Presentation Overview

1. Typical Issues with Zoning Codes
2. Components of a Form-Based Code
3. Overview of the Typical 3-Step Process
4. Conclusion
Euclidean Zoning is an Out-of-Date Operating System

FBC Goal: Provide Easy to Use System that Delivers Predictable Results and Process
At Most Basic Level: Establishing a Hierarchy of Scale

What We Heard: Some Want Bigger. Some Want Smaller.
Spreading Across the Country: 362 Adopted and Growing

While FBCs are 35 years old, 87% of the adopted codes were 2003 to now.

362 form-based codes were adopted from 1981 to now.

Source: Codes Study, Hazel Borys and Emily Talen, as of March 2016, Creative Commons NonCommercial ShareAlike License
1. Typical Issues/Challenges with Zoning Codes
   What Form-Based Coding is Addressing
Many Complex Layers Added to Code as Attempted “Fixes”

Makes Code Very Hard to Understand and Use
Base Zoning Standards Ineffective (Use Based)
The Response: Add Layers of Form Regulations

Problem: Never Got Rid of Ineffective Foundation
A More Direct and Effective System Based on Form
Over-Regulating Use

At Some Point It Stops Making Sense
At Some Point You Cannot Possibly List Every Allowed Use

• An Existing Land Use Table Prior to Rewrite

Allowed Uses

19. Baths, Turkish
25. Boxing arena
28. Chinchillas, retail sales
41. Eleemosynar institutions
42. Embalming business
116. Turkish Baths
Form-Based Use Tables: Size of Use Matters as Well

### Land Use

<table>
<thead>
<tr>
<th>Retail</th>
<th>T4MS</th>
<th>T4MS-O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eating or Drinking Establishment, except with any of the following features:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenant floor area:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5,000 sf</td>
<td>MUP</td>
<td></td>
</tr>
<tr>
<td>&gt;10,000 sf</td>
<td>CUP</td>
<td>–</td>
</tr>
<tr>
<td>General Retail, except with any of the following features:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenant floor area:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5,000 sf</td>
<td>MUP</td>
<td></td>
</tr>
<tr>
<td>&gt;10,000 sf</td>
<td>CUP</td>
<td>–</td>
</tr>
<tr>
<td>&gt;25,000 sf</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

#### Notes:
- P: Permitted Use
- MUP: Minor Use Permit Required
- CUP: Conditional Use Permit Required
- –: Not allowed on the ground floor unless behind an allowed ground floor use.
Numeric Parameters are Blunt and Unpredictable

Is FAR and Density the Right Tool?
Conventional zoning says they’re the same

FAR = 1.2
Conventional zoning says they’re the same

60 units | 5 units

Density  = 30 per acre
Each Zone District Has a Range of Allowed Types/Forms
Regulations Spread Across Many Different Locations, Documents, Maps

Easy to use and Understand?
Regulations Spread Across Many Documents and Maps

Zoning Code

Guidelines, Overlays, Area Plans
or Specific Plans, etc.
Too Difficult to Do Small Projects
Majority of Projects “On the Boards” Are Large & X-Large
Lack of Predictability in Process and Results

Majority of Projects Negotiated
Lack of Predictability for Community and Developer

Development Review Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Effectiveness</th>
<th>Clarity</th>
<th>Consistency</th>
<th>Predictability</th>
<th>Simplicity</th>
<th>Ease of Implementation &amp; Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BY-RIGHT (STANDARDS-BASED)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>2</td>
<td>DISCRETIONARY OR DESIGN REVIEW</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>3</td>
<td>CUSTOMIZED ZONING</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Key: ● High Level of  ○ Medium Level of  ○ Low Level of

In a discretionary or design review system, a permit is issued at the “discretion” of the review authority (e.g. staff or Planning Commission). In this system, standards are generally less specific and leaves more need for interpretation, thus requiring a more extensive, and sometimes subjective review process to ensure the intent is met. Projects often undergo multiple review loops to obtain approval.

