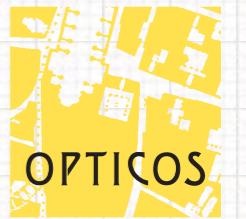
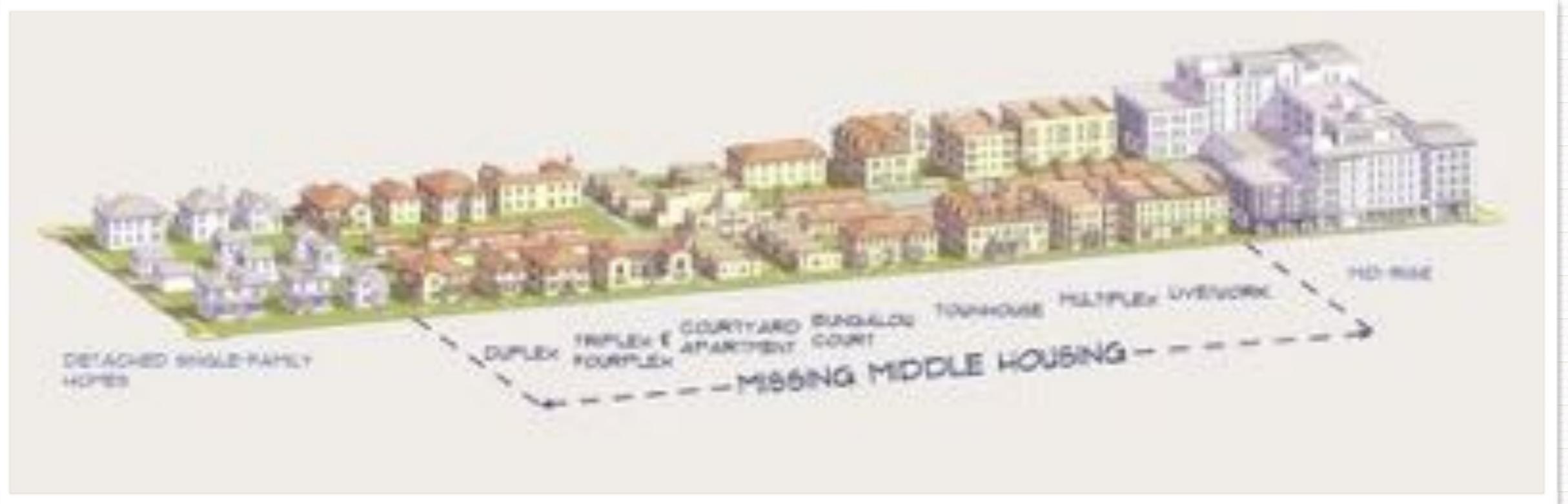


# Missing Middle Housing



## Responding to the Demand for Walkable Living



Karen Parolek  
LGC Capital Region Dinner Forum  
February 9, 2017

 KarenParolek  
karen.parolek@opticosdesign.com



# Courtyard Apartments

# Walkable Cities are Thriving Cities



Photo courtesy of the Michigan Municipal League  
Icons by Freepik from [www.flaticon.com](http://www.flaticon.com)

20-35%  
Gap

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

75-**85**%

Households  
Without Children  
by 2025

~U.S. Census Bureau

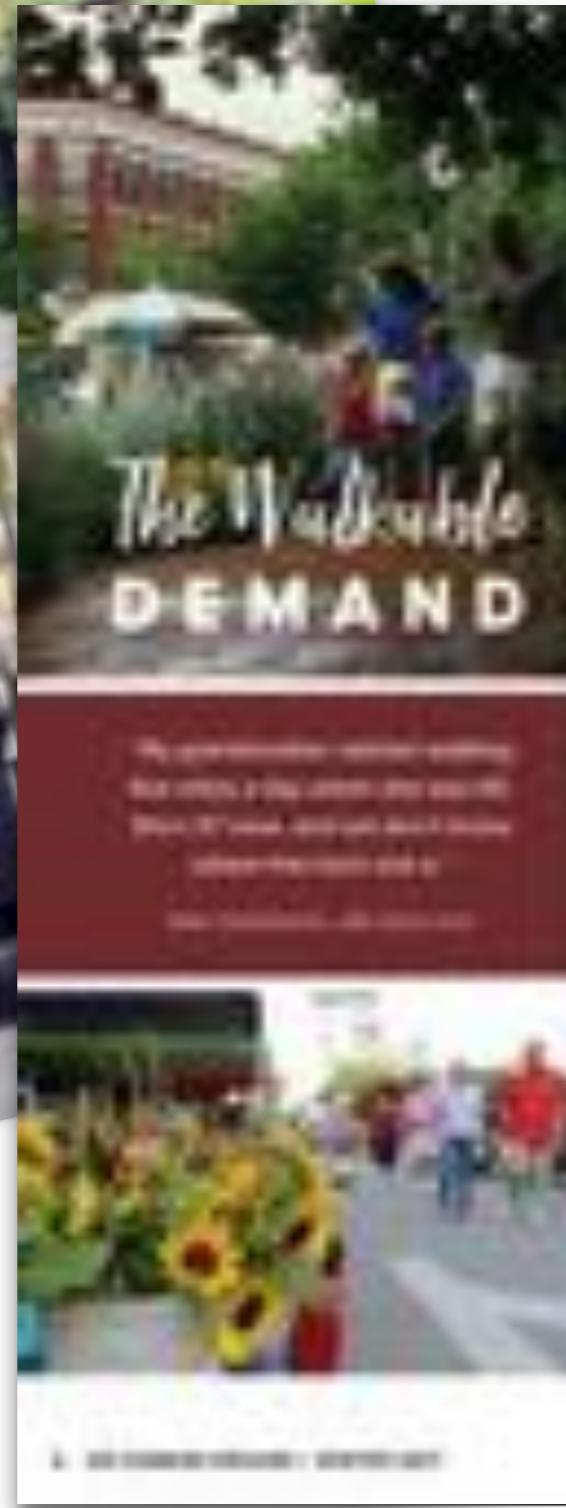
# 3 Million Unit Shortage

National Shortage of Small Lot  
and Attached Housing Units

~C. Nelson

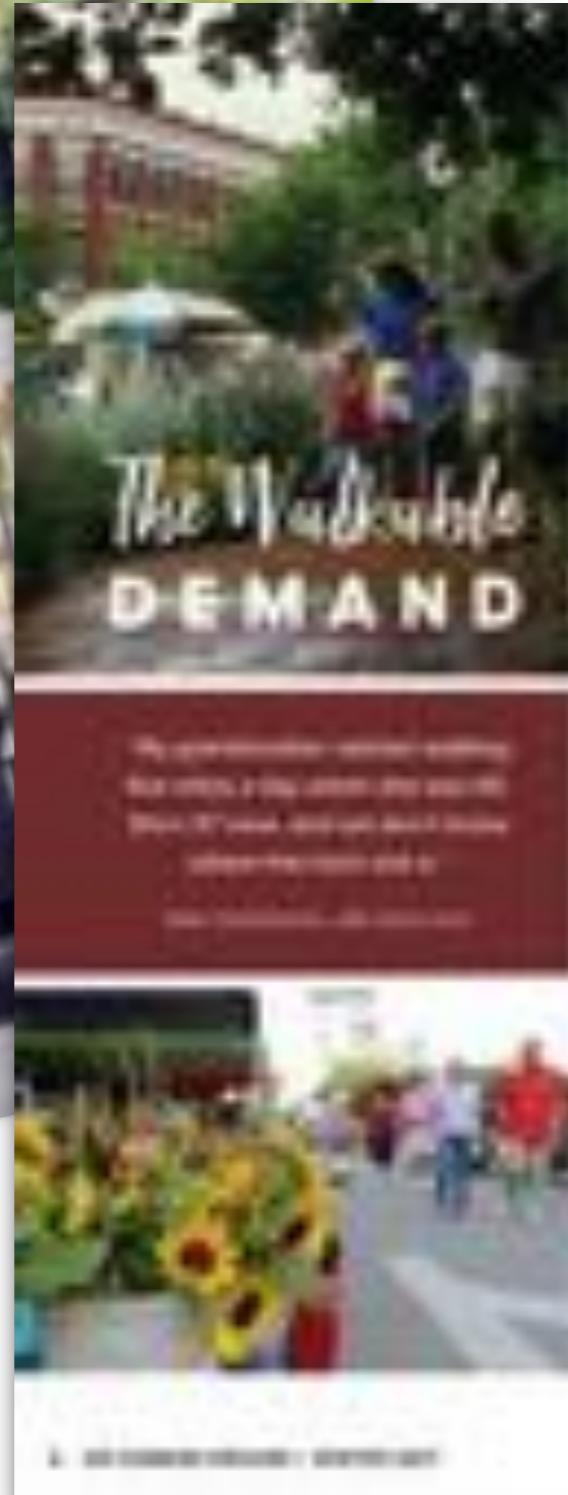
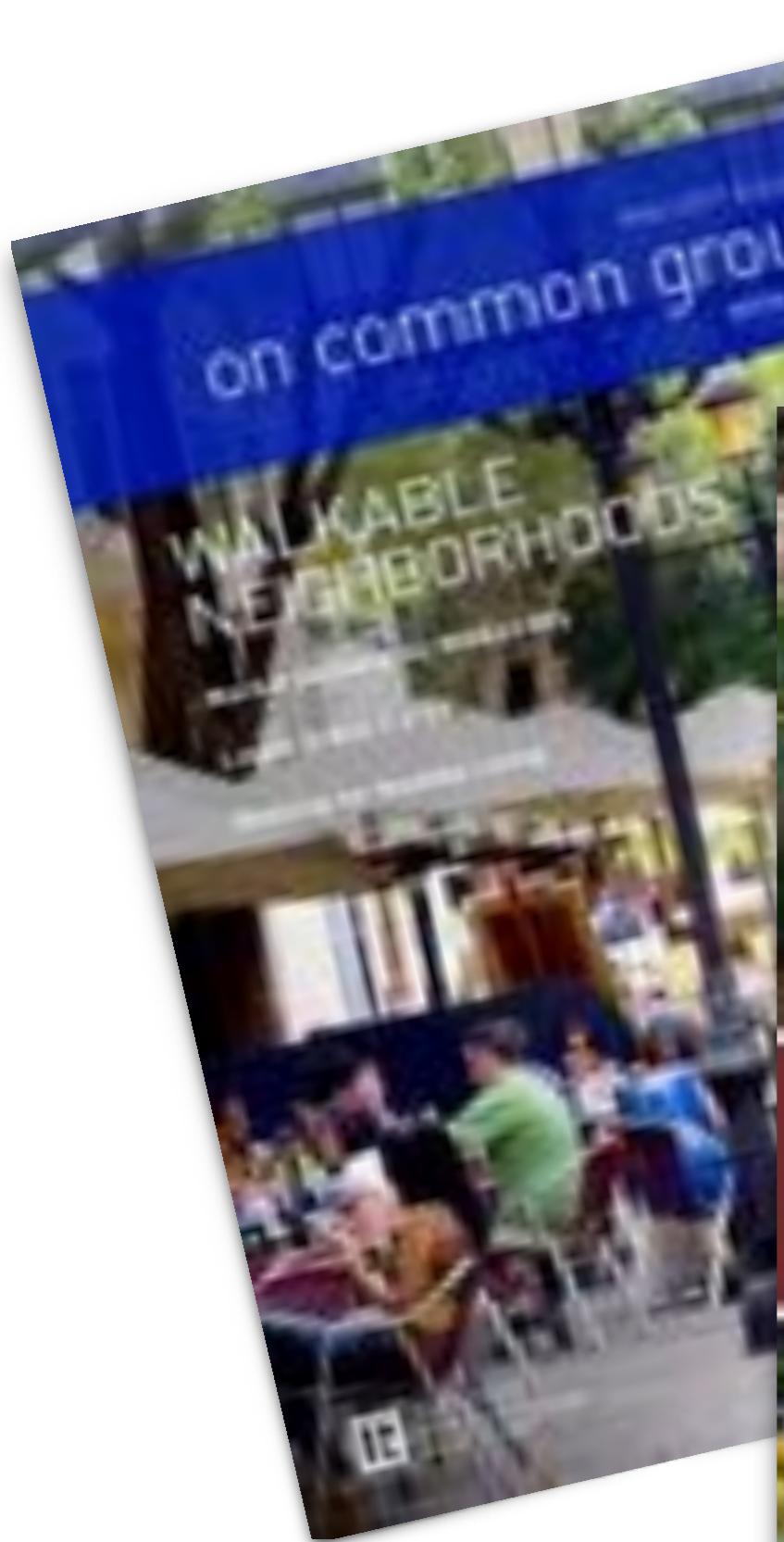


