

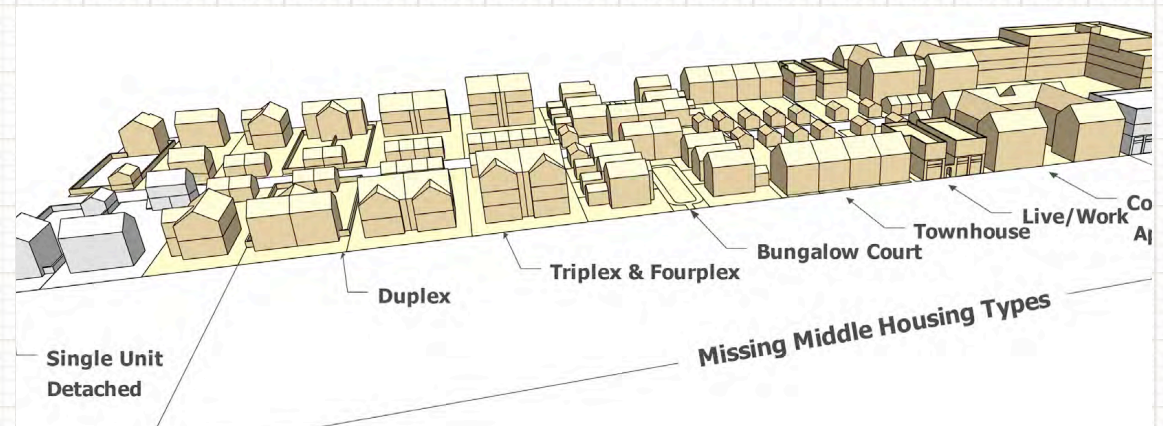
Northwest Quadrant Neighborhood Plan: Area Analysis and Design Considerations



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Drew Finke

Workshop 1
Novato, CA
March 14, 2015



Thinking about Compatible Form First



Walkable Context Different than Suburban Context



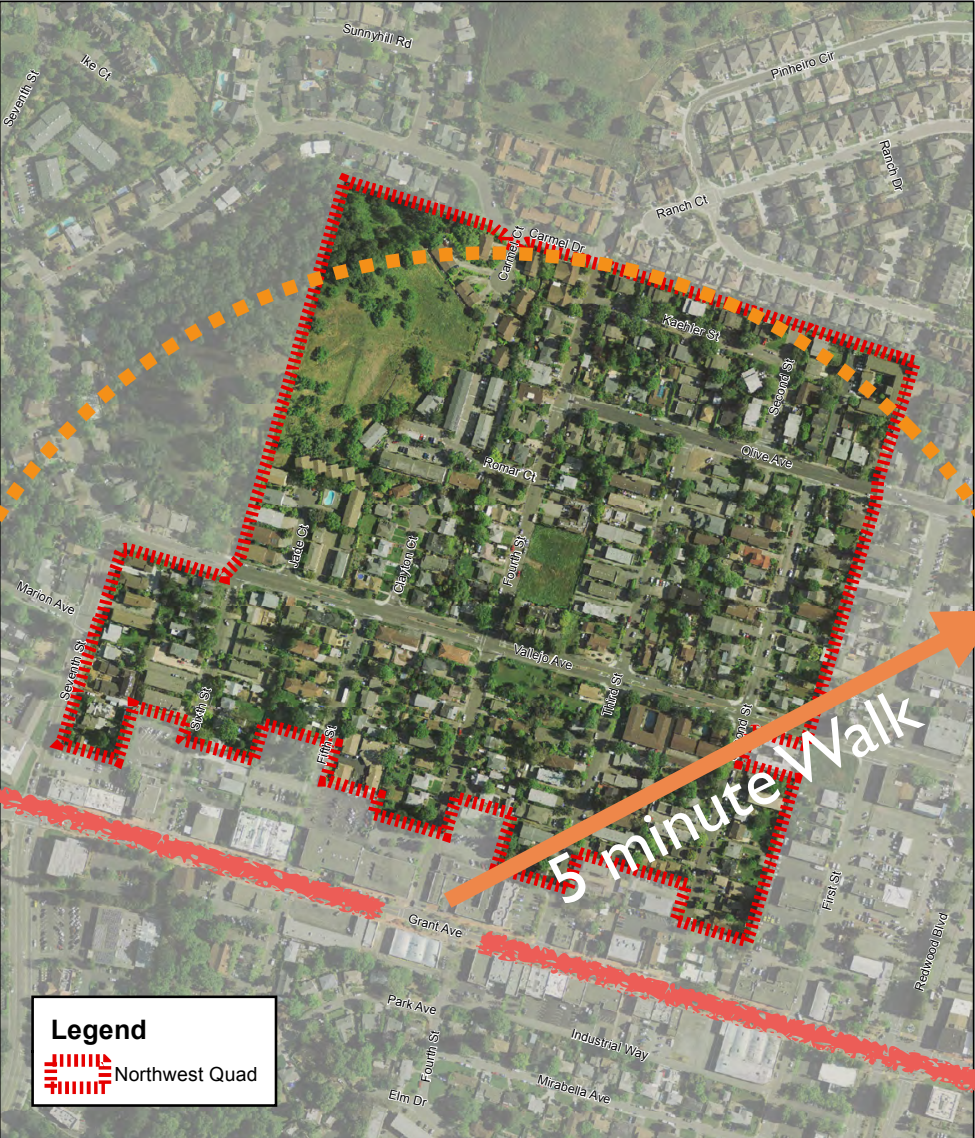
1

General/Introduction

Novato has Great Charm:



Amazing Location: Walkable to Many Amenities



Project Area



Adjacent retail on Grant Ave.

Amazing Location: Walkable to Many Amenities



Providing Diverse and Affordable Housing Options



Victims of Bad Density and Bad Design



Frontage sacrificed to parking



Incompatible building scales



Parking consumes front yard



100% lot coverage

Quality Impacted by Poorly-Designed Density



Garage doors and drives dominate fronts



Primary pedestrian entrance hard to find



Mansard roof fails to reduce perception of building's height and bulk.



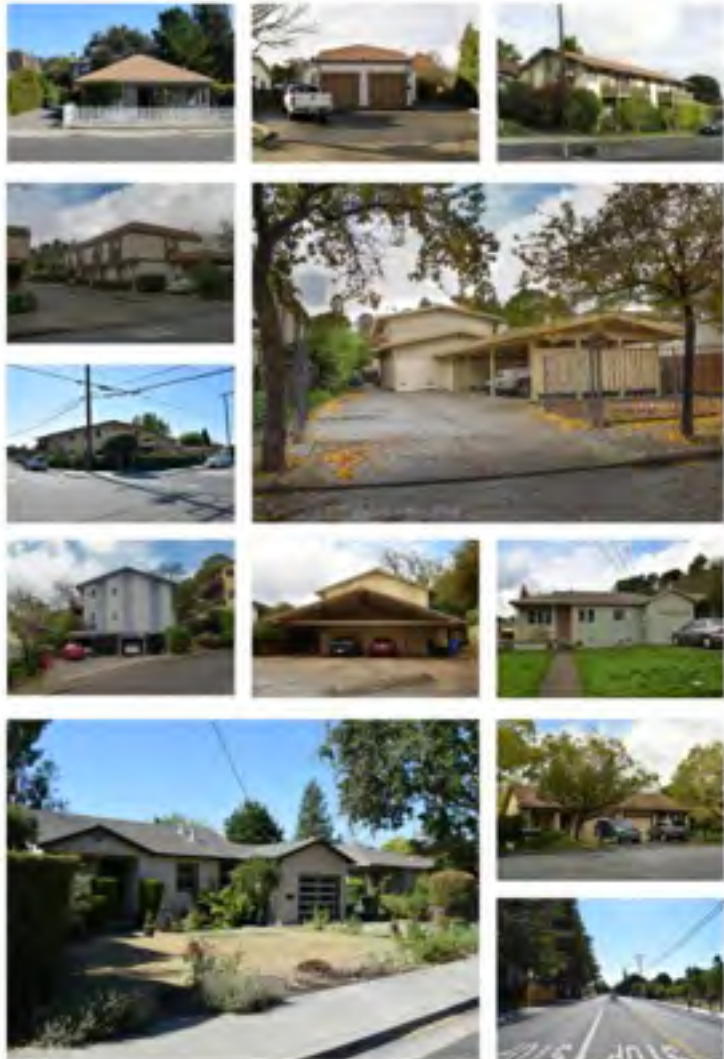
Parking dominates site

2

Photo Analysis

Step 1: Get to Know the Place

Capture and Understand Existing Character



Existing Neighborhood Character

January 2015
Novato, California



Existing Neighborhood Character

January 2015
Novato, California



Introduction to Potential Building Types

Compact Detached House

A small, detached structure on a small lot that incorporates site use.



Carriage House

An accessory structure typically located at the rear of a lot which provides either a small residential unit, home office space, or other small commercial or service use but may be above a garage or at ground level.