Interpretation Often Depends on Which Staff Member and Which Day You Go In
Predictable, Clear Process is the Goal

Miami 21: (DPZ)
Is the Process Predictable for Community and Developer?

Triggered CUP Due to Size Threshold of 25,000 SF
Build Upon Lessons Learned from Latest Zoning Efforts

Broadway Valdez Specific Plan
Components

Important How They Come Together: Recipe and Preparation
FBC Components are Like Ingredients of a Proven Recipe

1. Form-Based Zones
2. Frontage Types
3. Thoroughfare Types
4. Civic Space Types
5. Building Types
6. Regulating Plan: The Map

Zucchini Muffins Recipe

Prep time: 25 minutes  Cook time: 30 minutes  Yield: Makes 12-14 muffins

For those of you who prefer to use oil over butter, be my guest (use 1 cup vegetable oil instead of the butter) but I have to tell you, I’ve made these both ways, and the butter version tastes better.

If you are including both walnuts and dried fruit, you will likely have more batter than is needed for 12 muffins. I got about 14 muffins from this batch, and that included filling the muffin cups up as far as they could possibly go (above the surface of the muffin tin).

INGREDIENTS
☐ 3 cups grated fresh zucchini
☐ 2/3 cup melted unsalted butter
☐ 1 1/3 cup sugar
☐ 2 eggs, beaten
☐ 2 teaspoons vanilla
☐ 2 teaspoons baking soda
☐ Pinch salt
☐ 3 cups all-purpose flour
☐ 2 teaspoons cinnamon
☐ 1/2 teaspoon nutmeg
☐ 1 cup walnuts (optional)
☐ 1 cup raisins or dried cranberries (optional)

METHOD
You don’t need a mixer for this recipe.

1 Preheat the oven to 350°F (175°C). In a large bowl, mix the sugar, eggs, and vanilla. Stir in the grated zucchini and melted butter.

2 In a separate bowl, mix together the flour, baking powder, cinnamon, and salt. Stir these dry ingredients into the sugar mixture. Stir in walnuts, raisins or cranberries if desired.

3 Coat each muffin cup in your muffin pan with a little vegetable oil spray. Use a spoon to distribute the batter equally among the cups, filling the cups up about 2/3 full.

4 Bake on the middle rack until muffins are golden brown, about 20-25 minutes.
All Elements Coordinated and in One Location

Easy to Use and Administer: Clarity and Predictability
Effective Form-Based Zoning Districts

These are The Key Components
Operating System Based on Form: Think Simple

Small

Medium

Large

Overall Scale
Setbacks
Size of Uses

© 2016 Opticos Design, Inc.
Clarity and Usability: Not Just About Adding Graphics

Zone Standards

T4 Neighborhood Main Street (T4MS)

Specific to Transit Zones

16.2.2.070

T4 Neighborhood Main Street (T4MS)

A. Intent

To provide a variety of urban housing choices and limited, neighborhood-serving service uses in narrow-to-medium footprint, medium-to-high density building types, which reinforce the walkable nature of the neighborhood, and support public transportation choices.

Detached or Attached Buildings

Narrow to Medium Lot Width

Narrow to Medium Footprint

Buildings setback or close to ROW at corners

Small-to-No Side Setbacks

Up to 4 1/2 Stories

Ground Floor flush with Sidewalk

Primarily Shopfront, Studios, Porches

Retail and Service Streetscape

B. Sub-Zones

T4MS—Open Zone (T4MS-O)

The open sub-zone provides the same building types but allows for a more diverse mix of uses.

