Compact Housing

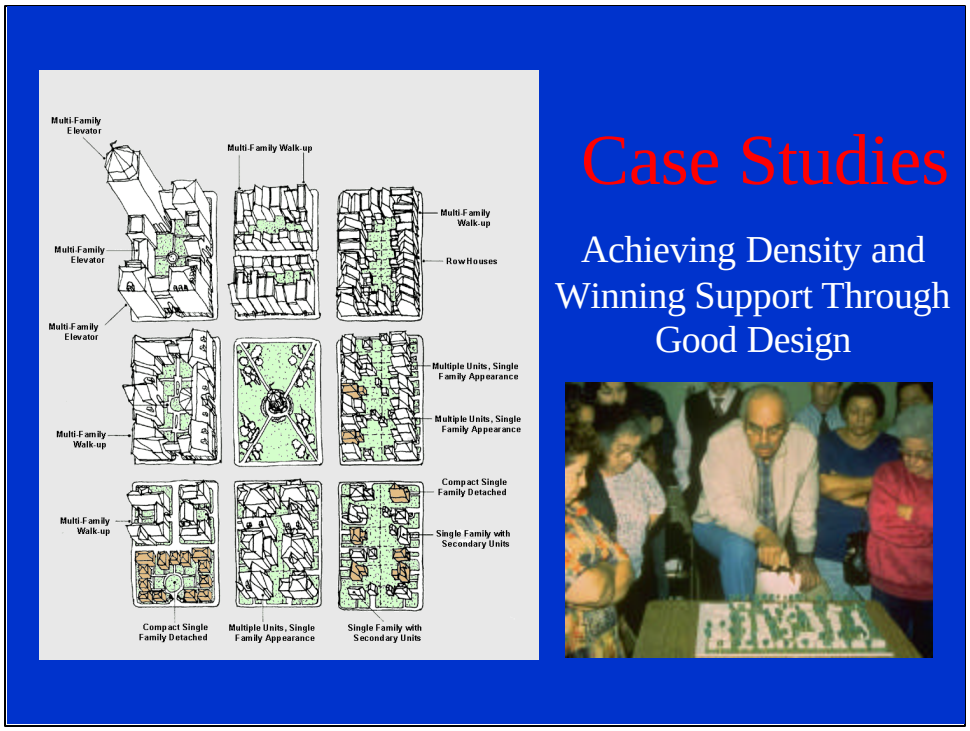
Providing Choice and Diversity






Compact Housing Models

1. **Compact Single Family Detached**
   7 – 21 units per acre
2. **Single Family with Secondary Unit**
   17-24 units per acre
3. **Multiple Units, Single Family Appearance**
   8-22 units per acre
4. **Rowhouses**
   10-40 units per acre
5. **Multifamily Walkup Flats and Apartments**
   16-51 units per acre
6. **Multifamily Elevator Apartments**
   21-236 units per acre



Understanding Density

"Density" is a word with many negative connotations for the general public, while increased density may provide many positive benefits for affordable hoing developers and their residents. In a separate Paper on "Understanding Density" a more detailed discussion is provided concerning what density is, how peoples opinions are formed about it, and what approaches seem to work in in working with design teams and community outreach efforts to achieve "good density".

The following presentation looks at the various models for achieving density, recognizing some universal issues that shape public opinion and building designs across the breadth of possible models.

1. Communication and terminology are critical- the term density has been replaced by the term compact housing because this more neutral term does not instill such passionate objection
2. Sponsors inherit the history of others – strong opinions about density may be rooted in past negative experiences that are more likely to be attributable to bad planning, design, management, or tenant selection. But density gets blamed for everything
3. Working with the public is essential- Not all opponents get converted, but public participation can be a positive way to shape the most appropriate design for the community, and win support in the process.

The appropriate strategy to pursue is often driven by several local and site specific variables.

- The existing pattern of front yards – this is one of the major ways to relate to the existing context, although it may conflict with goals for larger rear or side open space

Neighbors evaluating alternative site plans at same density.

The appropriate design and density strategy to pursue is often driven by several local and site specific variables:

•The existing pattern of front yards – this is one of the major ways to relate to the existing context, although it may conflict with goals for larger rear or side open space

•The shape of the lot- initial studies to look at existing and new circulation patterns will quickly reveal a few approaches that minimize the cost of new streets and infrastructure lines, and the lot dimensions will derive from this

•Local cultural and environmental factors – these determine the values of different types of open space, including porches , balconies, low fences, and landscaping, that may make the usually decorative but unused front yard more useful to the residents

Ultimately all designs have to grapple with approaches to the following three interrelated site planning and layout issues:

- Building Typology
- Open Space
- Parking

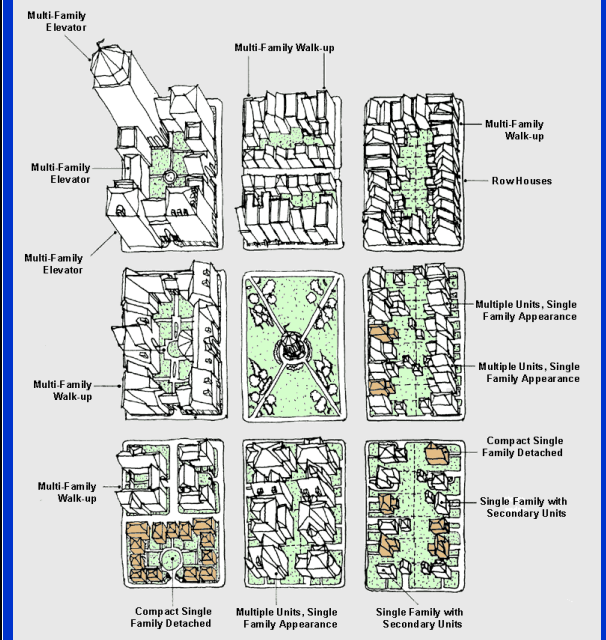
Compact Single Family Detached Homes

Generally, "Compact" single family lots are defined as smaller than 1/8 acre, or around 5500 – 5000 SF or less. Lots of this overall area are typically 50 by 100 feet, or 45 by 120 feet. Street frontage of 45 to 50 feet allows for a single garage plus living room to front the street, with side setbacks of 5 to 10 feet. Alternatively, they allow for an 8 - 10 foot wide driveway on one side of the lot to give access to a garage at the rear of the lot, and for a 25 to 30 foot wide house with an entry plus one or two rooms facing the street.

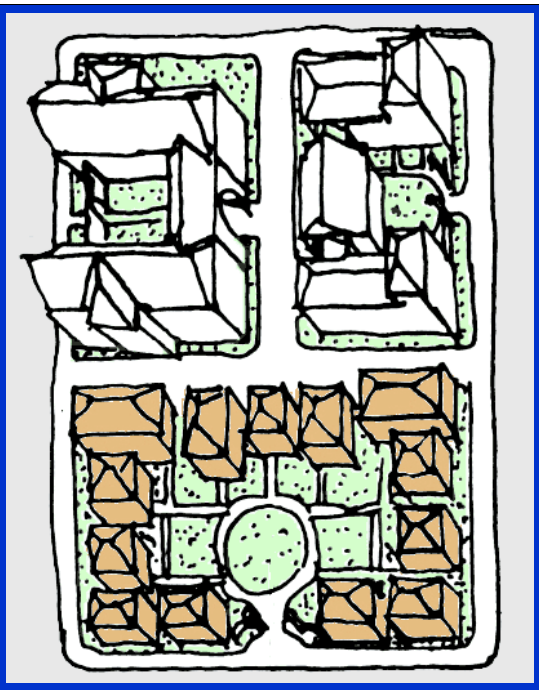
To achieve densities above 8 units per acre excluding streets (about 6 units per acre including streets) requires shrinking the width of the lot or depth of the lot or both. Using one strategy, "narrow but deep" lots 30 feet wide and 75 to 100 feet deep are used to reduce lot sizes and increase density. As lot widths narrow, there are more homes fronting a given length of street, which reduces street related infrastructure costs per unit, but increases the challenge of getting sufficient frontage for both cars and ground level rooms.

Using another strategy ,"wide but shallow" , lots are kept at 45 – 50 feet wide or more, but with depths reduced to 60 feet. This pattern keeps the homes spread further apart along the street, which resolves some of the visual and vehicular access issues of narrower lots, but is less efficient from a street infrastructure perspective, and may also compromise rear yard depth.

The case studies show a wide range of possible densities, from 7-21 units per acre.



Compact Single Family Detached



Compact Single Family Detached

Lyton Park Place, St. Paul, Minnesota

Case Study 1: Lyton Park Place, 7 units per acre, excluding streets, including alley

By Midwestern standards, these homes are on compact lots, even while they might appear quite generous in other more dense and higher land areas of the country. They serve as a good base index for comparing subsequent higher density single family case studies.

In the case of this development, just being able to meet the same density as the surrounding area was a challenge, because the neighbors were opposed to any affordable housing on the site. Here then, achieving the same density was highly dependent on a design that was similar to the wider neighborhood pattern. Lots varying from 48-51 feet in the midblock to 57 ½ feet on the ends allowed for generous side yards, and 20 foot setbacks from the front walk to the porch repeated standard patterns. Lots average about 5500 SF each, and all lots are 110 feet deep, with a 20 foot wide alley behind. The pland uses ten different unit types in a 21 unit development with each having several roof and bay forms. Thia creates a sense of uniqueness for each house, although all have simple and easy to build forms and details. Wider homes are interspersed with narrower homes so that there is variety to home types, and yet similar spacing between them. However, due to a parking requirement for one covered garage plus one additional space for each unit, the actual usable rear yard space is smaller than the front yard. The yards are still ample, and both the rear alley and parking space can serve as hard surface play area.

Case Study 2: Benson Glen, 7.2 units per acre including new public and private streets, but excluding saved wetlands

Benson Glen represents a statistically similar density as Lyton Park, but using a different site planning strategy and greater public cooperation in achieving densities greater than might have been allowed by conventional zoning. Here, the dimensions of the site plus the requirement that about 40% of the site be left as a wetlands led to a combination of some houses on wide but shallow lots along a new street, and then some additional units clustered along semi-private drives at right angles to the street. The local jurisdiction allowed reducing lot sizes to 3600 square feet, reducing parking from 4 cars to 2 cars per unit, and allowing the second car to be parked in the front drive. Front setbacks were also allowed to be just 15 feet, and side setbacks on one side were allowed to be reduced to 5-10 feet from a 15-20 foot standard. One garage per unit is accessed from the street side, but the visual image of the garage is played down by having garages in lower elements or further back from the street, and comprising only ¼ to 1/3rd of the building frontage.

The accumulated change in site sizes and layout standards allowed for the inclusion of a one quarter acre park within the development, which is included in the density calculations. Despite the lots being almost 40% smaller than Lyton Place, the back yards are substantially larger. Four basic models of units were developed, but with their varying heights and rotation on the lots at corners, a lot of visual variety and openness is achieved

Quincy Homes, Chicago, Illinois

Case Study 3: Quincy Homes, Chicago, 9 units per acre

The density of Quincy Homes is about 20% greater than that of Lyton Park Homes, while being within a very similar context of an older neighborhood with an existing rear alley system. This is possible because the average lot widths in this part of Chicago are narrower.

The context challenge for Quincy was also different, in that the older homes and apartments in the area were larger in scale, and the proposed new Quincy home could have looked too small. While keeping to an economical rectangle form, front porches and brick facing at the grade reflect local design elements. The lot size including the depths of front yards has been altered and paint colors varied to create a semi-custom home appearance.

While a uniform floor plan is used for all 40 three bedroom units, two distinct house and site plan choices are provided on the same standard lot. Raising the units allowed for garages in the basement level for 8 pairs of units, which are placed further forward on the lot and share a semi private drive that give access to their single car garage from the street. The remainder of the units sit further back on the lot, have more interior usable space in the ground floor level, and have a double car garage on the alley side. Those homes with a garage below their living space have a smaller front yard, a bigger back yard, and space for their second car is out at the alley side. Others get more interior space in the basement and bigger front yard, but smaller back yard, with both cars on the alley.

Self Help Homes, Santa Rosa, California

Case Study 4: Self Help Homes, Santa Rosa, 14 units per acre

These homes on 3000 square foot lots are twice the density of Lyton Park Place, and almost 50% more dense that the Quincy homes, yet do not appear any closer than the previous three examples. This illustrates the visual advantages of the"wide-shallow" strategy, as the lot size savings are entirely in shallower front and back yards, and only slightly narrower side setbacks. The main plan of the homes is just 15 feet back from the street, but a front porch encroaches into that setback. The actual lot configuration and unit placement is similar to that of Benson Glen, but the rear yards are shallower and there is no central community open space. Comparing lot sizes only, this development is about 10% more dense than Benson Glen.

Variations in roof forms, porch locations, roofing color, and siding color provide visual variety, while trees planted in the front yard areas will soon create a green canopy and provide greater visual privacy for upstairs bedrooms and shelter from hot summer sun.

De Turk Homes, Santa Rosa, California

Case Study 5: De Turk Homes, Santa Rosa 16 units per acre, including semiprivate lanes.

Developed by the same sponsor as the Self Help Santa Rosa Homes, this development of 2700 square foot lots uses a different strategy for the parking and even shallower front yards The presence of a new city park and community center across from the site removed the need for a park in the development, and allowed for smaller yards.