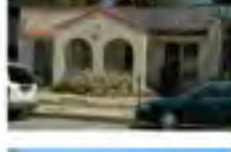
Bungalow Court

A series of small, detached structures, providing multiple units, arranged to follow a shared court line. It typically provides close to the street. The shared court takes the place of a private rear yard and increases an important amenity enhancing economic.



Duplex: Side-by-Side

A small to medium-sized structure that consists of two side-by-side dwelling units, both facing the street and with a single building footprint.



Duplex: Stacked

A small to medium-sized structure that consists of two stacked dwelling units, with facing the street and with a single building footprint.



Fourplex

A medium-sized structure that consists of a side-by-side and stacked dwelling units, typically with one shared entry or individual entries along the front.



Example Photo Homes

Example Building Types

Townsend Northwest Neighborhood Study

January 2014
Towson, California



Example Building Types

Townsend Northwest Neighborhood Study

January 2014
Towson, California



3

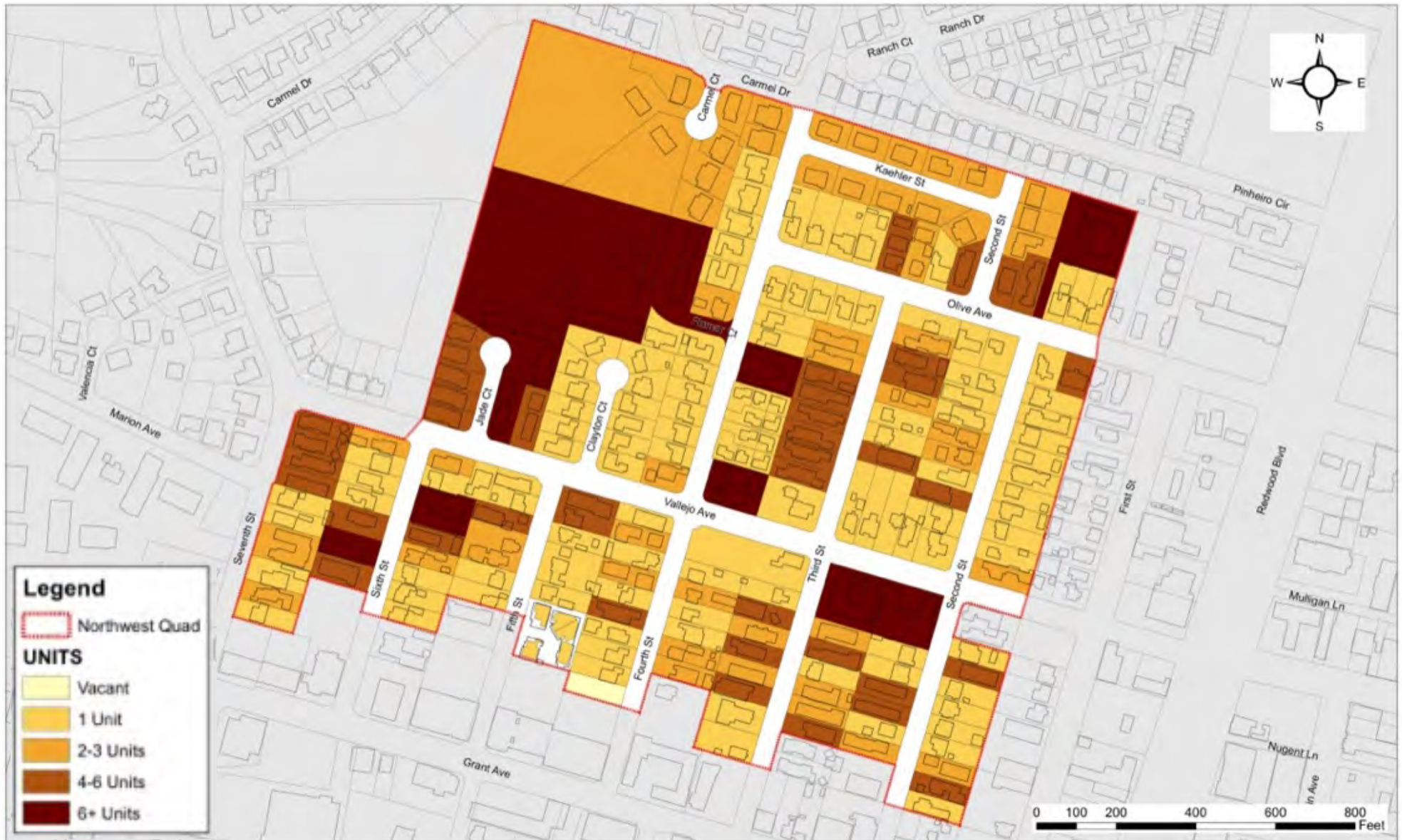
Mapping Analysis

Step 2: Get a More In-Depth
Understanding

Larger Context and Existing Open Space



Existing Number of Units



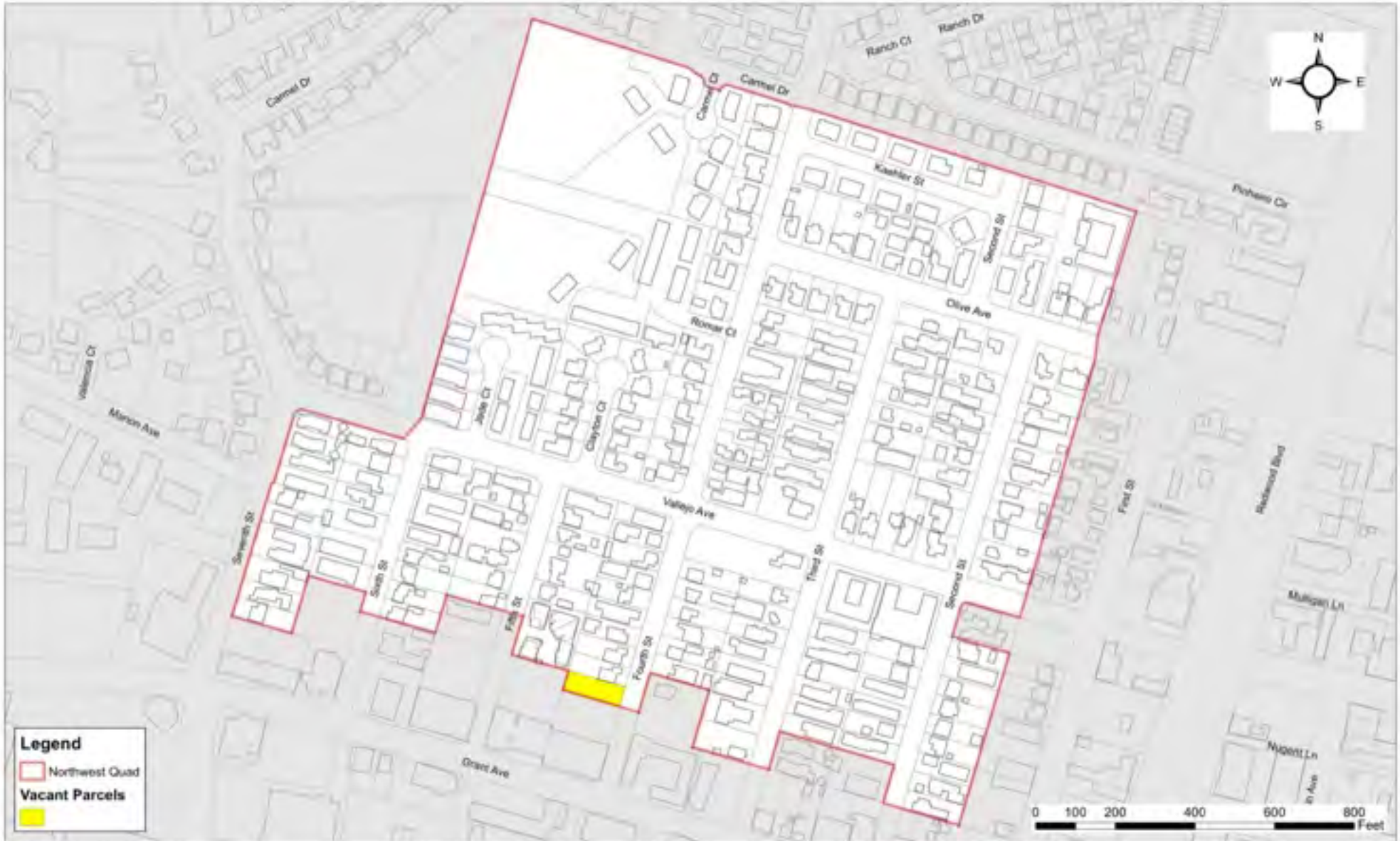
Building Footprints



Existing Building Heights



Vacant Parcels: Only 1 In the Planning Area



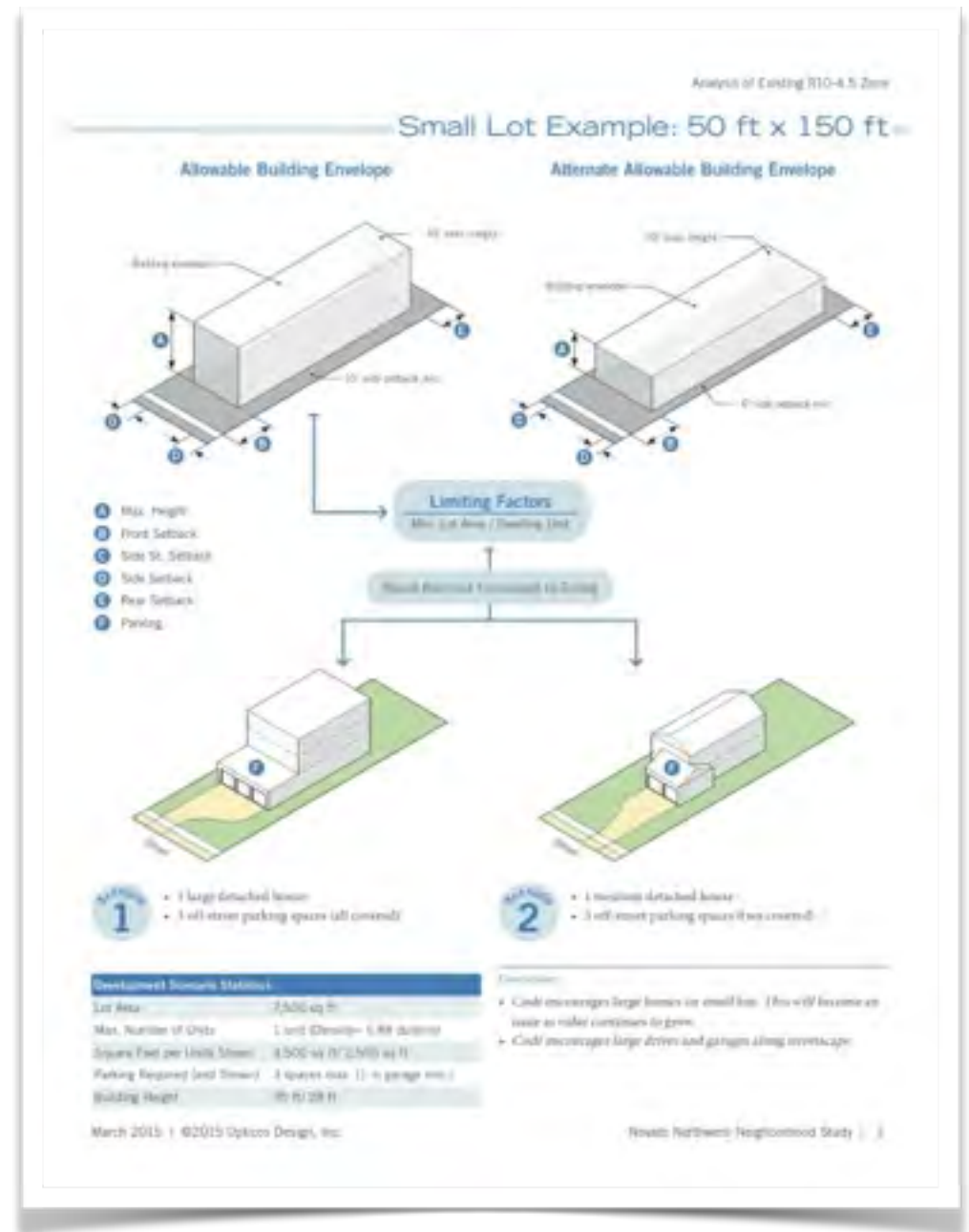
Zoning Analysis

Step 3: Get a More Technical
Understanding of the Rules

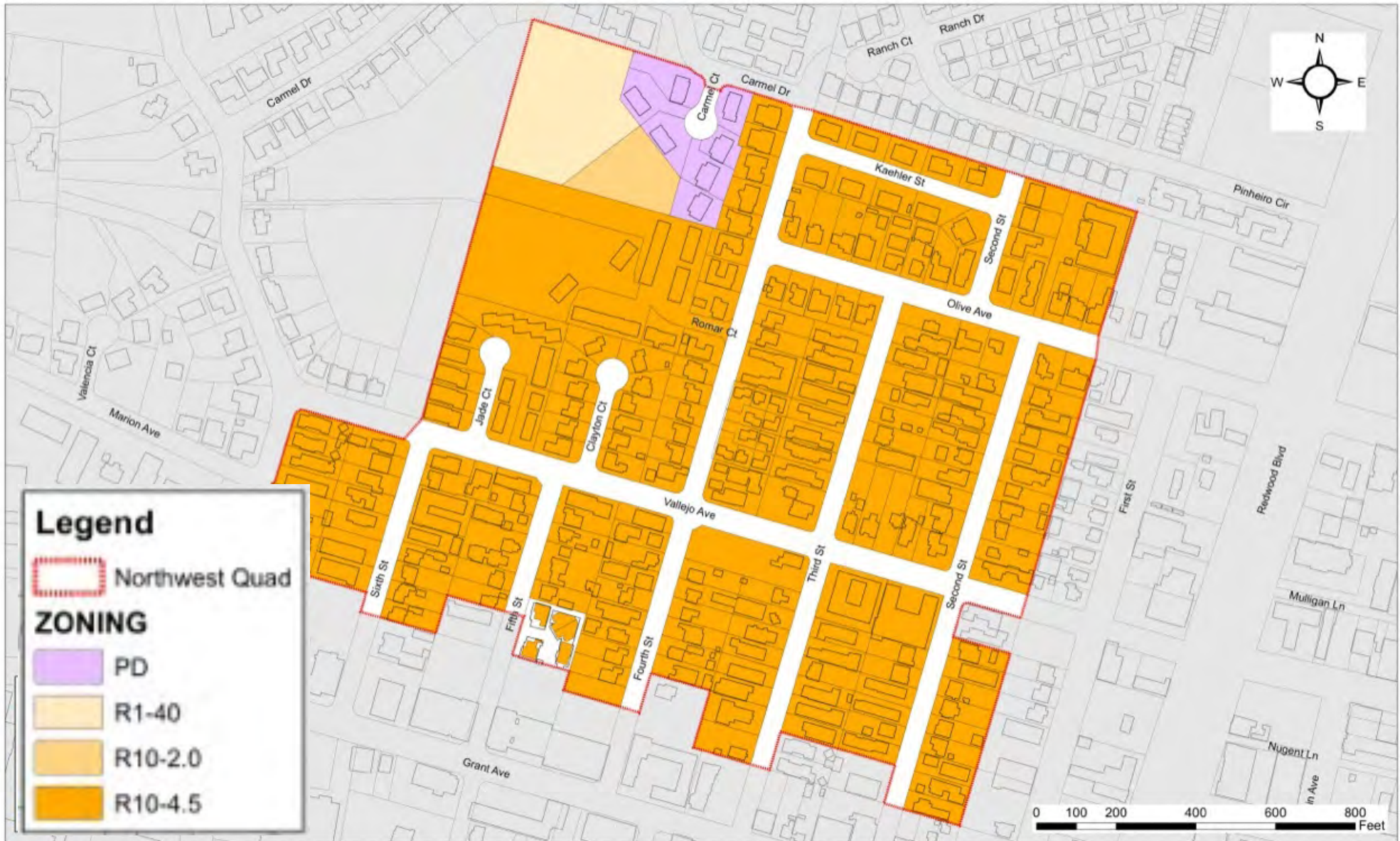
4

Why do we do this?

1. What does current zoning actually encourage vs. intent? (Often find there is a disconnect.)