**MISSING MIDDLE**  
Responding to the Demand for Walkable Urban Living



**60% favor**  
neighborhoods with  
walkable mix of houses  
and stores

~National Association  
of Realtors



**56% of millenials  
and 46% of boomers**  
want to live in more  
walkable neighborhoods

~American Planning  
Association

on common ground

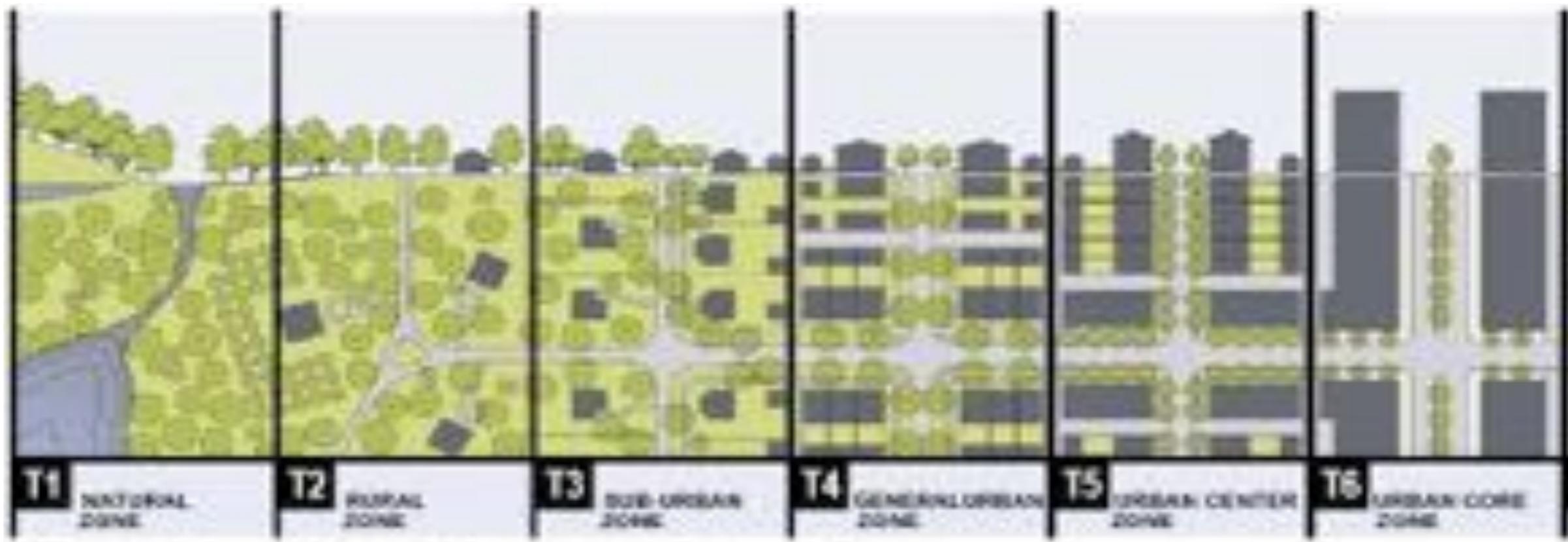
WALKABLE  
NEIGHBORHOODS

THE  
WALKABLE  
DEMAND

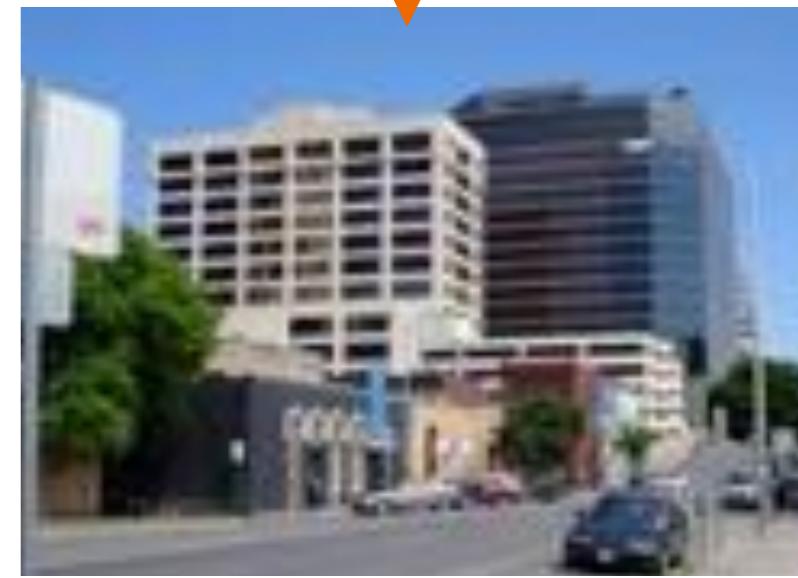
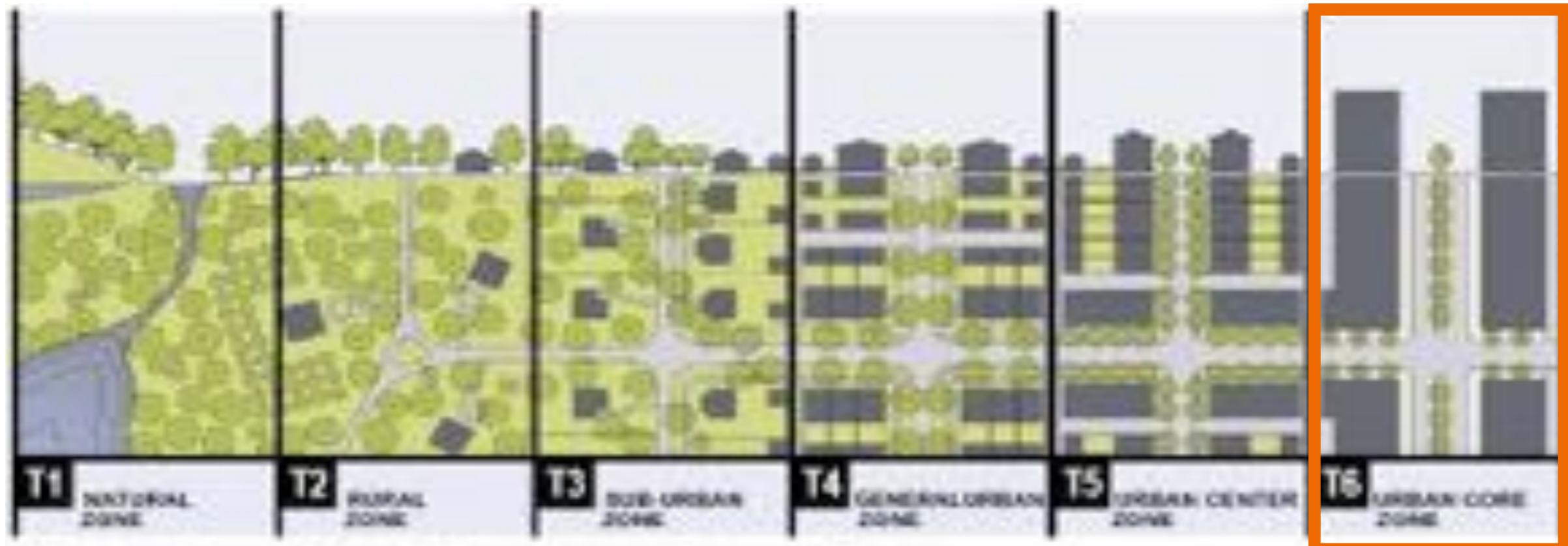
Office  
tenants prefer  
locations in walkable  
urban environments by  
**4:1 margin**

~NAIOP Commercial  
Real Estate Dev't  
Assoc.

# Neighborhood Living is Different than City Living



# Neighborhood Living is Different than City Living



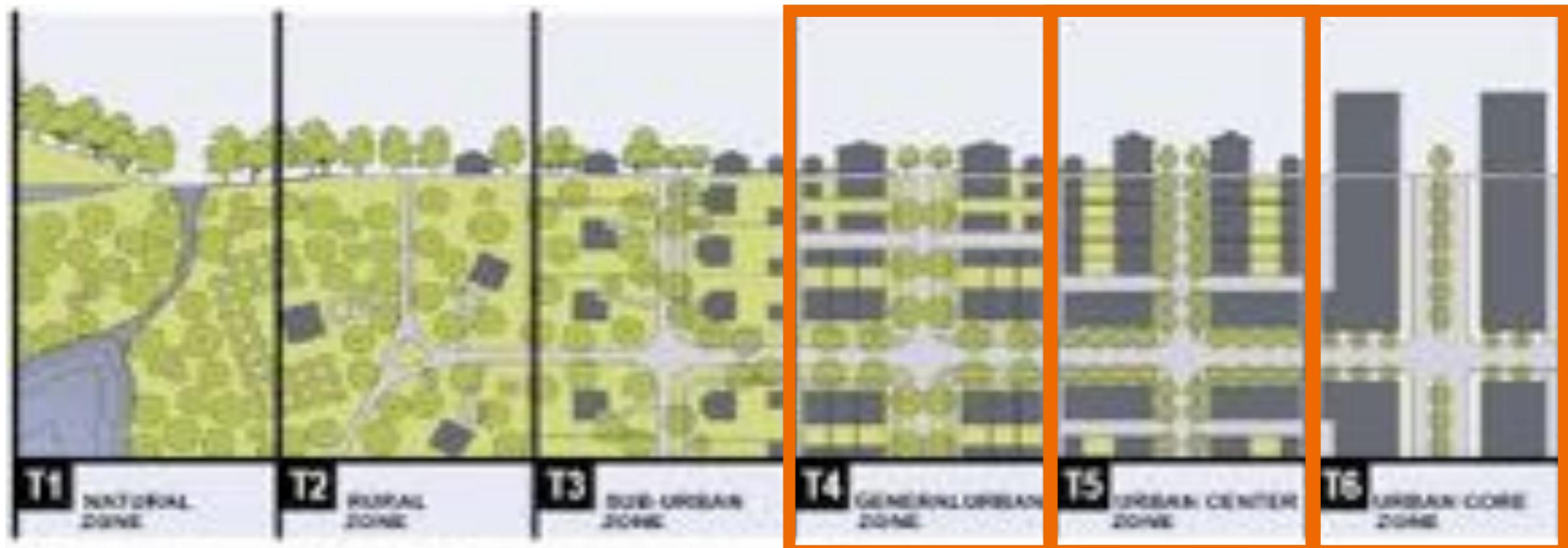
# Neighborhood Living is Different than City Living



