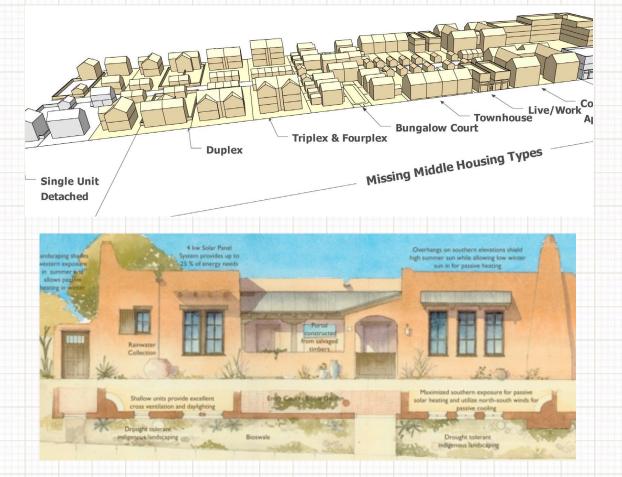
# Missing Middle Housing in Practice



Daniel Parolek
Principal, Opticos Design, Inc.
dan@opticosdesign.com

New Partners for Smart Growth Kansas City, MO 2013



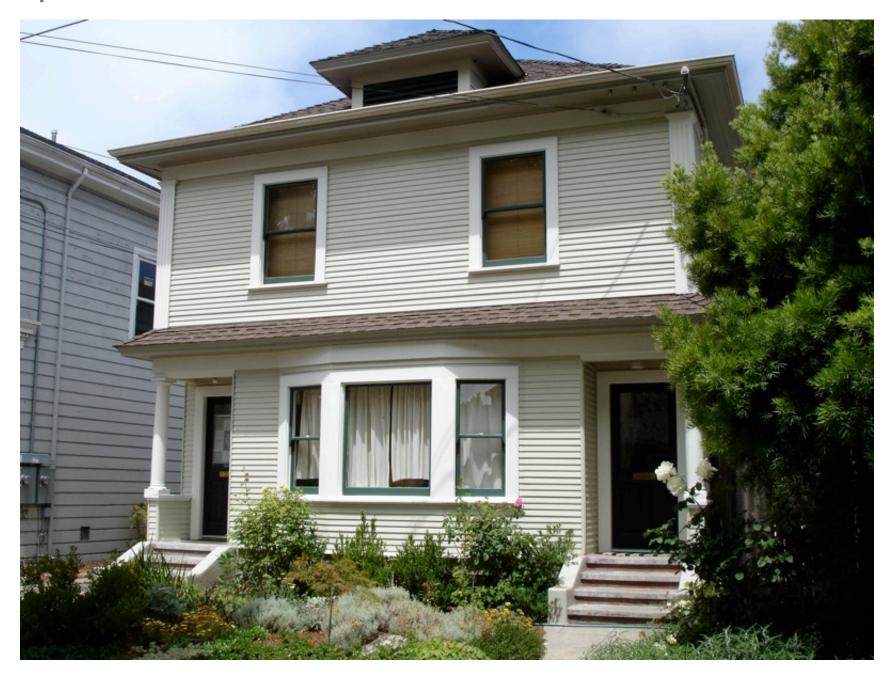
## **Bungalow Courts**



#### **Bungalow Courts**



## Duplexes: Stacked



## Duplexes: Stacked



## **Courtyard Apartments**



#### Courtyard Apartments



## Why Is This so Important for Your Community?

Responding to the Demand for Walkable Urban Living

## Diverse Housing is Illegal in Most Cities!



#### Responding to the Demand for Walkable Urban Living

- Current demand for small lot and attached housing exceeds the current supply by 35 million units (C. Nelson).
- 30-40% of buyers want to live in walkable urban places and only
   10% is being provided in any given market (C. Leinberger).
- 3. By 2025, 75-85% of households will not have children.



