

Getting to Small Footprint Density

Responding to the Market Demand
for Walkable Urban Living

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Founding B Corporation





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“Leaders in building complete, connected communities of not-so-big, detached, single-family homes. So, you can live large *and* leave a small footprint on the earth.”

FOR SALE

APPROACH

COMMUNITIES

PLANNING

ABOUT US



Simple. Smart.
Sustainable.

HOMES FOR SALE



**THE OPTION
OF URBANISM**
INVESTING IN A NEW
AMERICAN DREAM
CHRISTOPHER
B. LEINBERGER

The Option of Urbanism: Investing in a New American Dream

By Christopher Leinberger

“In delightfully readable prose, Professor Leinberger overwhelms us with the advantages of development that is dense enough and mixed enough to make walking and transit worth it, while illuminating the unintended urban consequences of land use regulations, Wall Street finance, and the eleven o'clock news.”

—Douglas Kelbaugh, FAIA, Dean and Professor of Architecture and Urban Planning, A. Alfred Taubman College of Architecture + Urban Planning, University of Michigan.

Presentation Overview

1. What is wrong with the way we regulate and build density?
2. What is small footprint density?
3. Why is this topic important to be discussing?
4. What is wrong with conventional zoning?
5. Toolkit of the solutions

1 Issue: How Medium Density is Being Built and Regulated

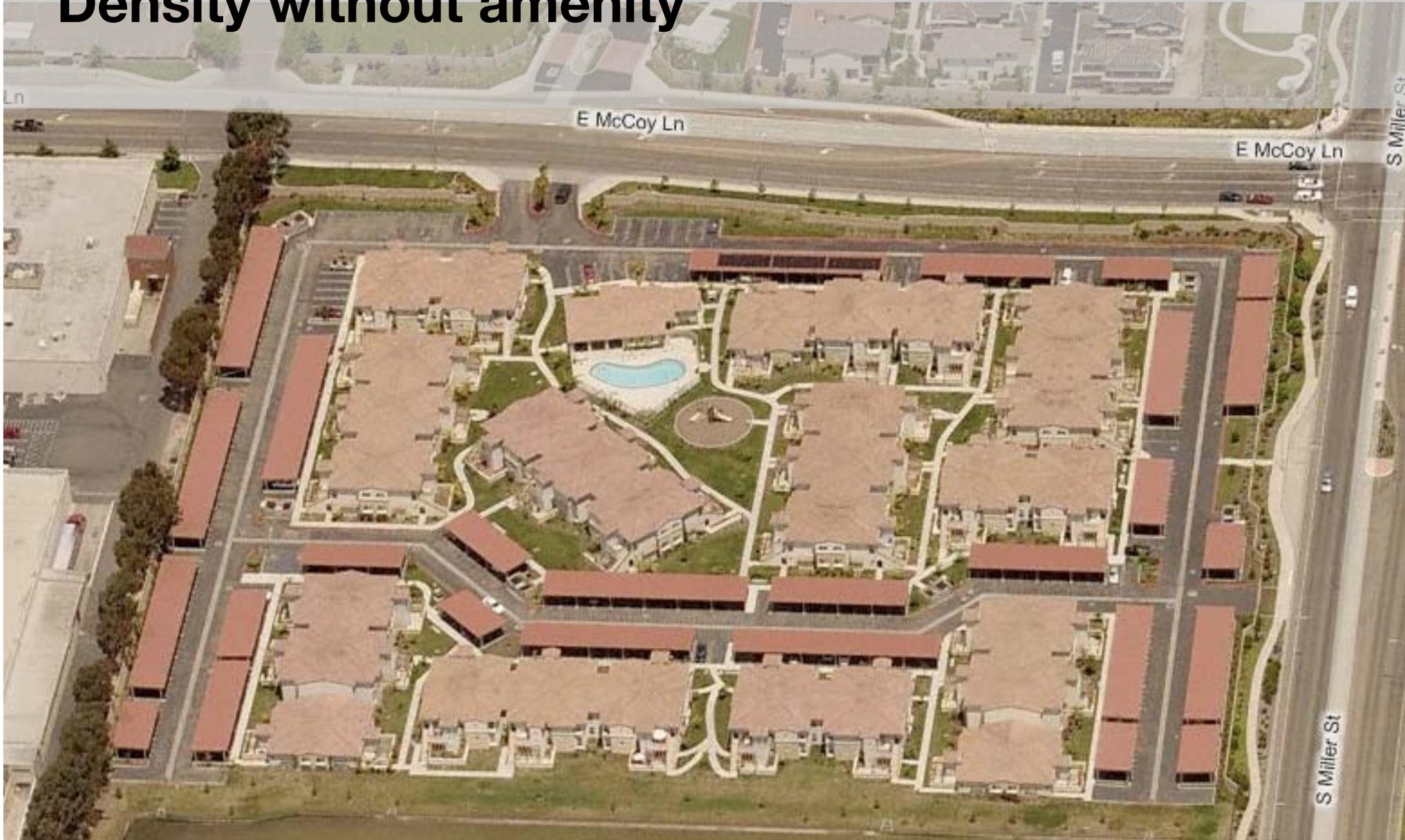
Simply Numeric Approach to Creating Housing

How dense can single family get?



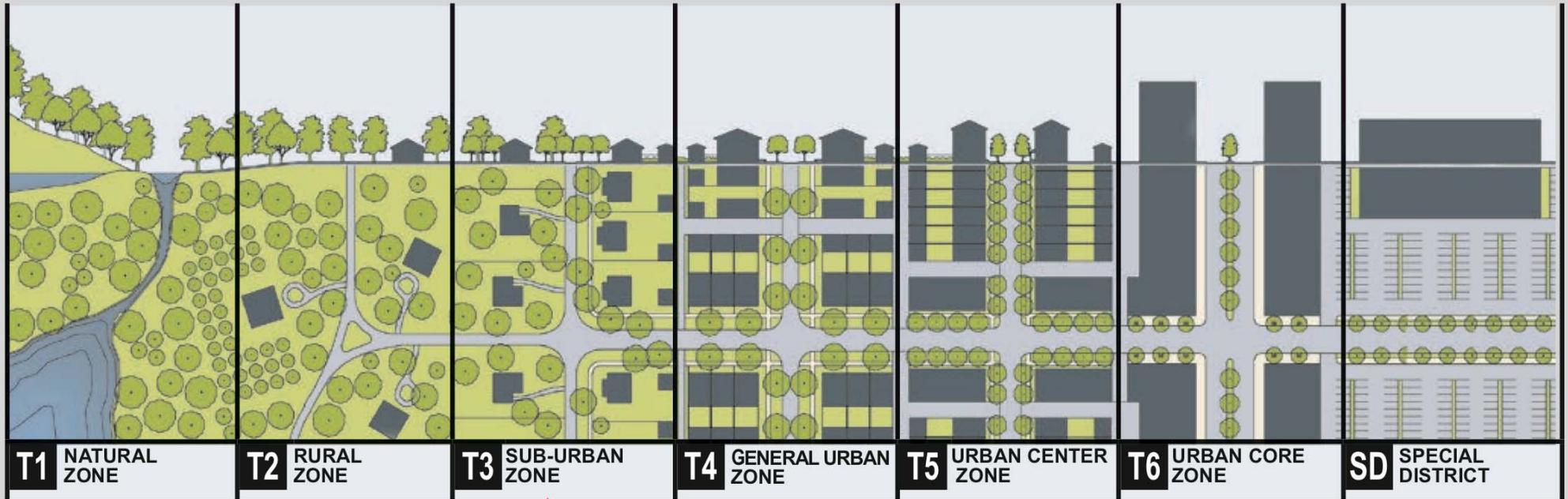
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Density without amenity