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

C. Allowed Building Types

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Lot</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriage House</td>
<td>n/a</td>
<td>16.3.6.0</td>
</tr>
<tr>
<td>Detached House</td>
<td>30'</td>
<td>75'</td>
</tr>
<tr>
<td>Compact</td>
<td>50'</td>
<td>75'</td>
</tr>
<tr>
<td>Duplex</td>
<td>40'</td>
<td>80'</td>
</tr>
<tr>
<td>Rowhouse</td>
<td>18'</td>
<td>80'</td>
</tr>
<tr>
<td>Multiplex: Small</td>
<td>50'</td>
<td>100'</td>
</tr>
<tr>
<td>Multiplex: Large</td>
<td>75'</td>
<td>100'</td>
</tr>
<tr>
<td>Stacked Flats</td>
<td>75'</td>
<td>100'</td>
</tr>
</tbody>
</table>

D. Building Form

<table>
<thead>
<tr>
<th>Height</th>
<th>Stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Building</td>
<td>4 1/2</td>
</tr>
<tr>
<td>To Eaves/Parapet</td>
<td>48'</td>
</tr>
<tr>
<td>Overall</td>
<td>60'</td>
</tr>
<tr>
<td>Accessory Structures</td>
<td>2 stories</td>
</tr>
<tr>
<td>Accessory Dwelling</td>
<td>1 story</td>
</tr>
<tr>
<td>叙事</td>
<td>1 story</td>
</tr>
<tr>
<td>Ground Floor Finish Level</td>
<td>6'</td>
</tr>
<tr>
<td>Above Sidewalk</td>
<td></td>
</tr>
<tr>
<td>Ground Floor Ceiling</td>
<td>14'</td>
</tr>
<tr>
<td>Upper Floor Ceiling</td>
<td>18'</td>
</tr>
</tbody>
</table>

Footprint

<table>
<thead>
<tr>
<th>Accessory Structures</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Floor Space</td>
<td>24'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. 10' distance between entries to ground floor uses, loading docks, overhead doors, and other service entries shall be screened and not located on primary street facade.</td>
<td>32'</td>
</tr>
</tbody>
</table>
Clarity and Usability: Not Just About Adding Graphics

Zone Standards
At Most Basic Level: Establishing a Hierarchy of Scale

What We Heard: Some Want Bigger. Some Want Smaller.
Building Types as “Ingredients of Place”

50’x150’

50’x150’

75’x150’
Building Types as “Ingredients of Place”
Standards = range of expectations

2 of the tested outcomes
Within Zones Hierarchy of Form and Scale Should be Clear

Cincinnati, OH Form-Based Zoning Districts
Form Hierarchy Should be Obvious: Cincinnati, OH

Less Urban

More Urban

T5 (continued)

T6

T5 Main Street (T5MS)

T6 Core (T6C)

T5 Flex (T5F)
Transitions Between Scales Directly Regulated within Zoning District Standards

Predictable Outcome: Vs Difference Btwn 2.5 and 3.0 FAR
Regulating the Specific Desired Form of Urban Buildings

- Habitable space requirement separates parking from street edge by 20’
- Towers are regulated by a 60’ setback from one another
- Pedestrian streets break block into smaller 275’ sections
- Consolidated open space
- Frontage has a minimum 80% built out

Miami-Dade County, FL
Dover, Kohl & Partners
Varied Urban Scales and a Vibrant Public Realm

Dover, Kohl & Partners
Some Thoughts on Projects “On the Boards”
Carefully Considering Tower Bulk - Not Just Height
Carefully Considering Tower Bulk and Context - Not Just Height
Frontage Standards

5.20.050.G Forecourt

This forecourt visually extends the public realm into the lot.

This residential forecourt provides an entry yard and breaks down the overall massing along the street.

Key
- ROW / Lot Line
- Setback Line / STL

6. Encroachments

<table>
<thead>
<tr>
<th>Encroachment Type</th>
<th>Front</th>
<th>Side St.</th>
<th>Side</th>
<th>Rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecourt</td>
<td>A</td>
<td>A</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Easement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Architectural Features</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Signage</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Landscaping</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Fences or Freestanding Walls</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Driveways, Walkways</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Utility Lines, Wires and Related Structures</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