# 2 Defining Missing Middle Housing

Small Footprint, High-Quality Density

## Scale Between Single Family Housing and Stacked Flats



## The "Missing Middle" Building Types



**Mansion Apartment: 6-8 units** 



**Fourplex** 

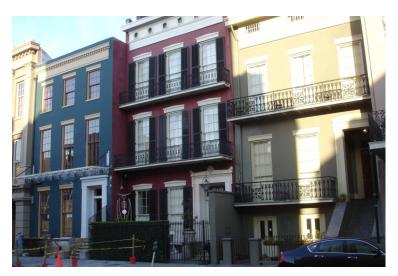


Duplex



**Bungalow Courts** 

#### "The Missing Middle:" New Orleans, LA



**Townhouses** 



**Fourplex** 



**Duplex** 



**Small Lot, Small Unit Single Family** 

## "The Missing Middle:" Duluth, MN



**Mansion Apartment** 



Rowhouses



**Fourplex** 



**Duplex** 

#### Four/Sixplexes



## Fourplex

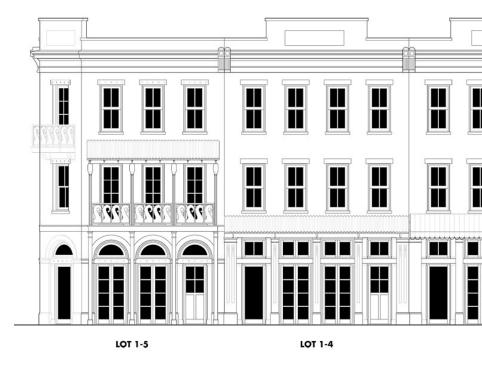


## Missing Middle Types in Cincinnati



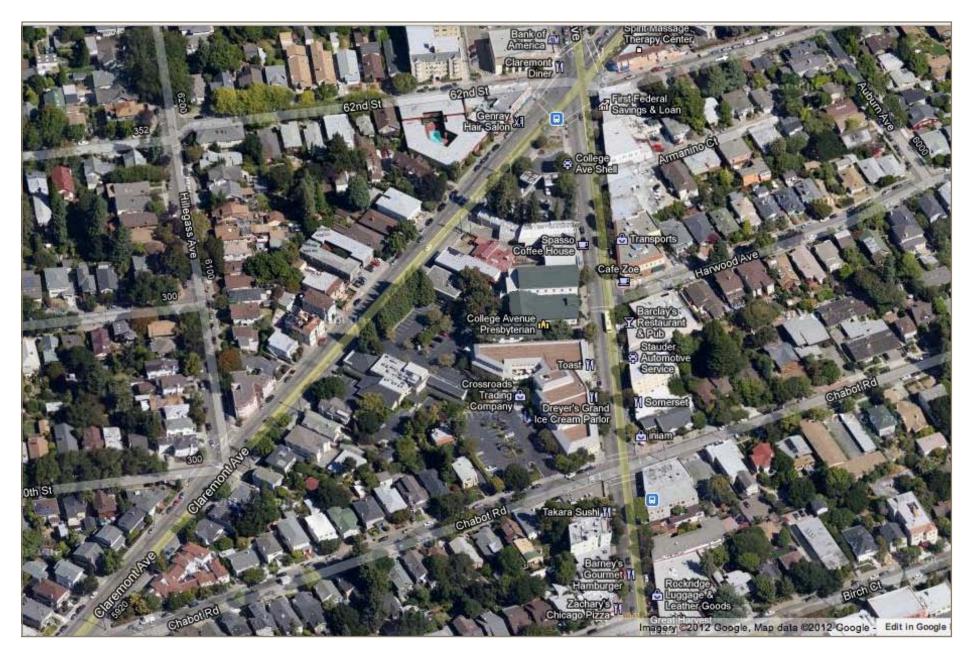
#### Live-Work: 3 Potential Streams of Income