# Neighborhood Living is Different than City Living



# Neighborhood Living is Different than City Living

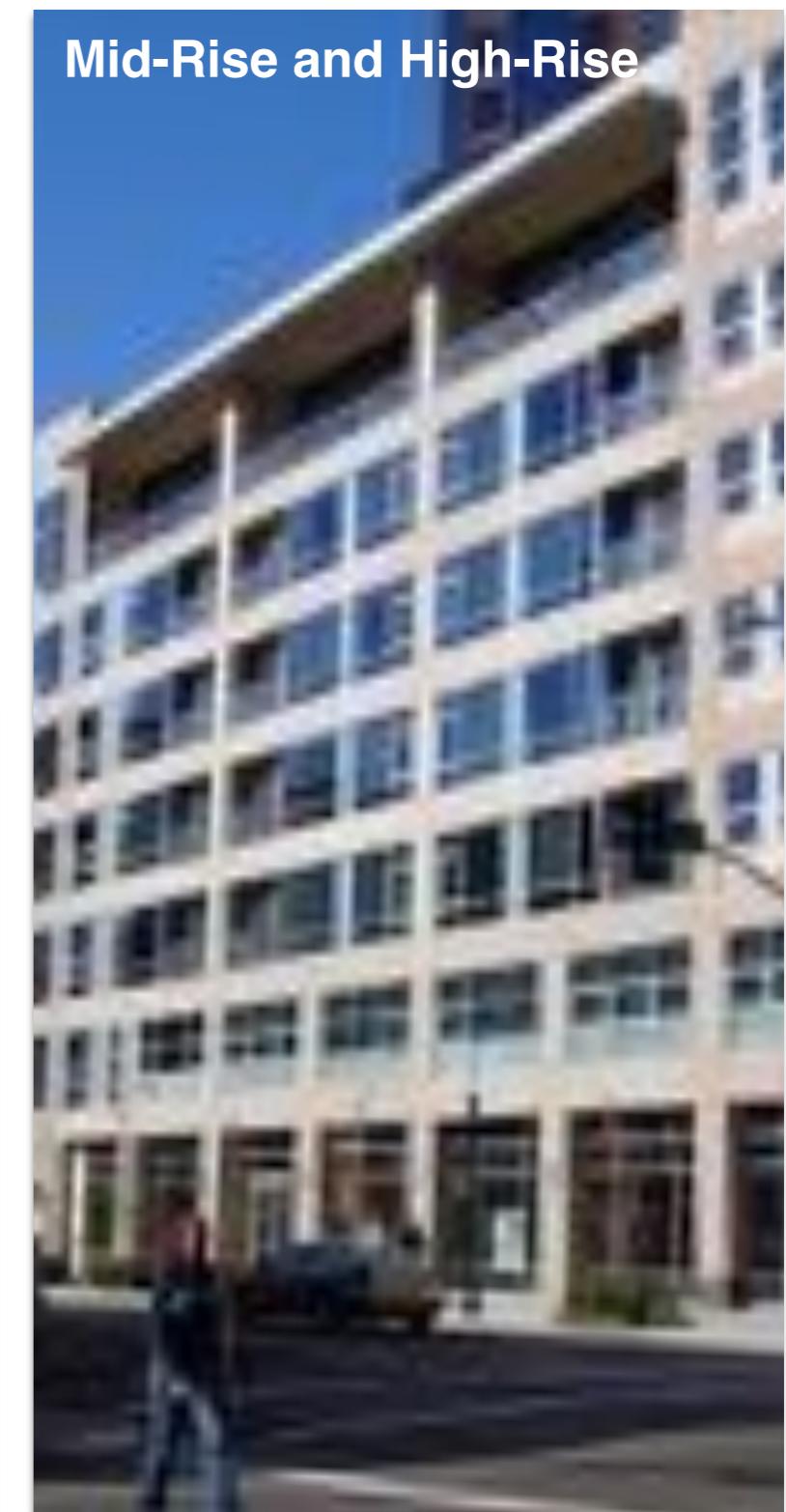


# What the Market is Delivering

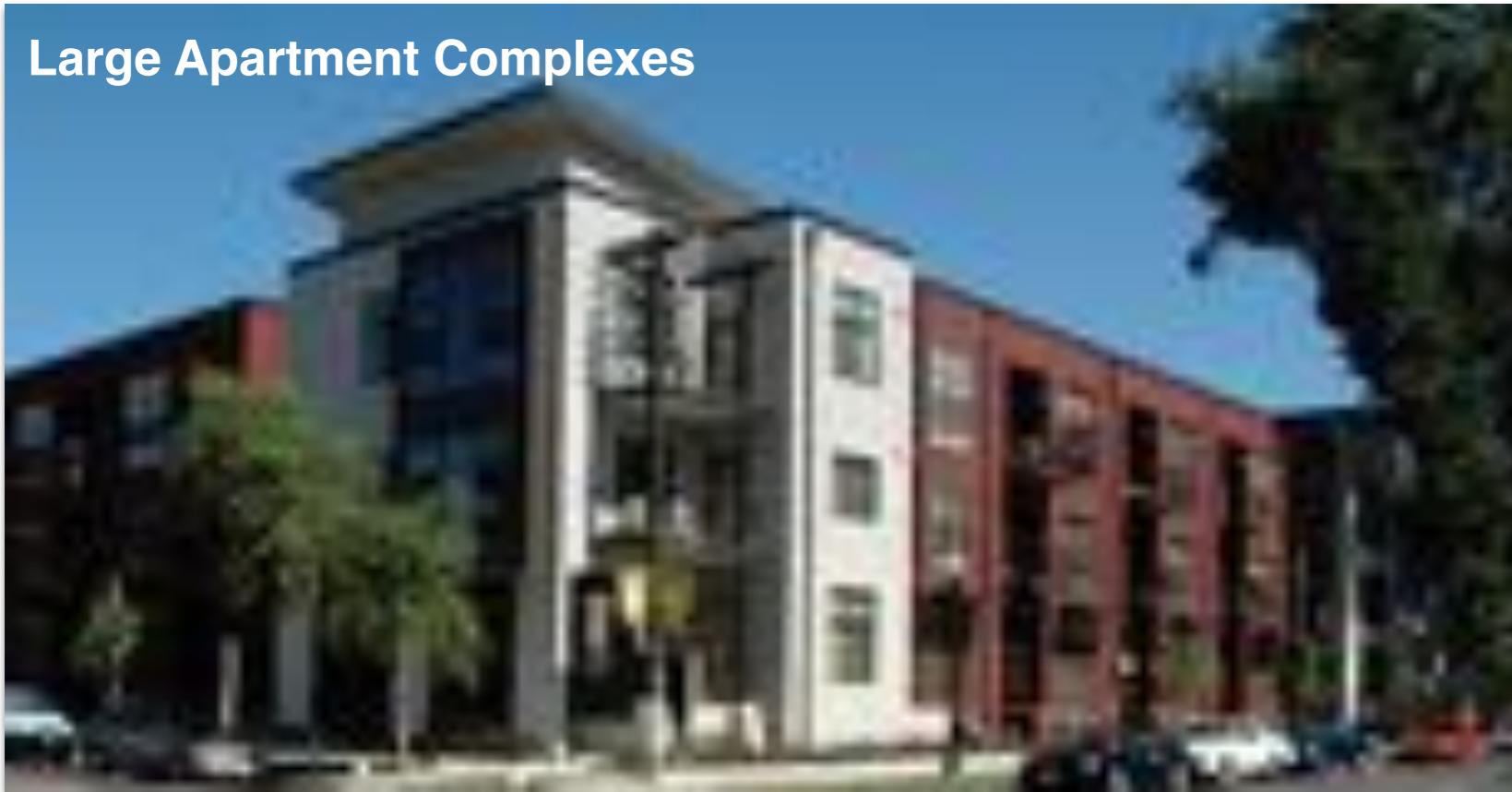
Small-lot Single-Family



Mid-Rise and High-Rise



Large Apartment Complexes



1

# What is Missing Middle Housing?

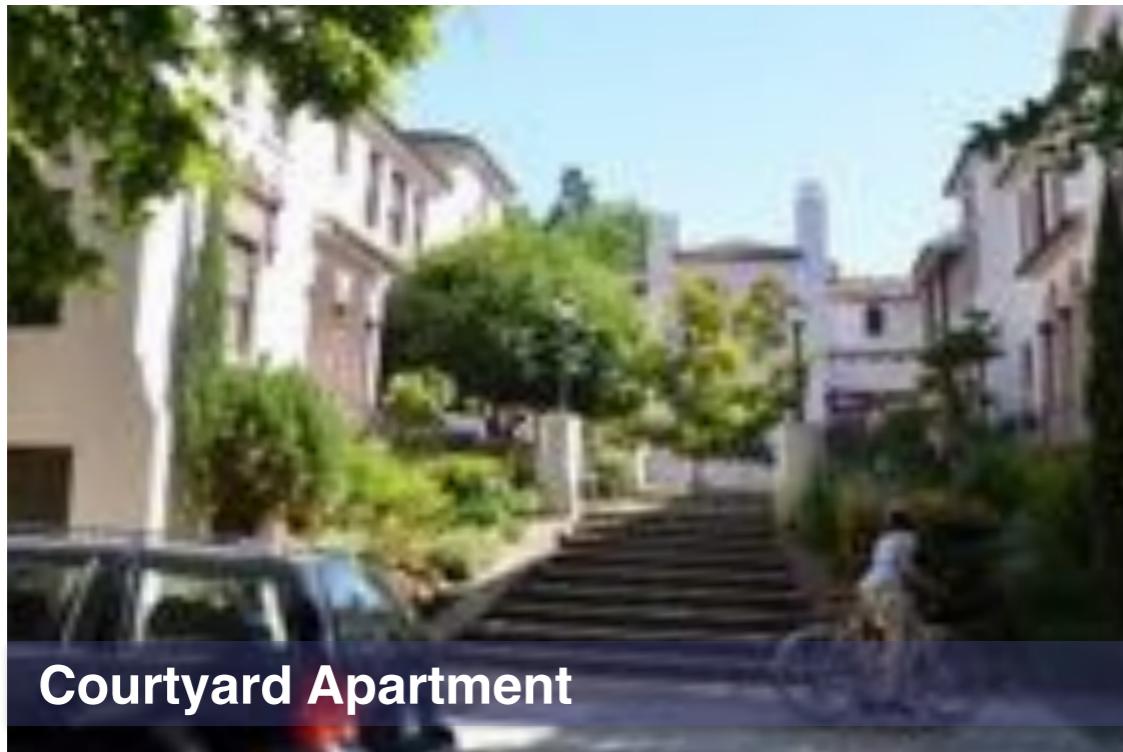
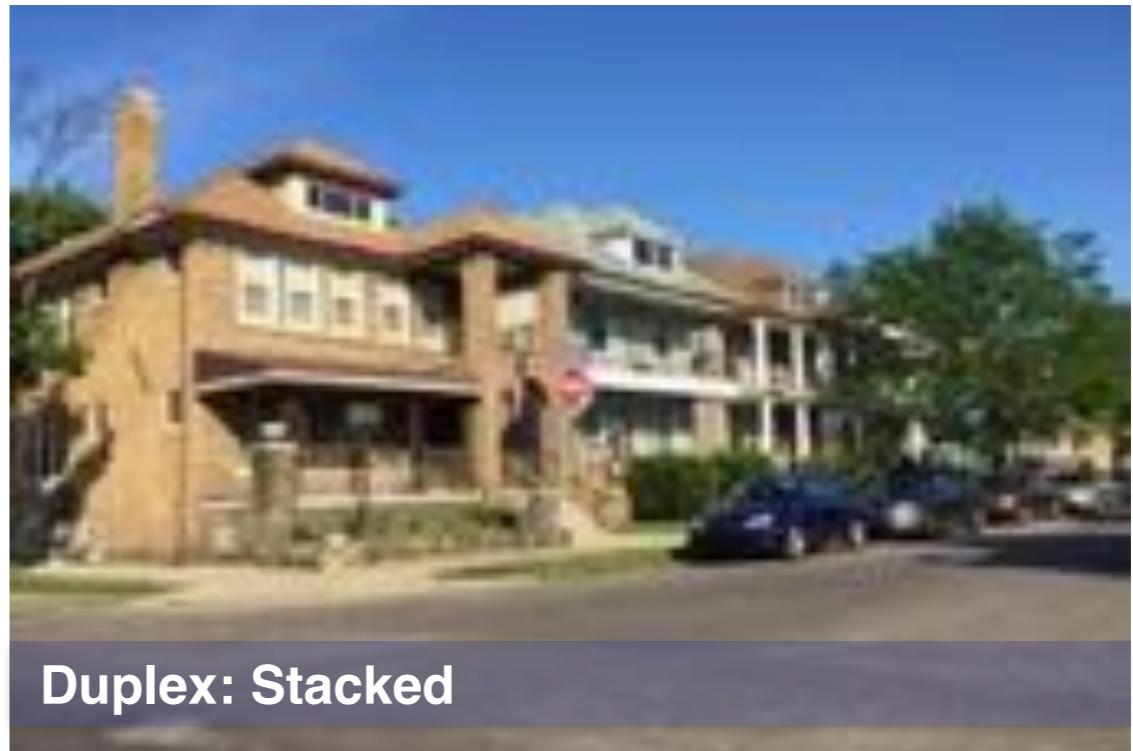
---

# Missing Middle Housing



*Missing Middle is a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living.*

# Missing Middle Housing: National



# Missing Middle Housing: California



**Duplex: Side-by-Side**



**Cottage Court**



**Multi-Plex: Small**



**Courtyard Apartment**

# Missing Middle Housing: Sacramento



**Bungalow Court**



**Duplex**



**Multiplex: Small**



**Multiplex: Medium**



# The Types

---



**Duplex: Side-by-Side**

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**Duplex: Stacked**



**Bungalow Court**



# Carriage House



**Fourplex**



# Multiplex: Small

© 2016 Opticos Design, Inc. | 21



# Townhouse



Live/Work





# Courtyard Apartments



# Can You Guess How Many Units Are in This Building?



## Unique Types: Mansion Apartment

# Can You Guess How Many Units Are in This Building?



7



## Unique Types: Mansion Apartment



# Important Characteristics of Missing Middle Housing

---

Getting it Right: Not Just Medium-Density Housing

# Characteristics of Missing Middle Housing



## I. Walkable Context



# Destinational Walking: Amenities Close By



# Street Design: Is Walking Comfortable and Safe?



# Characteristics of Missing Middle Housing



## 1. Walkable Context

## 2. Small Footprint Buildings



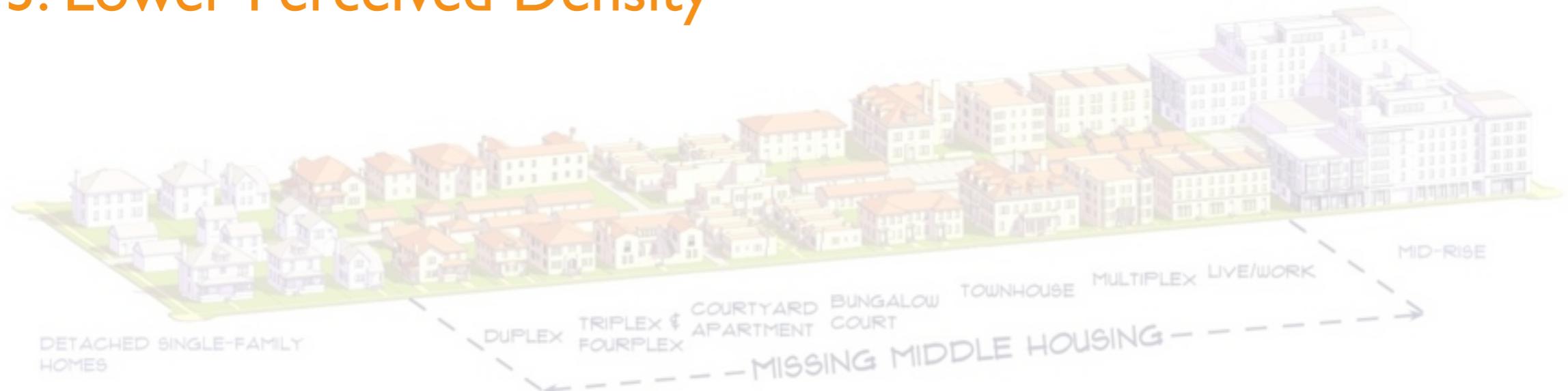
# Smaller Does Not Necessarily Mean This Small



# Characteristics of Missing Middle Housing



1. Walkable Context
2. Small Footprint Buildings
3. Lower Perceived Density



# Scary Density



# Scary Density





Typical Lot Size	Density
60' x 125'	12 du/acre
50' x 100'	17 du/acre
50' x 85'	19 du/acre

## Duplex: Stacked



## Bungalow Court

Typical Lot Size	Density (5 units/lot)	Density (6 units/lot)
100' x 125'	17 du/acre	21 du/acre
100' x 100'	22 du/acre	26 du/acre
80' x 100'	27 du/acre	33 du/acre