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Looking at Density along the Transect



Wrong place for density

SmartCode (Image Credit: DPZ)

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The Intent Becomes Unclear

RG – SUBURBAN MULTIPLE RESIDENTIAL DISTRICT

2-25-010 Purpose.

The purpose of the RG district is to provide areas for the location of low density, multiple-family residential dwellings and to establish regulations for their development. It is intended that the district be used in higher density areas designated in the general plan or in other areas when found to be necessary or desirable to achieve good neighborhood design and for purposes of stabilizing land use. In order to provide the city the opportunity to vary multiple residential density, the RG district is subdivided into the RG-16, RG-14, RG-12, and RG-10 zoning districts. (Ord. 649 § 17, 1968; Ord. 442 § 8.10)

City of Livermore, Ca Development Code

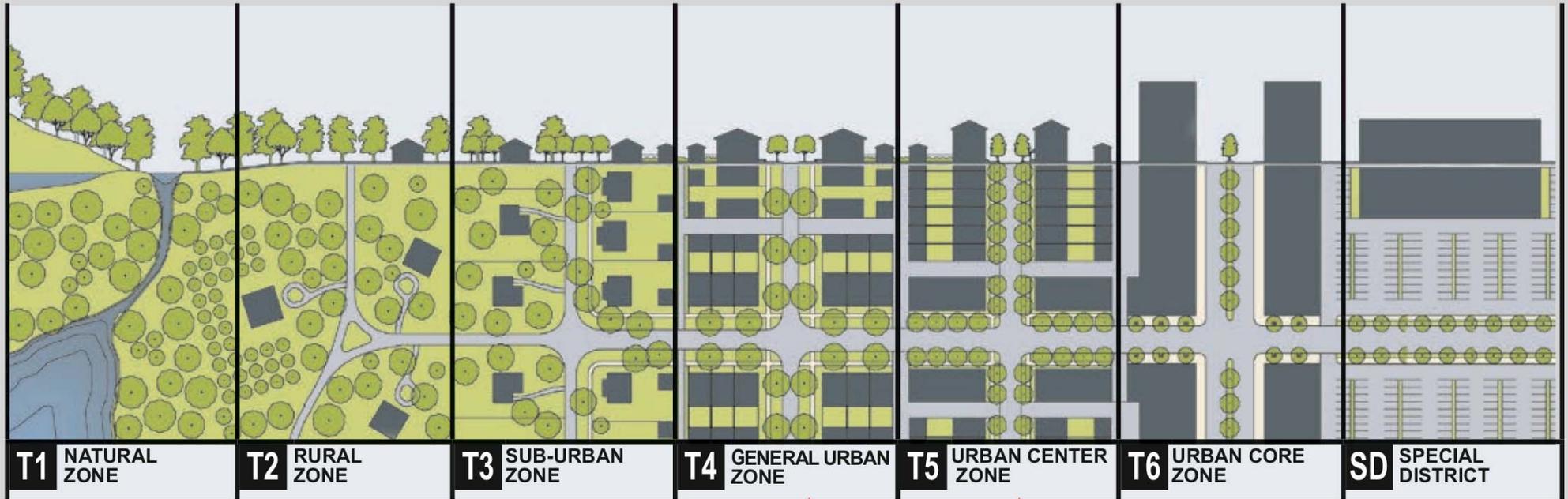
“Purpose..is to provide areas for the location of low density, multiple-family residential dwellings..It is the intent that the district be used in the higher density areas designated in the general plan..”

Density with Amenity



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Looking at Density along the Transect



Right place for density

SmartCode (Image Credit: DPZ)

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2 What is Small Footprint Density?

Small Building Footprint and Small Ecological Footprint

The “Missing Middle” Building Types



Mansion Apartment: 6-8 units



Duplex



Fourplex



Bungalow Courts

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Duplexes



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Bungalow Courts



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Bungalow Courts



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Third Street Cottages, Langley, Washington



- 8 - 1 BR cottages <900
- 31,000 SF lot
- 11 du/acre
- Completed 1998
- First CHD code in US



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Danielson Grove Kirkland, Washington