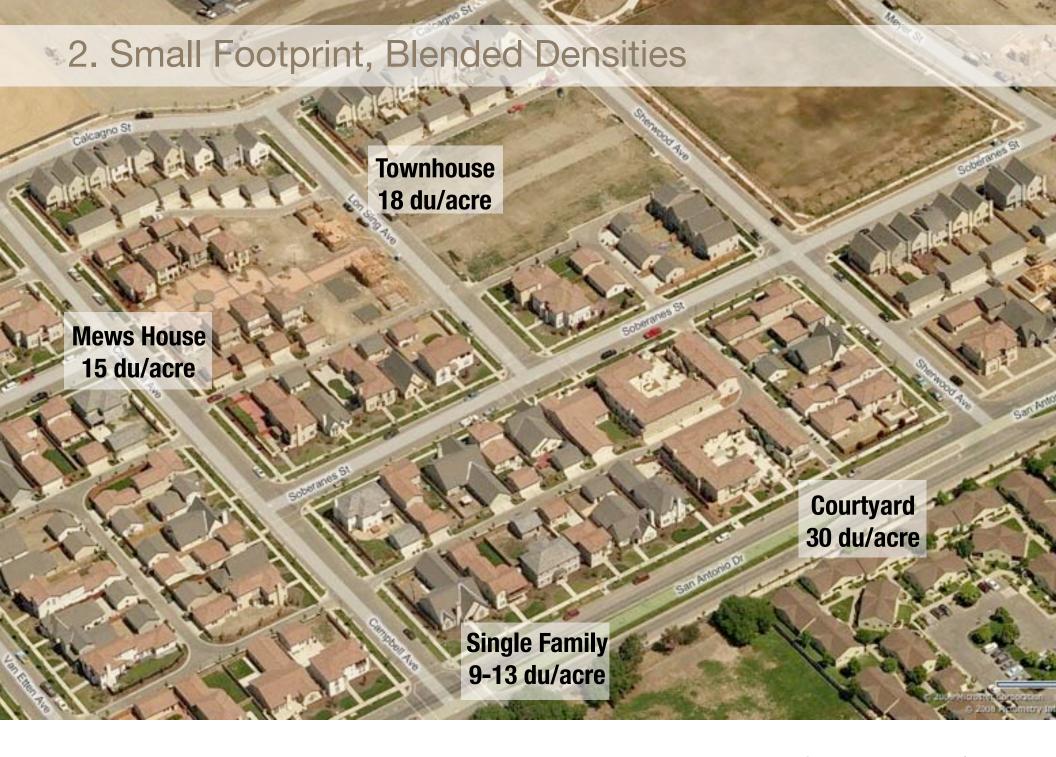




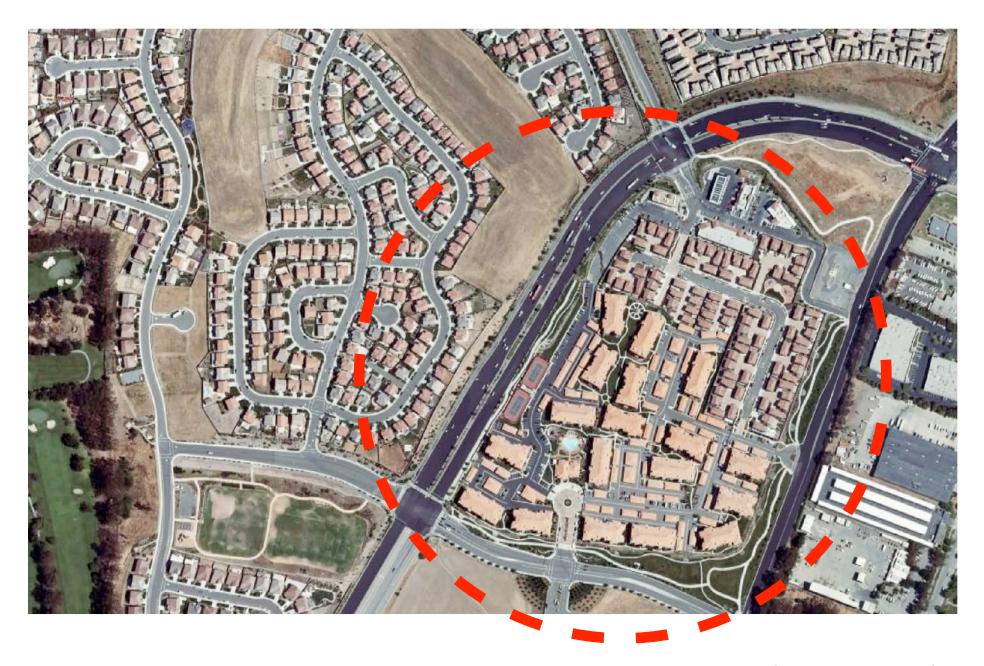
Characteristics of Missing Middle Housing

#### 1. Set in a Walkable Urban Context





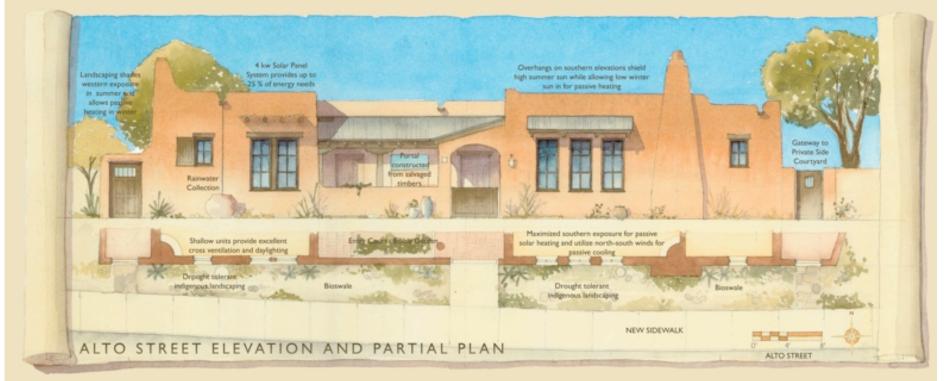
## Podded, Isolated Densities are Products of Zoning



