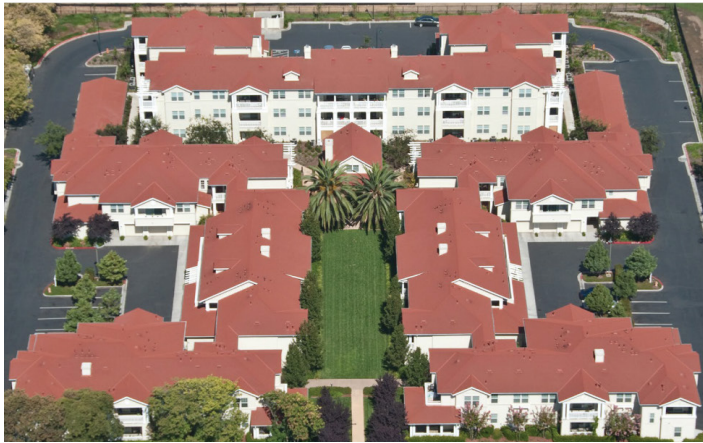


Figure 21: Context Matching: Casa Del Maestro on Left, surrounding neighborhood on right

DESIGN FACADE WITH NEIGHBORHOOD CHARACTER IN MIND.

To help EWH developments fit into their surrounding neighborhoods, building facades include shifts in materials, color, and form. The nine projects demonstrate a variety of attractive facade strategies, with many using facade materials and color changes to highlight different areas of the building (Figure 23). For example, Shirley Chisholm Village’s facade is folded and steps back as it rises, with a recessed ground floor and horizontal projections in a contrasting material that make the five stories

seem less imposing. Eastmoor similarly uses a controlled material palette, with the patios, staircases, and accents clad in brown tones that play nicely against the light green siding and white stucco. Sage Park has an expressive facade, with a varied yellow, orange, brown, and tan striated exterior. The materials ensure the long horizontal cladding remains vibrant, and the colors map onto repeated building elements which improve visual cohesion.

Figure 22: Roof Pitch and Massing Variety
Left to right: Eastmoor Heights, Sage Park, Shirley Chisholm Village





Casa del Maestro



Sage Park



705 Serramonte



The Alameda



Eastmoor Heights



Shirley Chisholm Village



The Sevens



The Acacia



1701 San Pablo

Figure 23: EWH Building Facades

Figure 24: Type V Construction at The Sevens in Mountain View



3. CONSTRUCTION

With site planning and building organization established, construction translates designs into EWH housing projects that are affordable, durable, and efficient to build. This section reviews the construction methods deployed across the nine projects, highlighting common building types, modular approaches, and sustainability investments that shape long-term durability.

3A) CONSTRUCTION TYPE

USE CONSTRUCTION TECHNIQUES THAT KEEP COSTS DOWN.

Construction type in California is largely determined by the fire-rating requirements of the primary building materials. Most EWH projects, like most multifamily buildings across the United States, use either Type V (“stick-built”) wood-frame construction or the 5-over-1 approach, with a concrete or steel ground floor (Type I) and wood framing (Type V) for the three to five stories above (Figure 24). Type V construction is relatively inexpensive, efficient, and an industry standard familiar to contractors. 5-over-1 approaches are especially common for multifamily housing projects since they maximize building size without dramatically increasing costs.

Eight of the nine case study projects use one of these two methods. The remaining project, Eastmoor, uses modular prefabricated construction, an industry whose advantages are becoming more feasible. In prefab projects, self-contained units are built in a factory off-site, transported to the site, and assembled into the final building (Figure 25). Prefab construction requires less on-site prevailing wage labor - work completed in the factory is not subject to prevailing wage - and can be associated with faster construction timelines, but the relative novelty of this construction approach means that

prefab projects can still face delays especially during the permitting and approvals processes.

3B) CONSTRUCTION QUALITY

INVEST IN SUSTAINABILITY AND CONSTRUCTION QUALITY.

Building sustainability and energy efficiency are also important considerations. There are numerous sustainability awards and organizations that certify energy efficiency and strong sustainability decision-making in new building construction, and many EWH developments have received sustainability certifications. One of the most well-known of these organizations is the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program.