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Four-Six Plexes



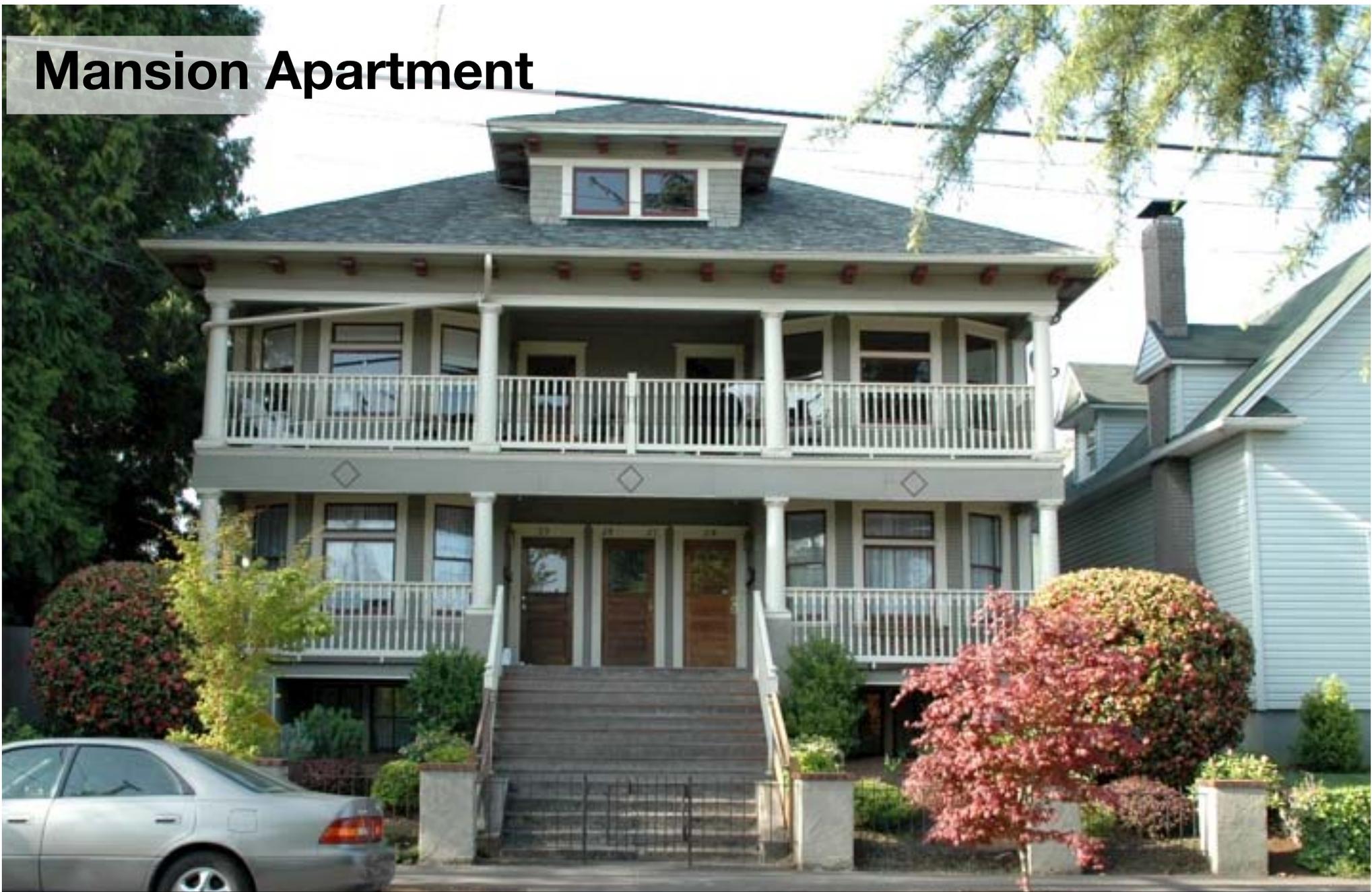
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Fourplex



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Mansion Apartment



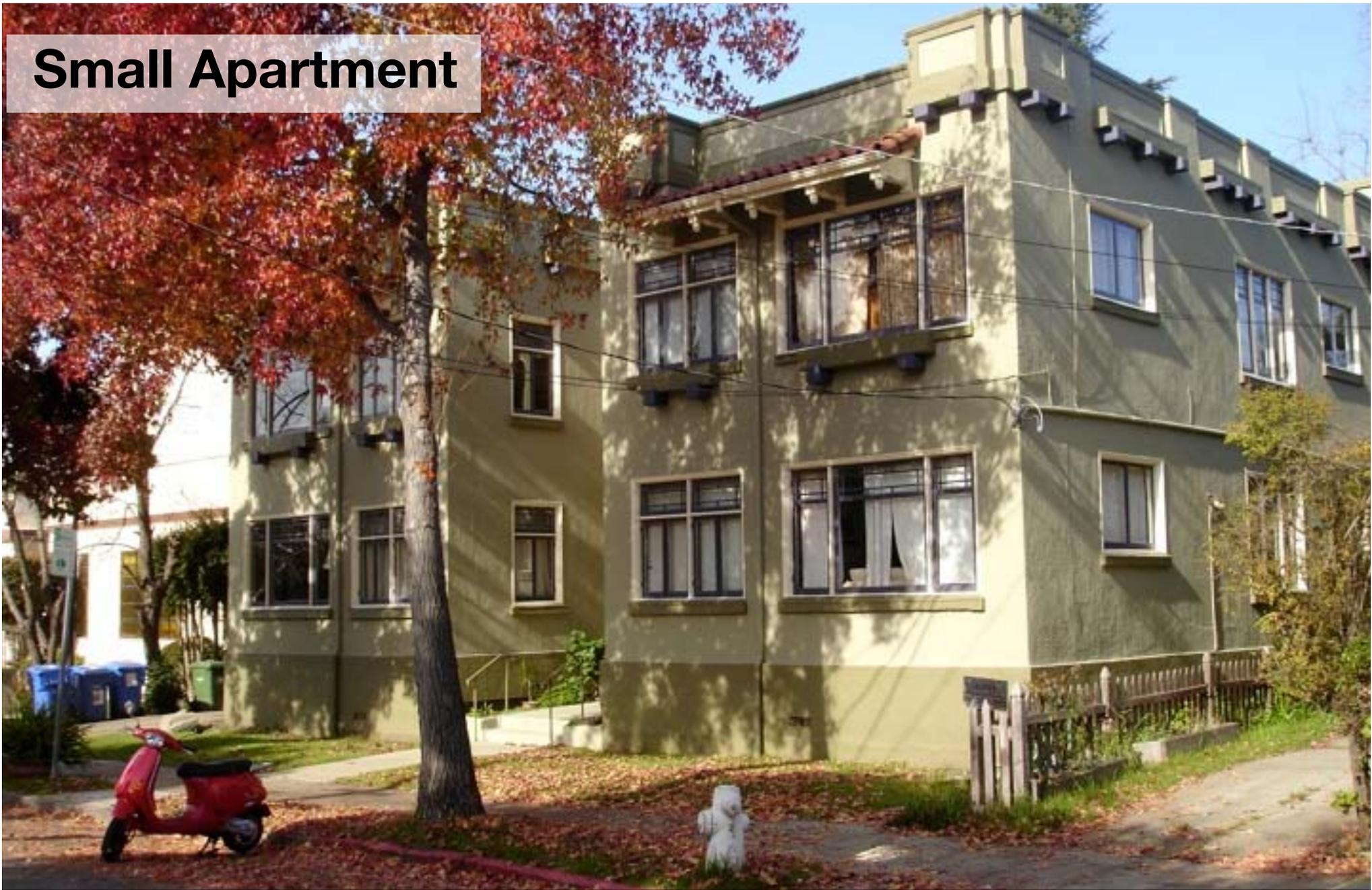
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Mansion Apartment



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Small Apartment



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Small Ecological Footprint

1. Supporting a pattern of walkable neighborhoods
2. Reaching transit-supportive rooftop thresholds
3. Reducing auto trips (VMT) and supporting a local economy by providing enough rooftops to support neighborhood main streets.