Garages have been moved back form the façade and project slightly into the rear yard. The front of the hoes is pushed forward, just 12 feet from the sidewalk. The living quarters portions of the homes do not touch, but paired garages do., so technically the homes are semi-detached. Buyers and neighbors still consider them “detached” homes to the rear of the units, accessed by a narrow drive up one side of the house that serves two single car garages the side lot line. Simple shapes, and small scale porches and windows and detailing make the homes look bigger than they are.

The development was sought by the City who worked with the sponsor to maximize density within the goal of providing a first time homebuyer model that people would be willing to take a risk on. The area around was a mix of run down industrial and commercial properties, and considered both blighted and unsafe. The homes therefore actual set up a new residential pattern, which ha subsequently been copied with great success by market rate developers who came into the area later.

Randolph Neighborhood, Richmond, Virginia

Case Study 7: Randolph Neighborhood, Richmond, master planned new urban neighborhood, 20 units per acre average of town homes plus apartments

There are certain similarities between the Classics at McNear Landing and the Randolph Neighborhood in term of the lot sizes and historically evocative building types, although important differences related to their context and public expectations. The Randolph Neighborhood was a relatively flat urban parcel, within an existing gridded street pattern context, and the street layouts were dictated by the desire to link the area to the wider community. adjacent blocks of 1920s red brick houses with white-painted porches and rear alleys were replicated with a proposed mix of single homes and duplexes. The zoning was changed to conform to traditional patterns which was made possible using redevelopment area procedures. While the built result is handsome and well received, its urban character was sought by the neighbors who considered the density and attached home types “too urban”

Additionally, the market was not receptive to some of the attached housing models, and the original townhouses were therefore separated by three feet and raised slightly above grade to make them feel separate and larger. The duplexes were left in the plan and were able to sell. The splitting apart of the townhouses late in the development and construction process led to the use of cost saving wood siding with no windows in them. This reduced the density of the original concept by about 10%, and increased costs.

Metro Square, Sacramento, California

Case Study 8 Metro Square, Sacramento 21 units per acre

This case study of a market development is also included to illustrate anther strategy for achieving surprisingly high density while preserving single family characteristics.

The size of the typical Sacramento block allowed for one set of narrow, shallow lot homes to face the public streets, and then an inward facing set to face a private "street". In stead of providing a City and fire department required standard 60 foot wide right of way down the block middle, the architects won support for two ten foot wide shared pedestrian/auto lanes, with a 40 foot wide public green between. Minimal front setbacks for these "green" facing units, combined with the use of deep front porches that have bedrooms above, allowed for a substantial amount of living space to be on the front portions of the shallow lots. Larger front yards are fond on the units that face existing streets, to match existing urban patterns.

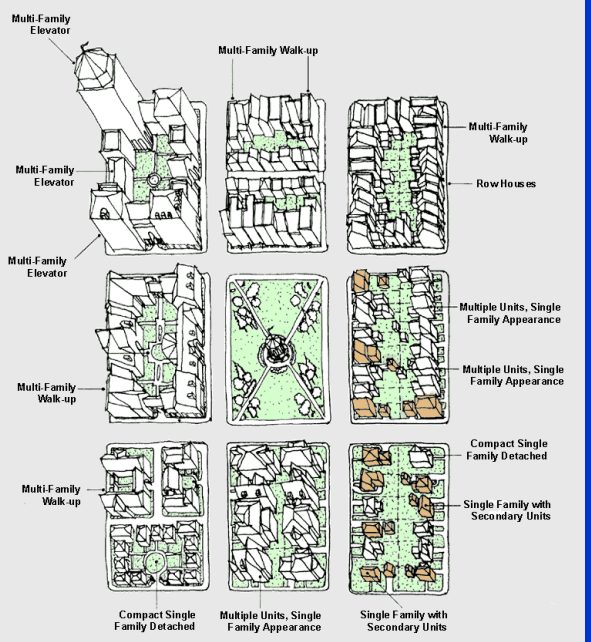
While only a few basic unit layouts are used, a great variety I achieved by changing porch, rail, window size, roof shape, and color from unit to unit, just as the l920's arts and crafts units in the neighborhood also features. Many developers doubted these small lot homes would ever be sought given the soft market in the City, but they were quickly sold out and are now being copied by others.

Single Family Homes with Secondary Units

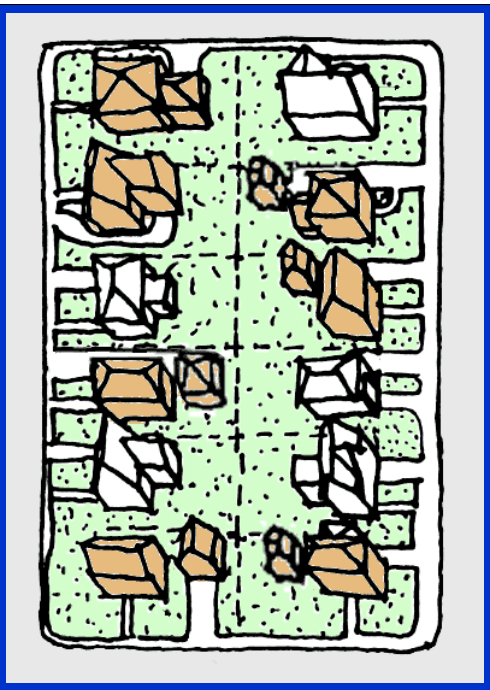
The inclusion of a smaller, secondary unit on the same site as a single family detached home adds housing units without changing the perception of a different home type, or greater density. Secondary units provide income to the primary homeowner, and thus can allow buyers who would others is not be able to afford a home to obtain ownership. Secondary units may be considered more desirable to certain groups of tenants than larger apartment buildings, and the cost to construct them and to manage and maintain them is less than multifamily apartments.

The benefits of secondary units are being rediscovered, but the housing type is an old one. The two most common ways to accommodate a secondary unit are within the main house, usually at grade, or in a separate structure about the size and scale of a double car garage. As a variation, historically they have been developed above garages, or even on an upper floor with a separate access stair. During the second World War when defense industry expansion in many cities created a housing shortage, public policies promote subdividing older homes and installing secondary units in basements, attics, and garages, to help house single workers

Two case studies in the following sections show secondary units as art of detached home developments. Additional secondary unit models can be found in the row house section.



Single Family with Secondary Units



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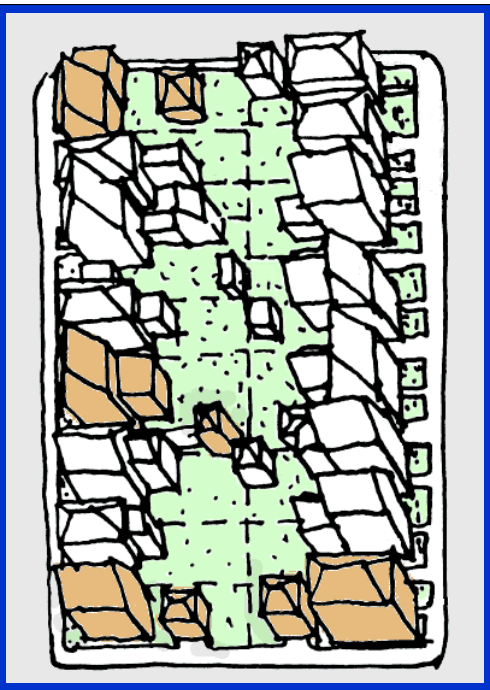
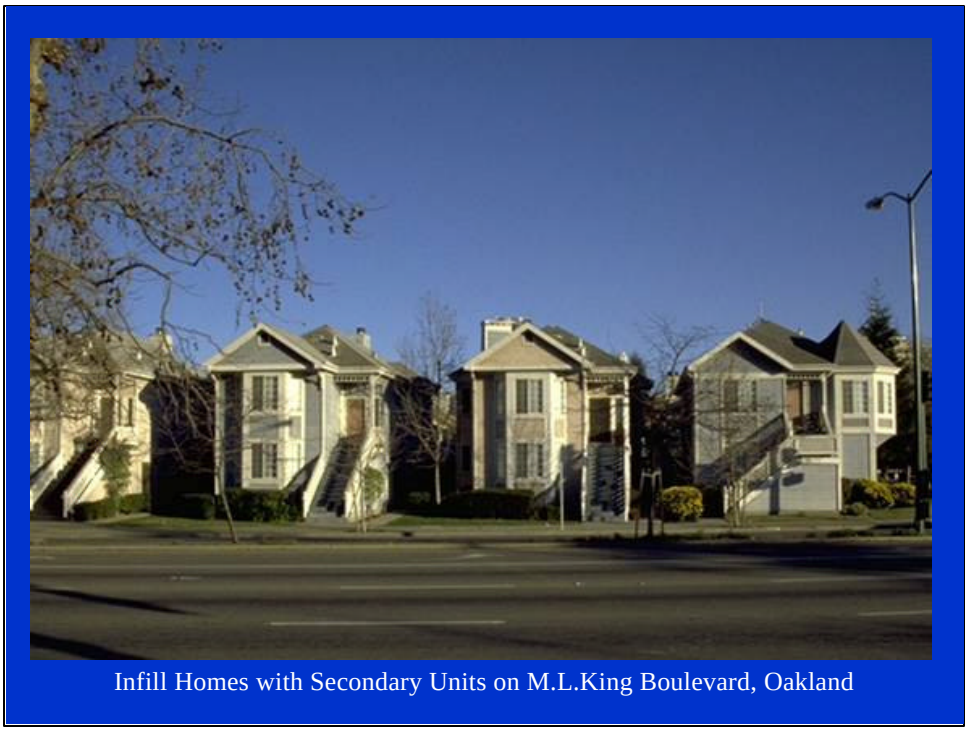


Single Family with Secondary Units



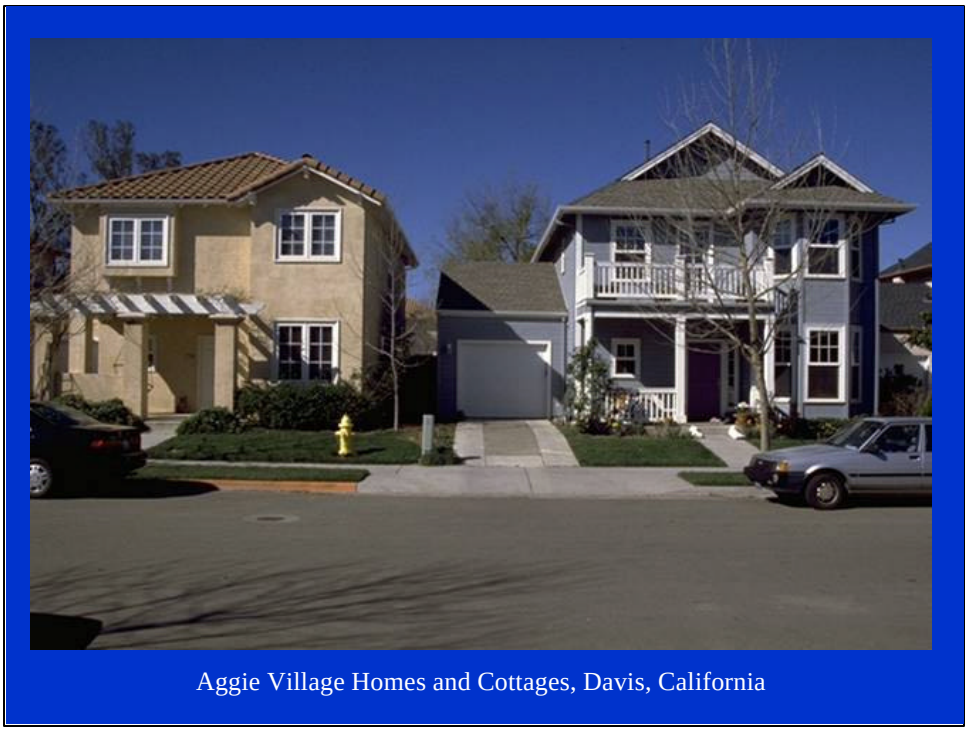
Infill Homes with Secondary Units on M.L.King Boulevard, Oakland

Case Study 9: MLK Homes, Oakland, 24 units per acre including alley

These ownership homes on 30 foot by 100 foot lots in a turn of the century neighborhood have a small one bedroom rental secondary units that is entered by a door facing the side yard. The main level of the larger home is on the upper floor with two bedrooms, and an interior stair leads to a lower level room bedroom and bath. A rear alley provides access to a double car garage. The rear side of the homes has a large upper deck for the main home, as well as a yard at the lower level between the rear of the house and the garage.

Most of the units back up to the alley system, but a few do not due to he irregular boundaries of the lot, and they have two one car garages facing the street instead of the extra bedroom and bath for the main unit.

The project was undertaken to replicate a similar successful development nearby that allowed mothers from the surrounding neighborhood to become homeowners, and the secondary unit income is essential to the success of the first time buyers.



Aggie Village Homes and Cottages, Davis, California

Case Study 10, Aggie Village, 17 units per acre.