Sage Park received a LEED Gold rating (the second highest of Platinum, Gold, Silver, and Certified) based on its inclusion of a reflective roof, bio-filtration system, and community garden. Sage Park also has solar shades above windows on the southern and western facades where solar exposure is most direct (Figure 26). The second phase of the Casa del Maestro development achieved LEED Silver for its inclusion of porches, balconies, and roof overhangs that help to shade and filter direct solar exposure. While not recognized with an award, Eastmoor Heights relies on 100% electric energy, has solar panels hidden behind raised roof parapets, and includes a 100% stormwater bioretention system that prevents runoff and channels all excess water back into the soil.



Figure 25: Type 5-over-1 in The Acacia (left)
Prefab Construction in Eastmoor (right)

Building quality can be difficult to measure at the time of construction, but taking steps to ensure high-quality construction can minimize maintenance costs in the long run. For example, Casa del Maestro (which opened its first phase in 2001) was recently audited for a facilities assessment. The audit found that, despite no recent large capital improvements, the landscaping, parking and streetscape, building siding, interior and exterior materials, mechanical, electrical, and plumbing and fire systems, and lighting are all adequate and do not require significant maintenance.

Another way to measure quality is to survey tenants' satisfaction with the chosen materials and building finishes. Per our tenant survey of three EWH projects, 50% of residents were either somewhat or extremely satisfied with the materials in their units.

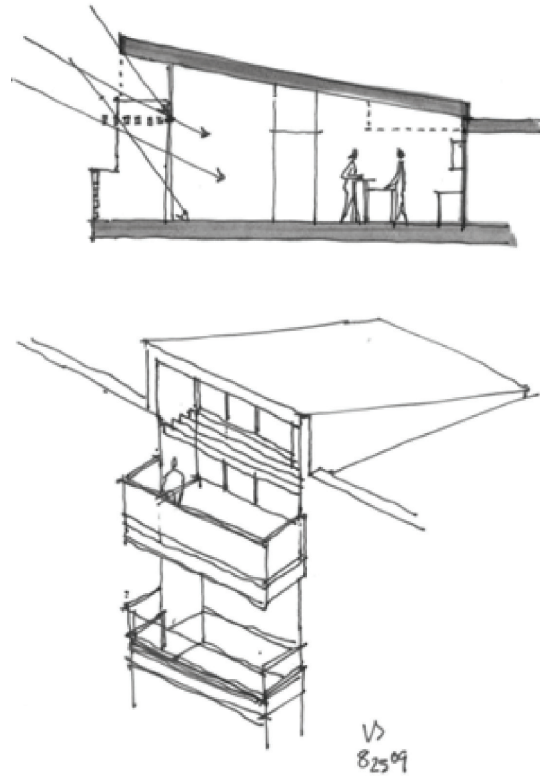


Figure 26: Sage Park Solar Shading



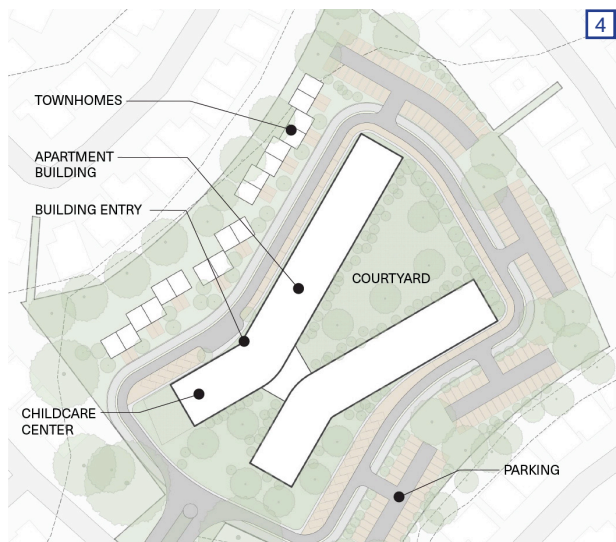
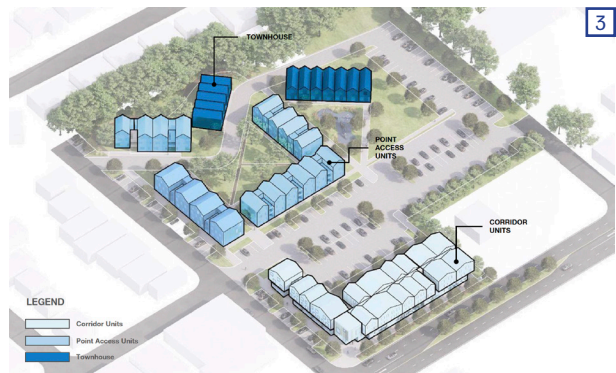
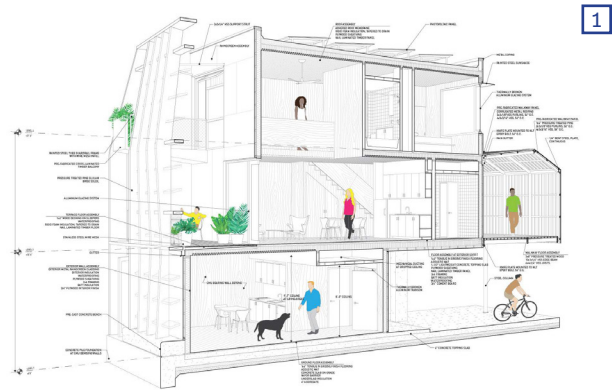
4. LOOKING AHEAD