3 Why is This Conversation Important?

The Growing Demand for Walkable Urbanism

Responding to a Change in Market Demand

1. Current demand for small lot and attached housing exceeds the current supply by 35 million units (C. Nelson).
2. 30-40% of buyers want to live in walkable urban places and only 5-10% is being provided in any given market (C. Leinberger)

Responding to Climate Change

“The body of research surveyed here shows that much of the rise in vehicle emissions can be curbed simply by growing in a way that will make it easier for Americans to drive less. In fact, the weight of the evidence shows that, with more compact development, people drive 20 to 40 percent less, at minimal or reduced cost, while reaping other fiscal and health benefits.

..The term “compact development” does not imply high-rise or even uniformly high density, but rather higher average “blended” densities. Compact development also features a mix of land uses, development of strong population and employment centers, interconnection of streets, and the design of structures and spaces at a human scale..”

“Growing Cooler” -Ewing

Protecting Community Character



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4

What is Wrong with Zoning?

Providing Impediments for the “Missing Middle” and Walkable Urbanism

Issues with Regulating by Density

1. Lack of predictability-what does the number mean?
2. Densities are usually established really low because communities are afraid of the number
3. Does not allow for blending of densities
4. Encourages “crew cut” buildings” that simply max out buildable envelope
5. Can simply add a larger lot to same bad type to get lower densities

99.99% of Zoning Codes Default to Drivable

Suburbanism

1. Developers who want to respond to the market are having to jump through hoops = increased risk

Other Issues with the Current Regulatory Context

1. Zoning by use does not allow the fine-grain integration of uses that are necessary for walkable urbanism
2. Our planning administration and review systems are set up to entitle strip malls and subdivisions
3. A residential unit is treated the same no matter what the size
 - A. Development fees discourage smaller units
 - B. Parking requirements by unit discourage smaller units

5 Form-Based Codes as a Tool to Get Us There

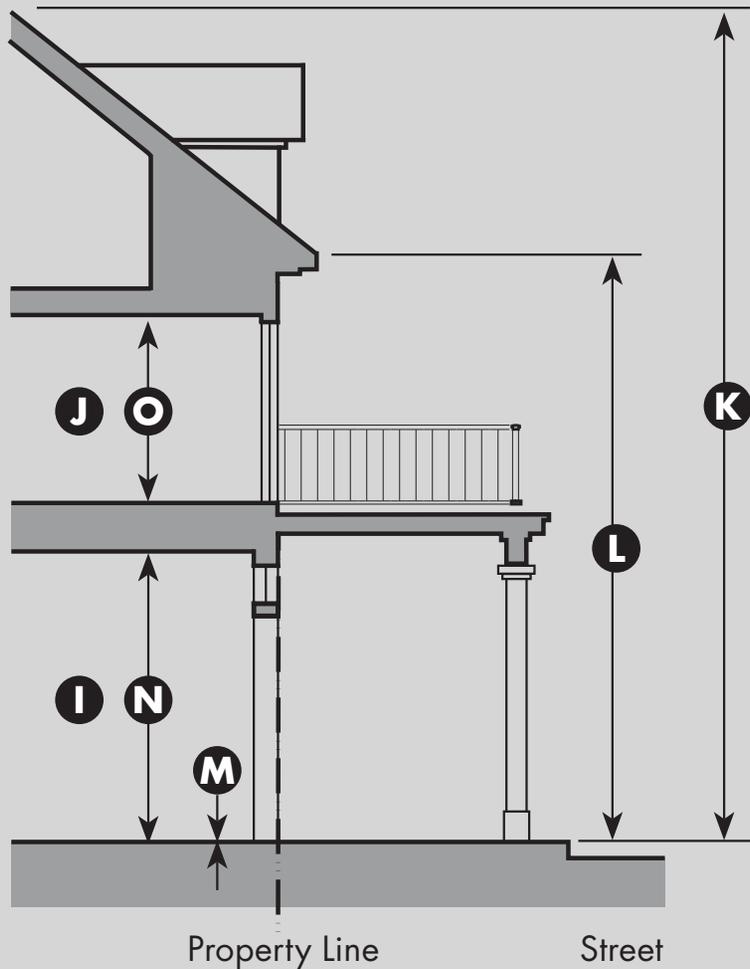
Zoning Reform with Character of Place in Mind

“Top 20 Ways to Make a Green, Smart City”

#2 Replace Your Euclidean Zoning with Form-Based Codes

Rob Dixon, Albuquerque developer in his plenary presentation at the New Partners for Smart Growth Conference, January 2009

Graphic and Easy to Understand



Use

Ground Floor	Service, Retail, or Recreation, Education & Public Assembly*	I
Upper Floor(s)	Residential or Service*	J