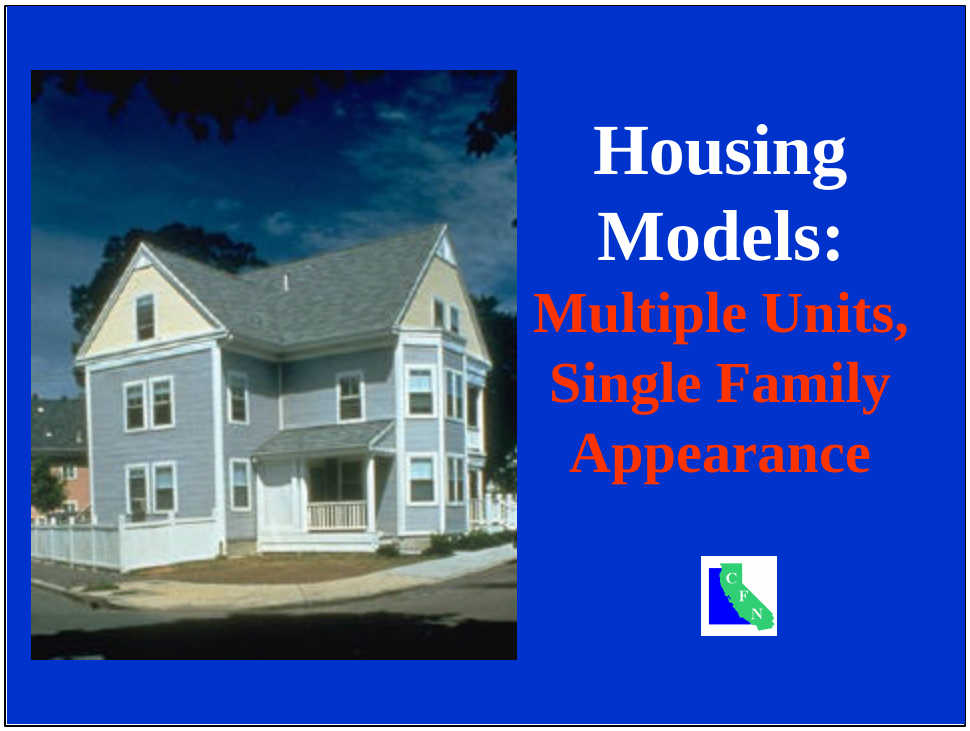
The site plan for this development provides for main houses with garages at their sides facing a regular street system, and small secondary cottages at the rear of the lot, facing a pedestrian mews. In some cases, the cottages face another street instead of the mews.

The allowance for just one garage per main unit, and a waiving of the parking requirement for the secondary unit, reduced the impact of drives and garages on the overall site plan. The house plans are similar of each typology, but the roof shapes and materials, building materials, and general details create e visual mix which mirrors he larger neighborhood. There, 1920's style homes in a variety of Mediterranean, neo Victorian, and arts and crafts styles all occur, but with very regular spacing, similar massing, and a unifying street grid and mature street trees.

Aggie Village Secondary “Cottages”

This view of the cottages is that face a narrow street of their own shows their stylistic differences are the same as those of the main house. All have large porches, even though they are small junior one bedrooms units inside.

The site was donated by the University of California, Davis to a private developer in exchange for lowering sales costs to a level affordable by faculty and staff. Graduate students and entry level faculty and administrators constitute the largest pool of potential cottage occupants. The low parking requirement was essential for the site plan to work, and reflects the ease of waling and bicycling in the town flat terrain and mild climate of Davis, combined with the close proximity of the development to the campus, a adjacent small retail complex, and downtown.

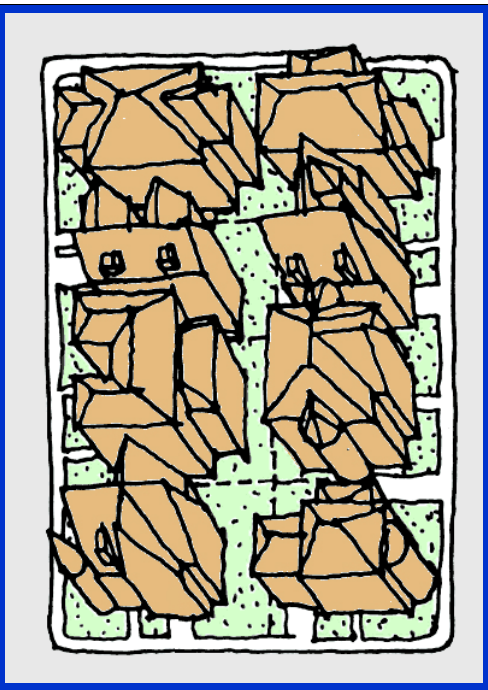


Buildings that contain several units, but are designed to appear like one older home, can be seen as more in character with some neighborhoods than either row houses or walkup garden apartments. The strategy of achieving density through this model represents a revision of older patterns once found in many America cities of models and an application to new situations an old "pre-zoning" pattern in many cities of having duplexes, Triplexes, and even larger "plexes" on corner sites, or within the shell of older buildings that have been subdivided to create separate apartments within.

These types of buildings are often found between traditional single family detached districts and commercial or apartment housing districts. They can also be fond along the "grand boulevards" that trolleys traveled and once had large estate homes. As wealthier families continued to move further out of the cities, their former homes were often subdivided into apartments. New apartments made to look like older homes were then used to fill in between the older homes.

The case studies show that a wide range of densities can be achieved using this building type, from 7 – 22 units per acre, mirroring the range of detached homes. The case studies show how this type allowed for preservation of on-site open space or the meeting of context requirements in a manner that would not have been achieved using the detached house model.

Multiple Units, Single Family Appearance



Multi Units, Single Family Appearance

Multi Units, Single Family Appearance

Lake Park Town homes, Issaquah, Washington

Case Study 11: Lake Park Townhomes 7.8 units per acre including street.

These homes are actually duplexes that are about the same density as the Lyton Park detached homes, but show a different approach to the issue of scale and context compatibility. The development of detached homes was considered but rejected, as they would have appeared too small and closely spaced compared to the surrounding homes in the Klahanie new town. Duplexes also offered some construction and maintenance savings by being attached along one party wall

These 14 duplex buildings provide 28 units of 1450 units each that fit into the size and scale of the 3000 SF homes in the adjacent master planned community. Large front setbacks and side setbacks copy of the patterns of the neighboring homes. One basic plan has been used, but changes in window placement, garage placement, porch forms, and and roof forms provide variety.

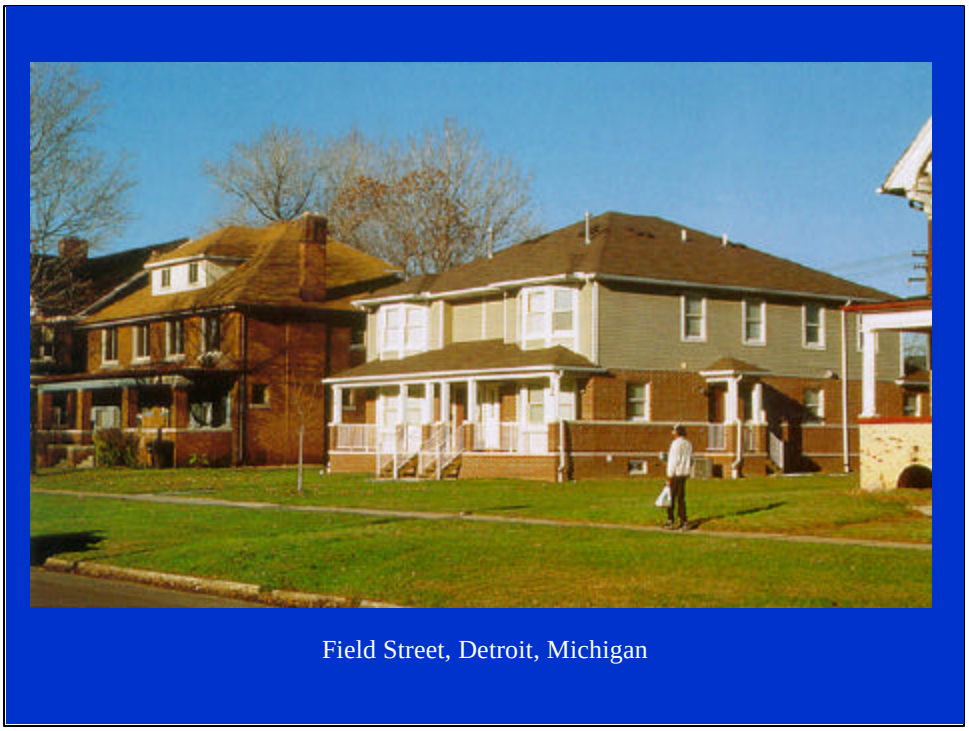
Large backyards are also a feature of the development

Case Study 12: Battle Road Farm, 10 units per acre including wetlands and commons

The 120 units at Battle Road Farm are developed in 34 separate buildings that are designed to appear like traditional large New England homes and outbuildings. These are laid out on a curving street system and inserted between existing mature trees to create a meandering village edge feeling that is compatible with the pattern of large homes and estates found nearby.

The allusion to traditional architecture includes the use of familiar symmetrical main homes, with a large front porch facing the street, and then attached lower and more irregular "outbuildings" at the rear that mimic traditional add-ons that linked original homes to their later carriage houses and small barns.

These "homes contain 3 or 4 units each, with the structures paired so that uncovered parking courts on one side provide both vehicular and pedestrian access to the side and rear units, while all units have porches or access to the large shared side yard that is shared by 6-8 facing units. While there are no fenced in individual yards, the clustering of the units allowed for a sizable wetlands that occupies about 20% of 24 acre site, and a 120 foot by 550 foot green "commons" at the heart of the community.



Field Street, Detroit, Michigan

Case Study 13: Field Street, Detroit, 12 units per acre

The 21 units in duplex and quadruple structures along Field Street and Grand Boulevard East replace previously razed structures, and are designed to match the very large single family and duplex homes in the surrounding area.

The overall placement and shapes of the buildings match the context, which is characterized by large rectangular homes with full width front porches, structures raised up on semi-depressed basements, with a mixture of brick and wood siding and historical styles.

The quadruple units look like large single family homes but actually contain four two story units, with two accessed by way of the front porch, and two entered through smaller side entries. On other lots, the units resemble nearby duplexes, or nearby row houses, but all have the same setbacks and share the system of a rear alley that provides access to parking

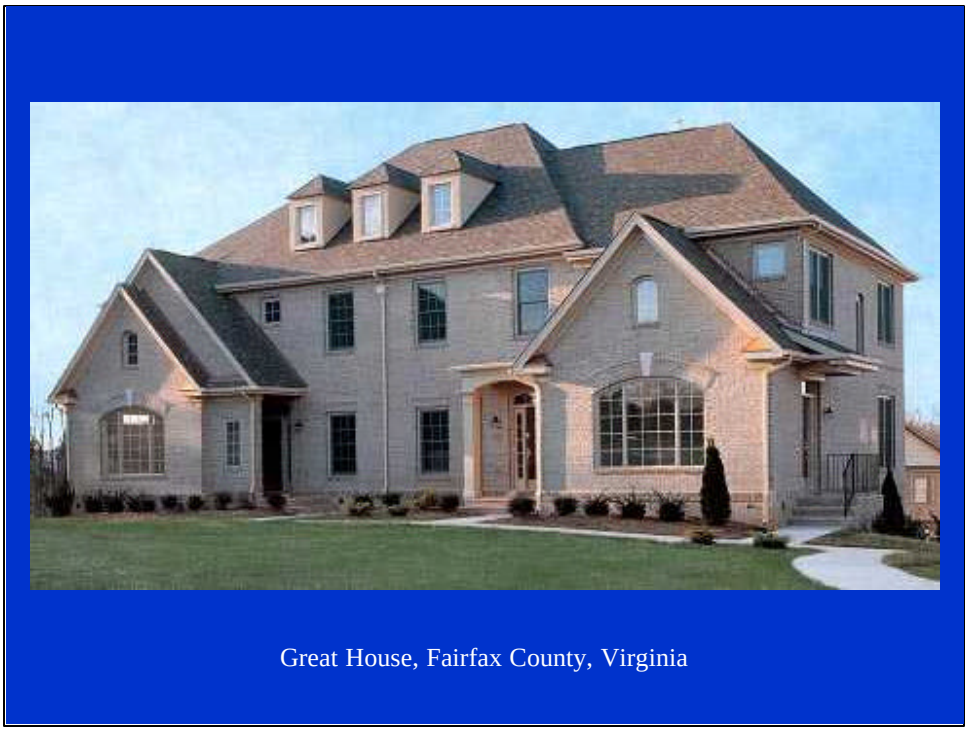
The Farm, Soquel Santa Cruz County

Case Study 14: The Farm, Soquel CA 13 units per acre including preserved meadow field and community building

The farm is situated in a semi-rural area adjacent to existing large single family homes, and the site required the preservation of a natural meadow. An old farmhouse on grounds that constituted almost half the site was preserved and renovated for use as a childcare and community center. A guest parking lot was developed adjacent to the old farmhouse

The new housing on an L shaped parcel opposite the farm house provides for 2 or three town homes within each new "farmhouse" whose composition, materials, colors, and detailing echoed the original renovated farmhouse. Some of these face the public street, while others are arranged along a wide green commons at right angles to the street.

Parking for the units is provided in an l shaped lot at the rear of the units. Individual front porches provide the only private open space, but the commons and the open fields around the restored farmhouse provide ample shared recreational open space, which together constitute about 30% of the site. Without the inclusion of the field and community building, the density of the housing and its attributable parking and commons would be about 18 units per acre.



Great House, Fairfax County, Virginia

Case Study 15: Great House, Fairfax County, density varies with lot size: range 8-16 units per acre

The Great House is a building typology being utilized by market rate builders to meet their required below market rate units in new large home subdivision throughout the county. The Great House incorporates two or four townhouses within one building designed to look similar in scale and character to the adjacent market rate homes. In the model pictured, the façade is designed to mask the several entries and provide some asymmetrical elements to avoid looking like a standard duplex or fourplex. Middle units have access to a third floor attic, and all units also have access to full basements below and large decks behind. Parking is on surface lots at the rear of the building.