#### 3. Lower Perceived Density (This is 24 du/acre)

"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



#### Local, Green and Affordable

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

## 4. Well-Designed Smaller Units



#### 5. Off-Street Parking Does Not Drive the Site Plan



#### 6. Simple Construction: Easier to Finance

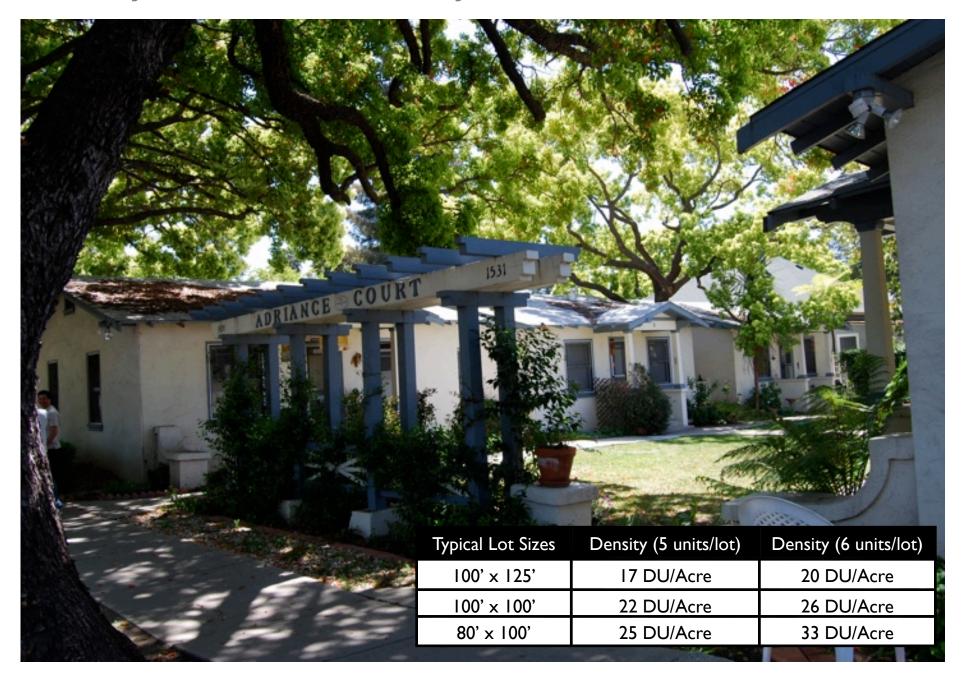


#### Can Help Achieve Affordable Housing & Diversity Goals

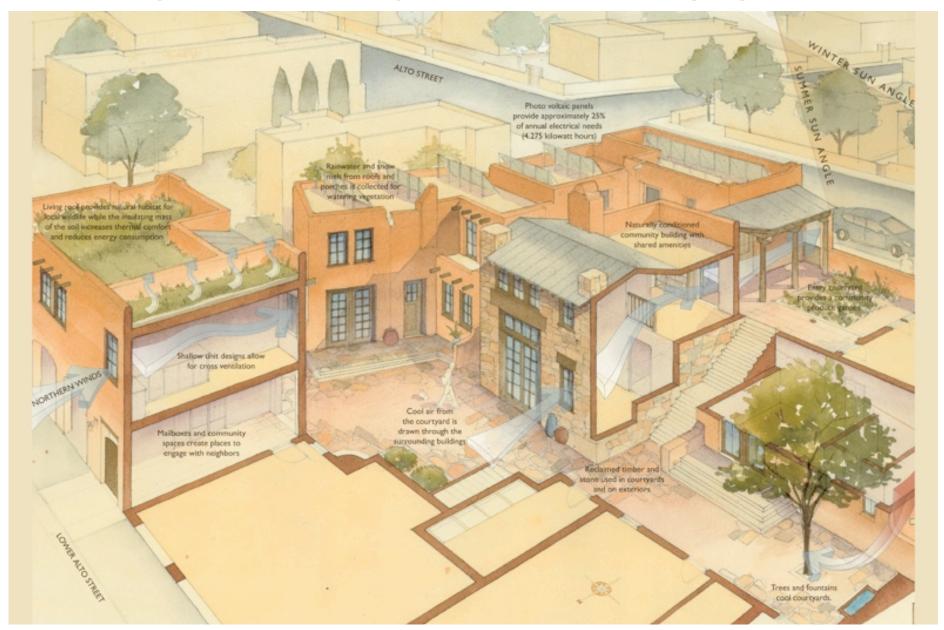


Only \$23,000 Household Income Needed to Qualify

#### 7. They Create Community



### Private Space is Exchanged for Community Space



### 8. They Are Marketable



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' × 85'	51 DU/Acre	NA