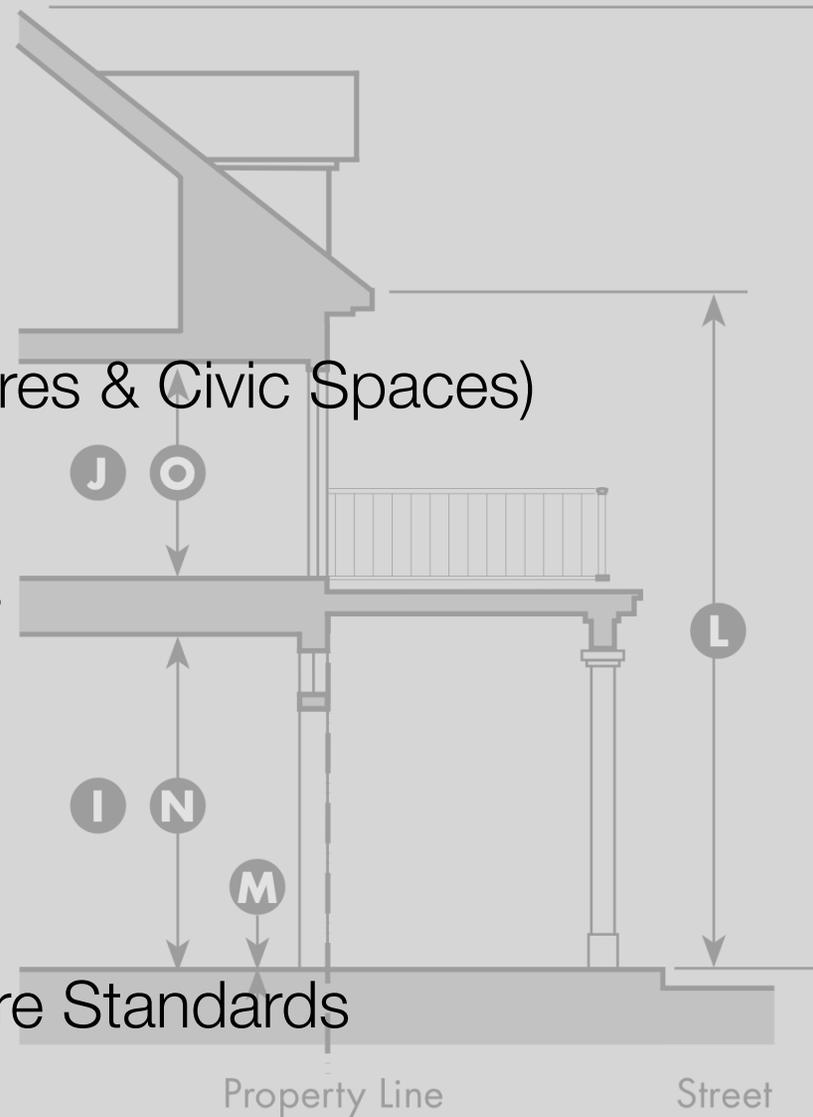
*See Table 4.1 for specific uses. Ground floors that face the waterfront shall be nonresidential and shall not include parking, garages, or similar uses.

Height

Building Min.	22'	K
Building Max.	2.5 stories and 40'	K
Max. to Eave/Top of Parapet	35'	L
Ancillary Building Max.	2 stories and 25'	
Finish Ground Floor Level	6" max. above sidewalk	M
First Floor Ceiling Height	12' min. clear	N
Upper Floor(s) Ceiling Height	8' min. clear.	O

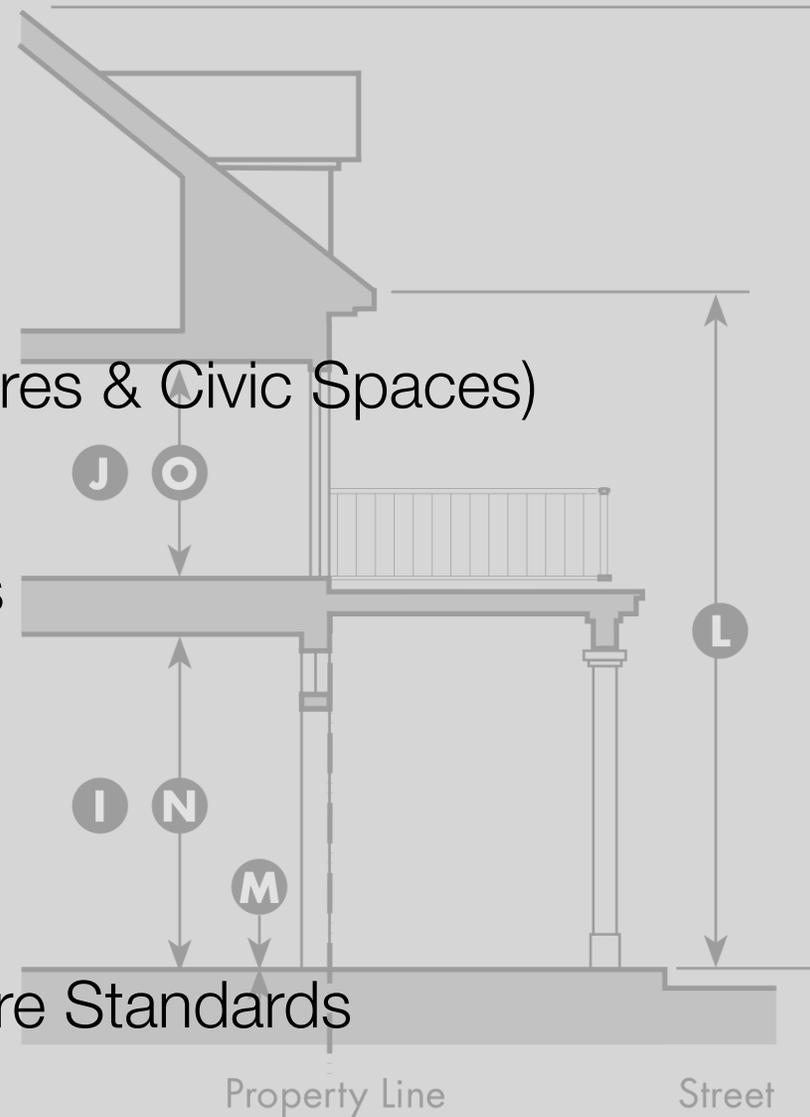
Form-Based Code Components

1. Regulating Plan
2. Building Form Standards
3. Public Space Standards (Thoroughfares & Civic Spaces)
4. Frontage Type Standards
5. Block and Lot Subdivision Standards
6. Building Type Standards
7. Sustainability Standards
8. Green Building Standards
9. Architecture & Landscape Architecture Standards



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Menu of Building Types

1. Single-Unit House
2. Single-Unit House, Sideyard
3. Carriage House
4. Bungalow Court
5. Duplex
6. Townhouse
7. Triplex & Fourplex
8. Mansion Apartment
9. Live-Work
10. Stacked Units
11. Courtyard Apartments
12. Commercial Block
13. Liner Buildings

Live/Work



Commercial Block



Detached Single-Unit



Bungalow Court



Townhouse



Duplex, Triplex, Fourplex



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Building Type Standards: Two Pages Per Type

5.xx.xxx

Fourplex & Sixplex

Chapter 5.XX: Fourplex & Sixplex

General Note: the drawings and photos below are illustrative.



A grouping of fourplex units that have the scale and character compatible with large single-family houses.



A newly constructed sixplex that is of an appropriate scale and character to be integrated into a primarily single-family neighborhood.



A grouping of fourplex units that have the scale and character compatible with large single-family houses.

5.xx.xxx Description

The Fourplex & Sixplex building type consists of structures that contain four to six side-by-side and/or stacked dwelling units with one shared entry. This building type has the appearance of a medium to large single-family home, and is typically integrated sparingly into single-family neighborhoods or more consistently into neighborhoods with other medium-density types such as duplexes, fourplexes, or courtyard apartments. This building type enables the incorporation of high-quality, well-designed density within a walkable neighborhood.