The overall composition and volume of the building fits into the typology of the area, where one projecting wing may signify the living room, and the other contain a three car garage entered from the side. Prior to the development of the Great House, the typical solution to the Affordable Dwelling Unit requirement had been the construction of conventional townhouses and low-rise multi-family multi-plexes, both of which appeared quite incompatible with the predominant single family detached homes and clearly labeled the affordable housing as different and less desirable.

To date, two projects containing attached Great House units have been built in Fairfax County - one with two units in a single building (the duplex model) and the other with four units per building (the multiplex model).

Capen Green, Dorchester, Massachusetts

Case Study 16: Capen Green, Dorchester Mass. 17 units per acre

These ten duplexes provide similar size units as the Issaquah homes, but the house forms allow for expansion by the owners who can convert unfinished basements and attics to bonus rooms for their own use, or to create income producing secondary units over time. If all owners do install secondary units, the density will statistically increase to 34 units per acre.

Buildings are alternative placed along the street front with a wide side facing the street, then a narrower gabled side facing the street. This provided variety, and also allowed for a closer spacing of the units along the street, allowing one more duplex in a series of five than would have otherwise been possible. Additional variety is economically provided by changing the location and direction of front porch stairs and the style of porch details. The main simple rectangle homes feature modular construction components, but look lie the traditionally built

The homes circle most of a common block, so they share common open space beyond their own small yards. Parking did not have to be covered, so two cars are effectively accommodated in tandem form on a private drive at one side of each building.

Sheridan Senior Estates, 18 units per acre

The development consists of seven cottage-style buildings that accommodate fourteen two-bedroom rental units. The homes face inwards towards a centrally located laundry/storage facility and a small community center featuring two outdoor patios. The units were designed with two bedrooms to provide additional space for a caregiver. The vaulted ceilings and combined living, dining, kitchen alcove, provide large open, well-lit space in these efficiently designed, small units.

Willows Infill Homes, Menlo Park

Case Study 17: Willows Homes, Menlo Park, 21 units per acre

The Willows development utilized several scattered sites in a neighborhood of large old arts and crafts style homes. Using the standard 6000 Square foot lot, a basic Triplex building type was developed, with porches, trellis, and fencing that vary from site to site. Units are sited so that they front a walkway at right angels to the street, with uncovered parking in a common lot behind.

While the siting of the building is not typical for the immediate neighborhood, it is a familiar solution historically. Within the wider community and the greater Bay Area region, there are neighborhoods and streets that have narrow but deep lots on which large homes have been built that are entered like the Willows from the side, not from the front.

There are no fenced in private yards, but the community has nearby large parks, and the walkways and entry areas sere as semiprivate open space. Small back areas on the parking side also are used for social space, and both he parking area and the front walk double as hard surface play areas.

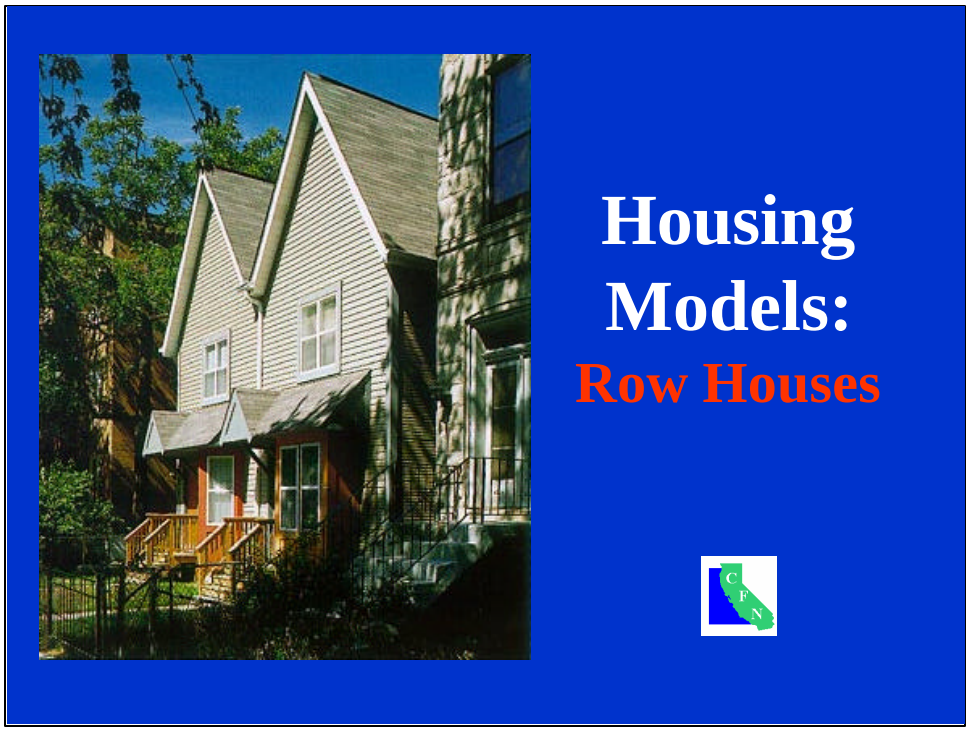
Hyde Square Co-op, Jamaica Plain, Massachusetts

Case Study 18: Hyde Street Co-op, 22 units per acre

Like the Willows in Menlo Park, The Hyde Street Co-p is a scattered site infill development, with 41 units in 17 buildings. Three different building types were developed. These included including two different duplex (stacked flats) models looking like large single family houses with some bedrooms of the upper unit under a steep pitched roof. The third building type is a three unit three story flat roofed building building resembling the "triple-Decker" stacked flats that also exist in the area. The neighborhood pattern of curving and angled streets and irregular lot depths meant that unlike the Menlo Park project no tow sites were alike and presented a major site planning challenge. The "house" style duplexes were sited on the narrower lots or sideways on shallow corner lots. The "triple decker" buildings containing two two-story flats over one single level apartment were in a wider but shallower building type, so better suited to the wide but shallow lots in the area.

All ground floor units have some rear yard area, and all units on upper floors have large porches to compensate for their lack of private yards.

Parking is provided in a variety of patterns, including a mix of shared lots at the side or rear of clustered buildings, and some group parking across the street from buildings on lots to small or narrow to have on-site parking.



Row Houses

The row house offers the advantage of both economical construction and potentially higher land use efficiency by attaching a series of units in a row with party walls on two sides. While attached and often narrower than a detached house, the row house still offers the visibility of an individual front door, an individual back yard, and no other family living above or below.

The rowhouse does eliminate the option of side windows except at end units, and therefore its depth is more limited than for detached or semi-detached units.

With some exception, the sales value of rowhouse and attached style ownership units is lower on a per bedroom or per square foot basis than for detached units, due primarily to market preferences for light and air on multiple sides, and misgivings about the potential for noise and pest transmission between units.

Additionally, technical and design attention must be given to the maintenance of common party walls and the draining of roofs to avoid conflicts among neighboring residents in row houses and attached units.

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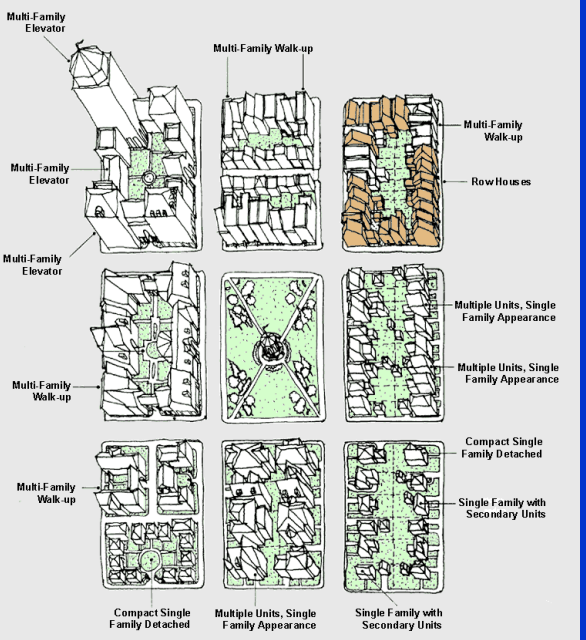
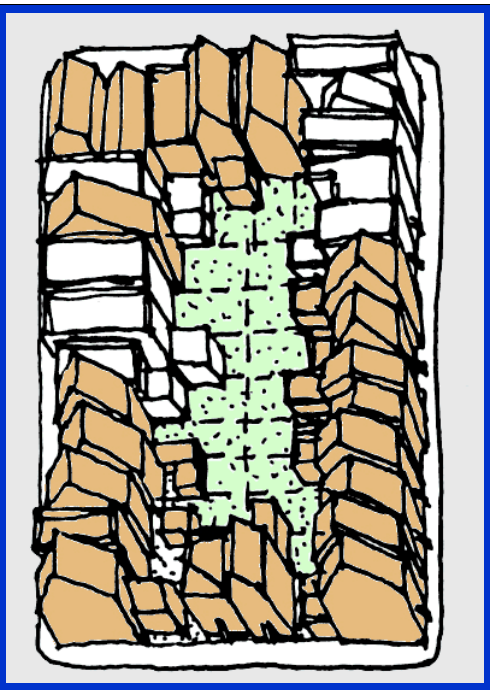

Multi-Family Elevator
Multi-Family Walk-up
Multi-Family Walk-up
Row Houses
Multi-Family Elevator
Multi-Family Elevator
Multiple Units, Single Family Appearance
Multiple Units, Single Family Appearance
Multi-Family Walk-up
Compact Single Family Detached
Multi-Family Walk-up
Single Family with Secondary Units
Compact Single Family Detached
Multiple Units, Single Family Appearance
Single Family with Secondary Units

Row Houses



Row Houses

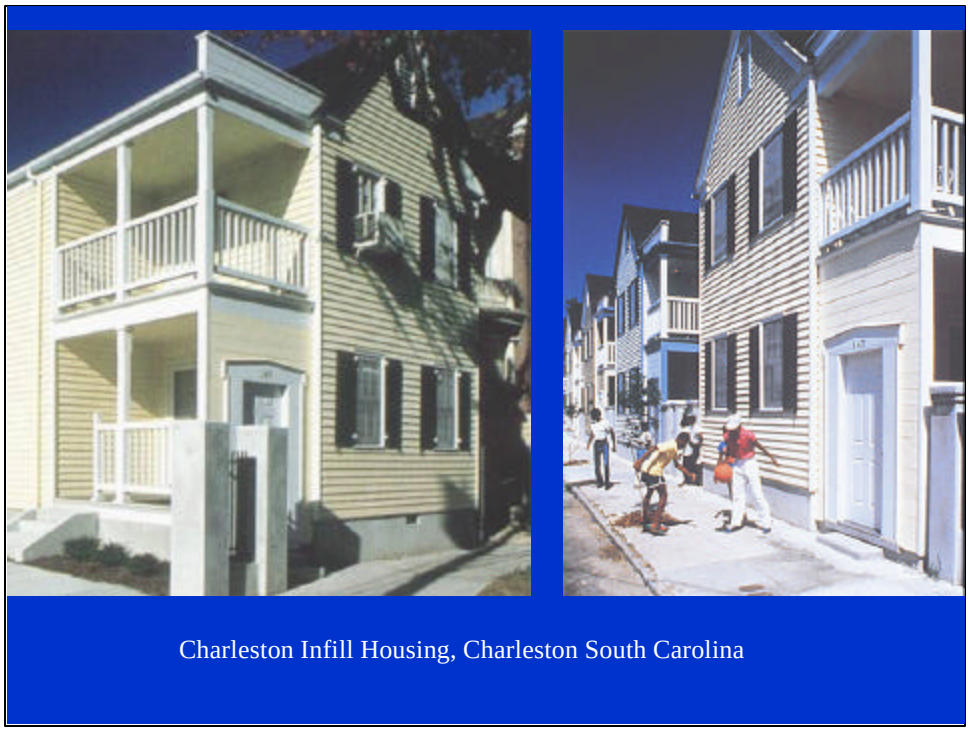
Harriet Square, Minneapolis, Minnesota

Case Study 19A: Harriet Square Minneapolis 10 units per acre including rear parking court and small green

The Harriet Square development is in an older neighborhood with moderately sized older homes on large lots, featuring expansive front yards. To achieve greater density than the surrounding lot pattern would have allowed, these homes are attached as rowhouses. The traditional elements of the screened in front porch, steep pitched roofs, and elevated first floors have been followed, so that when viewed from the sidewalk the units look more like nearby closely spaced detached homes.

The traditional raising of the units allowed for a partial basement that also contains the garage. In place of the traditional narrow alley, the garages face a wide parking court that has a small green space in the middle, and serves as a recreation and play area. The row of homes is broken in a few places to define subclusters of houses, provide a small common side yard play area.

While the houses have no private back yard, the large screened porches provide private space.



Charleston Infill Housing, Charleston South Carolina

Case Study 19B: Charleston Infill Housing, Charleston South Carolina 11 units per acre including ganged surface parking and community building

These row houses were the result of a scattered site infill development on deep, narrow lots in Charleson. The designers chose as a prototype the 18th century "single house", a familiar type in the historic district. Long and narrow, this house fits nicely on the lots, and, being one-room wide, provides cross-ventilation for the hot and humid climate. The duplexes have side porches, another climate-influenced feature of the side house. The architects added a false entry on the street side of the porch for privacy; the remaining street frontage is fenced for security and to strengthen the street edge.