2. Getting beyond the numbers (density, lot cover, etc.) and understanding form the zoning is encouraging.



Existing Zones



Zoning Summary for RI-04.5

Existing Medium Density Multi-Family Residential District Regulations

Max. Number Dwelling Units	1 du/ 4,500 sf of site area	
Min. Lot Area	6,000 sf	
Min. Lot Dimensions	60' min. width 100' min. depth	
Max. Height	35 ft	A
Min. Front Setback	20 ft	B
Min. Side Street Setback	10 ft, or 20 feet (bldg. height >20 ft, or for garage using side street access)	C
Min. Side Setback	6 ft (bldg. height <20 ft), or 10 ft (bldg. height >20 ft)	D
Min. Rear Setback	15 ft, or 20 ft (if rear property line abuts a single family zone)	E
Max. Building Coverage	40%	
Floor Area Ratio	n/a	
Multifamily Parking Count	1.2sp/studio; 1.5sp/1 bdrm; 2 sp/2 bdrm; 2.2 sp/3 bdrm; 1sp/ every 3 units for guests	F
Single-Family Parking Count	2 sp/unit; 1 in garage; 3 max.	F
Min. Open Space/Unit	500 sf (250 sf must be private)	

Notes:

Max. 50% paved surface area in front setback.

Allowable density reduced by 20 percent for lots less than 7,500 square feet or width less than 60 feet.

Typical Assumptions for Build-out Examples on Following Pages:

- 10-ft side setbacks are used to take advantage of 35 ft height limit, which allows for 11-ft tall ground floor and 10-ft tall upper floors.

According to the General Plan, for the Northwest Quadrant: "... Allow multi-family housing only in cases where the City makes the following findings: (1) That the rezoning would not encourage the demolition of a sound dwelling.... (2) That the rezoning would not lead to the intrusion of apartments into a predominantly single-family area."