# Courtyard Apartments



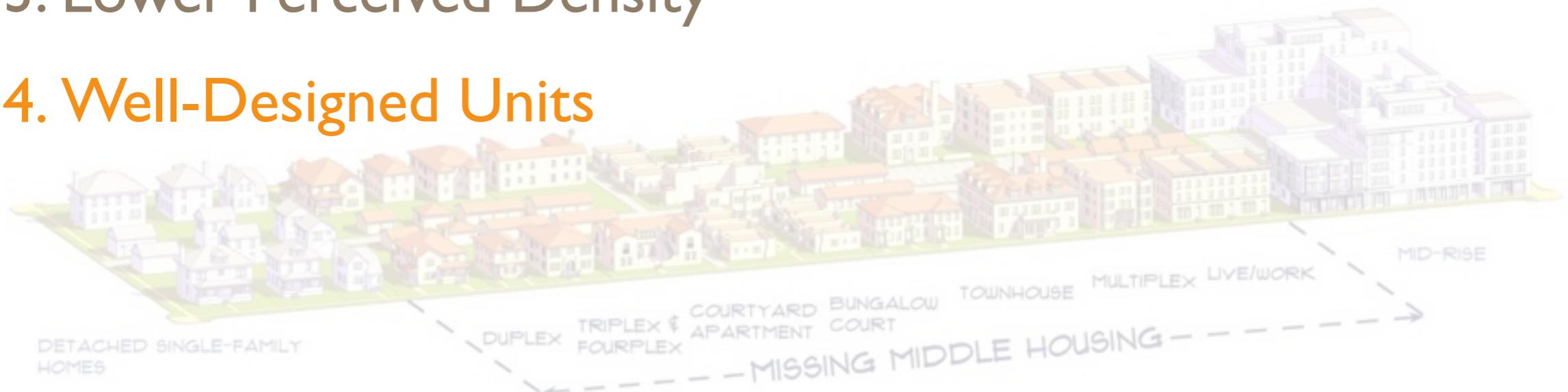
Never Bigger than a House

© 2016 Opticos Design, Inc. | 37

# Characteristics of Missing Middle Housing



1. Walkable Context
2. Small Footprint Buildings
3. Lower Perceived Density
4. Well-Designed Units



# Smaller Does Not Mean Lowest End of the Market



Market is Choosing Quality Over Quantity

# Characteristics of Missing Middle Housing



1. Walkable Context
2. Small Footprint Buildings
3. Lower Perceived Density
4. Well-Designed Units
5. Fewer Off-Street Parking Spaces



# Characteristics of Missing Middle Housing



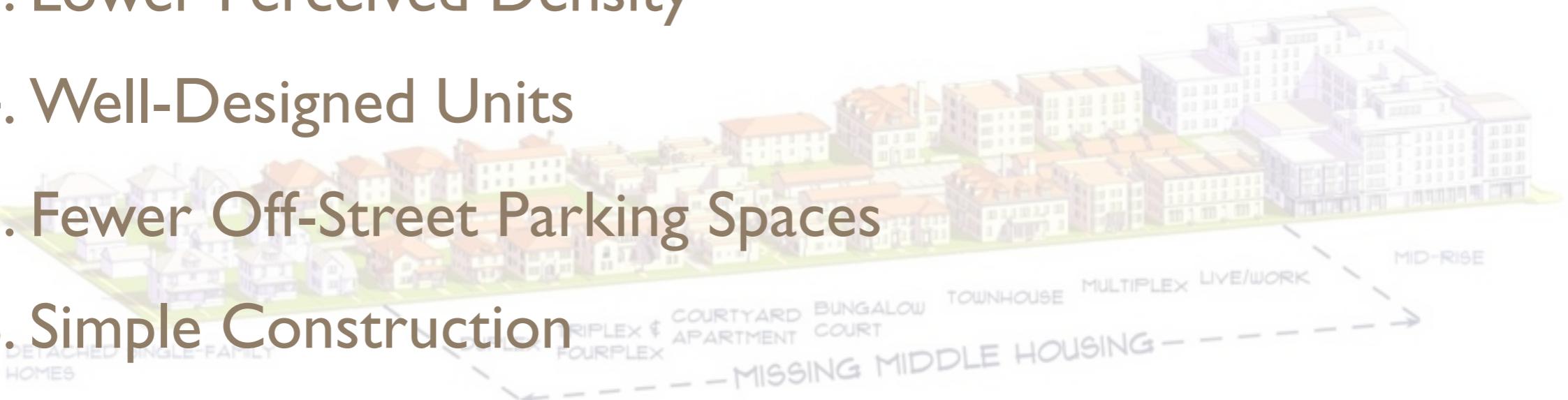
1. Walkable Context
2. Small Footprint Buildings
3. Lower Perceived Density
4. Well-Designed Units
5. Fewer Off-Street Parking Spaces
6. Simple Construction



# Characteristics of Missing Middle Housing



1. Walkable Context
2. Small Footprint Buildings
3. Lower Perceived Density
4. Well-Designed Units
5. Fewer Off-Street Parking Spaces
6. Simple Construction
7. Creates Community



Creates Community: Within a Project Like This or The Larger Context



Conover Commons: Redmond, WA



# Where Do You Find Missing Middle Housing?

---

# Distributed throughout a Block with Single-Family Homes



# End-Grain of a Single-Family Block



# Transition from Single-Family Housing to a Mixed-Use Corridor



# Imagine Missing Middle Housing Supporting Your Main Street





# Not a Mono-Culture of One Type



# The Barbell of Affordable Housing



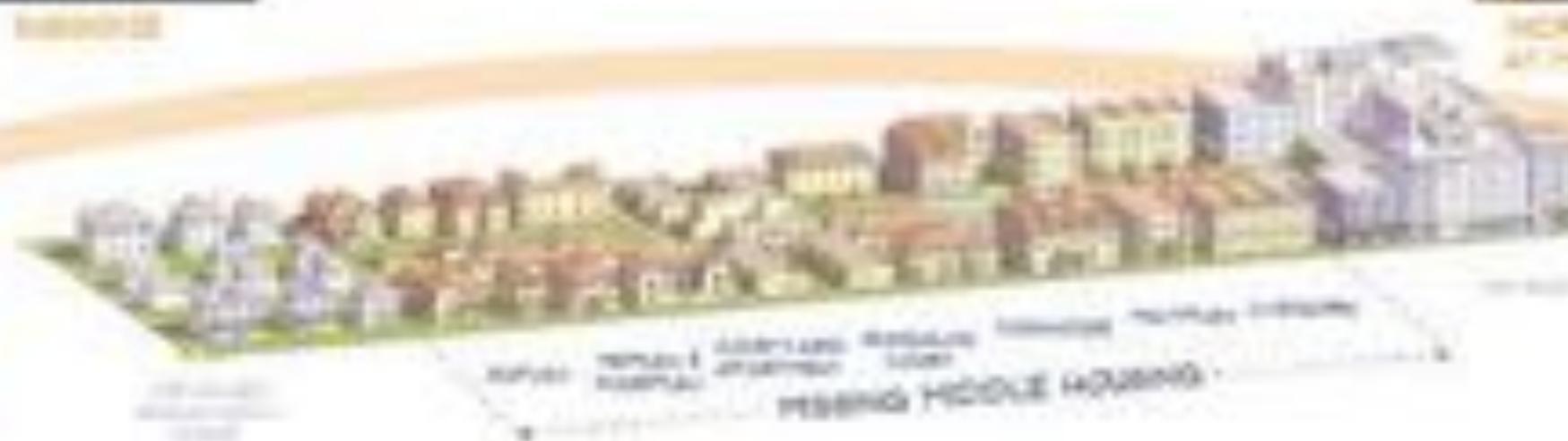
MISSING MIDDLE



MISSING MIDDLE  
AT THE HIGH-END

MISSING MIDDLE

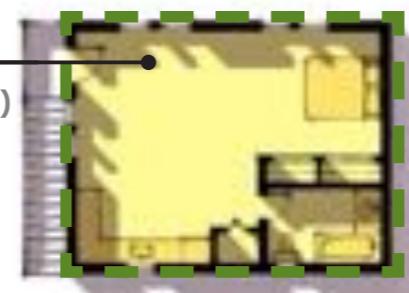
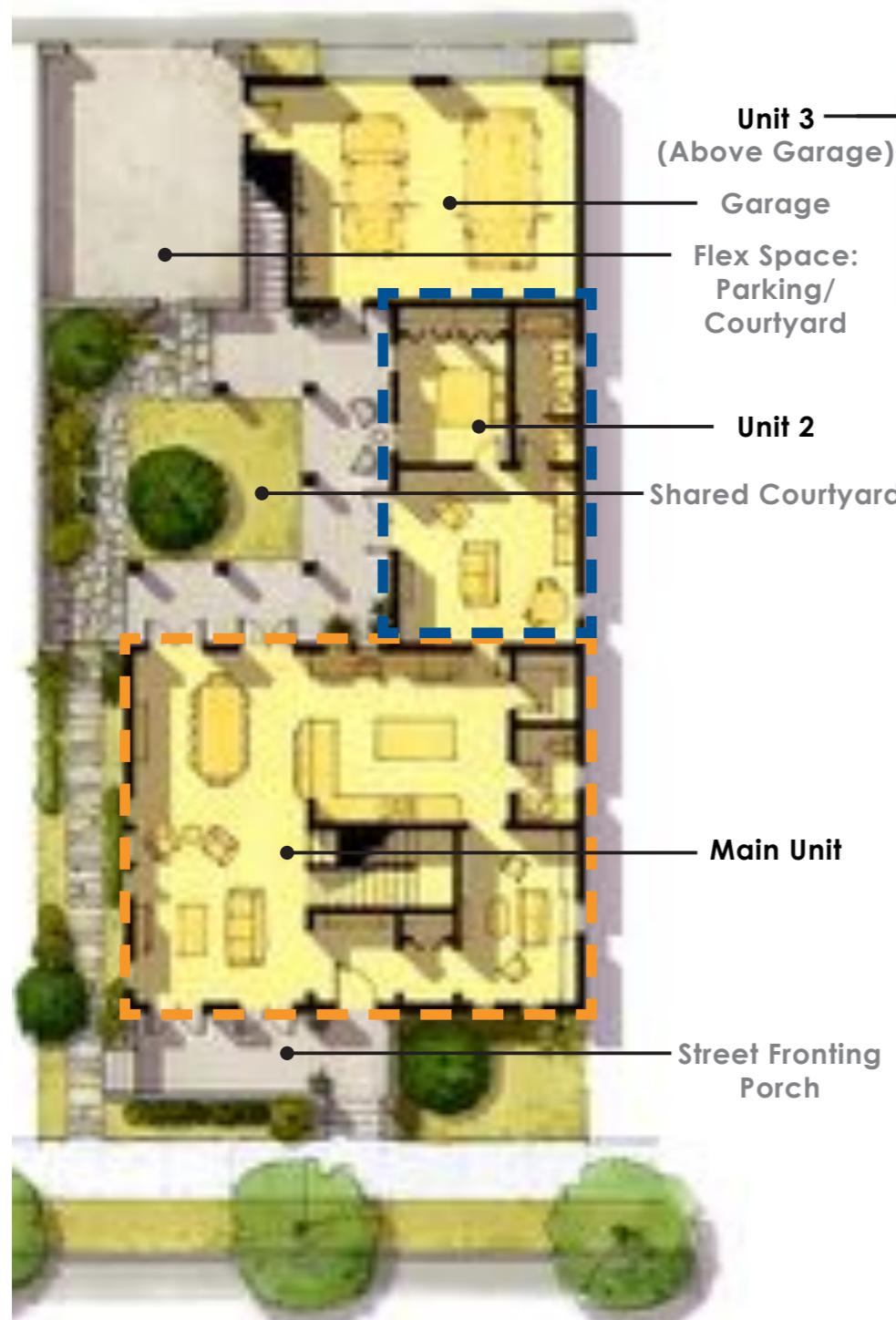
# The Barbell of Affordable Housing



**Missing Middle Housing**  
A powerful new affordable housing solution

- More supply
- Smaller units
- Neighborhood living
- Workforce housing
- Incremental development