The units have no front yard, as is the urban tradition, but have very deep back yard areas and porches.

Rancho Cucamonga Villas, Cucamonga, California

Case Study 20: Villas at Ranch Cucamonga, CA 12.5 units per acre

The sponsors and neighbors for this 120 unit development sought a townhouse instead of an apartment complex model for this rental development, one that looked more like the detached homes also nearby. The plan places townhouse style units at the permitted of the site, with alternating pedestrian courts and automobile courts giving access to additional units at the site interior. The high visibility of the site, across the street from a large public playing field, suggested the development of attached townhouse units that are massed and stepped up and down so as to create the impression of detached units. When seen while walking or traveling along the street, the units do not appear attached, an illusion that is heightened by varying the colors and window placements of the individual units, and setting portions of the units back further from the street.

Landscaped pedestrian entry courts off the main street provide access to the front porches and doors of 6-8 units each and provide a shared play area. Parking in a combination of garages and open lots is reached directly through the backdoors of the units. The parking required a significant part of the site, and limited the provision of private open space, but there is a large landscaped commons, barbeque and play area, community building, and child care building shared by all residents in the large midblock area of the site, reached by the series of pedestrian mews

Lavell Court, Sonoma County, California

Case Study 21: Lavell Court, Sonoma County CA, 12.5 units per acre

The density of Lavell Court is statistically identical to the Villas at Rancho Cucamonga, but the site plan feel more open for a variety of programmatic reasons.

Primarily, the open feeling comes from the smaller size of the units, which have an average of one less bedroom per unit, and the combining of a narrow parking zone around a wide commons at the center of the site, which is all visible from the main street that the development fronts.

Like Rancho Cucamonga, it is an inwardly focused site plan, there are only small private yards, and the architectural style used derives from local single family home styles and regional traditions.

The smaller average size of the Lavell Court development, and a lower parking requirement, both combined to require less building and parking footprint, and allow more open space than at the Villas.

Lavell Court, Sonoma County, California

The site plan mixes some more compact, two story stacked flats containing the two bedroom units with two and one story rowhouses. The townhomes are arranged on three sides around a large green commons and community building.

Instead of placing the parking behind the units, a u shaped parking “street” circles through the site, and no carports or garages were required. This pattern provided a large visual distance across the site, and recreated a familiar type of small town or village in the region, where a town green is surrounded by streets with head-in parking.

The location for the development is within a small unincorporated urban services area with few buildings and otherwise surrounded by rural farmlands and vineyards of Sonoma county. There is no townhouse tradition in most of the county, so n effort is made to highly differentiate the units, and provide breaks between them at regular intervals, to downplay their attached quality. The design therefore clusters no more than 4 units in a row, shifts the plane of the units forward and back, and uses different porch details, roof forms, and pint colors for each unit.

International Homes, Chicago, Illinois

International Homes, Chicago 14 units per acre

28 units in clusters of 2 to 6 on infill lots

Front yards and character of buildings match older row houses

Lot depths vary, with range of small and large rear yards but all have private outdoor space, plus full basements

Parking ganged in spaces off of existing city alley system

Main Street Park, Half Moon Bay, California

Case Study 22: Main Street Park, 14.9 units per acre

The 64 units at Main Street Park were required to include a semi-public park in the site plan, and respond to design guidelines oriented toward fitting new development into the rural character of the community. At the same time, the zoning and public policy promoted higher density, as a way to accommodate the rural workforce within existing city limits.

The site plan and building solution was to place the park on the front portion of the site, and to arrange clusters of townhouses around the edges of the park in a casual way so as to fit into the rural character of the community.

A community building that primarily serves residents, but can also used for the general public as part of park events, is made to look like one of the regions small agricultural structures.

Main Street Park, Half Moon Bay, California

One row of townhomes are oriented toward the main street, but as the buildings step back around the park, some of the units have their bedrooms on a third floor, and additional clusters of homes are reached by way of an internal lane. The ability to add some of the required building volume through third story elements helped off set the amount of land left for the park.

Traditional small scale elements such as picket fences, bracket eaves, and door canopies capture the style of older structures. The development uses just a few basic unit plans, but attached in many different ways and painted in different pastel colors.

In addition to the public park, clusters of 4 to six buildings are arranged around semiprivate play areas at the interior of the site. A double loaded open parking lot is at the back of the site and serves all units, providing 128 cars (2 cars per unit).

West Town II, Chicago, Illinois

West Town II, Chicago, Illinois, Average 17 Units per Acre

A series of 30 scattered sites in the West Town Neighborhood were used to accommodate 113 units of new infill townhomes. The typical lots of 25 by 100 feet with alley's behind many allowed for both small front yard and a very large rear yard, with a two story townhouse. Where multiple sites in a row were available, some variation was provided by creating new pedestrian mews from the street to the alley behind, and lining up some of the homes on the mews.

Willowbrook Green Apartments, Los Angeles, California

Willowbrook Green Apartments, Los Angeles 19 units per acre

Adjacent context large intuitional structures, including Drew University and M. L. King Medical Center next door, and elementary school across the street.

60 two story townhouses arranged around a single large open space

Units turn inward, away from surrounding areas due to high crime an no residential context

Entry to site left undeveloped for future childcare center

private lane leads from street past one side of the development to give access to rear parking lot with 113 cars

Southside Park, Sacramento, California

Southside Park Co-Housing, Sacramento CA 20 units per acre

This development uses the shapes and details of 1910-1920's nearby homes on narrow deep lots to create a development that looks very similar to them from the street. Shifts in the planes of units, changes in color, and different dormer forms all create a sense of detached homes.

Units are attached in short rows of two or three with space between that provides access to the central court.

The depth of the site from main street to alley allowed for a second row of units and a very large community house to back up to the alley, while creating a large common yard space within the block. The units all have large porches which serve as the only private open space. The program four the site called for most of the exterior space for common use, including a commons building with a space large enough to accommodate the entire community for dining.

Southside Park, Sacramento

Five of the units are sited on a parcel across the narrow alley, having no street frontage. The siting of the community building directly across from them, and the provision of a landscaped “alley cross” to link the se houses to the main area help keep them from feeling like second class units.

The surprising density of the development was facilitated in part by the presence of a public alley that all the parking spaces face, and the requirement for only one space per unit. These factors combined to leave a much greater proportion of the site available for housing, as no new drives and parking lots were needed.site benefited from the presence.

Jingletown Homes, Oakland, California

Jingletown Homes, Oakland 23 units per acre

53 units total

During the workshops, the participants choose to organize the larger homes with spaces available for future side garages, while the smaller homes have their autos clustered in three small lots, placed in front of the homes. The homes face onto auto/pedestrian courts, paved for pedestrian use, and lined with bollards without curbs to enhance the feeling of a pedestrian plaza. These courts are aligned with the rear vacant lot for future pedestrian connection. The child care center and community meeting room were placed at the corner of two access streets to allow their use by the larger neighborhood. Homes along the streets were placed so that their entrances address these streets to ensure their security and to relate to homes on the other side. A central walkway connects two major streets as a convenient shortcut to a shopping district for neighbors to the north of the site

Jingletown Homes, Oakland, California

Jingletown homes have a bonus first floor room at the front which can legally be used as a business office.

Waterside Green, Stamford, Connecticut

Waterside Green, Stamford 27 Units per acre

The 75 units were divided into four building clusters grouped around semi-private courtyards. Each cluster differs because of the shape of the lot, giving the housing an unregimented appearance. By designing the one-bedroom units as third floor walk-ups over three bedroom townhouses, architect Zane Yost succeeded in giving the buildings the character of large houses, helping them fit in well with the Victorian character of the late 19th Century neighborhood. Townhouses have front porches and yards with picket fences that give families secure, private outdoor space, which is rare in higher density housing.

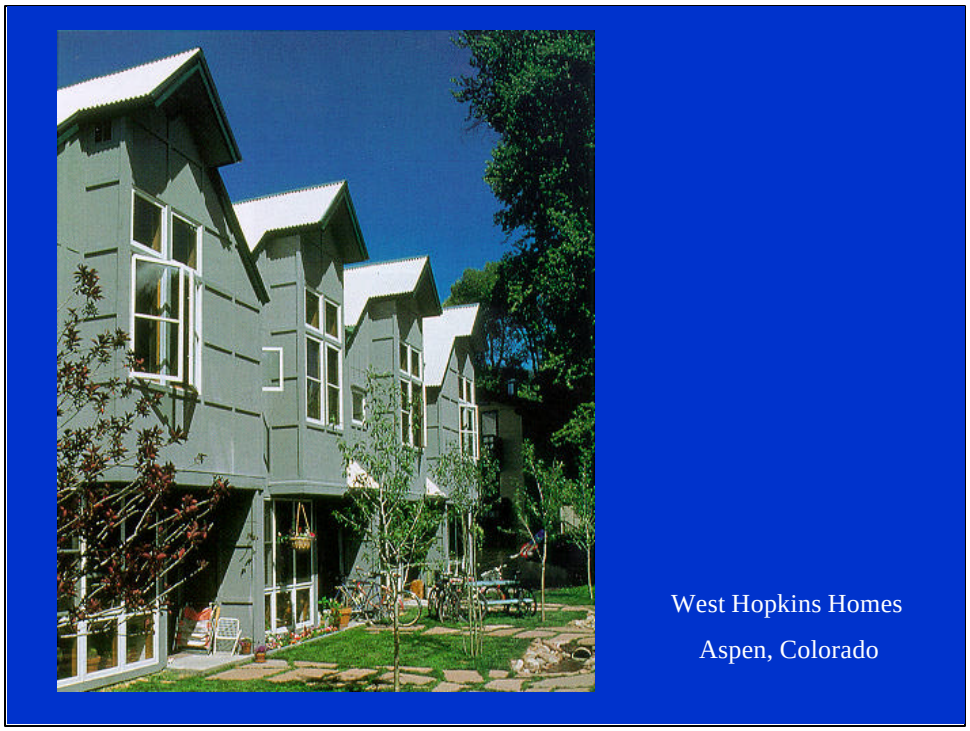
Southside Housing, Pittsburgh, Pennsylvania

South Side Housing: Fox Way Commons & New Birmingham, 29 units per acre

The development, a complex of new residential buildings and adaptive reuse buildings, is designed to fit seamlessly into the fabric of the neighborhood, while emphasizing the inherent differences in location and orientation, and diversity of dwelling types. The development is concentrated in high densities to capture public and private open space. Extending the existing pattern of houses that line the perimeter of a block, the townhouses front the street on all four sides of the block and define a continuous street wall. Urban squares are created by these solid building walls along the perimeter of the blocks. The interiors of the blocks are reserved for private informal use.

At a density of more than forty units per acre in the developed area of the site, these new townhouses are comparable to the surrounding blocks built more than seventy years ago; yet they also offer the amenities of a garage or parking space and a private yard for every unit.

The contemporary brick and metal-sided buildings re-interpret the traditional urban rowhouse of the South Side with a vocabulary that echoes nearby industrial buildings. Architectural features such as stoops and dormers, which are distinctive in the neighborhood, are incorporated into the simple expression of the exterior. Smaller units, modestly priced to attract young urbanites, are expanded visually with open interior spaces and private courtyards. The larger units have three bedrooms and den or family room. All together, there are twelve unit types on the site, which creates the possibility of a diversity of income and lifestyle on a single block.



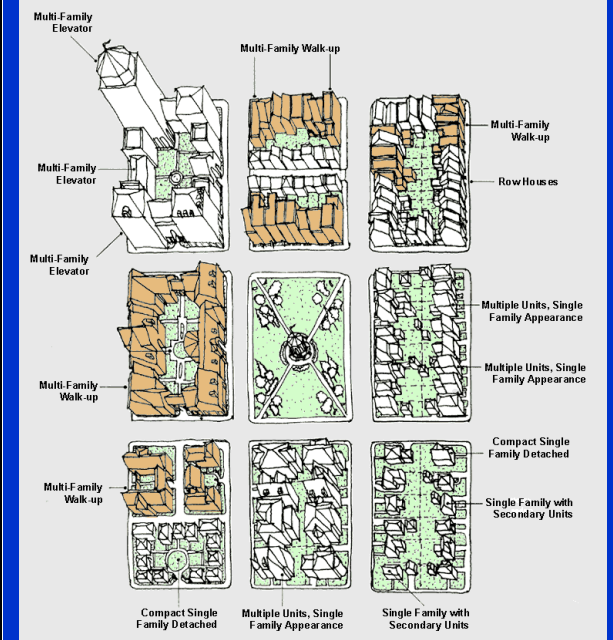
West Hopkins Homes, Aspen 40 units per acre

The West Hopkins housing was a test infill development of only 11 units built on a vacant parcel of land. The scale and architectural character of the three groups of buildings are compatible with the existing context; the buildings are oriented to the street with the living spaces on the ground level to promote neighborhood interaction; they have an internal, semi-private open space. The required one space of parking per unit is on-site and accessed from an alley.