## Regulating for High-Quality Infill

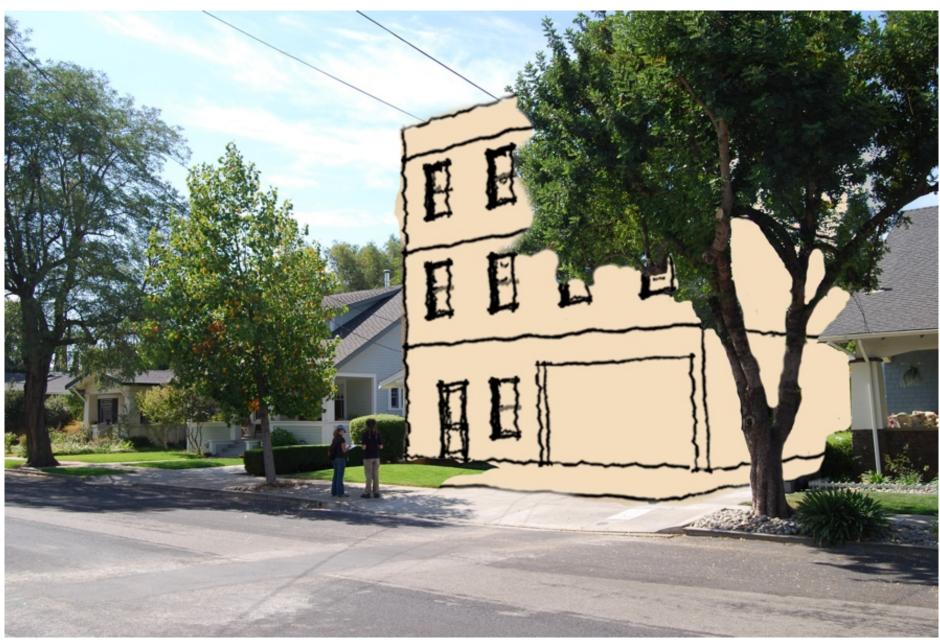
Form-Based Approach to Zoning

#### Existing Community Context: Intent is to Maintain



Livermore, CA Development Code Update: Driehaus Form-Based Code Winner

#### Illustrating What is Allowed by the Existing Code



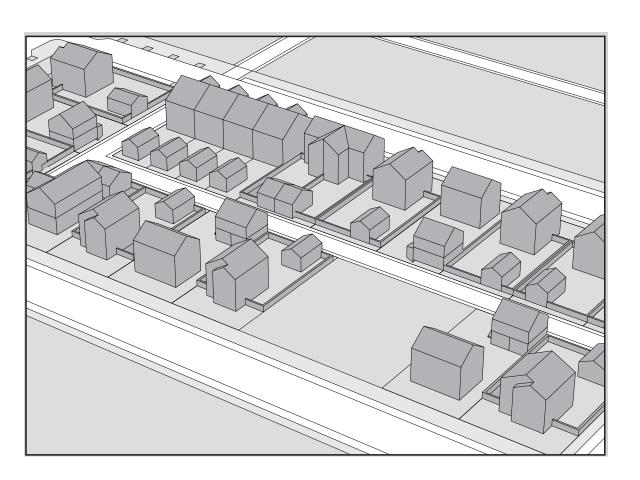
Livermore, CA Development Code Update: Driehaus Form-Based Code Winner

## Writing a Code to Ensure a Happier Ending to the Story



Livermore, CA Development Code Update: Driehaus Form-Based Code Winner

#### Case Study: Neighborhood Infill at 20 du/acre





Typical Lot: 150 deep x 100' wide = 15,000 sf Existing zoning allows 20 du/acre = 6 units

What does 20 du/acre look like?