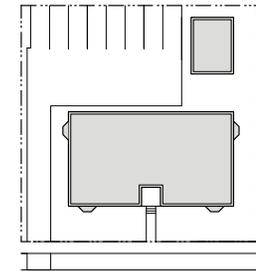
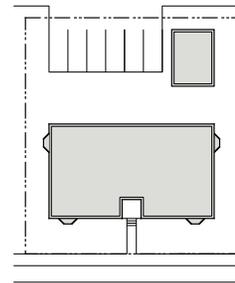
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Livermore Planning and Zoning Code

Fourplex & Sixplex

5.xx.xxx

Alley



Typical Plan Diagram Primary Street

5.xx.xxx Lot	
Lot Size	
Width	75' min., 150' max.
Depth	100' min., 150' max.
5.xx.xxx Pedestrian Access	
Main Entrance Location	Primary street
Each unit may have an individual entry	
5.xx.xxx Frontages	
Allowed Frontages	
Porch	
Stoop	
Forecourt	
5.xx.xxx Vehicle Access and Parking	
Parking spaces may be enclosed, covered or open	
Garages may be detached or tuck-under.	

5.xx.xxx Open Space	
Width	8' clear min.
Depth	8' clear min.
Open Space Area	100 sq ft/unit min.
Required street setbacks and driveways shall not be included in the common open space area calculation.	
5.xx.xxx Building Size and Massing	
Main Body	
Width	50' max.
Depth	40' max.
Secondary Wing	
Distance from front facade	10' min.
Width	15' max.
Depth	35' max.
Detached Garage	
Width	22' max.
Depth	25' max.

Livermore Planning and Zoning Code

5-21

Two Different Types of Zones Cannot be Combined!

Form-Based Zones/
Transect

Walkable Urbanism/Low-carbon



Lower parking requirements
(More walking, access to transit)

Public realm = Public space

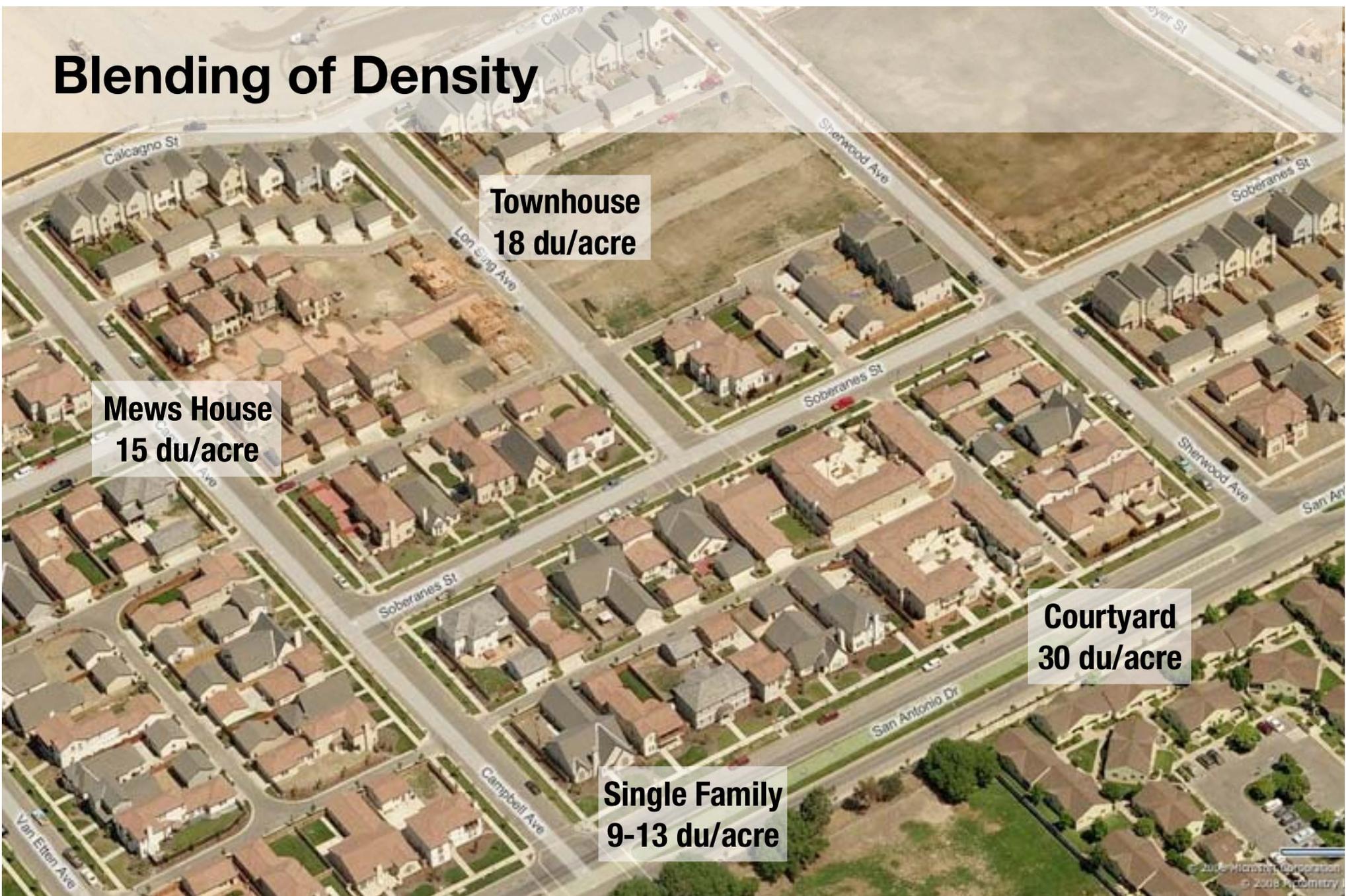
Special Districts/Auto
Dependent

Drivable Suburban/High-carbon

Higher parking requirements
(less walking and access to transit)