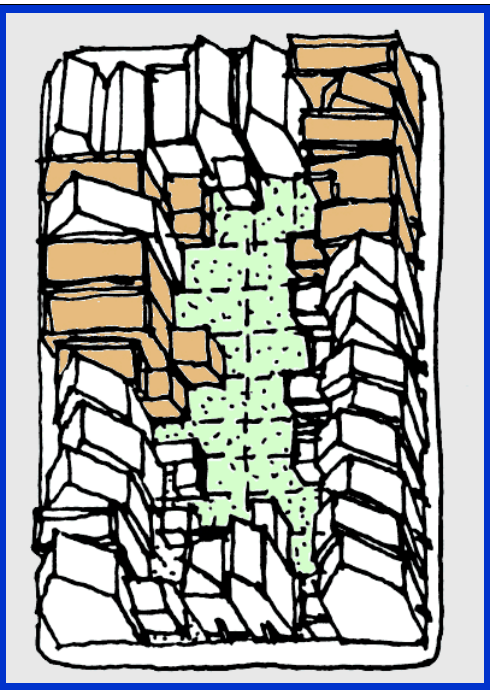
Developed by the Aspen-Pitkin County Housing Authority, architect Larry Yaw designed the units with steep metal roofs and board and batten siding to recall Colorado's turn-of-the-century miners cottages,. Higher density was achieved by placing smaller one bedroom "carriage houses" over garages off the rear drive

Housing Models:

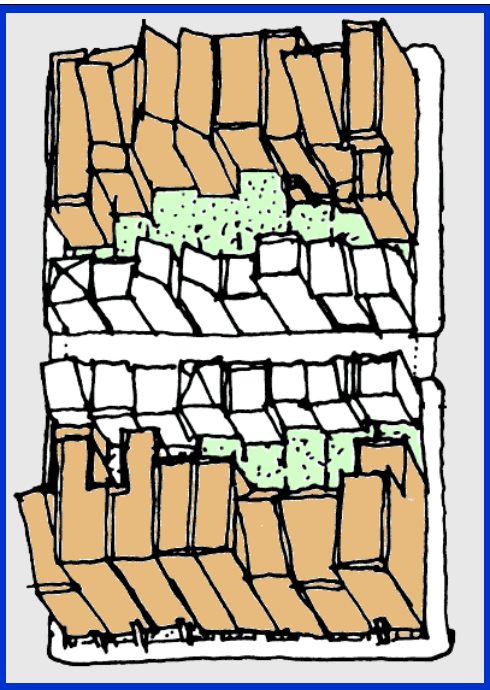
Multifamily Walkup Flats and Apartments



Multifamily Walkup Flats and Apartments



Multi Family Walk-up



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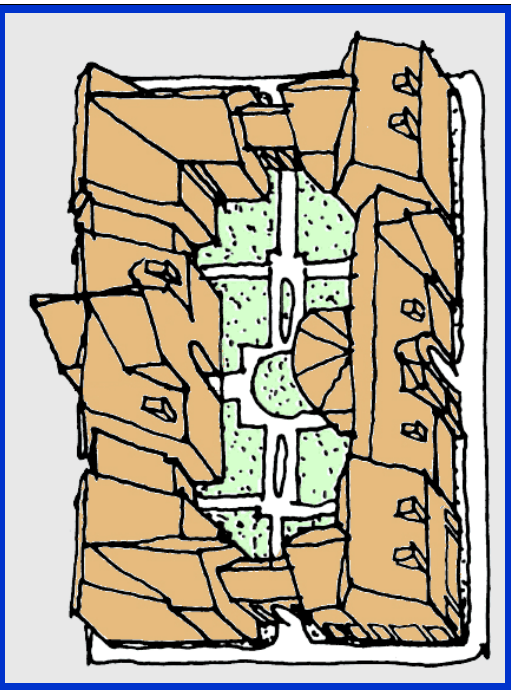
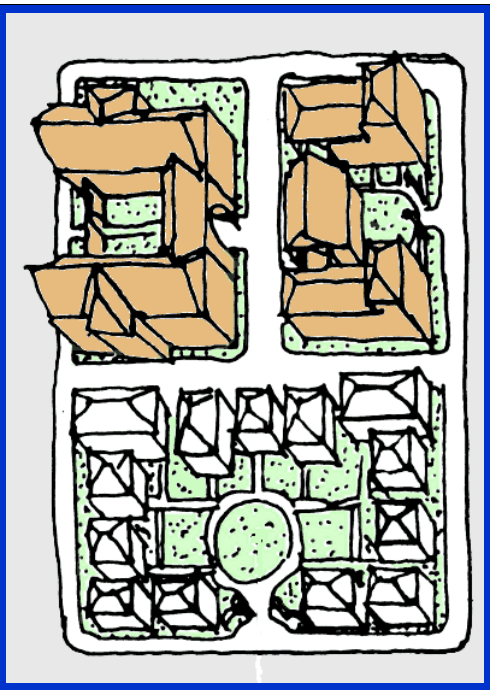


Multi Family Walk-up



Multi Family Walk-up

Stoney Creek Apartments, Livermore California

Stoney Creek Apartments, 16 units per acre

This development is almost the same density as Tuscany Villas, with the same parking ratio, but illustrates a different building type strategy. In this development, the 70 units are arranged into five separate courtyards with a combination of townhouses and stacked flats. Parking is accommodated through a combination of carports and tuck under parking along a private drive that runs behind the entire development.

The courtyards faced by the units are smaller than at the Villas, and more closed off to the general public, but are still large enough for play and open feeling. The units have a shallow entry area facing the courtyard, but have a "backyard" on the other side of the units as well. Common play areas are also located in landscaped spaces between the five courtyard clusters.

Outside stairs and balconies, plus third story elements where two story stacked flats occur over one story units or parking combine to add a lot of variety to the facades.

By tucking the parking under some of the units and keeping parking to one side of the side, slightly more area is left for total open space and it is flowing and contiguous, As a tradeoff, residents at the far end of the courtyards have a much greater distance to their cars than those living near the drive.

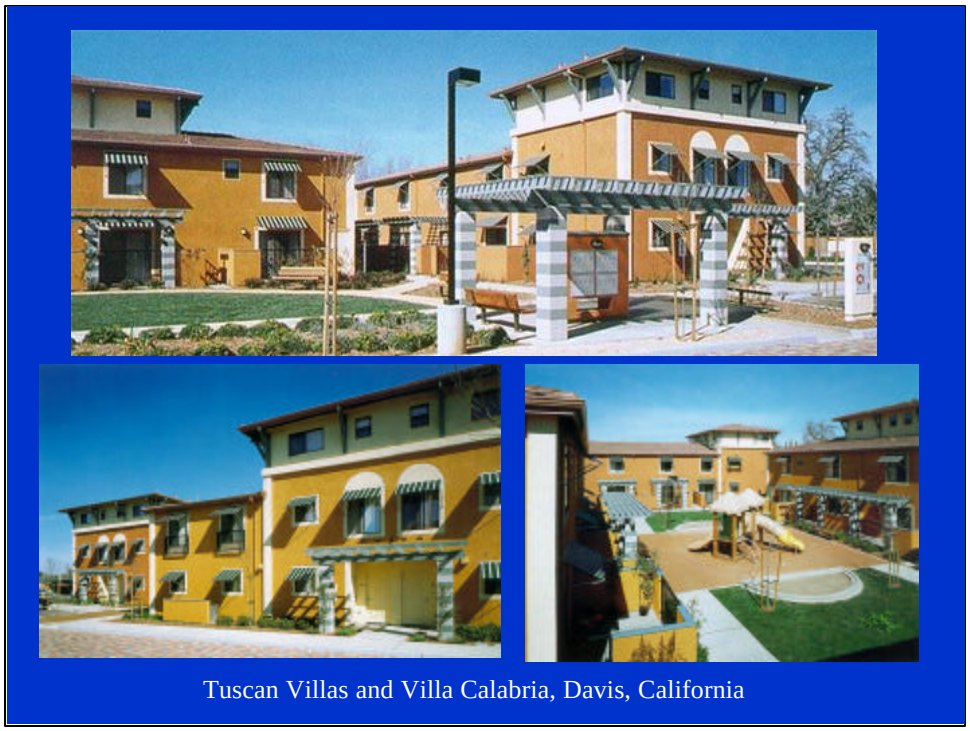
Stoney Creek Apartments, Livermore California

Stoney Creek, Livermore 16 Units per acre

The massing, detailing, and placement of the three story elements do not overwhelm the scale of the courtyards. The scale of the landscaping and courtyard furnishings also provide a mix of textures and elements of a scale that is similar to that of the buildings.

Trees are an important landscaping element in the Livermore Valley, and within a few years this open space will be sheltered from harsh summer sun by a canopy of leaves in the summer, but will be open to sun when desired during the winter times.

Crawford Square, Pittsburgh, Pa. Average 16.2 units per acre including parks and private streets



Tuscan Villas and Villa Calabria, Davis, California

Tuscany Villas, 15 units per acre family townhomes, 28 units per acre senior apartments

The zoning for the site allowed the maximum allowable density in the city of Davis, 15 units per acre for family units, and a 50% bonus for senior housing. The design challenge was to create an identifiable place in a nondescript setting. The site has single story duplexes on one side, a very large three-story apartment complex on another side, and open fields on the other two sides. To bridge the gaps in scale and massing between the existing buildings, the architects designed two-story buildings with three-story sections either in the middle or at the corners and placed them well back from the property line of the area of single-story buildings. Within the large villa forms are five or six townhouses, with some units having third floor bedrooms that were expressed as tower elements either in the middle of the building, or at the ends. These "villas" are then used to define an interior court o rear yard area, while access to the units is from a front private street and parking zone. The advantage of the townhouse approach for the family units is that each unit has its own ground floor private patio overlooking a shared commons.

The building with the senior units is across the street from the family units, with almost identical in floor area, but accommodates more units and contains a top floor community room and covered porch that has a view of the adjacent farmland. The city did reduce the parking requirement for the family units from 2 cars, to 1.75 cars, but this still occupies close to 40% of the site, and to date has not been fully utilized.

The Reservoir, Madison, Wisconsin

The Reservoir, Madison 18 units per acre

At the outset, community support was divided -- the antagonists outnumbered the advocates. The development faced strong opposition because neighborhood residents were concerned about the effect on the neighborhood of the families with low incomes who would move in. This situation changed during the design process to which the owner invited opponents of The Reservoir, residents of the mutual housing association's other co-ops, representatives from local non-profits serving older adults and persons with disabilities, and neighborhood residents. The two major changes that neighborhood concern brought about were the reduction of units from 40 to 28 and more parking. Susan Hobart, former executive director of the Madison Mutual Housing Association, believes that the additional months of planning committee meetings were key to the eventual acceptance of The Reservoir, and improved the overall building and site design.

Open Doors, Los Gatos, California

Open Doors, 19 units per acre

These 64 units in an affluent community contain two- and three-story buildings configured as stacked flats, and townhouses over flats in a pinwheel plan that create a variety of building elevations and setbacks. Different colors highlight separate identities for units in a building cluster. The housing is intended to feel like a village of attached houses rather than a monolithic apartment building. Although the apartments have front patios, they do not have private rear yards because they are back-to-back. The clusters are sited around a shared courtyard with a large lawn and a play structure.

From the street, few people can tell that each of these buildings contain 4 to 8 apartments.

Open Doors, Los Gatos, California

Most of the new units were pushed to the back of the lot where they were not visible to the neighbors, yet ample open space was still provided.

William Byron Rumford Plaza, Berkeley, California

William Byron Rumford Plaza, 24.4 units per acre

The project consists of 43 units of one, two, and three bedroom units in two and three story buildings. The buildings are clustered around central open space, with parking located in the middle and on the ends of the site. The project includes community facilities with meeting room, kitchen, and laundry.

The site presented a number of challenges due to its narrow shape of approximately 700 ft. by 100 ft. The difficulty lay in maximizing the amount of open space and relating the units to the street, while keeping the buildings suited to the neighborhood. These objectives were accomplished by stacking townhouse units over flats in two rows oriented to each of the streets, and placing unit clusters in a configuration which created sheltered open space and promotes a sense of community within the residential block.

The building includes elements that recall the shape and height of nearby homes, and then builds in height as it comes closer to a corner with taller buildings. Frequent insets and breaks in the front planes of the buildings provide further reductions in the visual mass of the e building.

Tower Apartments, Rohnert Park, California

Tower Apartments, Rohnert Park CA 25 Units per acre

The Tower Apartments is three times the density of its surroundings, yet feels comfortable both from the street and inside the complex. Composed of 50 units in two- and three-story buildings framing two courtyards, the site plan makes use of virtually every foot of space. The frontage on the main street has two-story townhouses; three-story buildings with townhouses over flats line the courts, and a combination of surface and "tuck-under" parking occupies the edges of the site. A service street separates the courtyards, one of which has a play structure and a building with a community room and a management office. Painted in light pastel colors and enlivened by roof dormers, pergolas, and porches, the buildings project a lively and appealing image; their style reflects the older architecture in the area.

The architects led participatory design workshops to incorporate suggestions from neighbors and public officials. Although the City of Rohnert Park was very supportive of the development, Cotati was concerned that the housing conflicted with its image of a rural community. The buildings along the main street were built at two stories and set back an extra five feet to address their concerns; this response made the apartments and open spaces smaller. Among the features designed to encourage residents to personalize their homes are trellises with hooks for hanging plants on the front and rear patios

Tower Apartments, Rohnert Park, California

By placing some of the units in three story structures and tucking 40% of the cars underneath half of those buildings, the footprint of the ho using and the parking was reduced in order to provide several open space courtyards

Matsusaka Townhomes, Tacoma, Washington

Matsusaka Town Homes 29 Units per acre

The 26 units at this development were planned and designed through an extensive neighborhood participation process that even included public votes on scheme alternatives during the process.

A committee of neighbors and possible users met in the parish hall across the street so the site was visible from the meeting area. The design of the buildings and their colors were derived from the other homes and buildings in the neighborhood. The massing on the main street matches that of the commercial and institutional buildings; the building steps down in the back to match the single-family houses behind. "The townhomes design with the distinctive colors and individual entrances from the street reinforces a sense of ownership for the residents," noted architect Les Tonkin. The townhouses wrap around the courtyard and have front and back yards; windows in the rear walls permit parents to watch the play area.