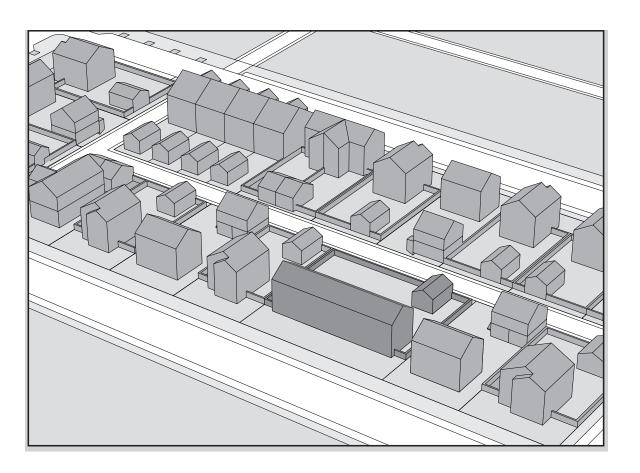








# Inappropriate Infill at 20 du/acre: Building Too Big

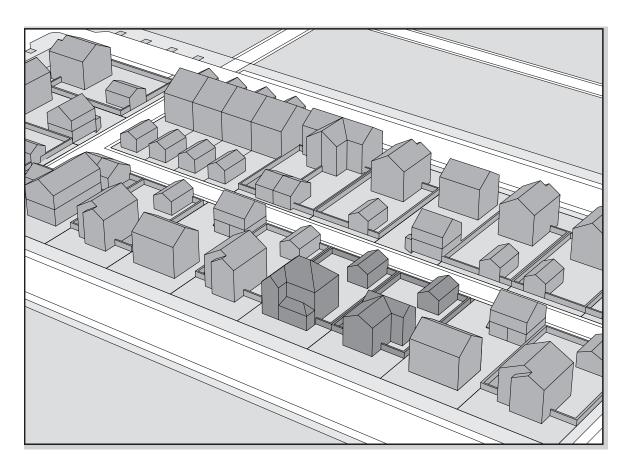






Architecture alone cannot make this compatible

## Appropriately-Scaled Infill at 20 du/acre: Form is Important!









Building Footprint (width and depth) are the two most critical elements to regulate!

## 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..lt is the intent that the district be used in the higher density areas designated in the general plan.."

## Basing Zones on Form not Uses: Protecting the Character



## Building Type As a Primary Component of a Code

## **Chapter 1703 Form-Based Code**

#### **Table of Contents**

City of Cincinnati Form-Based Code

Preamble	: A Place-Based Approach to Zoning	P-I
P.10	Introduction: Creating a Solid Foundation for the Cincinnati Form-Based Code	P-1
P.20	The Public Process for the Cincinnati Form-Based Code	P-2
P.30	Guiding Principles for the Cincinnati Form-Based Code	P-4
P.40	Classifications of Different Types of Places/Contexts in Cincinnati	P-5
P.50	What is a Form-Based Code?	P-8
P.60	The Rural-to-Urban Transect: The Framework for the FBC	P-8
P.70	The Cincinnati Transect	P-10
Section 17	03-1: Overview and Guide to the Cincinnati Form-Based Code	1-1
1703-1.10	Purpose	1-1
1703-1.20	Applicability	1-1
1703-1.30	Organization of the Form-Based Code	1-2
1703-1.40	How to Use the Form-Based Code Document	1-2
Section I	703-2: Specific to Transect Zones	2-1
1703-2.10	Purpose	2-1
1703-2.20	Applicability	2-1
1703-2.30	Transect Overview	2-1
1703-2.40	T3 Estate (T3E)	2-5
1703-2.50	T3 Neighborhood (T3N)	2-11
1703-2.60	T4 Neighborhood Medium Footprint (T4N.I)	2-17
1703-2.70	T4 Neighborhood Small Footprint (T4N.2)	2-23
1703-2.80	T5 Main Street (T5MS)	2-29
1703-2.90	T5 Neighborhood Large Setback (T5N.I)	2-35
1703-2.100	T5 Neighborhood Small Setback (T5N.2)	2-41
1703-2.110	T5 Flex (T5F)	2-47
	T6 Core (T6C)	2-53