L. Streetscape

Replace or Infill Street Trees

<table>
<thead>
<tr>
<th>Min. Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 sf 2 street trees Table 7.10.090.G</td>
</tr>
<tr>
<td>3,500 sf 3 street trees Table 7.10.090.G</td>
</tr>
<tr>
<td>3,500 sf Street trees along frontage Table 7.10.090.G</td>
</tr>
</tbody>
</table>

Key
- A = Allowed
- = Not Allowed
You Have Some Examples of What to Avoid
This Transition is Very Important to Regulate!
Good Shopfronts are In Demand by Businesses
Residential Frontages are Important

Buildings and their lots shape the streetscape through a variety of ways or “types”
Building Type Standards

Chapter 59: Building Type Standards

11-59-14 Mid-Rise

A. Description
Mid-Rise: This Building Type is a medium to large-sized structure, 4 to 8 stories tall built on a large lot that incorporates structured parking. This building type can be used to provide a vertical mix of uses with ground-floor commercial, service, or retail uses and upper-floor commercial, service, or residential uses; or may be a single-use building, typically service or residential, where ground-floor retail is not appropriate. This Type is a primary component of an urban downtown providing high density buildings.

B. Lot
Lot Size
- Width: 100’ min., 200’ max.
- Depth: 100’ min., 150’ max.

C. Number of Units
Unrestricted

D. Building Size and Planning
Height:
- 4 stories min.; 8 stories max.

Footprint:
- Floors 1-2: Width = 200’ max.
- Depth = 150’ max.
- Lot Coverage = 100% max.

E. Allowed Frontages
- Shopfront
- Dwelling
- Gallery
- Terrace

F. Pedestrian Access
Upper floor units shall be accessed by a common entry along the front.

G. Vehicle Access and Parking
Parking may be accessed from the front, alley or side street.

H. Open Space
No private open space requirement.

I. Courtyard(s)
- Width: 20’ min.; 50’ max.
- Width-to-Height Ratio: 1:2 to 3:1
- Depth: 20’ min.; 150’ max.
- Depth-to-Height Ratio: 1:2 to 3:1

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

© 2016 Opticos Design, Inc. 51
Group of Building Types Calibrated for the City

Specific to Building Types

Table 1703-3.30.A: Building Types General

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Transect Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriage House.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Detached House: Medium.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Detached House: Compact.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Cottage Court.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Duplex.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
</tbody>
</table>

Key

- T Allowed
- T Not Allowed

City of Cincinnati Form-Based Code

Public Review Draft: 9/21/12

1703-3-3

Table 1703-3.30.A: Building Types General (continued)

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Transect Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rowhouse.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Multi-plex: Small.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Multi-plex: Large.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Stacked Flats.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
<tr>
<td>Live/Work.</td>
<td>TJE, T3N, T4N.1, T4N.2, T5N.1, T5N.2, T5F, T6C</td>
</tr>
</tbody>
</table>

Key

- T Allowed
- T Not Allowed

City of Cincinnati Form-Based Code

Public Review Draft: 9/21/12

1703-3-4
A Range of Types are Allowed Within Each Zone

Specific to Transect Zones

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:

- Detached or Attached
- Narrow-to-Medium Lot Width
- Small-to-Medium Footprint
- Building at or Close to ROW
- Small to No Side Setbacks
- Up to 2½ Stories
- Elevated Ground Floor
- Primarily with Stoops and Porches

B. Sub-Zone(s)

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.

C. Allowed Building Types

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Lot Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width</td>
</tr>
<tr>
<td>Carriage House</td>
<td>n/a</td>
</tr>
<tr>
<td>Detached House:</td>
<td>30' min.;</td>
</tr>
<tr>
<td>Compact</td>
<td>50' max.</td>
</tr>
<tr>
<td>Cottage Court</td>
<td>75' min.;</td>
</tr>
<tr>
<td></td>
<td>100' max.</td>
</tr>
<tr>
<td>Duplex</td>
<td>40' min.;</td>
</tr>
<tr>
<td></td>
<td>75' max.</td>
</tr>
<tr>
<td>Rowhouse</td>
<td>18' min.;</td>
</tr>
<tr>
<td></td>
<td>35' max.</td>
</tr>
<tr>
<td>Multi-Plex: Small</td>
<td>50' min.;</td>
</tr>
<tr>
<td></td>
<td>100' max.</td>
</tr>
<tr>
<td>Live/Work</td>
<td>18' min.;</td>
</tr>
<tr>
<td></td>
<td>35' max.</td>
</tr>
</tbody>
</table>