Photo credit: Google Maps

Photo showing neighborhood's existing random pattern of build-out



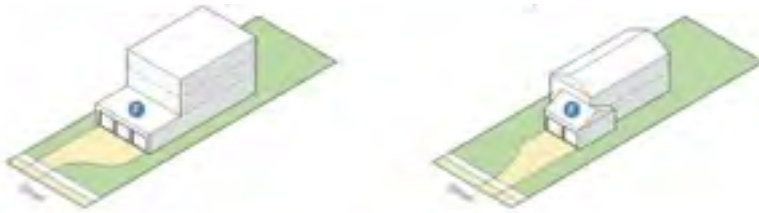
A large apartment building looming over a single-family home.

Number of Units Allowed in the Northwest Quadrant Neighborhood by Different Documents

	RI-04.5 Zone	1996 Novato General Plan	1977 NW Quadrant Plan
50'x150' lot	1	2	3
100'x150' lot	3	6	8
150'x150' lot	5	10	12

Methodology: Modeling Potential Lot Build-Outs

Small Lot Example: 50 ft x 150 ft



- 1**
- 1 large detached house
 - 1 off-street parking space (if covered)

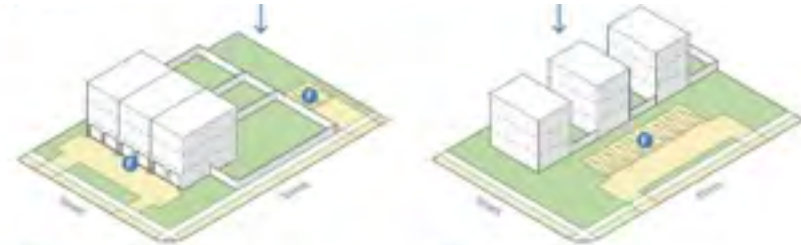
- 2**
- 1 medium detached house
 - 3 off-street parking spaces (if covered)

Development Scenario Statistics

Lot Area	7,500 sq ft
Max. Number of Units	1 unit (Density= 1.33 units/ac)
Square Feet per Unit Shown	7,500 sq ft (7,500 sq ft)
Parking Required (and Shown)	1 space (0.1)
Building Height	35 ft (2.8 fl)

- Comments:**
- Code encourages large homes or small lots. This will increase in value as market continues to grow.
 - Code encourages large drives and garages along streetscape.

Medium Corner Lot Example: 100 ft x 150 ft



- 1**
- 2 attached townhomes
 - 2 off-street parking spaces (if covered)

- 2**
- 3 detached townhomes
 - 4 off-street parking spaces

Development Scenario Statistics

Lot Area	15,000 sq ft
Max. Number of Units	3 units (Density= 5.77 units/ac)
Square Feet per Unit Shown	5,000 sq ft
Parking Required (and Shown)	2 spaces (0.2)
Building Height	35 ft

- Comments:**
- Large parking area or garages likely along both streetscapes.
 - Also likely build-out scenario is a set of 3-story flat roof detached homes.
 - Build-out of 3 units is very economically inefficient so not likely viable.

Large Lot Example: 150 ft x 150 ft



- 1**
- 5 large detached houses
 - 12 off-street parking spaces (if covered)

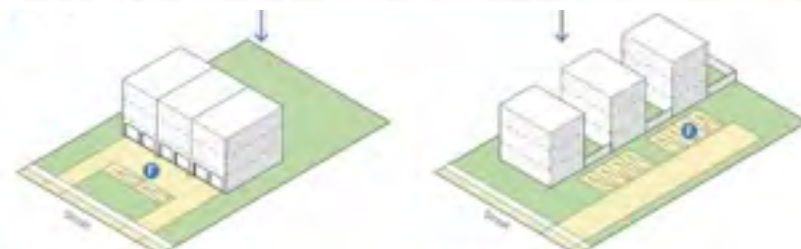
- 2**
- 3 attached townhomes
 - 12 off-street parking spaces

Development Scenario Statistics

Lot Area	22,500 sq ft
Max. Number of Units	5 units (Density= 9.67 units/ac)
Square Feet per Unit Shown	4,500 sq ft (2,500 sq ft)
Parking Required (and Shown)	12 spaces (0.53)
Building Height	35 ft

- Comments:**
- Most likely build-out would be 3 single-family detached units placed near the site.
 - Current regulations are not encouraging creative, well-designed build solutions.

Medium Lot Example: 100 ft x 150 ft



- 1**
- 2 attached townhomes
 - 2 off-street parking spaces (if covered)

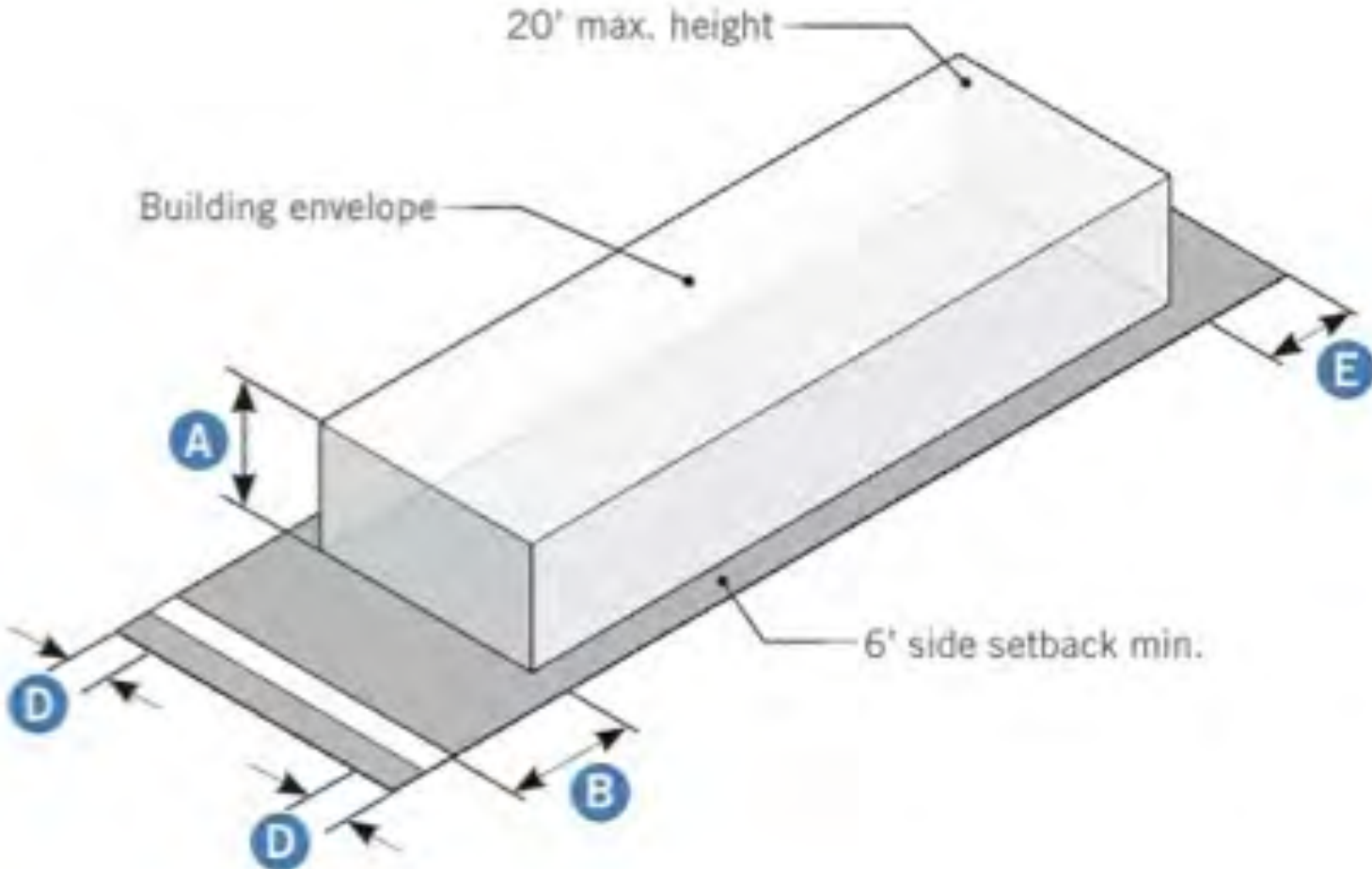
- 2**
- 3 detached townhomes
 - 4 off-street parking spaces

Development Scenario Statistics

Lot Area	15,000 sq ft
Max. Number of Units	3 units (Density= 6.72 units/ac)
Square Feet per Unit Shown	5,000 sq ft
Parking Required (and Shown)	3 spaces (0.2)
Building Height	35 ft

- Comments:**
- Most likely build-out scenario is a set of 3-story flat roof detached homes.
 - Build-out of 3 units is very economically inefficient so not likely viable.