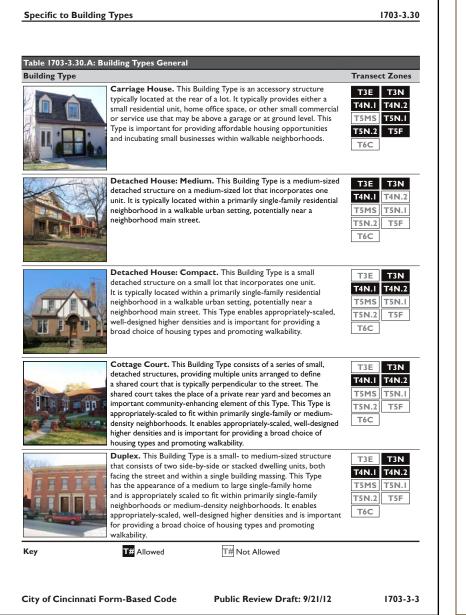
Public Review Draft: 9/21/12

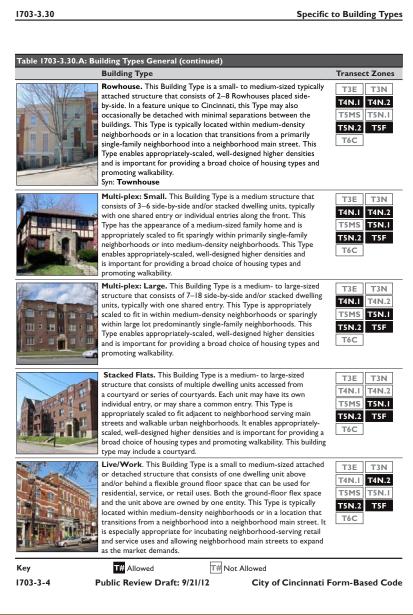
3-I
3-I 3-6 3-8 3-10 3-12 3-14 3-16 3-18 3-20 3-22 3-24 3-26 3-28 3-30 3-32
3-6 3-8 3-10 3-12 3-14 3-16 3-18 3-20 3-22 3-24 3-26 3-30 3-32
3-8 3-10 3-12 3-14 3-16 3-18 3-20 3-22 3-24 3-26 3-30 3-32
3-10 3-12 3-14 3-16 3-18 3-20 3-22 3-24 3-26 3-30 3-30
3-12 3-14 3-16 3-18 3-20 3-22 3-24 3-26 3-28 3-30
3-14 3-16 3-18 3-20 3-22 3-24 3-26 3-28 3-30
3-16 3-18 3-20 3-22 3-24 3-26 3-28 3-30
3-18 3-20 3-22 3-24 3-26 3-28 3-30
3-20 3-22 3-24 3-26 3-28 3-30 3-32
3-22 3-24 3-26 3-28 3-30 3-32
3-24 3-26 3-28 3-30 3-32
3-26 3-28 3-30 3-32
3-28 3-30 3-32
3-30 3-32
3-32
3-34
4-1
4-1
4-1
4-1
4-5
4-6
4-7
4-8
4-9
4-10
4-11
4-12
4-13

Missing MIddle Housing © 2013 Opticos Design, Inc.