The case study projects lay the foundation for what is sure to be a larger movement in the provision of EWH. In order to help school districts imagine the next generation of housing solutions, cityLAB-UCLA brought seven award-winning architecture firms at the forefront of multifamily housing design in California into the EWH Workshop Series. The firms prepared preliminary feasibility studies for 12 LEAs, and their work highlights many of the same best practices outlined in the preceding pages. However, their proposals include a number of additional design approaches that have not yet been incorporated in built projects, but would lead to stronger EWH developments moving forward. The innovative ideas from these architects are explained below, and they set new directions that we can expect to see in developments moving forward.

VARY HOUSING TYPOLOGIES.

The nine case study projects include a variety of unit types and sizes, but all are designed as apartment-style units. This limits the spectrum of potentially interested tenants as older teachers, those with larger families, or those with higher incomes who are still priced out of market-rate housing might prefer a townhome or a standalone unit. In the EWH 101 Workshop Series, the proposals from Iwamoto Scott, David Baker Architects, Paulett Taggart Architects, Koning Eizenberg, and Kevin Daly Architects include a mix of apartments and townhomes which are able to accommodate a wider range of tenants (Figure 27). Furthermore, this mix of housing types helps the proposed projects better fit into their surrounding neighborhoods and provides nice variety in the overall project massing. Especially for projects in more suburban or residential contexts, varying the housing typology can be an effective strategy.

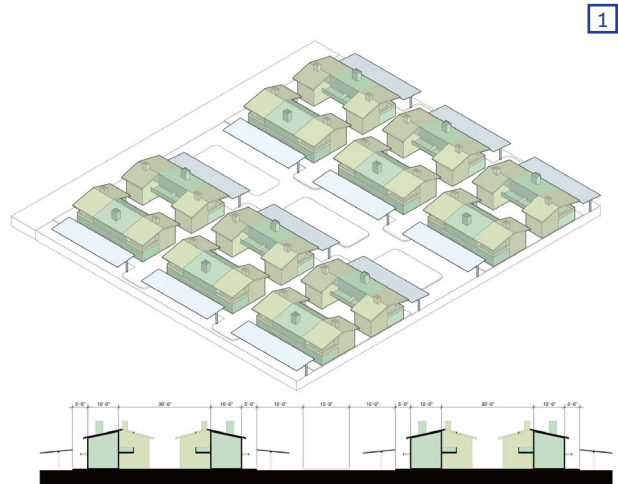
Figure 27: Mixed Housing Typologies
From top: Kevin Daly Architects (1, 2), Iwamoto Scott (3), Paulett Taggart Architects (4), David Baker Architects (5)



CREATE A WALKABLE COMMUNITY WITH MINI-NEIGHBORHOODS.

The architecture firms organized many of their preliminary feasibility studies around a central paseo or shared green-spaces that intentionally break the site plan into a handful of smaller mini-neighborhoods (Figure 28). This helps a 100+ unit project feel more like a community, and creates an open site plan that can better match the residential housing that surrounds most EWH projects. For example, Sharif, Lynch: Architecture's concept for Firebaugh-Las Deltas USD proposes a courtyard organization where a dozen units share a central, walkable open space. In another, higher-yield iteration for the Tulare County Office of Education, Sharif, Lynch designed a similar walkable, community-oriented module to create a number of smaller neighborhoods that cohere into one larger development. Both Kevin Daly Architects' approach for Inglewood Unified School District and Koning Eizenberg's approach for Oxnard Union High School District use a similar neighborhood strategy at a larger scale.