# Don't Forget About Multi-Generational Housing



2

## Why is it “Missing?”

# Unfortunately, Missing Middle Housing is Illegal in Most Cities





## Never Learned How to Plan and Regulate Non-Single Family Buildings

---

# Problems with “Multi-Family” Zones: Location and Design



# Poor Zoning: Allows This -AND- Prevents Missing Middle



# Time to Sharpen Our Planning and Regulatory Tools

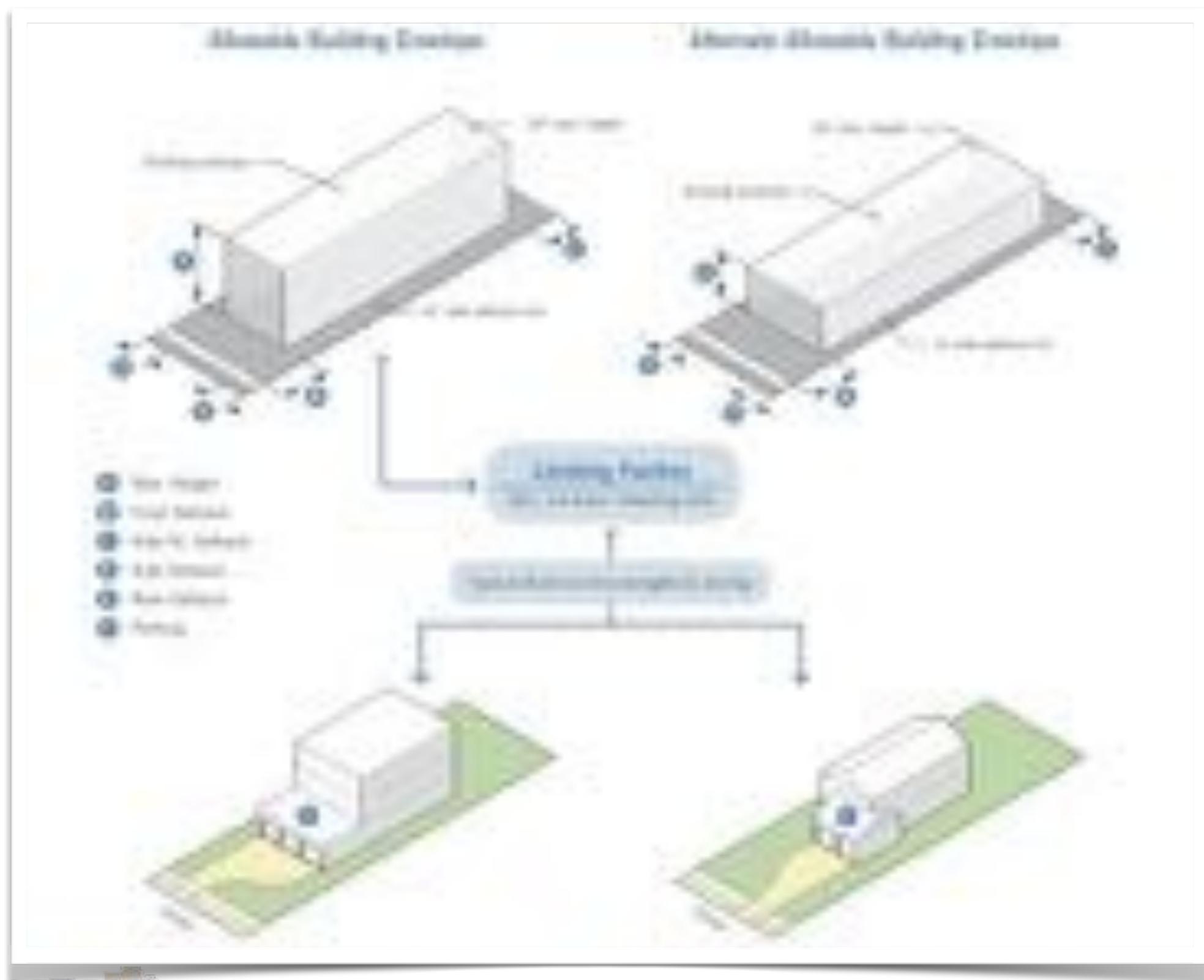


3

## Removing Barriers for Diverse Housing Choices

---

# What Does Your Code Actually Encourage?



50x150' Lot



# Allowed by Zoning: 35' Tall Single-family House



# Allowed by Zoning: 3-unit Multi-family



# Not Allowed: More Compatible with More Units



# Regulating Desired Form



# Allow a Range of Building Types within Each Zone



**Specific to Transect Zones** 1703-2.70

**T4 Neighborhood Small Footprint (T4N.2)**

1703-2.70 T4 Neighborhood Small Footprint (T4N.2)

**A. Intent**

To provide variety of urban housing choices, in small-to-medium footprint, medium-to-high density building types, which reinforce the walkable nature of the neighborhood, support neighborhood-serving retail and service uses adjacent to this Zone, and support public transportation alternatives. The following are generally appropriate form elements in this Zone:

**B. Sub-Zone(s)**

Detached or Attached  
T4N.2-Open Zone (T4N.2-O)  
The open sub-zone provides the same building form but allows for a more diverse mix of uses.

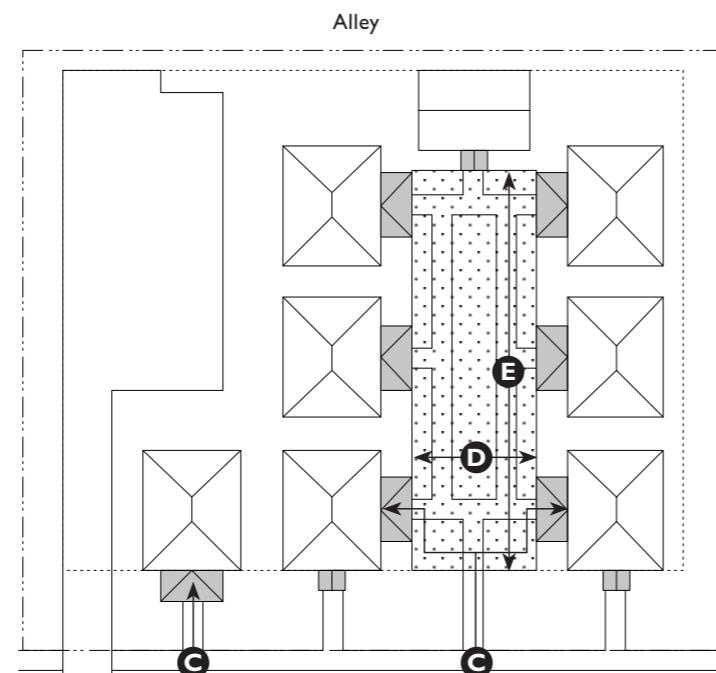
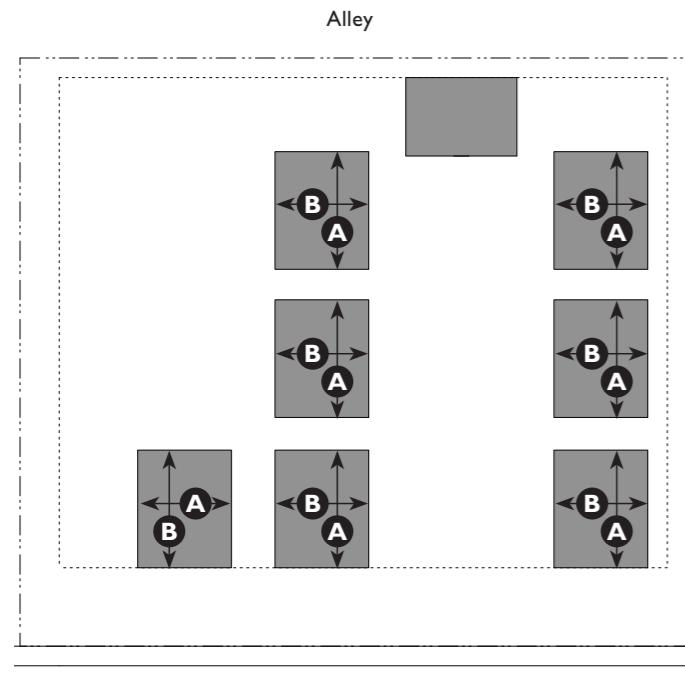
General note: The drawing above is intended to provide a brief overview of this Transect Zone and is illustrative only.

City of Cincinnati Form-Based Code Public Review Draft: 9/21/12 1703-2-23

## C. Allowed Building Types

Building Type	Lot		Standards
	Width <b>A</b>	Depth <b>B</b>	
Carriage House	n/a	n/a	1703-3.40
Detached House:	30' min.; Compact	75' min. 50' max.	1703-3.60
Cottage Court	75' min.; 100' max.	100' min. 50' max.	1703-3.70
Duplex	40' min.; 75' max.	100' min. 75' max.	1703-3.80
Rowhouse	18' min.; 35' max.	80' min. 35' max.	1703-3.90
Multi-Plex: Small	50' min.; 100' max.	100' min. 75' max.	1703-3.100
Live/Work	18' min.; 35' max.	80' min. 35' max.	1703-3.130

# Regulate Form by Building Type



Key	
--- ROW / Lot Line	Building
---- Setback Line	

B. Number of Units	
Units per Building	1 max.
Cottage Buildings per Lot	3 min.; 9 max.

## C. Building Size and Massing

### Height

Height 1½ stories max.

### Main Body

Width 32' max. **A**

Depth 24' max. **B**

### Secondary Wing(s)

Width 24' max.

Depth 12' max.

Key	
--- ROW / Lot Line	Frontage
---- Setback Line	Private Open Space

## D. Allowed Frontage Types

Porch: Projecting 1703-4.50

Stoop 1703-4.70

## E. Pedestrian Access

Main Entrance Location Front Street **C**

## F. Common Open Space

Width 20' min. **D**

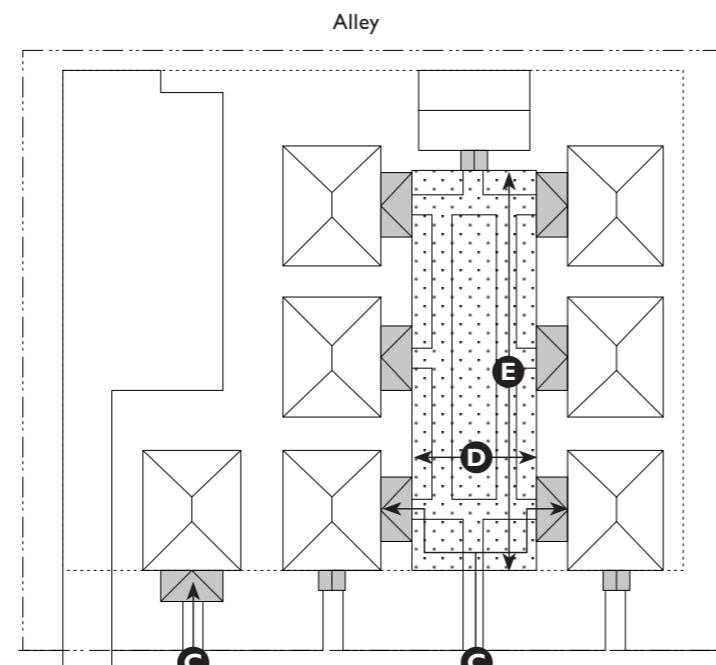
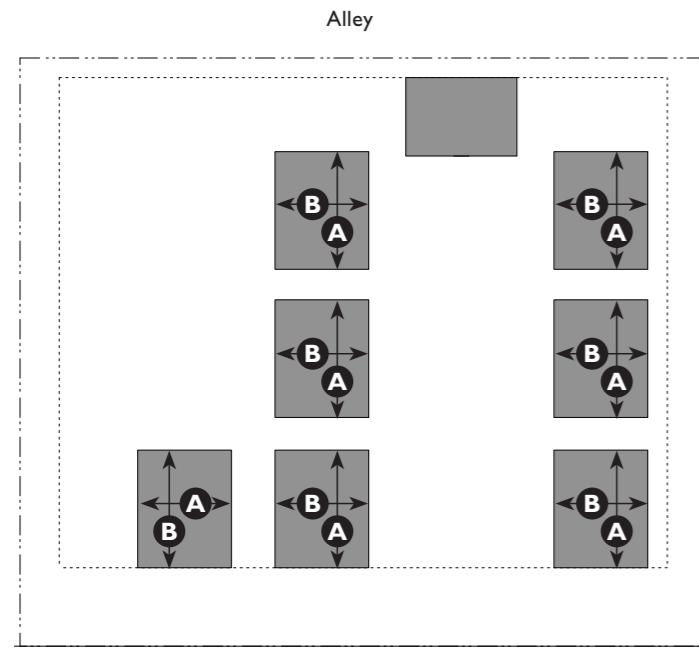
Depth 20' min. **E**

Area 400 sf per unit min.

Required street setbacks and driveways shall not be included in the private open space area calculation.



# Regulate Form by Building Type



Key	
--- ROW / Lot Line	Building
---- Setback Line	

B. Number of Units	
Units per Building	1 max.
Cottage Buildings per Lot	3 min.; 9 max.

C. Building Size and Massing	
<b>Height</b>	
Height	1½ stories max.
<b>Main Body</b>	
Width	32' max. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span>
Depth	24' max. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">B</span>
<b>Secondary Wing(s)</b>	
Width	24' max.
Depth	12' max.

Key	
--- ROW / Lot Line	Frontage
---- Setback Line	Private Open Space

D. Allowed Frontage Types	
Porch: Projecting	1703-4.50
Stoop	1703-4.70
E. Pedestrian Access	
Main Entrance Location	Front Street <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">C</span>
F. Common Open Space	
Width	20' min. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">D</span>
Depth	20' min. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">E</span>
Area	400 sf per unit min.

Required street setbacks and driveways shall not be included in the private open space area calculation.



# Important to Have Different Rules for Different Contexts



**Types of Places: Walkable Urban**



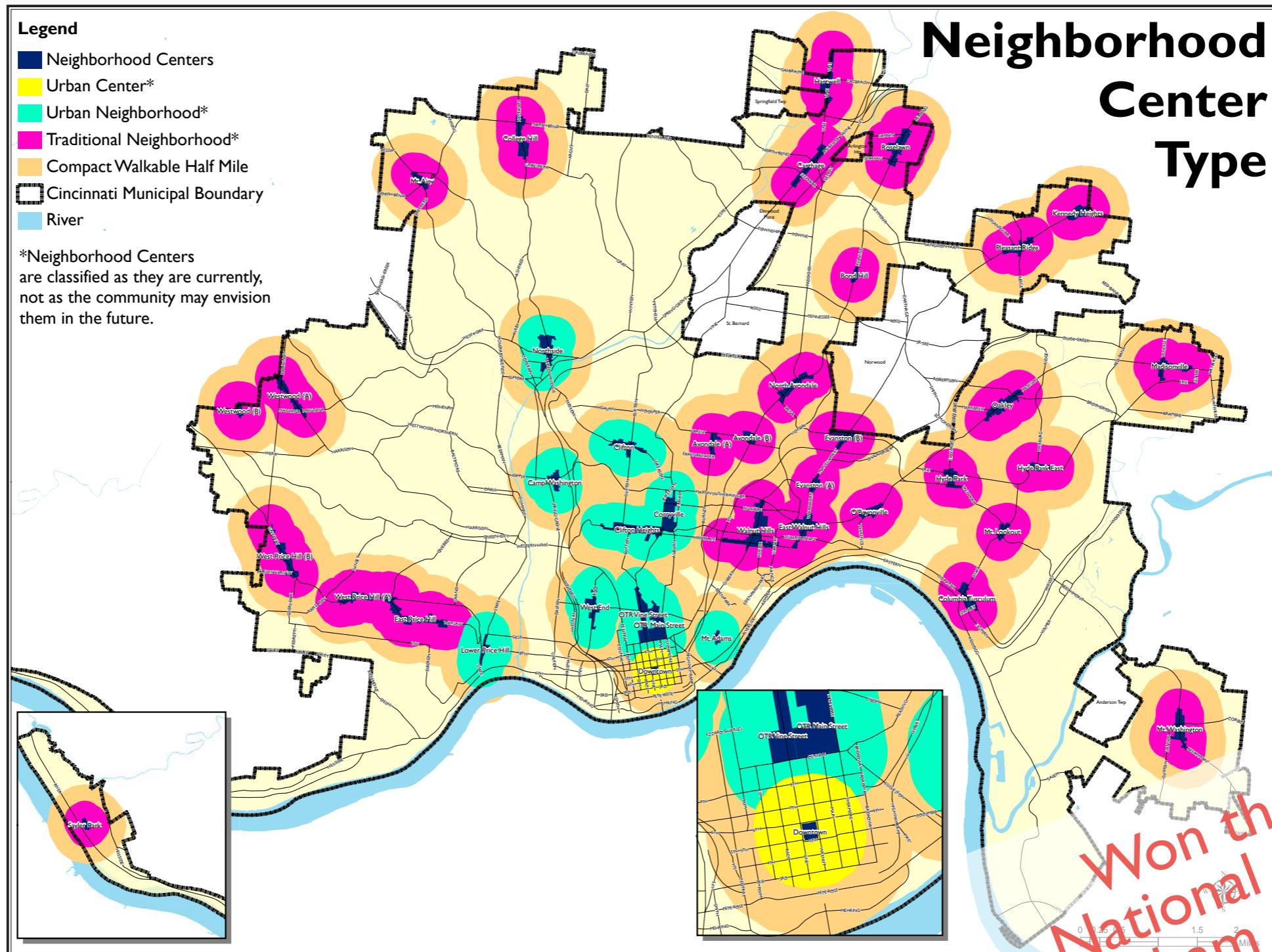
Walkable urban places are built on a grid pattern with a mix of uses. They have a mix of uses, including homes, businesses, and parks, within walking distance. This allows people to walk to their destination without having to drive.