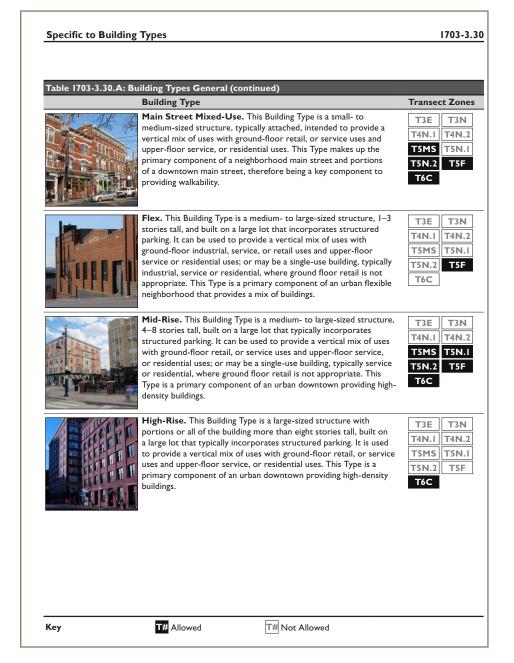
1703-i

## **Building Type Overview**

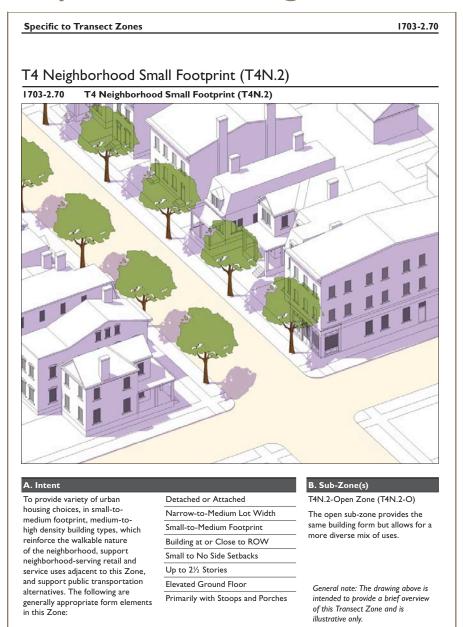




## **Building Type Overview**

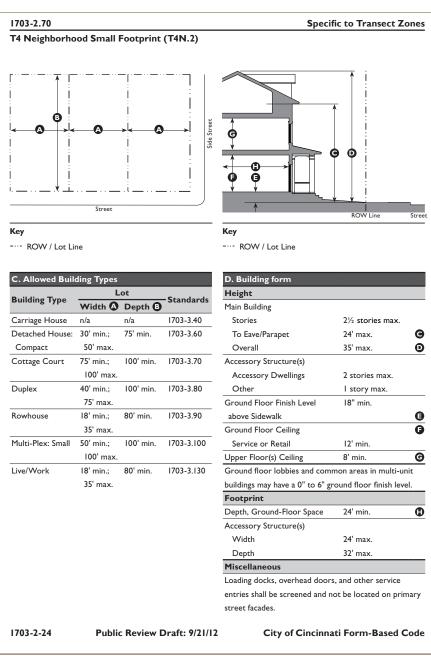


## Keyed to Building Form Standards



Public Review Draft: 9/21/12

City of Cincinnati Form-Based Code



Missing MIddle Housing © 2013 Opticos Design, Inc.

1703-2-23

## Supplemental Form Standards for Each Building Type

## Supplemental Form Standards for Each Building Type

1703-3.90

**Specific to Building Types** 

#### 1703-3.90 Rowhouse



Classically detailed brick Rowhouses are stepped down a steep sidewalk



Rowhouses with covered stoops acting as a single building



A row of minimally-detached three-bay Rowhouses

#### A. Description

The Rowhouse Building Type is a small- to mediumsized typically attached structure that consists of 2-8 Rowhouses placed side-by-side. In a feature unique to Cincinnati, this Type may also occasionally be detached with minimal separations between the buildings. This Type is typically located within medium-density neighborhoods or in a location that transitions from a primarily single-family neighborhood into a neighborhood main street. This Type enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.

#### Syn: Townhouse

T3E T3N T4N.1 T4N.2 T5MS T5N.I T5N.2 T5F T6C

Key

T# Allowed

T# Not Allowed

General Note: Photos on this page are illustrative, not regulatory.

1703-3-16

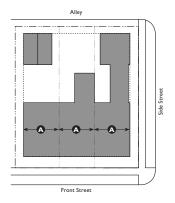
Public Review Draft: 9/21/12

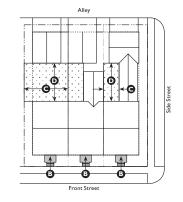
City of Cincinnati Form-Based Code

#### **Specific to Building Types**

1703-3.90

Rowhouse





#### Key

- ---- ROW / Lot Line ---- Setback Line
- Shared Lot Line<sup>1</sup> <sup>1</sup>Rowhouses may have a shared Lot Line.

B. Number of Units	
Units per Rowhouse	I per floor max.
Rowhouses per Lot	I max.
Rowhouses per run	2 min.; 8 max.

#### C. Building Size and Massing Height

Per transect zone standards in Section 1703-2 (Specific to Transect Zones).

Main Body		
Width per Rowhouse	18' min · 36' may	_

The footprint area of an accessory structure may not exceed the footprint area of the main body of the building.

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

D. Allowed Frontage Types				
Porch: Engaged	1703-4.60			
Porch: Projecting	1703-4.50			
Stoop	1703-4.70			
E. Pedestrian Access				

Main Entrance Location	Front street
Each unit shall have an indivi	dual entry facing a street

F. Private Open Space		
Width	8' per unit min.	9
Depth	8' per unit min.	O
Area	IOO of min	

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

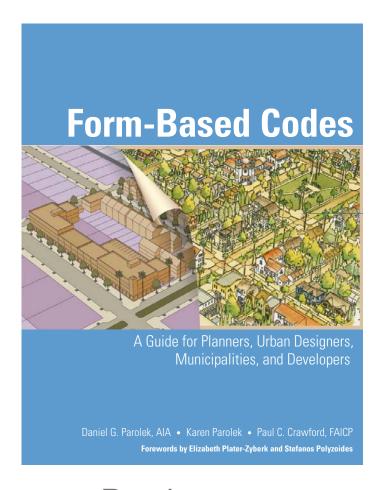
main body of the building.

City of Cincinnati Form-Based Code

Public Review Draft: 9/21/12

1703-3-17

## Form-Based Code Resources





www.formbasedcodes.org

Purchase at: www.amazon.com

# 5 > Conclusion

Responding to the Demand for Walkable Urban Living in Your Community

# Don't Forget About Multi-Generational Housing



# Small Physical and 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

# The Market is Waiting. Will You Respond?

dan@opticosdesign.com