A mix of walkup flats, and two story townhouses over one story apartments was used to provide variety of units type and to provide different building forms as seen from the street. The slightly raised front setbacks landscape areas featuring a low stone wall echoes a common treatment in the residential area of this neighborhood.

Hommocks Apartments, Mamaroneck, New York

Hommocks Apartments, 30 units per acre

The 54 apartment units are organized in two types of buildings: one housing two different duplex units, the other a combination of one-bedroom and two-bedroom units with an upstairs loft. Each building has both individual garages and access to on-street parking. All units face common green space so that each has a "garden" exposure.

The development benefits from the adjacent Hommocks Park and School which provide recreational amenities including an indoor pool and ice skating rink. In addition, the development's parking requirements were decreased by leveraging the parking capacity provided at the adjacent school.

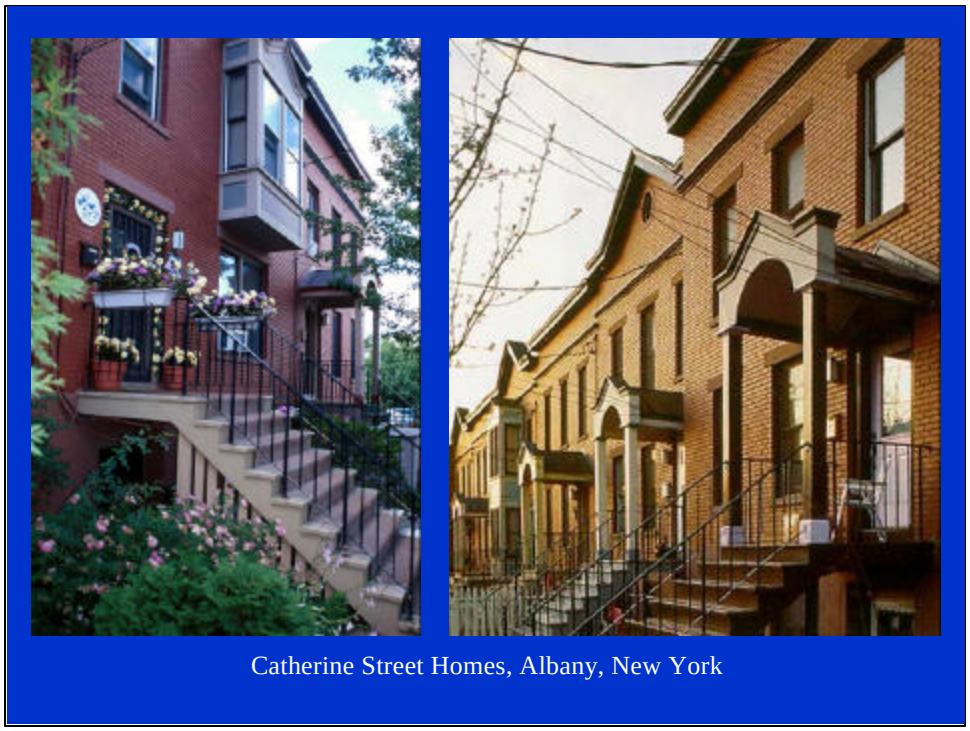
Because the New York State building code limits wood frame buildings to 2 story construction, the architects included loft space in order to create a mezzanine and additional living space within the code's constraints. This additional living space also allows more flexibility of space use for the individual household.

Yorkshire Terrace, Los Angeles, California

Yorkshire Terrace, Los Angeles 35 Units per acre

The building facades present a crisp composition of integrated modern forms that resonate with the architectural history of the Los Angeles region. Mutlow designed the street elevation with a 30-inch bay that contains closets and recessed windows, buffering those openings from the street edge. The stepping in and out of the wall breaks up the linear facade with a series of elements in scale with the context, enriches the play of light and shadow, and gives expression to individual units.

Under the redevelopment plan 28 units could have been built (this number was half the maximum permitted by the zoning.) Only 18 units were built for a variety of reasons: a third of the site was designated for open parking, and two units were removed to provide an outdoor play area. In addition, Mutlow felt that housing for families should be limited to two stories, which fit in with the existing context



Catherine Street Homes, Albany, New York

Catherine Street, Albany 37 units per acre

Dove Street, Albany, New York

Dove Street 38 units per acre, homeless shelter

Design was complicated and enriched by the many stakeholders in the project. The property is located in an historic district where the character of new construction is carefully regulated by ,both, local standards administered by a review committee and by independent review from the State Preservation office utilizing the Secretary of the Interior's Standards. In addition an active design advisory committee appointed by the neighborhood association participated in detailed reviews of the project. One advantage of this complicated process was the it was not possible to cut any of the exterior design features on the building facade after project approval as this would have necessitated a new review. Funders' and sponsor's understanding of lifecycle costs was critical to achieving the high quality of construction as was the contractor's commitment to execution of each detail.

Ocean Park Co-op, Santa Monica, California

Ocean Park Co-op, Santa Monica 41 units per acre

There are many styles for achieving compact density, as shown by this cooperative in Santa Monica. Using a Southern California bungalow court style...

Ocean Park Co-op, Santa Monica, California

And building parking entirely under the landscaped rear yard allowed this complex of smaller units to be built at 41 units per acre.

Heart’s United Development, Chicago, Univ Ill site

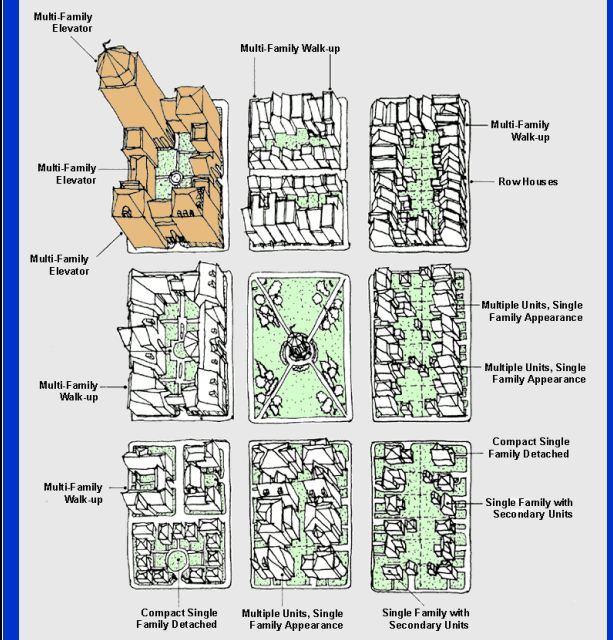
Density varies, estimated 30-50 units per acre

The Hearts United Development is located on 15 separate, infill sites

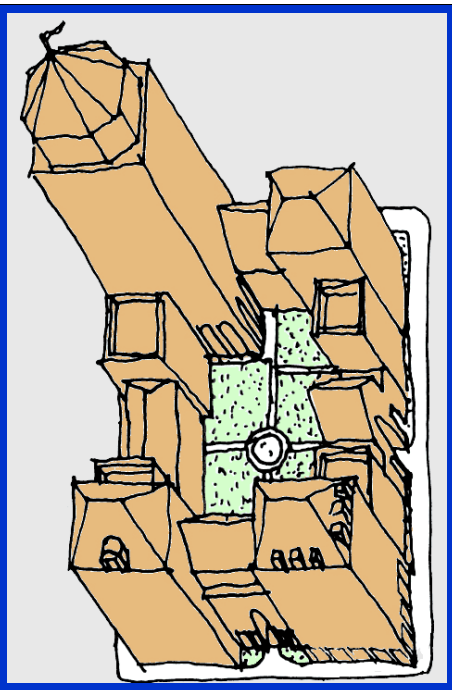
Phase 1 of the project consists of 115 housing units, arranged in 3 building types: "six flats" with six 2-bedroom units on three floors, 3-bedroom rowhouses with a one-bedroom, a handicapped-accessible flat on grade and a separate three-bedroom duplex above; and the 4-bedroom rowhouse with a one-bedroom, handicapped-accessible flat on grade with a separate four-bedroom duplex above. The six flats are freestanding buildings. The Rowhouses are grouped together as the individual site dimensions allow. Each site accommodates at least one parking space per unit and common yard areas with landscaping. Sites are bordered with wrought iron fencing and a custom designed gate that identifies the building.

Housing Models:

Multifamily Elevator Apartments



Multifamily Elevator Apartments



Multi Family Elevator

YWCA Village, Redmond, Washington

YWCA Family Village, 21 units per acre including one story of YWCA facilities.

The Northwest lodge look was used to help shape this building, one of the tallest in Redmond, to feel more compatible with lower homes nearby. The L shaped structure steps down from four stories at the corner to three along the wings, and features some informal and irregular bays, screen porches, and window bands that add finer scale and texture to the building.

The building has YWCA offices, classrooms, and a childcare center on the entire ground floor, with the 20 residential units in the stories above. The tall first story required by the facilities mad the building taller than a conventional residential building, so devices such as broad overhang eaves and narrow widow banding are used to make the top floor appear smaller.

A childcare yard at the south side of the building along one street provides open space that will be preserved when a second phase, lower building is later completed.

Parking in a continuous, double loaded lot behind the building and running along the entire site is adjacent to parking areas on the neighboring lots.

Existing mature trees were saved by providing setbacks on the north side of

City Center Plaza, Redwood City, California

City Center Plaza, Redwood City, 46 Units per acre including ground floor retail, childcare, and learning center

The construction of a new City Hall, creation of a new library in an historic building, and development of the adjacent City Center Plaza apartments and shops in downtown Redwood City have all helped spark a revival in an area once sliding into possible decay. The affordable housing at City Center Plaza compliments the scale and massing of the new civic structures and meets the need for providing a critical mass of new units, while also blending in with the historic and lower-scale retail center of downtown. The project came out of a public consensus-building process that included merchants, nearby residents, and city staff, and resulted in agreement on utilization of the site for mixed-use, affordable development as a catalyst for private sector housing investments nearby.

City Center Plaza provides ground floor retail and restaurants sought by the city, plus a through- block pedestrian mews (paseo) that connects the retail street on one side of the development to the civic plaza on the other side.

Broad landscaped stairs provide access up to the paseo level, and townhouse and flats are accessed from semi-private stairs from that level up. An elevator provides access from the street/garage level up to the paseo.

To compensate for the lack of some residential amenities in the downtown

Hismen Hin-Nu, Oakland, California

Hismen Hin-Nu Apartments, Oakland Flats: 85 units per acre, Townhouses 35 units per acre

The sponsors and the architect wanted to recreate the older, denser pattern of mixed-use - two to three story buildings with retail below and housing above - as an example of good planning for future developers in the neighborhood. The architecture is an interpretation of Mission Revival Style, recalling the graceful three and four story apartment buildings in the neighborhood. Red tiled roofs, trellised balconies and warm colored stucco create a solid yet lively street front building along the main boulevard.

Hismen Hin-Nu, Oakland, California

Roxbury Corners, Boston, Massachusetts

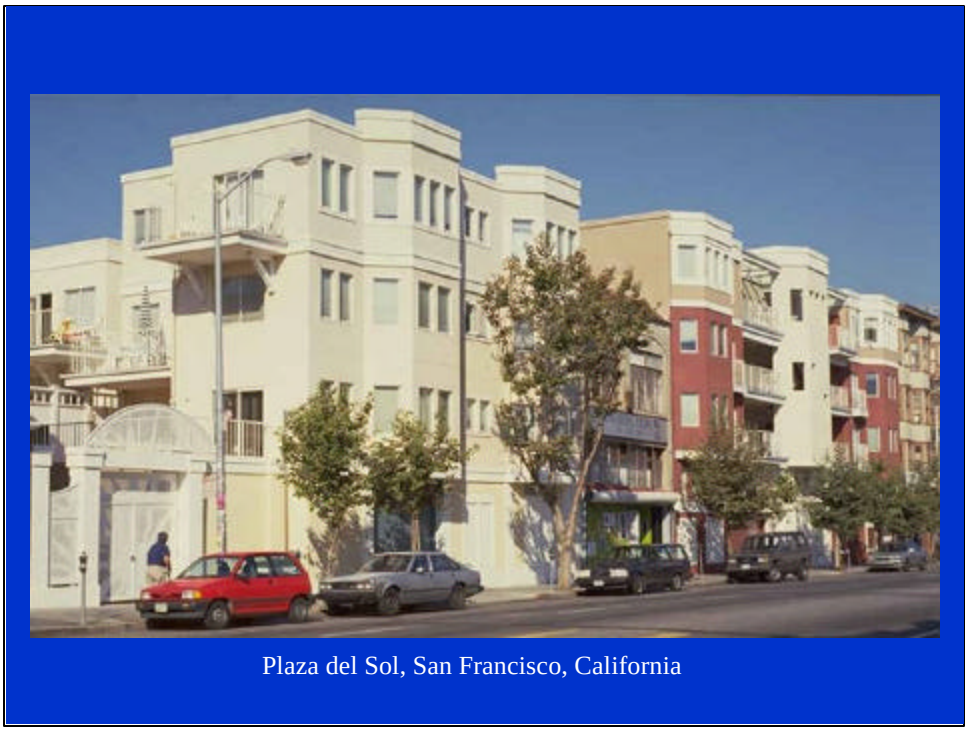
Roxbury Corner, Boston Mass. 65 Units per acre

Total units in both new and rehab structures: 54

Roxbury Corners stands on two parcels of land in the Lower Roxbury section of Boston's South End historic district. The westerly parcel has a new structure of four-and-a-half stories; two rehabilitated buildings and a new four-story addition stand on the other parcel. Surrounding buildings are multi-family, low-income housing projects in high- or low-rise blocks that date from the last 25 years and 19th century brick row houses with front stoops and mansard roofs. At 65 dwelling-units per acre, Roxbury Corners is actually less dense that many of the nearby buildings “affordable towers”, but higher than the rowhouses.