Figure 28: Examples of Proposed Walkable Communities. Images from top: Sharif, Lynch: Architecture (1,2,3), Kevin Daly Architects (4), Koning Eizenberg (5)

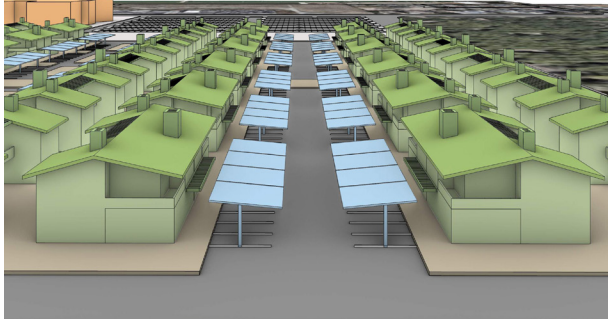


UTILIZE PASSIVE ENERGY STRATEGIES.

Owing to California's temperate climate, passive heating and cooling strategies can be an extremely effective means to efficiently and sustainably control a housing development's internal environment. Across their feasibility studies, the firms proposed solar shades, roof-mounted solar panels, single-loaded corridors to facilitate cross-ventilation, and extensive use of plants and landscaping to control heat (Figure 29).

Figure 29: Examples of Passive Energy Strategies

Below: Paulett Taggart Architects



Above: Sharif, Lynch: Architecture

Below: David Baker Architects



Below: Kevin Daly Architects



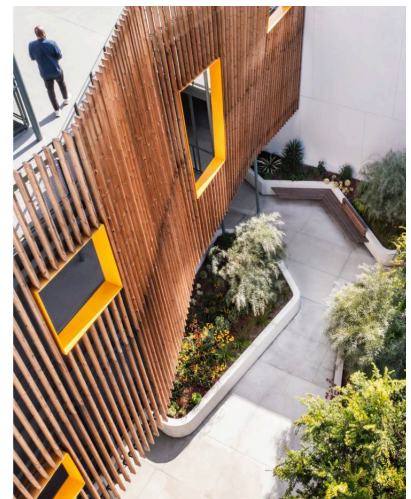
Passive Strategies

Employ Renewable & Recyclable materials with thermally massive characteristics, to stabilize temperatures and minimize cooling demand.



Energy Production

Take advantage of extensive roofscapes and shading structures to generate energy on-site.



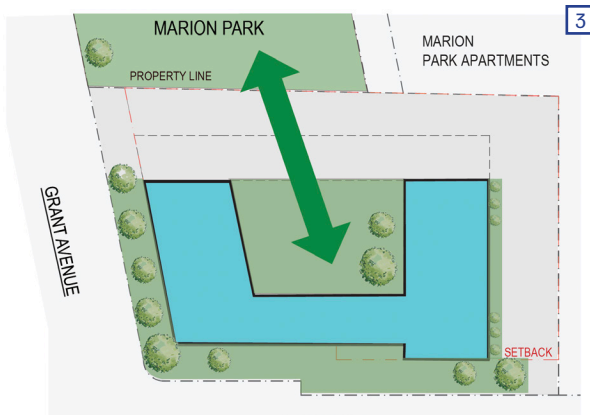
Unconditioned Living Space

Double each Unit's Living Space by providing usable, protected outdoor living space. Right-Size Units to minimize conditioned environments.

CO-LOCATE COMMUNITY OR DISTRICT BENEFITS.

As school districts look to maximize the benefit from their long-term investment in EWH, co-locating other district uses like sports fields and childcare centers or community uses like a farmers market can improve project reception and ensure that resources are being allocated effectively (Figure 30). In David Baker Architects' proposal for Lompoc Unified School District, the firm included a dog park and pedestrian connection to an existing public park nearby. In a study for Martinez Unified School District, Iwamoto Scott Architecture proposed a walking path to help neighbors enjoy the adjacent creek. Fougerson proposed connecting their development to a nearby park. Finally, Kevin Daly Architects proposed co-locating housing with the existing skatepark and farmers market area.

Figure 30: Examples of Co-Locating Community Benefits
 Images from top: David Baker Architects (1), Kevin Daly Architects (2), Fougerson Architects (3) Iwamoto Scott Architecture (4)



PREPARE FOR PHASING.