Step I: Determine the Building Envelope Allowed



Step 2: Determine the Limiting Factor for Development

Existing Medium Density Multi-Family Residential District Regulations

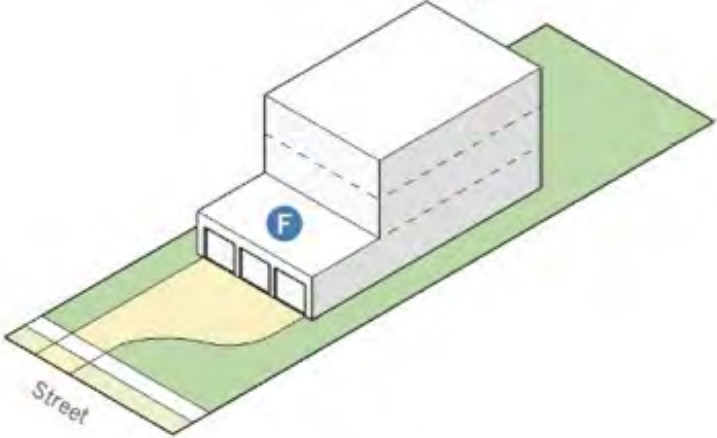
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Min. Lot Area	6,000 sf	
Min. Lot Dimensions	60' min. width	
	100' min. depth	
Max. Height	35 ft	A
Min. Front Setback	20 ft	B
Min. Side Street Setback	10 ft, or 20 feet (bldg. height >20 ft, or for garage using side street access)	C
Min. Side Setback	6 ft (bldg. height <20 ft), or 10 ft (bldg. height >20 ft)	D
Min. Rear Setback	15 ft, or 20 ft (if rear property line abuts a single family zone)	E
Max. Building Coverage	40%	
Floor Area Ratio	n/a	
Multifamily Parking Count	1.2sp/studio; 1.5sp/1 bdrm; 2 sp/2 bdrm; 2.2 sp/3 bdrm; 1sp/ every 3 units for guests	F
Single-Family Parking Count	2 sp/unit; 1 in garage; 3 max.	F
Min. Open Space/Unit	500 sf (250 sf must be private)	

Notes:

Max. 50% paved surface area in front setback.

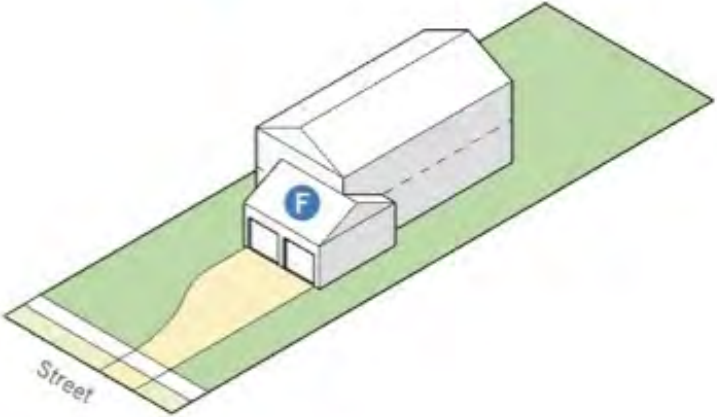
Allowable density reduced by 20 percent for lots less than 7,500 square feet or width less than 60 feet.

Step 3: Design Likely Build Out Examples



Scenario
1

- 1 large detached house
- 3 off-street parking spaces (all covered)



Scenario
2

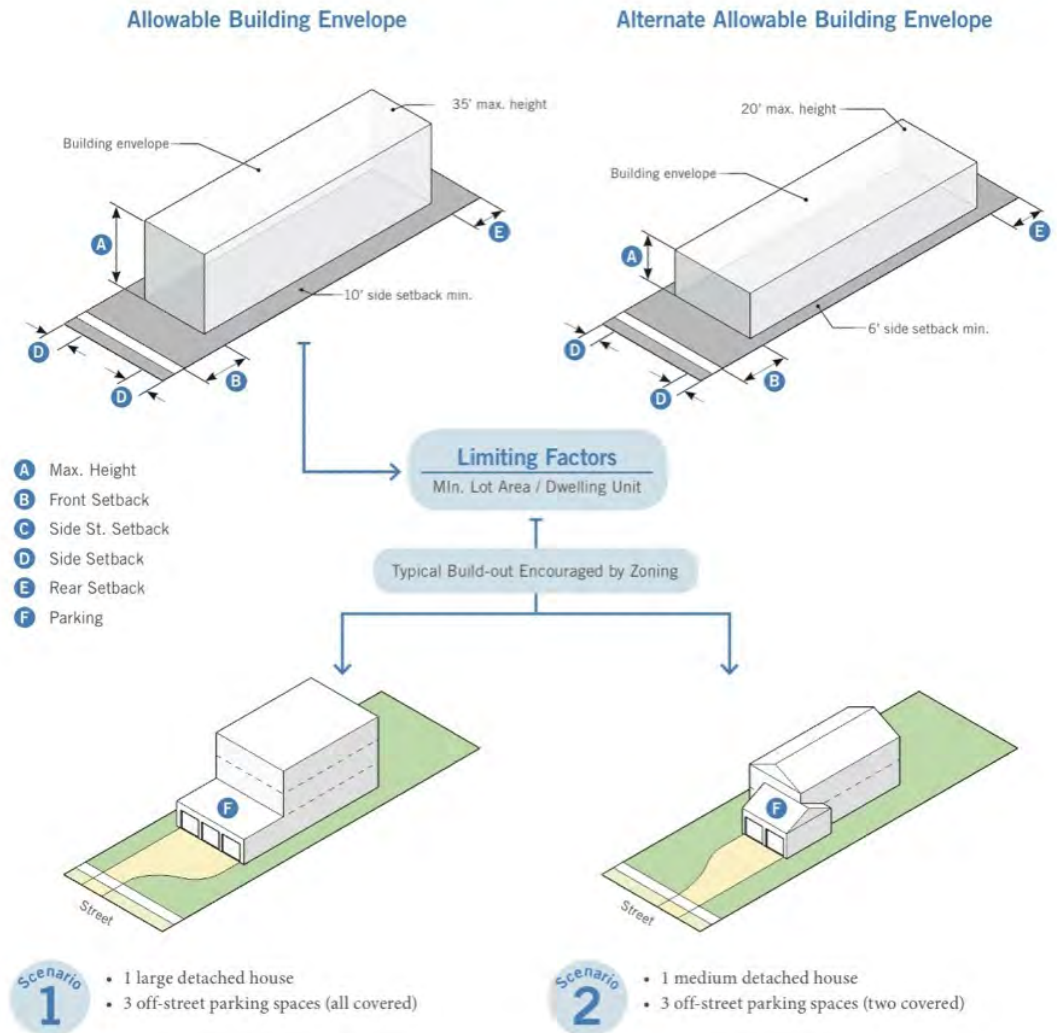
- 1 medium detached house
- 3 off-street parking spaces (two covered)

50 x 150 ft Lot

Findings

1. 1 unit allowed
2. 3 Stories allowed
3. If get new houses will likely have large driveways and garages facing the street
4. Due to proximity to downtown, may eventually get really large, high end single family home remodel/rebuild

Small Lot Example: 50 ft x 150 ft



Development Scenario Statistics	
Lot Area	7,500 sq ft
Max. Number of Units	1 unit (Density= 5.88 du/acre)
Square Feet per Units Shown	4,500 sq ft/ 2,500 sq ft
Parking Required (and Shown)	3 spaces max. (1 in garage min.)
Building Height	35 ft/ 28 ft

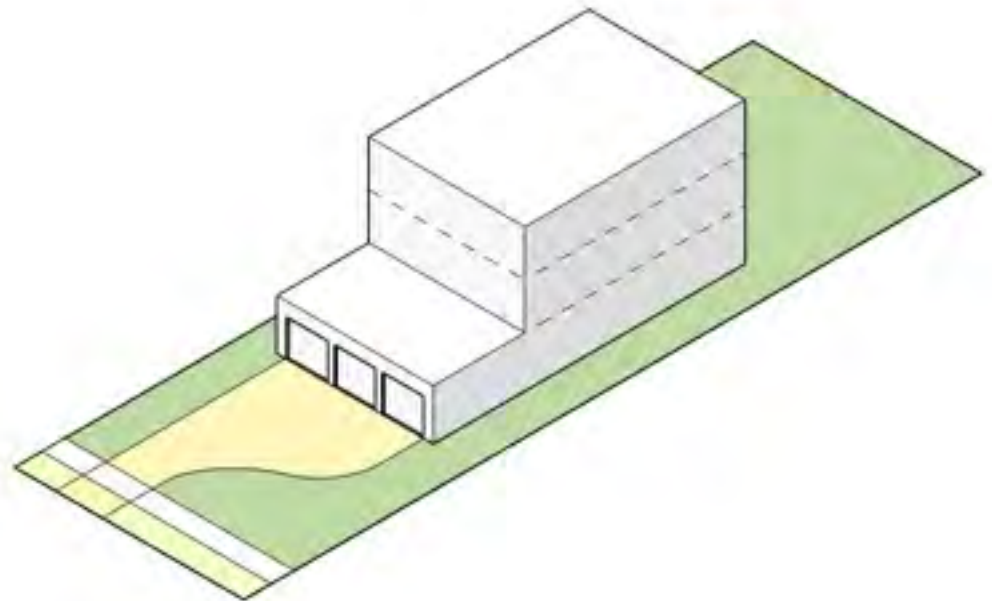
Conclusions:

- Code encourages large homes on small lots. This will become an issue as value continues to grow.
- Code encourages large drives and garages along streetscape.