Parking was only required for 19 cars, which were accommodated in surface lots at the rear of the building. An on site open space and recreation area at the rear of one of the buildings was made possible by the low parking requirement

Parking for



Plaza del Sol, San Francisco, California

Plaza del Sol, 76.6 units per acre

Plaza del Sol is composed of 59 units, arranged on the site as two rows of flats and townhouses separated by a common court, over partially underground parking and also featuring a south facing landscaped ramped court that takes residents and visitors gradually up from the street to the heart of the housing area, or to a childcare playground and drop-off area up to podium level, access to all units from stairs

The residential structures had to be wrapped around a small community theater structure that was preserved on the site, and parking for the residents, the theater, and the nonprofit office building all had to be accommodated in a partially subterranean shared garage. The housing was configured in a traditional series of back-to back three-story walk-up flats facing the primary street, with a mix of shallower two and three - story townhomes and flats clustered at the back of the site facing a shared plaza. The large bedroom units in the rear row of units have semi-private gardens of their own. The shared space between the rows of buildings is similar in width to the narrow lanes found in the neighborhood, although its orientation keeps it sunny and open feeling during the midday period.

Plaza del Sol, San Francisco, California

South facing entry court "Court of the Serpent"

The south facing "Serpent Court", named for the embedded serpent mosaic, is reached from the street up a sinuous with raised landscaping beds. At the court/podium level this space separates the new residential building from a retained two story 1950's office building that has been renovated as offices for non-profits on the upper floor, and a large day dare center on the lower floor

The development is located in a neighborhood of 3-4 story buildings near the intersection of two neighborhood commercial streets with many small grocery and convenience stores and one block from the 16th Street subway station of the BART regional transit line. However, the back of the site abuts a much lower scale residential street, with buildings having shallow rear yards. To protect the sun and light on the adjacent rear yards and reflect their pattern, the Plaza del Sol site plan provides for a continuous rear setback and lower building heights at the rear, and this space also provided the semiprivate gardens for those units facing the rear.

Langham Court, Boston, Massachusetts

Langham Court, 81.5 units per acre

The 84 units at Langham Court are arranged as stacked two story twonhuses along two streets and a double loaded elevator building building on a third, all surrounding a major central open space that opens on the fourth side. The development occupies an entire block in a neighborhood of older brick townhouses and apartments.

The overall design emulates the massing and consistent street wall setback-stoop-entrance relationships to the surrounding neighborhood. Dormers, bays ; arched and vaulted entries; a combination of mansard and flat roofs; stringer courses and textured brickwork, and a palette of well chosen materials provide an unusual richness.

The parking is in one level underground, and has space for one car per unit. Some residents don't own cars due to the proximity of good mass transit, and extra spaces are rented out to the community

Langham Court, Boston, Massachusetts

The 84 units are distributed so that the larger family units are in the walkup flats, while the smaller ones are in the elevator building. The townhouses are reserved for households with children and have direct front entries from the street and rear access to small private outdoor areas, with the common courtyard beyond. Residents use the backyards for sitting out on warm evenings, barbecue storage, growing roses and play areas for small children.

The commons at the center of the site is a quasi public area, whose gates are open to the community by day, but locked off at nights.

Tent City, Boston, Massachusetts

Tent City, Boston, 81.5 units per acre

Located in Boston's South End Historic District, Tent City contains 269 units on an entire block next to fashionable Copley Place. The area is a large redevelopment district, and the development serves as a transition between the high-density housing of Copley Place and the lower scale South End, which has three-and-one-half- to four-story townhouses. The density of Tent City is similar to that of the South End on two-thirds of the site and increases to 12 stories in the area next to Copley Place. Overall the density is 81.5 units per acre with 212 parking spaces per acre below grade. The parking was developed by the Copley Place developers and serves both projects..

The three- and four-bedroom units are in four-story townhouses, or two stacked two-story units. All have individual entries and stoops on the street, rear exits onto private patios, and access to the shared courts beyond. The one- and two-bedroom units are in midrise buildings with elevators and have laundries and lounges as well as access to the shared amenities. On Copley Place the facade is relieved by a sweeping curve, the result of the shape of the subway tunnel below. The historic district's guidelines influence the design,

Hope Village, Los Angeles, California

Hope Village, Los Angeles 88 units per acre

A major community participation plan was used to shape the future development of the scattered vacant and underutilized parcels in the South Park district adjacent to the downtown Staples Center and close to the historic commercial district. With the general aim of bringing more residents into downtown, while also meeting the affordable hosing shortage for much of the downtown workforce, a master plan was created for the entire block to provide a range of affordable housing opportunities and amenities at downtown densities. The 66-unit, mixed-use Hope Village building joins the already completed 40-unit TELACU Plaza Apartments for persons with disabilities and the 75-unit Villa Flores Apartments for seniors. A new church, pocket park, offices, and some market-rate housing will complete the mix.

The design provides some commercial space and two-story townhouses entered by their own stoops at the landscaped sidewalk level. A separate lobby and elevator reach upper-story flats and apartments for each of the four buildings that define the complex. An ample interior court contains recreational space for barbecue, basketball, table tennis, and a grassy play area for younger children. The on-site South Park Neighborhood Resource Center with its own dedicated open space conducts after-school programs, a computer lab, parenting programs, and food distribution for both building and community-wide residents.

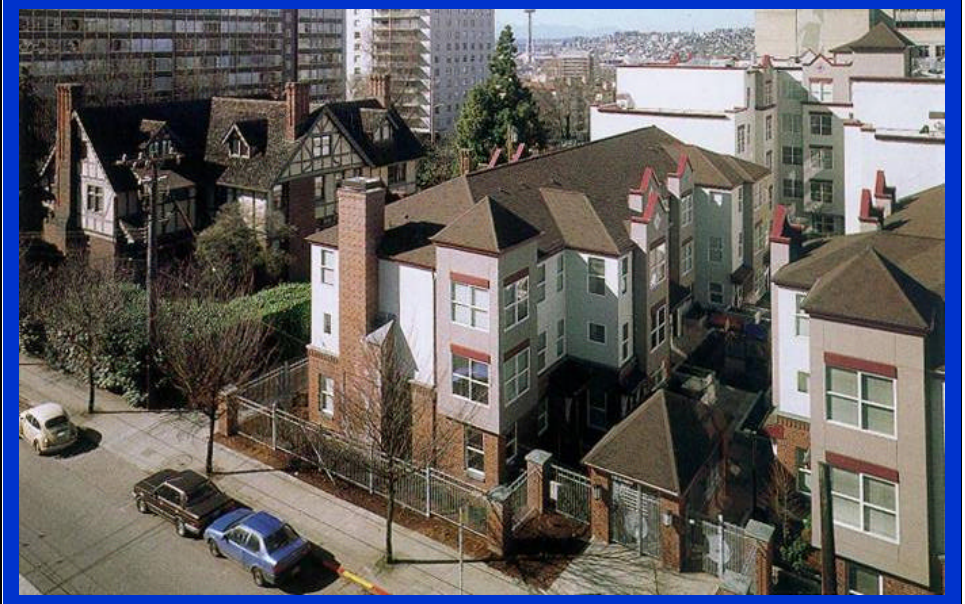
The use of changing horizontal color, bay windows, a 20 foot landscaped setback from the street, and breaks in the massing of the building all give scale and visual interest

555 Ellis Street, San Francisco, California

555 Ellis Street Apartments, 122 units per acre

The 38 unit building design recalls older apartment buildings with many different unit plans and many units with cross-ventilation. Like older apartments in San Francisco the streetfront has a strong symmetry, and the building mass is broken down by vertical bays. Although it occupies 75 per cent of its site and has a density of over 100 units per acre, the building feels spacious, and the public areas are light-filled and generous. The fourth floor of apartments is set back from the street in response to the city sunlight access code, which requires that winter sun reach the park across the street. The setback zone contains the large terraces for the studio apartments; these units have sloped ceilings and lofts for storage or sleeping. A tutorial center with computer stations, study desks, and a resource library are also on the top floor.

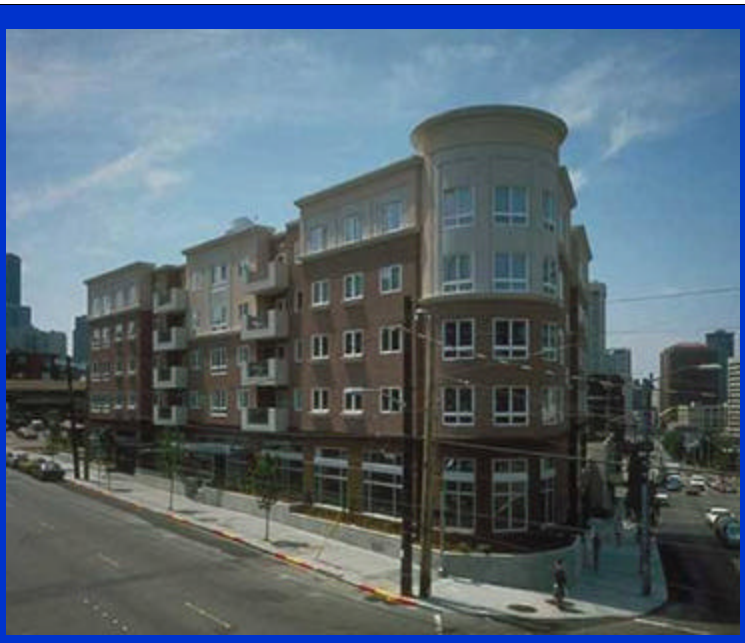
Due to its excellent location near multiple transit lines and downtown, the parking requirement was only one space for every four units in a covered garage. This allowed the remainder of the ground floor to be used for social service offices, multiple meeting and tenant service spaces, a laundry, the two bedroom managers unit, and a youth project and recreation room. The large garden behind the building was designed with separate areas for children's play equipment and other activities. A patio partially covered by the residential floors above provides outdoor space for social events. A smaller, separate courtyard is used for quieter activity.



Cascade Court, Seattle, Washington

Cascade Court, Seattle Washington, 151 Units per Acre

Among the thorny challenges that architects face in designing housing for families with low incomes in historic neighborhoods is that of compatibility with older historically significant buildings. In the case of Cascade Court Apartments, GGLO architects met the challenge of designing a 100-unit apartment building next to former single-family mansion with great success. If the architects had not been sensitive to the context, the much larger building might well have been an intrusion rather than a contribution to the neighborhood. The adjacent building, the landmark Stimson-Green mansion built in 1900 was occupied by Priscilla Collins, who had grown up in the house. Concerned about the possibility of high rise condominiums being developed on the adjacent lot, she bought the parcel. Her desire that families be able to live in the neighborhood influenced her decision to sell the property at 25% of the sales price to a non-profit development corporation, the Seattle Housing Resources Group (SHRG), which agreed to develop the site as housing for families with children.



Bellevue and Olive Apartments, Seattle, Washington

Bellevue and Olive Apartments, Seattle, 96 units per acre

Bellevue and Olive Apartments is a mixed-use development of 48 units plus ground floor commercial stores designed to harmonize with the prewar apartment buildings in the west Capitol Hill neighborhood of Seattle. The challenge in designing Bellevue and Olive Apartments was in creating family dwelling units and usable open space in an urban context. As a result, the building was sited to buffer a protected landscaped courtyard and playground on the sunny south and west sides of the site from the adjacent busy streets. At the juncture of those two streets, Bellevue and Olive, a rotunda was designed to emphasize the identity of the building. The building also includes underground parking for residents and first floor commercial space.

Eden House/Promise Place, Washington, D.C.

Eden House/Promise Place, 101 Units per acre

The programs of N Street Village are distributed in five to eight story buildings that is responsive to contextual complexities. Frontage on three streets of varying character, relationships to surrounding buildings (including several historic landmarks) and the incorporation of four 19th century townhouses into the development, all influenced the building form.

Affordable housing, the largest and tallest building in the project, is located on the wide 14th Street mixed-use corridor. The supportive housing and associated services are located off an internal courtyard which opens onto N Street. New construction on this street is similar in height to both the historic N Street townhouses on the site and the Luther Place Church parish hall across the street. The early childhood development center, which is open to the community, is located on the ground floor of the Vermont Avenue frontage. This side of the building, scaled to match neighboring structures has a repetitive bay rhythm recalling the townhouse increment so prevalent on the immediate stretch of the avenue. The buildings surround a central courtyard, which serves as an organizing element for the entire project.

The Studios at 1801 S. Wabash, Chicago, Illinois

The Studios at 1801 South Wabash, Chicago 236 SRO units per acre

The Studios at 1801 S. Wabash is a single room occupancy residence (SRO). The building was developed in response to a pressing need for affordable housing in Chicago's South Loop. It was the first new SRO constructed in the area since the 1940's. The fully furnished, 235 square foot rooms include a small kitchen and bath. Common living spaces -- laundry, lounge, TV room, recreation room -- are located on the ground floor. A south-facing courtyard provides a quiet green space for residents. The ground floor also includes spaces for job training and counseling