EWH housing developments are expensive, and in some instances an LEA might want to build some units quickly before raising the funds to pay for the entirety of a project. Understanding these financial realities as well as the complexities of LEA governance, a phasing strategy can be an effective way to deliver smaller blocks of units in quick succession (Figure 31). For example, Kevin Daly Architect's proposal for Davis Joint Unified School District does this well, breaking a 200-unit project into three ~66-unit developments that helped the district move forward with their development planning. In Ventura, Koning Eizenberg proposed dividing the large site into four development areas connected by a major community spine.

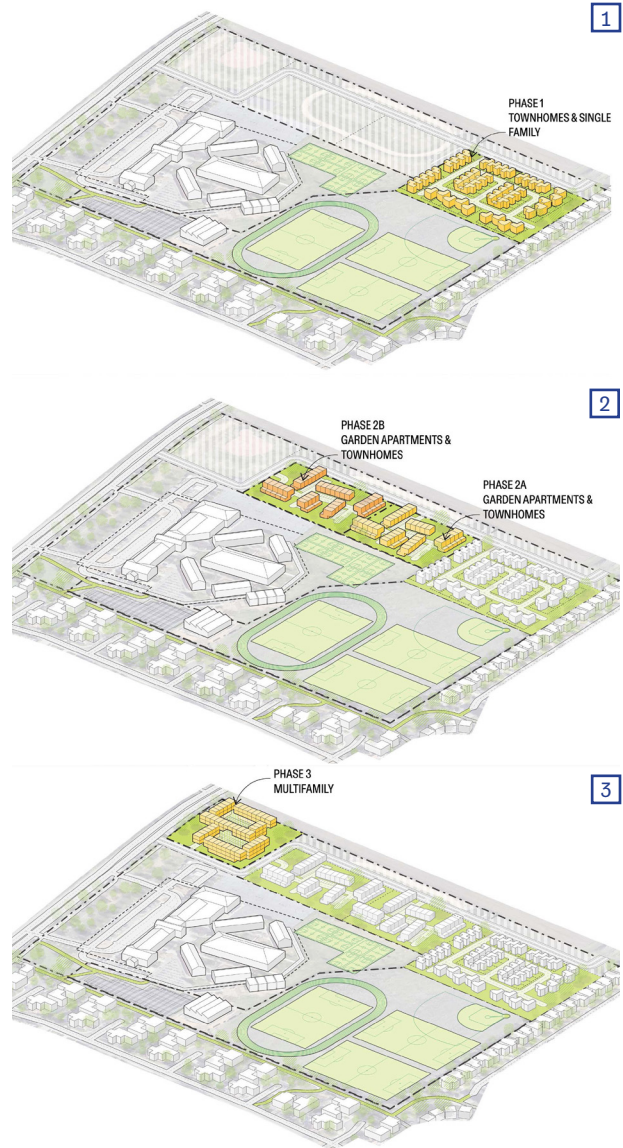


Figure 31: Examples of Phasing
Images from top: Kevin Daly Architects (1,2,3)
and Koning Eizenberg (4)



CONCLUSION

Designing and building a high-quality Education Workforce Housing project requires constant negotiation in almost every aspect of development. Inclusion of shared amenities offers opportunities to build community but reduces the amount of rentable space. Building taller can lead to more units but might elicit more community pushback. A parking garage can liberate ground floor site area but is more expensive to build. And achieving LEED certification reflects goals to improve long-term energy efficiency and achieve cost savings but can simultaneously increase upfront costs. While tradeoffs are inevitable, LEA staff deserve to see high-quality architectural designs become high-quality homes, and LEAs should build housing projects that remain long term assets.

By studying built EWH projects as well as strong feasibility study proposals, this report reveals the architectural strategies that make it through the development gauntlet to improve the lives of residents. These recommendations touch on site planning, landscaping, parking, building massing, unit design, facade development, sustainability, and construction, offering a roadmap for delivering even stronger, better designed EWH projects moving forward.

As the movement behind EWH development continues to grow, there is an incredible opportunity to innovate and improve EWH design, development, and construction. We hope that the 20 recommendations in this report help LEAs and their project teams as they look to further elevate the standards of these fundamentally important projects.

Figure 32: Sage Park shared outdoor space