50 x 150 ft Lot

Findings

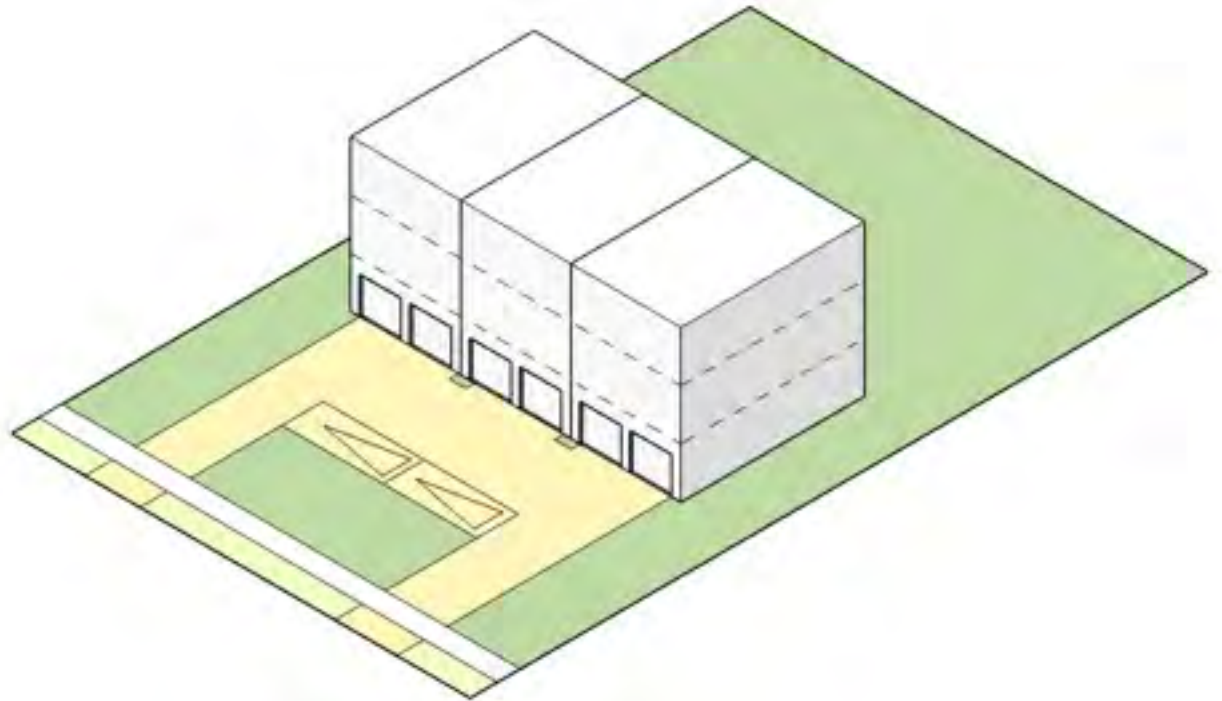
1. 1 unit allowed
2. 3 Stories allowed
3. If get new houses will likely have large driveways and garages facing the street
4. Due to proximity to downtown, may eventually get really large, high end single family home remodel/rebuild



100 x 150 ft Lot

Findings

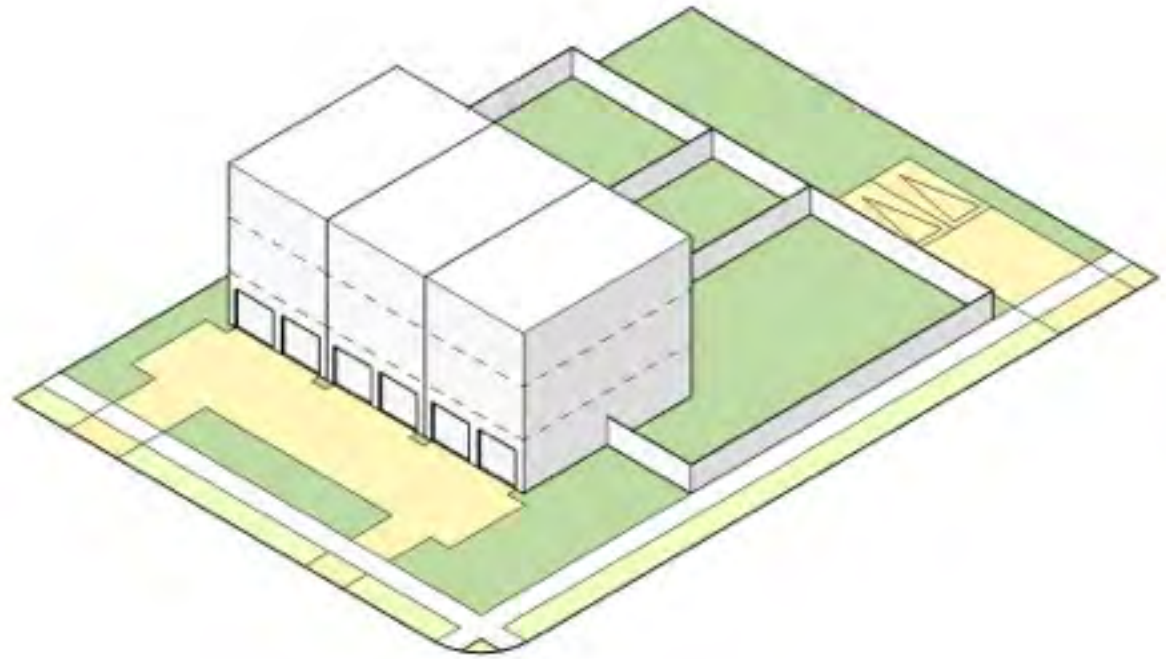
1. 3 units allowed. Not enough to encourage rebuild or major renovation.
2. 3 stories allowed
3. Likely result: 3 detached houses packed onto the site. Parking and garages out front.



100 x 150 ft Corner Lot

Findings

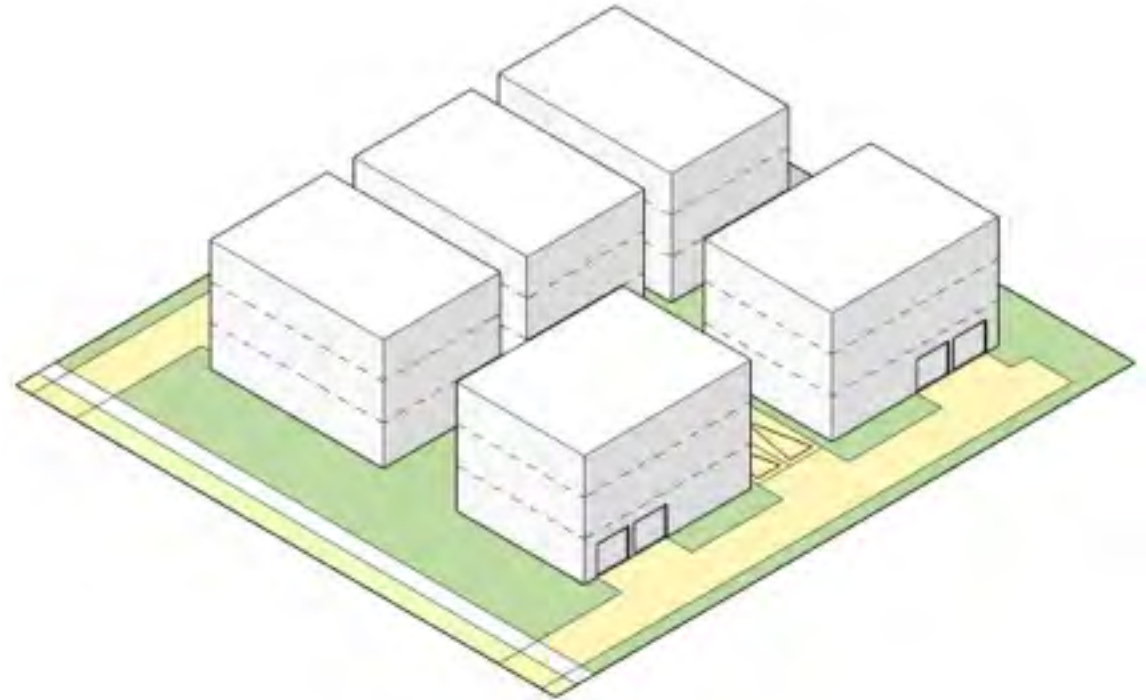
1. 3 units allowed. Not enough to encourage rebuild or major renovation.
2. 3 stories allowed
3. Likely result: 3 detached houses packed onto the site. Parking and garages out front.