**Types of Places: Drivable Suburban**



Drivable suburban places are built on a grid pattern with a mix of uses. They have a mix of uses, including homes, businesses, and parks, within driving distance. This allows people to drive to their destination.

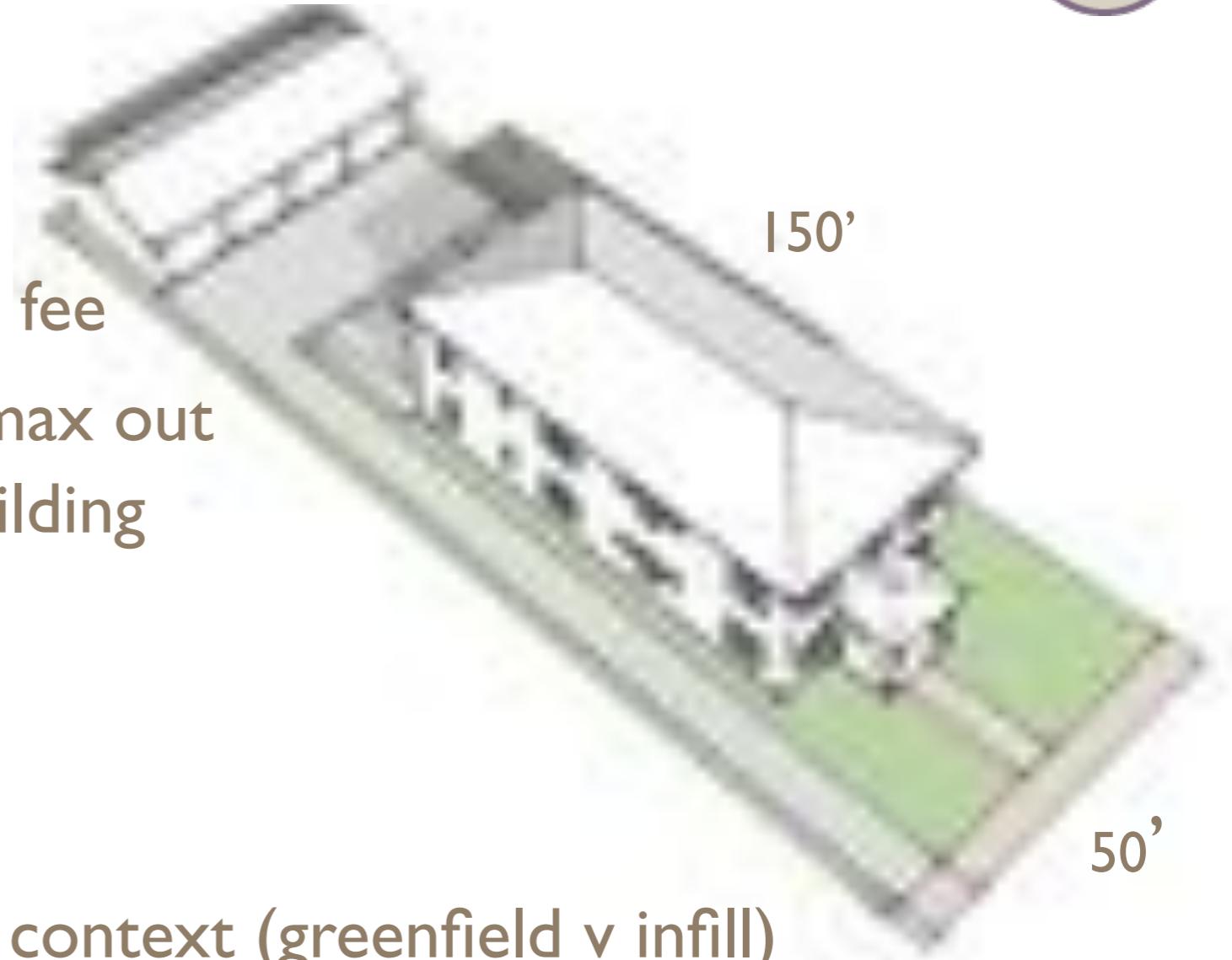
# Form-Based Bridge between General Plan and Zoning



# Other Barriers to Remove



- Novato Example:
  - \$35k/unit impact fee
  - \$45k/unit utility hook up fee
- Encourages developers to max out the unit size rather than building more, smaller units



## Solutions:

- Adjust impact fee based on context (greenfield v infill) and size of unit
- Work with utility companies to do the same

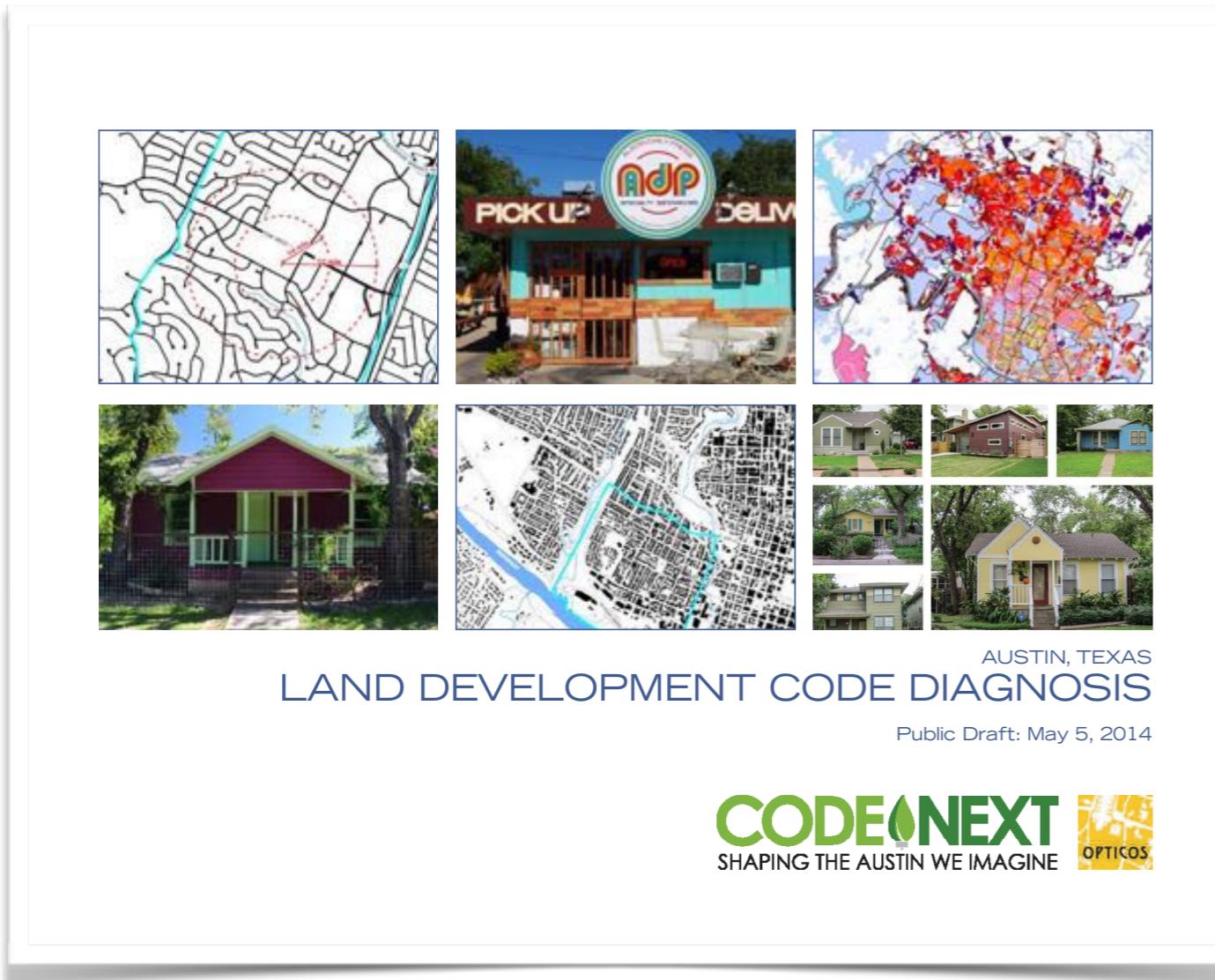
# MiPlace: Michigan Statewide Economic Dev't. Strategy

The screenshot shows the homepage of the MiPlace website. The header features the MiPlace logo with a stylized 'M' icon and the text 'Michigan Statewide Economic Development Strategy'. The top navigation bar includes links for 'Home', 'About', 'Strategic Initiatives', 'Programs', 'Events', and 'Contact Us'. A search bar is located in the top right corner. The main content area has a green header with the text 'Strategic Initiatives' and 'Programs'. Below this, there are several sections: 'Documents' (with a link to 'Document Library'), 'Programs' (with a link to 'Programs'), and 'Events' (with a link to 'Events'). There are also large images of people working in a garden and a group of people at an event. The footer contains a 'MISSING' logo with the tagline 'Responding to the Demand for Quality Places' and a 'Michigan Economic Development Corporation' logo.

# Missing Middle Affordable Housing Density Bonus



Chapter 3: Content-Specific Findings



**AUSTIN, TEXAS**  
**LAND DEVELOPMENT CODE DIAGNOSIS**  
Public Draft: May 5, 2014

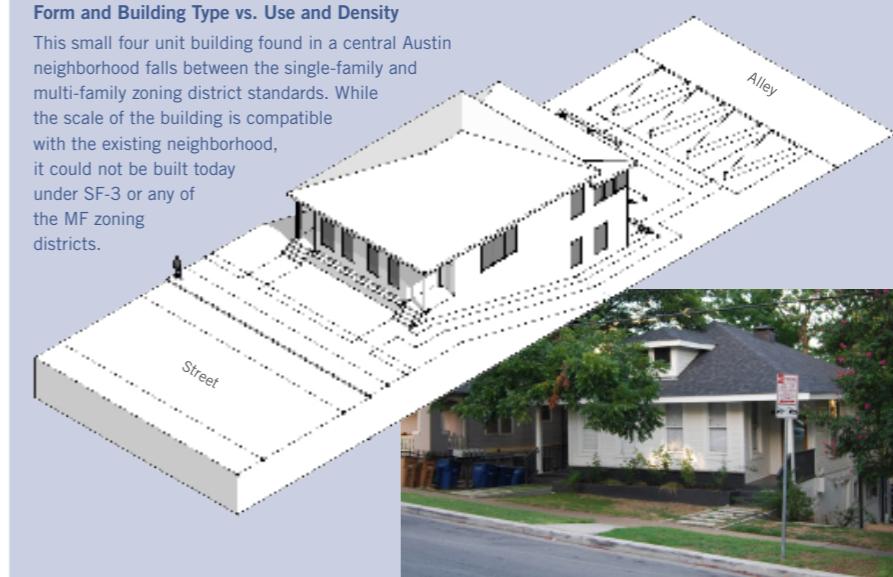
**CODENEXT**  
SHAPING THE AUSTIN WE IMAGINE

**OPTICOS**

## Creative Example of Medium Density Housing

### Form and Building Type vs. Use and Density

This small four unit building found in a central Austin neighborhood falls between the single-family and multi-family zoning district standards. While the scale of the building is compatible with the existing neighborhood, it could not be built today under SF-3 or any of the MF zoning districts.



## Creative Example of Medium-Density Housing

Existing Lot Zoned SF-3	LDC Regulations	
	SF-3 Zoning District	MF Zoning Districts
Lot Size	7,865 sf	5,750 square feet min., 8,000 square feet min. 50 foot width min. (all MF zoning districts)
Number Parking Spaces	4 spaces for 4 units	2 spaces per dwelling unit
Density	22 du/a	7.5-11 du/a 23 du/a in MF-2 and higher
Other limiting regulations:	MF Zoning districts allow 40 – 60 feet in building height, discouraging one- to three-story buildings.	

46 | LAND DEVELOPMENT CODE DIAGNOSIS

## Barriers Within the LDC to Missing Middle Housing Types

There are no small-lot, multifamily zoning districts: All MF zoning districts have a minimum lot size of 8,000 square feet.