Larger public and private open space
required due to isolation

Blending of Density



Townhouse
18 du/acre

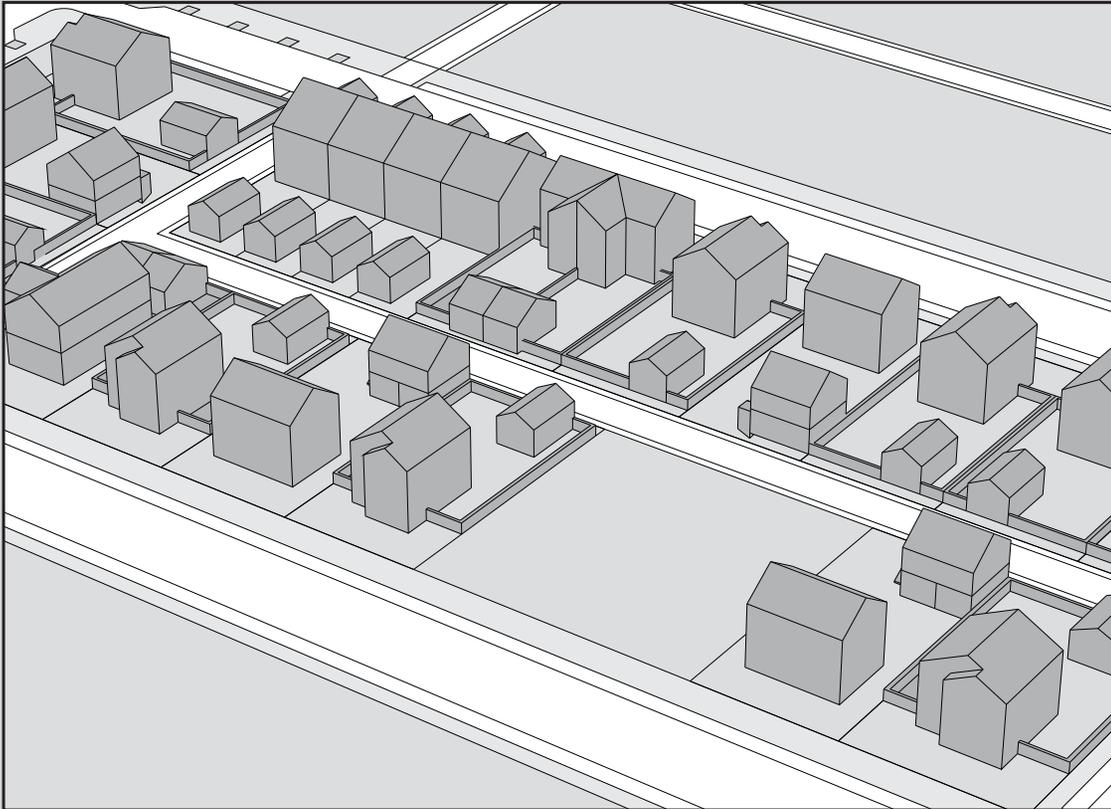
Mews House
15 du/acre

Courtyard
30 du/acre

Single Family
9-13 du/acre

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Appropriate Scale Infill at 20 du/acre



Existing Conditions

Typical Lot: 150 deep x 60' wide = 9,000 sf

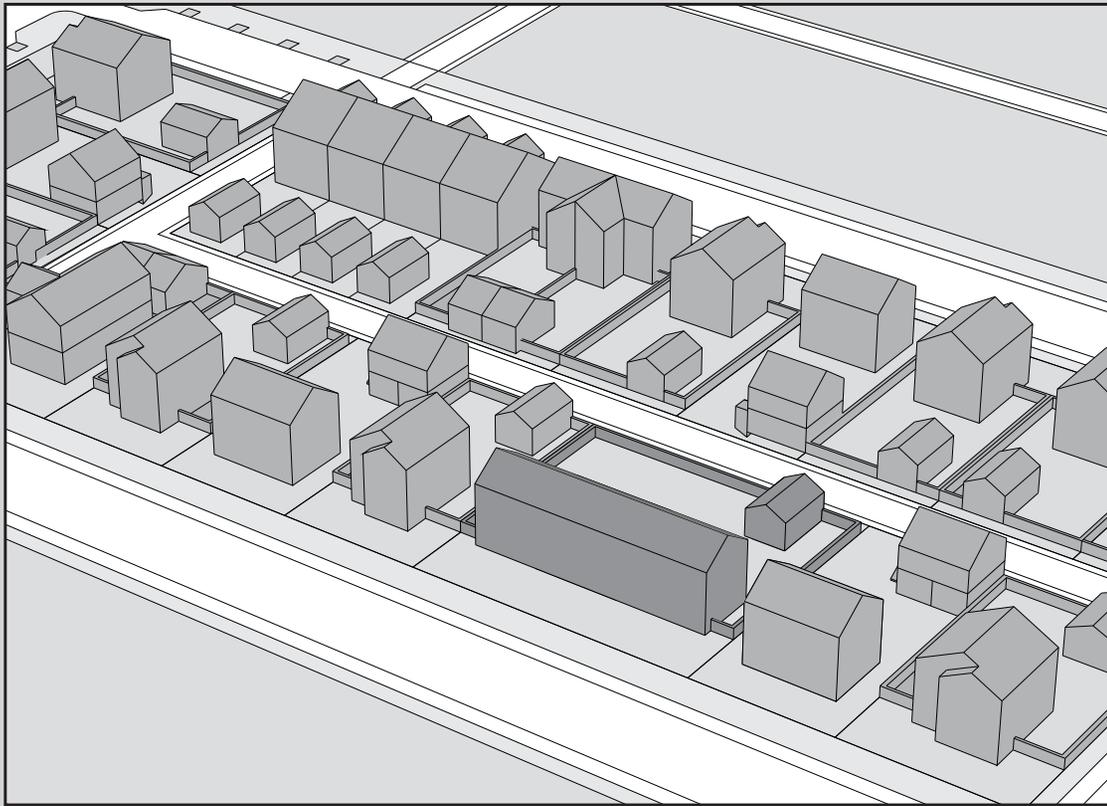
Existing zoning allows 20 du/acre = 4 units

What does 20 du/acre look like?