150 x 150 ft Lot

Findings

1. 5 units allowed. Not enough to encourage rebuild or major renovation.
2. 3 stories allowed
3. Likely result: 5 detached houses packed onto the site. Parking and garages out front or tucked under house.



5

Discussing Appropriate Neighborhood Form First: Introduction to Housing Types

Why is This Important for Your Community and Your Practice?

A Tsunami is Upon Us

We Have Forgotten How to Build and Regulate Density



Lot Build-Outs Using Density Allowed by 1977 Neighborhood Plan

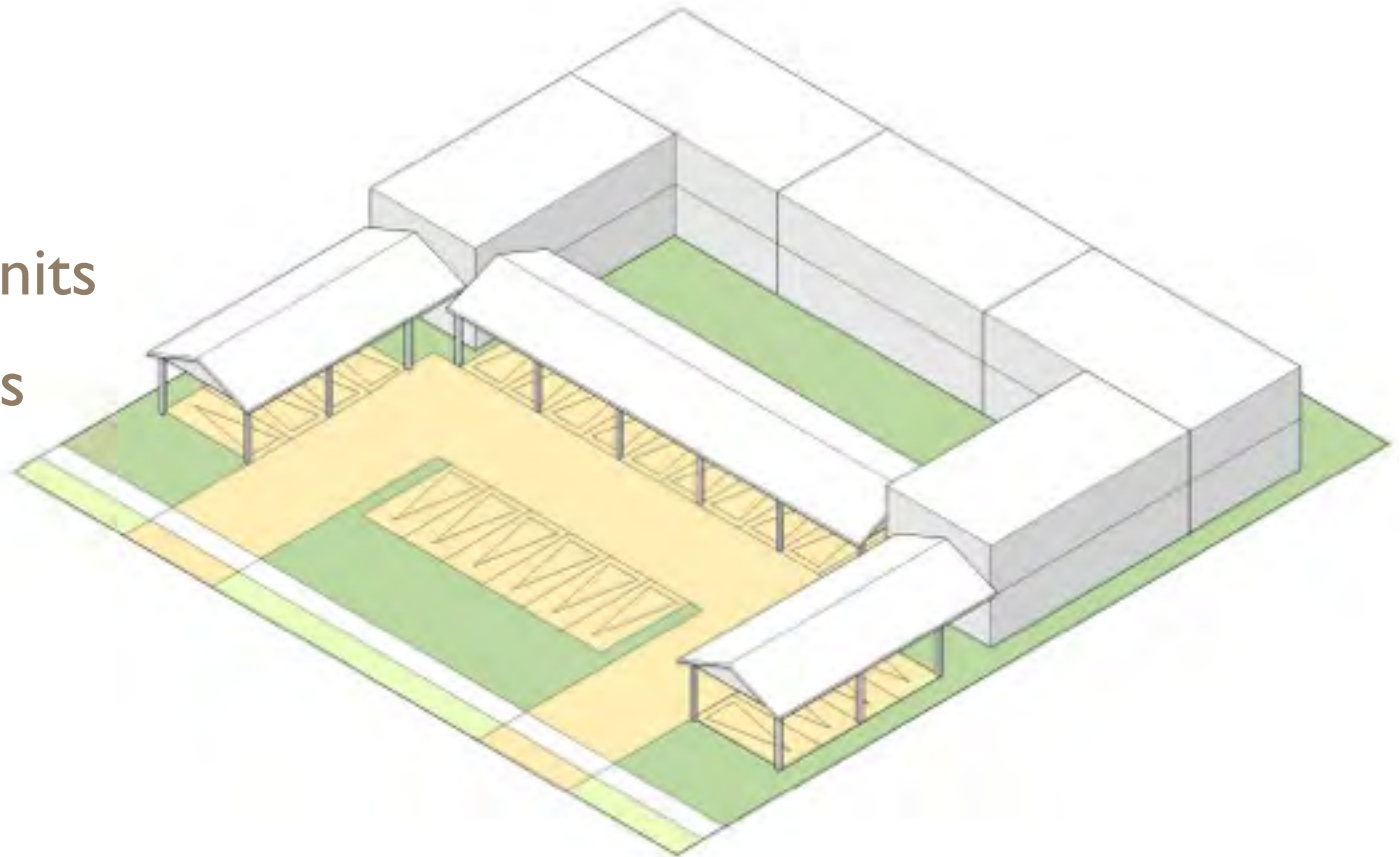
100 x 150 ft Lot

Assumptions:

6 units

All 2-bedroom units

14 parking spaces



35 Million Unit
Shortage

National Shortage of Small Lot
and Attached Housing Units

(C. Nelson).

20-35%
Gap

Between Demand and Supply
of Walkable Urban Living Choices
(C. Leinberger)

75-85%

Households
Without Children
by 2025

30%

Households
will be Single Person
by 2025

Missing Middle Housing



Scale Between Single Family Housing and Stacked Flats

The “Missing Middle:” Sacramento, CA



Fourplex



Bungalow Court



Side-by-Side Duplex

The “Missing Middle” in Alameda, CA



Stacked Duplex



Fourplex



Fourplex



Bungalow Court

The “Missing Middle” in Berkeley, CA



Mansion Apartment



Bungalow Court



Stacked Duplex



Fourplex

Courtyard Apartments



Typical Lot Sizes	Density (8 units/lot)	Density (14 units/lot)
110' x 125'	26 DU/Acre	46 DU/Acre
110' x 110'	29 DU/Acre	50 DU/Acre
120' x 135'	22 DU/Acre	DU/Acre

Four/Sixplexes



Typical Lot	Density (4 units/lot)	Density (6 units/lot)
75' x 125'	18 DU/Acre	27 DU/Acre
60' x 125'	24 DU/Acre	35 DU/Acre
60' x 100'	28 DU/Acre	NA

Duplexes: Stacked



Bungalow Courts



Typical Lot Sizes	Density (5 units/lot)	Density (6 units/lot)
100' x 125'	17 DU/Acre	20 DU/Acre
100' x 100'	22 DU/Acre	26 DU/Acre
80' x 100'	25 DU/Acre	33 DU/Acre

Townhouse



Typical Lot Size	Density
30' x 125'	12 DU/Acre
25' x 100'	17 DU/Acre
25' x 75'	23 DU/Acre

Mansion Apartment



Typical Lot	Density (8 units/lot)	Density (10 units/lot)
100' x 125'	28 DU/Acre	35 DU/Acre
85' x 125'	33 DU/Acre	41 DU/Acre
80' x 85'	51 DU/Acre	NA

Important Characteristics of “Missing Middle” Housing

Getting it Right: Not Just Medium Density Housing



It is Set in A Walkable Urban Context

“What can I walk to?”