- This minimum size is much larger than the lots for most of the existing Missing Middle housing types.
- This regulation encourages lot aggregation for multifamily projects, the opposite of what should be encouraged in most neighborhoods, especially walkable urban neighborhoods that have a good mix of housing already.

Allowed densities in MF zoning districts are too low for some of these types

- Some of the existing Missing Middle types have densities as high as 40 to 50 dwelling units/acre even within their compatible form.
- Missing Middle housing densities could be allowed in MF-5 and above density-wise, but much larger buildings are encouraged in these zoning districts.
- The premise is that higher density always means

No maximum building footprint (depth and/or width)

- Most existing Missing Middle housing types have small building footprints (depth and width) that make them compatible with their context.
- The current MF zoning districts do not limit building footprint and in many ways encourage larger buildings, which obviously are less compatible with many neighborhood contexts.
- Regulations for Missing Middle housing types

# AARP Using MMH to Discuss Needs of Their Constituents

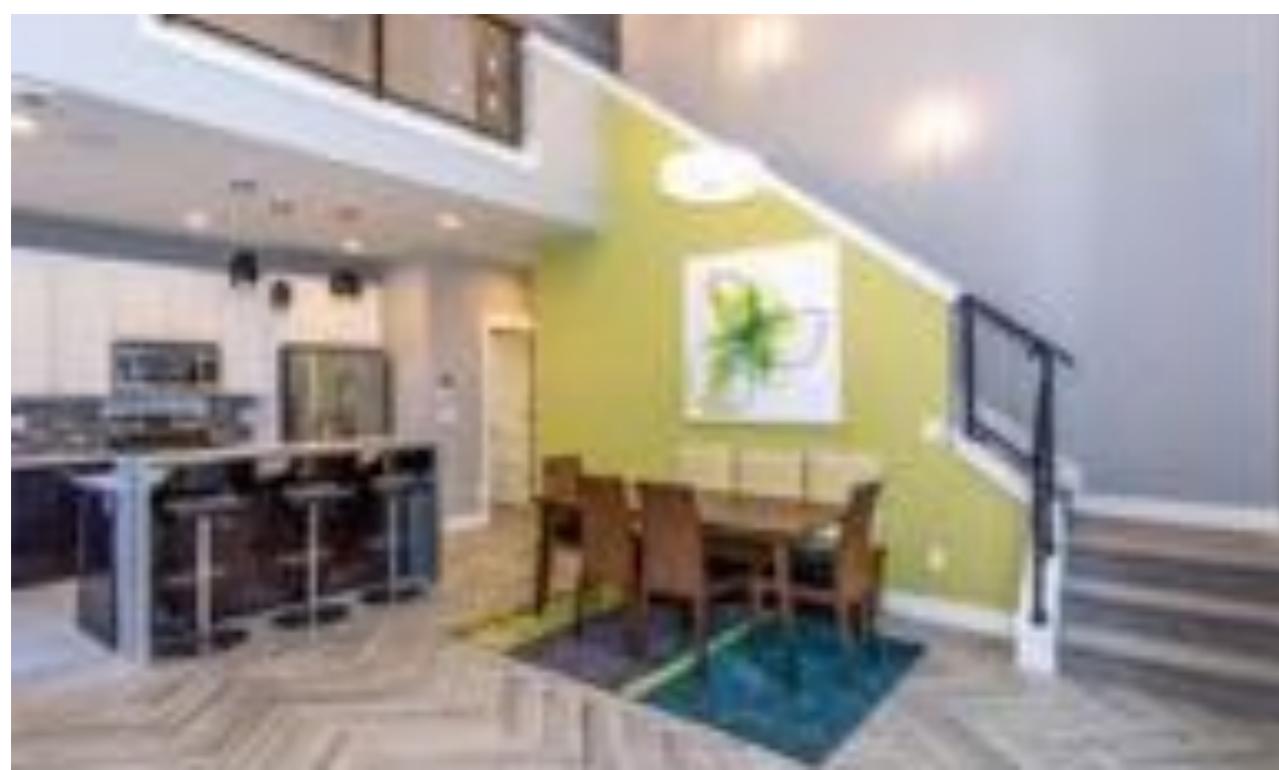
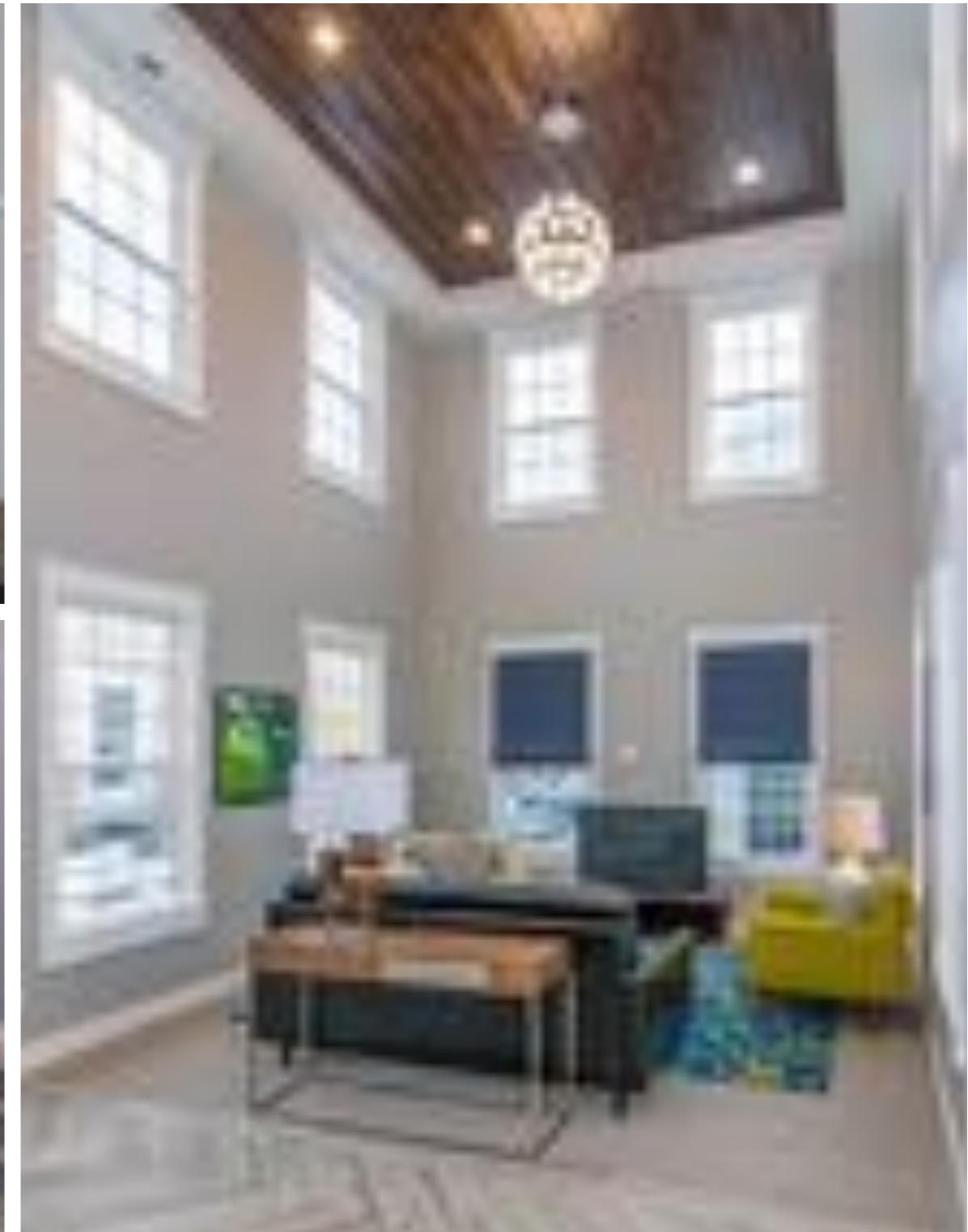


4

## Where's It Being Built?

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# High-Quality Housing at Affordable Prices





## Lakeside Drive Mansion Apartments: 10-12 Units

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## Main Street with Live Work Units



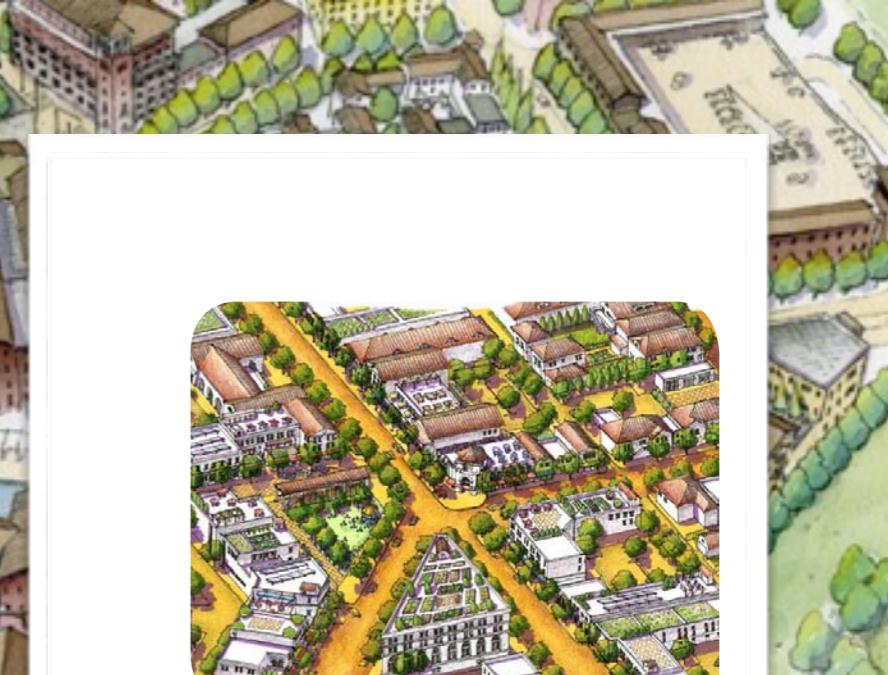
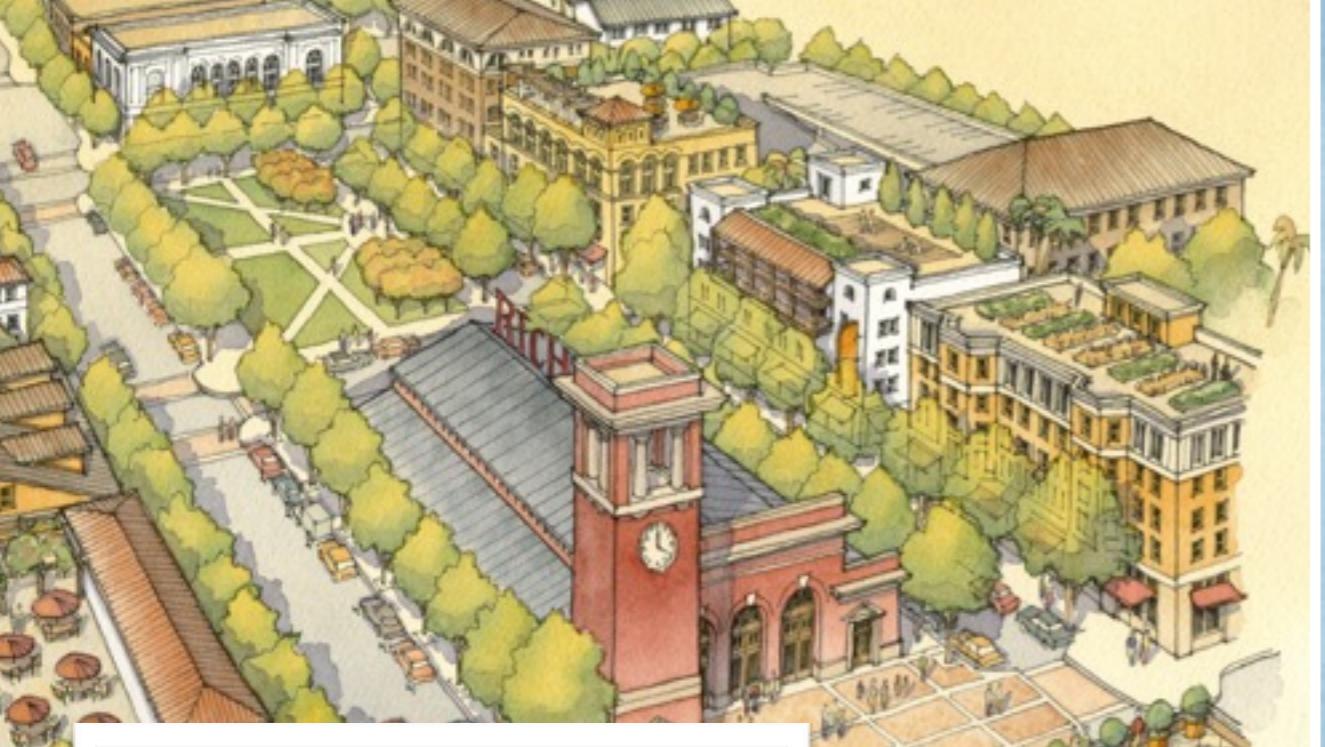
Neighborhood Street with Small Multiplexes

5

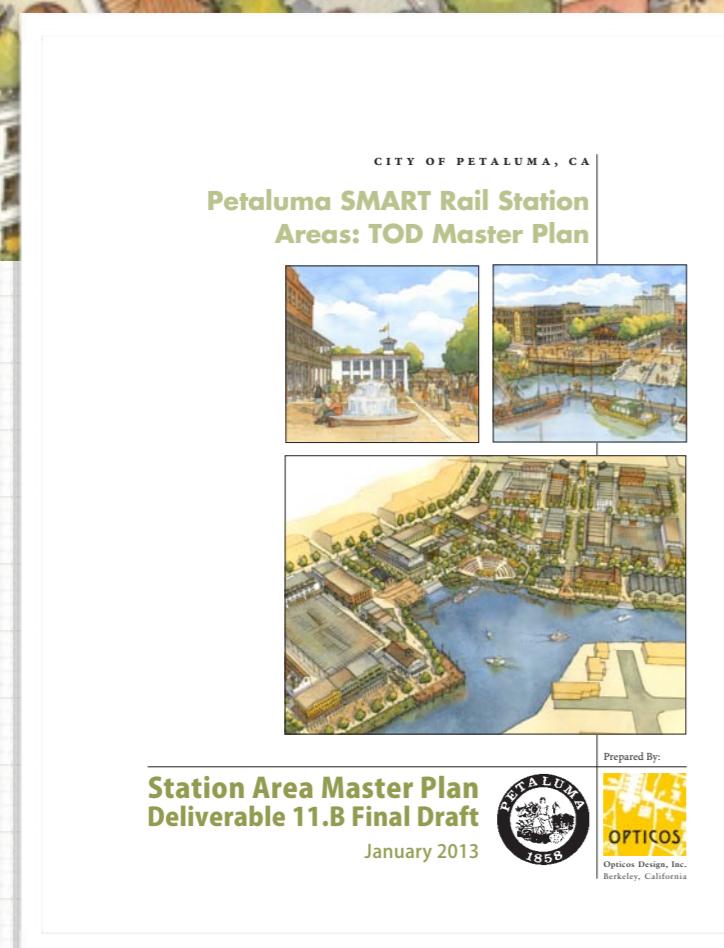
Wrapping Up...