General note: The drawing above is intended to provide a brief overview of this Transect Zone and is illustrative only.
Each Type Has Supplemental Form Standards
# Civic Space Standards

## Civic Space Types

### Table 10-70.10.030.A  Civic Spaces

<table>
<thead>
<tr>
<th>Transect Zone</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Space Type</td>
<td>Park</td>
<td>Greenway</td>
<td>Green</td>
<td>Illustration</td>
<td>Description</td>
<td>Size and Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>----------</td>
<td>--------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Park</td>
<td>Greenway</td>
<td>Green</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>----------</td>
<td>--------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Park</td>
<td>Greenway</td>
<td>Green</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>----------</td>
<td>--------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Park</td>
<td>Greenway</td>
<td>Green</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>----------</td>
<td>--------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Park</td>
<td>Greenway</td>
<td>Green</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 10-70.10.030.A  Civic Spaces (continued)

<table>
<thead>
<tr>
<th>Transect Zone</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Space Type</td>
<td>Square</td>
<td>Plaza</td>
<td>Pocket Plaza</td>
<td>Illustration</td>
<td>Description</td>
<td>Size and Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Square</td>
<td>Plaza</td>
<td>Pocket Plaza</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Square</td>
<td>Plaza</td>
<td>Pocket Plaza</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Space Type</td>
<td>Square</td>
<td>Plaza</td>
<td>Pocket Plaza</td>
<td>Illustration</td>
<td>Description</td>
<td>Size</td>
<td>Location</td>
<td>Typical Uses</td>
<td>Stormwater Management</td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© 2016 Opticos Design, Inc. 55
Defining a Network of High-Quality Public Spaces

4.50.050 - Open Space and Civic Space Regulating Plan Downtown Station Area

5 Pedestrian Priority Design Area. The streets and sidewalks in this area shall be designed to feel like a continuation of public space. This includes the use of decorative pavers or street print and rolled curbs and bollards where feasible. These locations are areas where the streets may be closed off for community events.

6 Linear Park. The linear park shall contain a central sidewalk and regularly spaced benches. See Thoroughfare Standards for a cross section and dimensional requirements.

7 Neighborhood Square. 75’ min. width; see 4.50 for additional regulations.

8 Pocket Plaza. See 4.50 for regulations.

9 Potential Future Pocket Park. (on existing parking lot) See 4.50 for regulations. A vertical element should be used to terminate the view down the Transverse Street.

10 Future Promenade Expansion. Future redevelopment of the parcels between Weller Street and the Petaluma River shall include and expansion of the promenade with a 12’ min. wide trail.

11 Amphitheater or other Civic gathering/ event space.

12 River Overlooks. Boardwalks constructed of wooden piers, beams, and floor planks, that project over the Turning Basin and have minimal impact on the shoreline below.

13 Plaza. 30’ min. width from the top of the bank to the face of the Special Building at the western end; 50’ min width from the top of the bank to the face of all other buildings. See 4.50 for additional regulations.

14 Promenade. 30’ min. width from top of bank to the face of the buildings. 12’ min. wide walkway.

15 General Waterfront Open Space. 20’ min. width from top of bank to the face of the buildings. 6’ min. wide walkways.

Thoroughfare Standards
Public Spaces for People Rather than Cars

Oakland, CA
Downtown Oakland Specific Plan
Zoning Map/Regulating Plan: Utilizing a More Detailed Assessment of Existing Conditions to Inform the Mapping

Sharpening the Tool

Establishes a Hierarchy
Transitions Between Scales More Effective and Direct
Charrette Intensity Diagram: Preserve exist. neighborhoods

DRAFT From Charrette & Plan Alt. Report
Greater intensity where contextually appropriate…

DRAFT From Charrette & Plan Alt. Report
Where is additional intensity contextually appropriate?
Form-Based Code Components: Optional

1. Sustainability Standards
2. Green Building Standards
3. Architecture & Landscape Architecture Guidelines
4. Stormwater Management
5. Etc.