Urban Amenities and the Competitive Advantage



Live-Work: Great for Transitions from Main Streets



LOT 1-5

LOT 1-4

South Main, Buena Vista, CO. Opticos Design



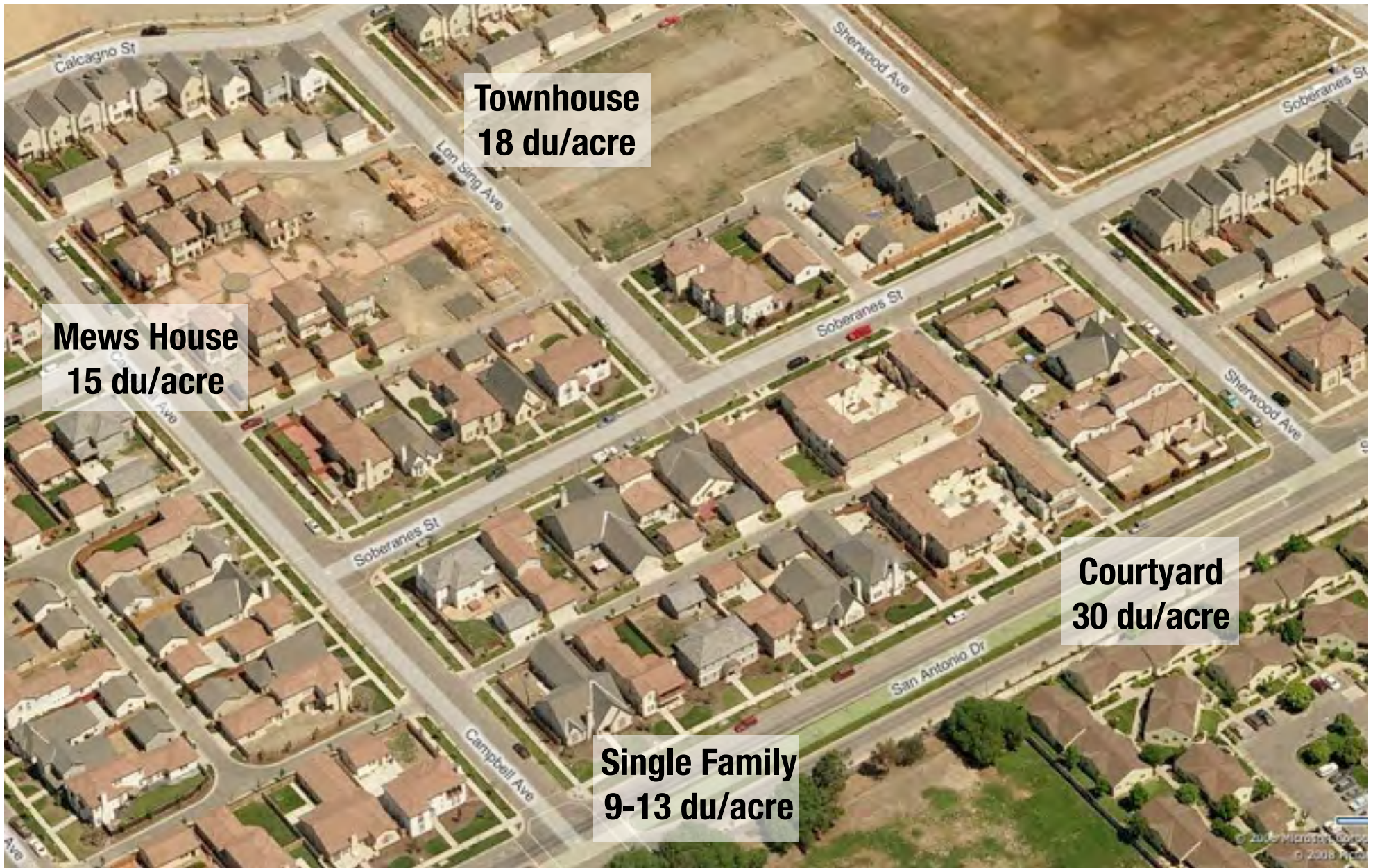
Small Footprint, Blended Densities

Mixing Housing Types

What's in Common? Small Footprint (Depth and Width)



Blending Density: Diff. Densities, but Compatible Forms





Lower Perceived Densities

Perception if 90% of the Issue

This is 24 du/acre, but Looks Like a House

"Particularly in the Southwest, the fundamental form of the time can best be expressed in a language native to the region. These ancient shapes are modern!"

~ John Gaw Meems



ALTO STREET ELEVATION AND PARTIAL PLAN

Local, Green and Affordable

Looking at regional building types and construction techniques to provide an affordable housing model for the City of Santa Fe

Same Scale as a House





Well-Designed, Smaller Units

Trading Quantity for Quality

Not Same Suburban Unit Type in Urban Context





Off-Street Parking Does Not Drive the Site Plan

Is Possible Due to Walkable Context

On Street Parking Assessment





Units	Density
9	22 DU/Acre

Otherwise You Get This



6

Creating Regulations that Encourage and Incentivize Compatible Housing

First Select Mix of Housing That is Compatible



Not Starting with Density or Use - Form First

Write Form-Based Regulations That Reinforce Those Types

10-40.40.080
T4 Neighborhood 2 (T4N.2) Standards

Key
 - - - - ROW/Property Line ■ Building Area
 - - - - Building Setback Line ■ Facade Area

D. Building Placement
Setback (Distance from ROW/Property Line)

Principal Building	
Front ¹	5' min.; 12' max. A
Front facade within area	50% min.
Side Street/Civic Space	10' min.; 15' max. B
Side ²	3' min. C
Rear	3' min. D
Outbuilding	
Front	20' min.
Side	0' min.; 3' min.
Rear	3' min.

¹Setback may match an existing adjacent building as follows. The building may be set to align with the facade of the frontmost immediately adjacent property, for a width no greater than that of the adjacent property's facade that encroaches into the minimum setback.
²No side setback required between townhouse and/or live/work building types.

Miscellaneous
 Upper-floor units must have a primary entrance along a street or courtyard façade.
 Ground-floor residential units along a street must have individual entries.

E. Building Form³
Height

Principal Building	
Stories	4 Stories max. E
To Eave/Parapet	40' max.
Overall	52' max.
Outbuilding	
To Eave/Parapet	18' max.
Overall	28' max.
Ground Floor Finish Level	18" min. above sidewalk F
Ground Floor Ceiling	9' min. clear G
Upper Floor(s) Ceiling	8' min. clear H
Footprint	
Depth, ground-floor residential	30' min. space along primary street frontage
Lot Coverage	80% max.
Miscellaneous	
Mansard roof forms are not allowed.	

³ See Division 10-50.100 (Specific to Building Types) for additional building form regulations.

10-74 **Flagstaff Zoning Code**

Key
 - - - - ROW/Property Line ■ Parking Area
 - - - - Parking Setback Line

G. Required Parking
Spaces⁷

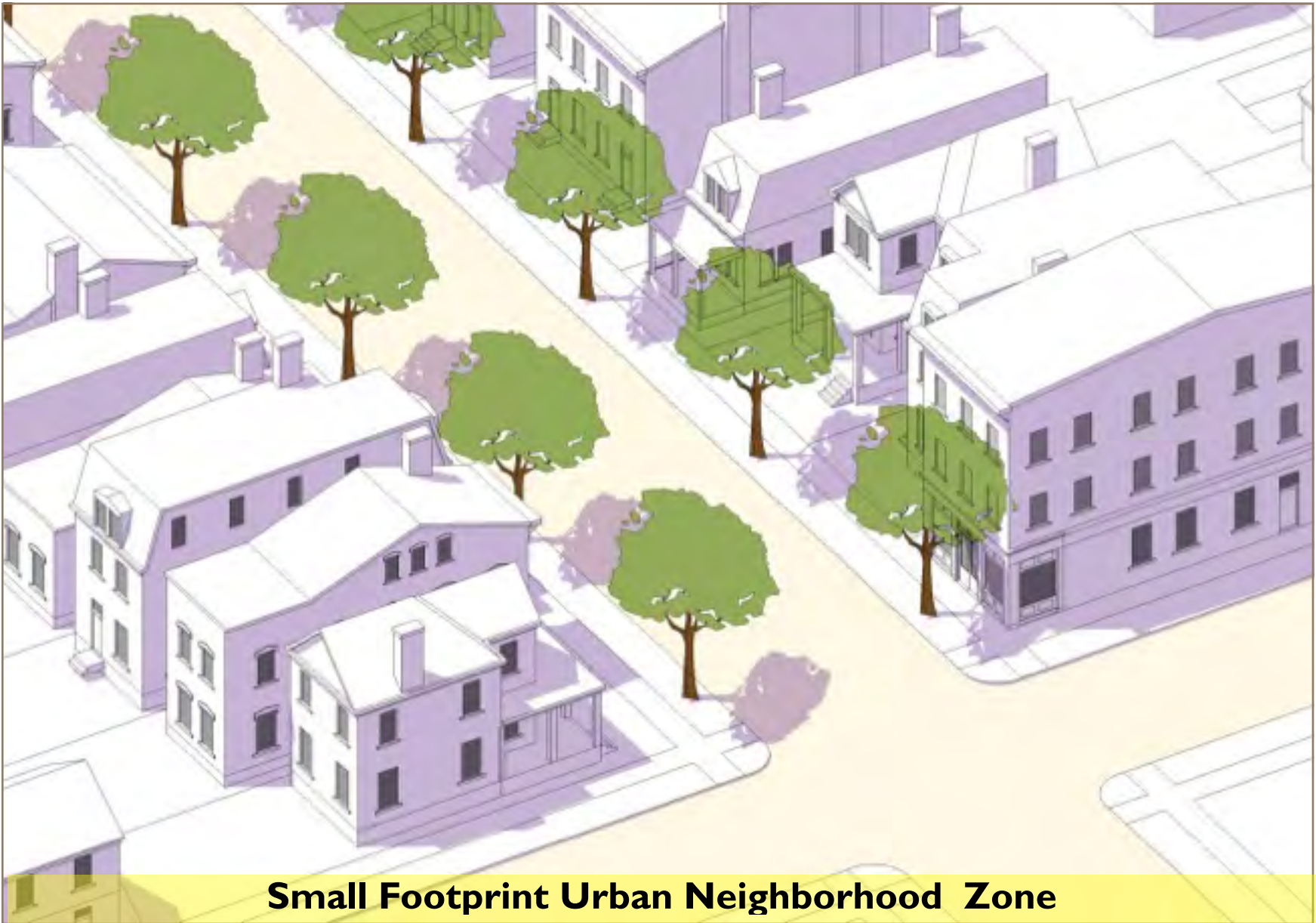
Residential Uses	
Studio/1 Bedroom	1 space/unit min.
2+ Bedrooms	2 spaces/unit min.
Retail Trade, Service Uses	
≤2,000 sf	No spaces required
>2,000 sf	2 spaces/1,000 sf min. above first 2,000 sf

⁷Use types not listed shall meet the requirements in Table 10-50.70.040.A (Automobile Parking Spaces Required).

Location (Setback from ROW/Property Line)

Front	M
Covered/Attached	30' min.
Uncovered	Match front facade min.
Side Street/Civic Space	5' min. N
Side	0' min. O
Rear	0' min. P

Make the Zoning Code/Rules Graphic, Clear, and Predictable





Conclusion

What Mix of Housing is Right Here?



Scale Between Single Family Housing and Stacked Flats

Question to Consider: Should Block Closest to Grant Avenue be Thought About Differently Than Other Blocks



Q & A