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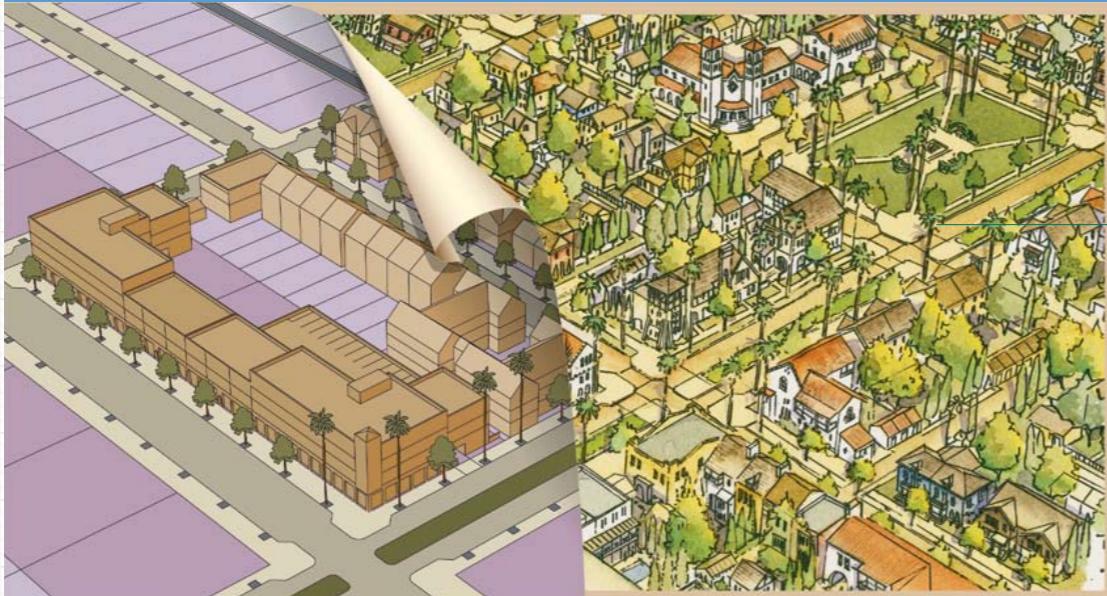
Propel Vallejo: General Plan Update  
Sonoma Boulevard Specific Plan  
Public Review Draft: October 2015



# Master Planning and Urban Design



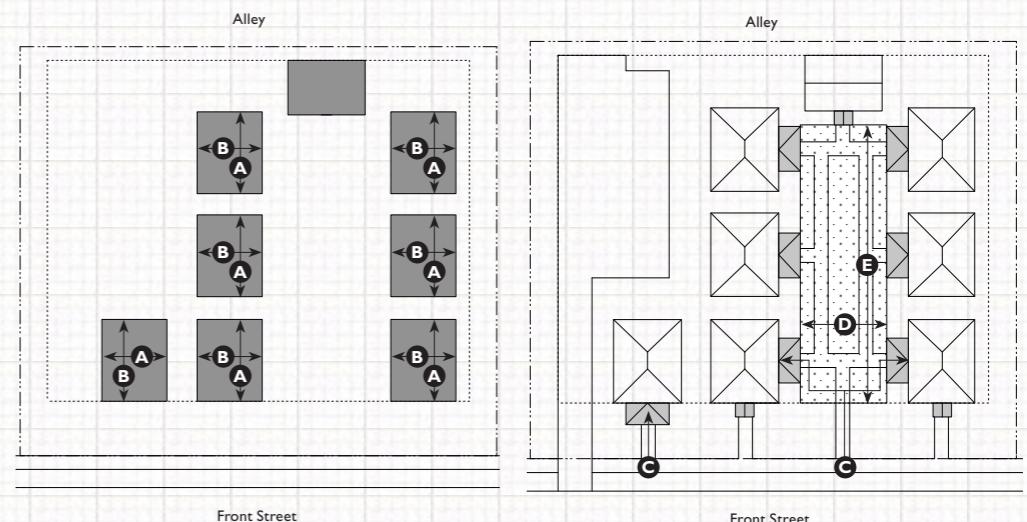
# Form-Based Codes



A Guide for Planners, Urban Designers,  
Municipalities, and Developers

Daniel G. Parolek, AIA • Karen Parolek • Paul C. Crawford, FAICP

Forewords by Elizabeth Plater-Zyberk and Stefanos Polyzoides



**Key**  
--- ROW / Lot Line  
---- Setback Line

## B. Number of Units

Units per Building	1 max.
Cottage Buildings per Lot	3 min.; 9 max.

## C. Building Size and Massing

### Height

Height	1½ stories max.
--------	-----------------

### Main Body

Width	32' max.
Depth	24' max.

### Secondary Wing(s)

Width	24' max.
Depth	12' max.

**Key**  
--- ROW / Lot Line  
---- Setback Line

## D. Allowed Frontage Types

Porch: Projecting	1703-4.50
Stoop	1703-4.70

## E. Pedestrian Access

Main Entrance Location	Front Street
------------------------	--------------

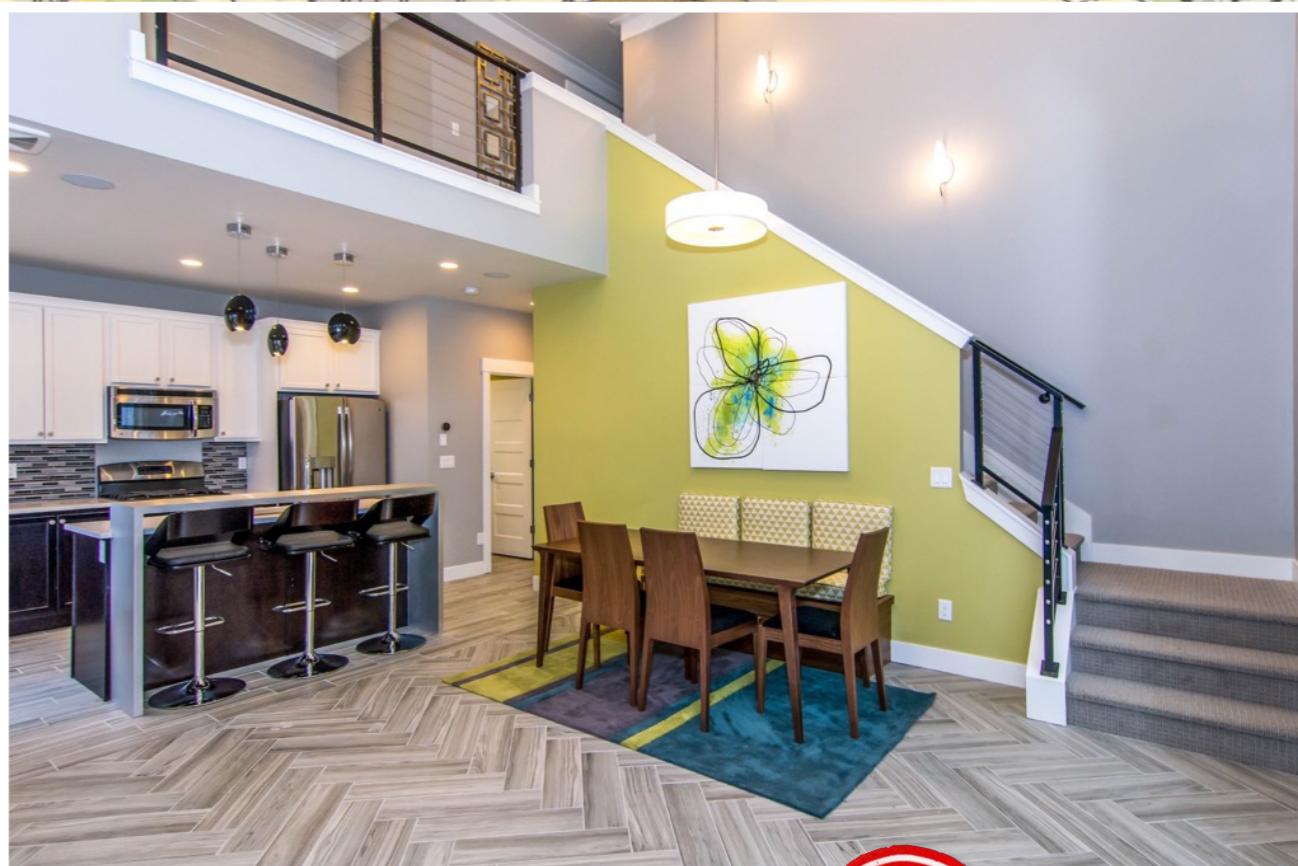
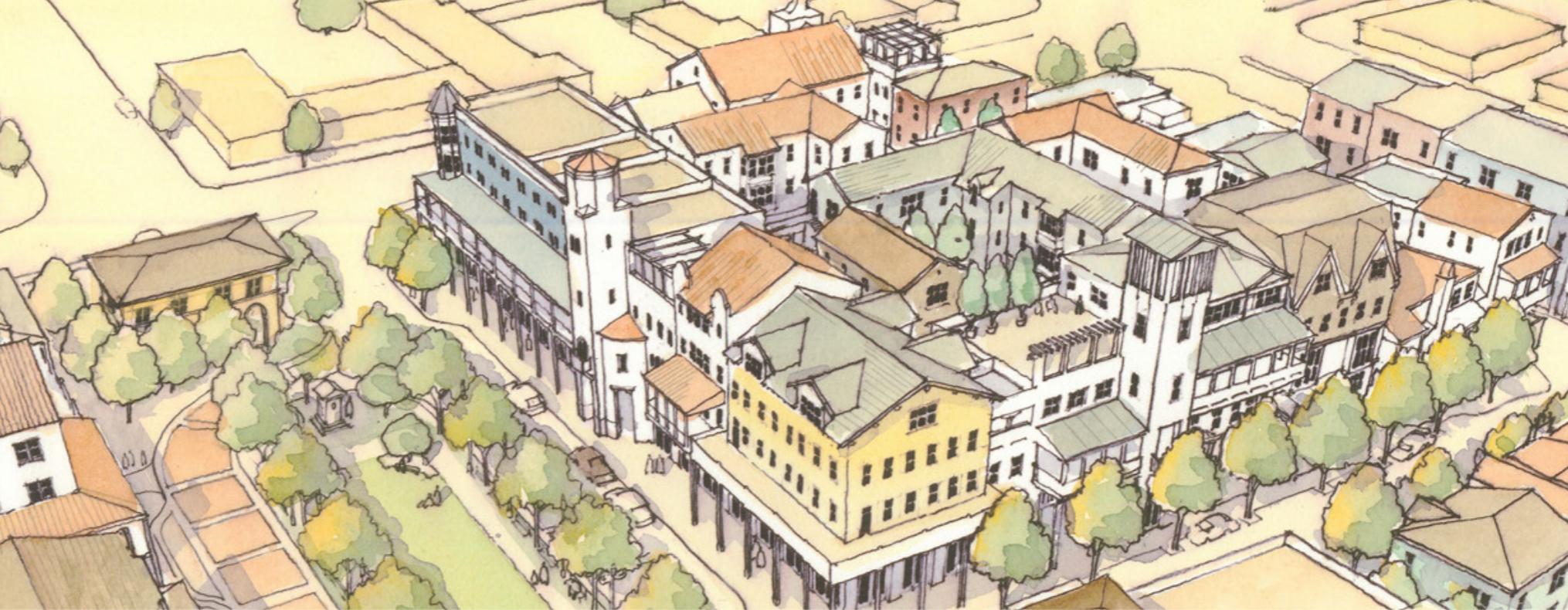
## F. Common Open Space

Width	20' min.
Depth	20' min.
Area	400 sf per unit min.

Required street setbacks and driveways shall not be included in the private open space area calculation.



## Zoning Reform for Walkable Communities



# Architecture: Capturing Untapped Markets



# Missing Middle Housing



# Providing Housing Choices for Walkable Living





“It's time to  
rethink and  
evolve,  
reinvent and  
renew.”

~*What's Next*,  
Urban Land Institute

 MissingMiddleHousing.com

 KarenParolek  
karen.parolek@opticosdesign.com