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Appropriate Scale Infill at 20 du/acre

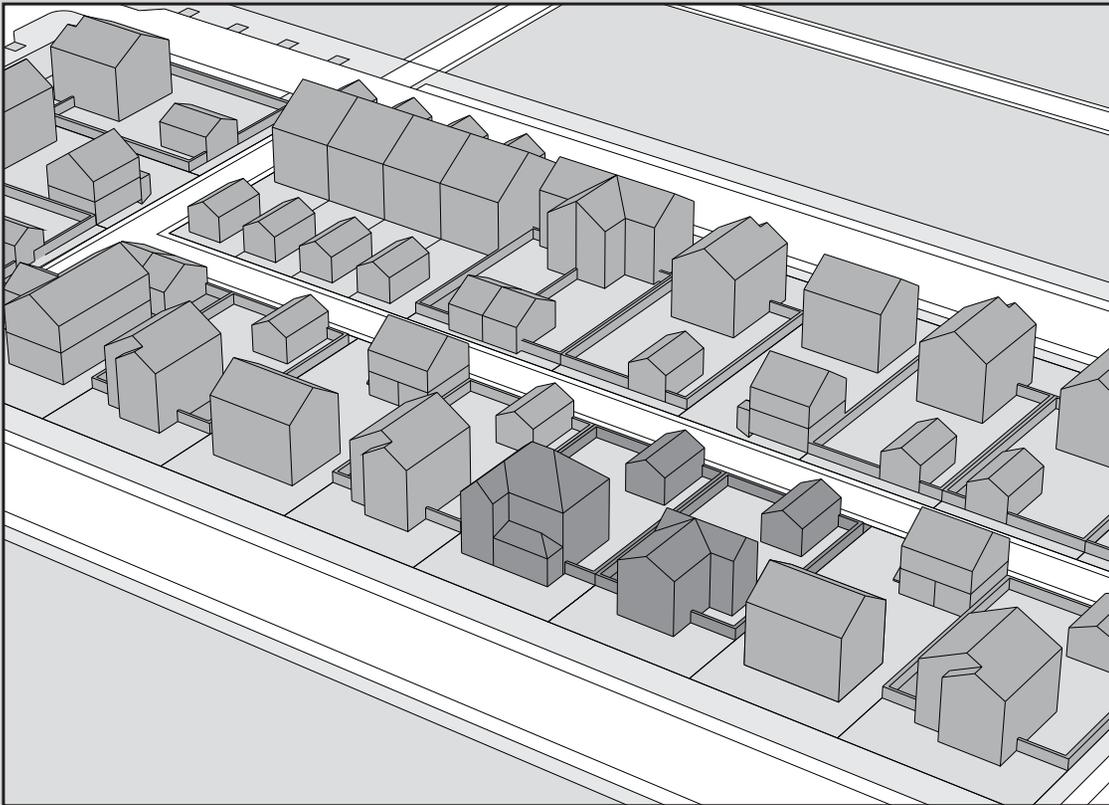


Inappropriately scaled infill at 20 du/acre



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Appropriate Scale Infill at 20 du/acre



Appropriately scaled infill at 20 du/acre



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Blending of Uses Not Buffering

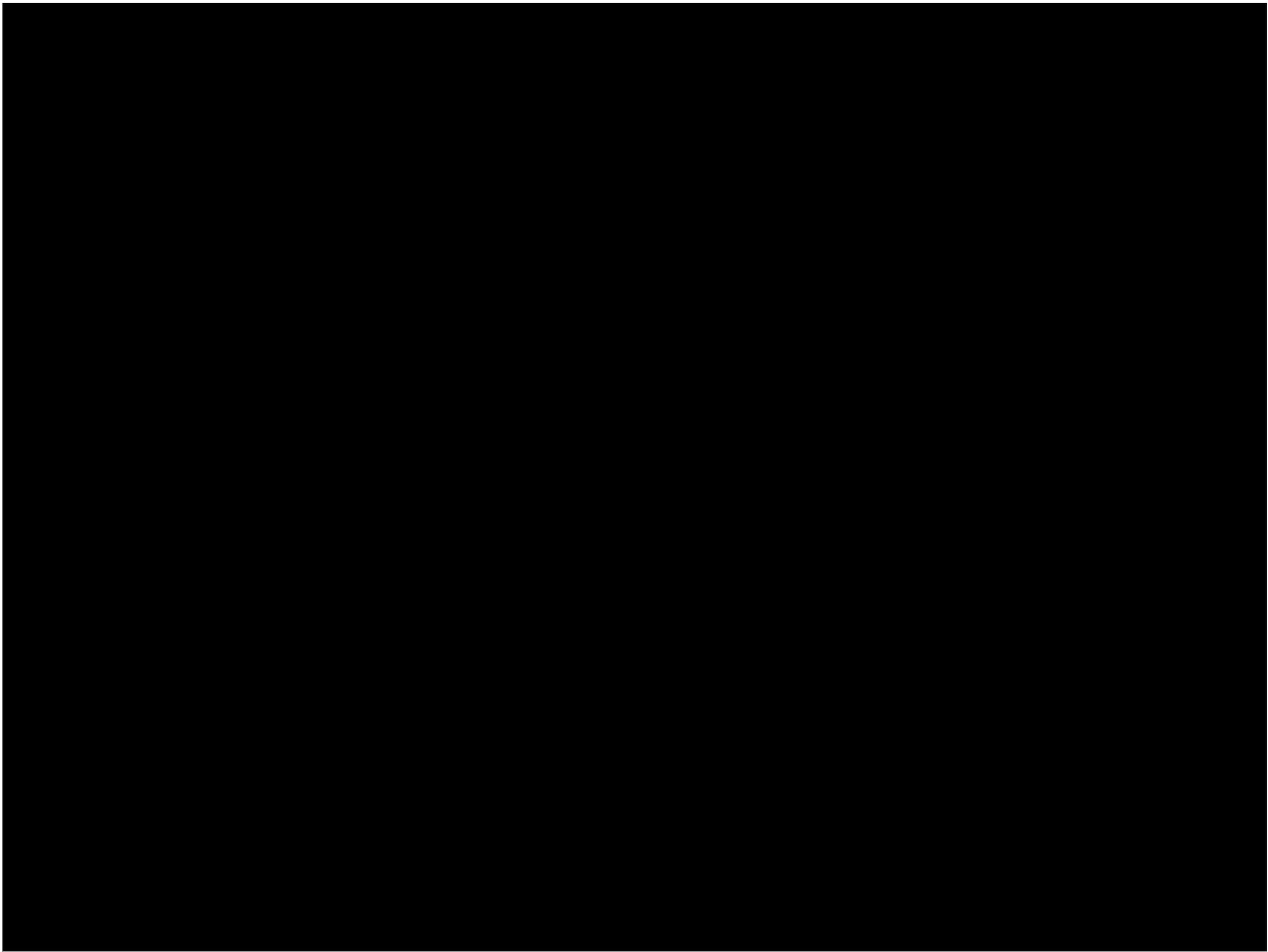


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6 Conclusion

How Do We Get There?





You Cannot Have it All

An Urban Place
with
Suburban Space.

You can have it all!

Big Views • Big Lawns

Big Apartments

A Shorter Commute

A San Francisco Address

Pets Welcome!



Parkmerced

**Renovated High Rise Flats
and Townhomes for Rent**

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