Form-Based Code Defines This

This is The Architecture
The Three-Step Process
Step 1: Documentation and Analysis

Extracting the DNA of a Place
Starts with Extensive Photo Documentation
No Other Zoning Approach Is as Rooted in Places

Both parcels zoned CBD-R.

Alice Street, Oakland, CA
Start with Graphic Diagnosis of Existing Zoning Districts

Medium Density Residential

**Small Lot Example (50' Wide Lot)**

Two individual lots shown.

**Large Lot Example (100' Wide Lot)**

Example of build-out based on the current code; showing 27% lot coverage (left) and 26% lot coverage (right).

**Build-Out Assumptions:**
- Building Envelope: Building can be located anywhere within this shape.
- Because there is a discrepancy in the differing setbacks (the landscape setback is deeper than the building setback), it was assumed that the building can occupy any space outside of the building setback; however, if the building does not occupy the remaining landscape setback, this space must be landscaped.
- Parking cannot occupy the building or landscape setback.
- The building setback is stepped back per additional story, as compared to the sloped setback in the Low Density Residential district.

High Density Residential

**Small Lot Example (50' wide Lot)**

Two individual lots shown.

**Large Lot Example (100' wide Lot)**

Example of build-out based on the current code; showing 45% lot coverage (left) and 31% lot coverage (right).

**Build-Out Assumptions:**
- Building Envelope: Building can be located anywhere within this shape.
- Because there is a discrepancy in the differing setbacks (the landscape setback is deeper than the building setback), it was assumed that the building can occupy any space outside of the building setback; however, if the building does not occupy the remaining landscape setback, this space must be landscaped.
- Parking cannot occupy the building or landscape setback.
- The building setback is stepped back per additional story, as compared to the sloped setback in the Low Density Residential district.

Step 2: Creating a Detailed Visioning

Need a Vision First: Code Then Implements the Vision
How Tall?

Gabon, Libreville
How Tall?

Gabon, Libreville
Public Engagement is Key Including Multi-Day Charrettes

"I was originally concerned that the multi-day charrette process would not be effective with our challenging community. Opticos adjusted the process to meet our needs, and in the end the charrettes were a huge success in terms of building public support and excitement about the project."

~Scott Duiven, City of Petaluma’s City Manager’s Office
Designing In Public: Illustrating Specific Alternatives
Weaving the Downtown into Adjacent Neighborhoods

Downtown Oakland Specific Plan
Conclusion
A Few Closing Thoughts
Considering Sustainability and Urban Agriculture

T3: Single Family and Carriage House

Strategic Shading.

Glazing. Design glazing to heat the structure from the south, and cool through cross-ventilation.

Water Infiltration. Allow water to percolate in sub-surface conditions.

Greenway. Use the greenway as a stormwater capture, conveyance and treatment feature.

South-Side Planting. Consider solar access on the south side of buildings when planting landscape.

Public/Private Portal.

Compost Bins. Require compost bins with instructions for homeowners.

Urban Farming. Encourage small-scale cultivation.

No Hose Bibs. Exclude external hose bibs from home design, thereby irrigating only by rain barrel or reuse water.

Rain Garden. Provide lot treatment rain gardens.

Flow-Through Stormwater Treatment Planter.

T4: Live/Work Building

Active Space. Allow some portion of outdoor space to be used for public open-space, potentially active space.

Retractable Awnings. Encourage the use of retractable awnings in storefront design, to protect from the summer sun.

Outdoor Seating. Encourage establishments to provide outdoor seating and outdoor spaces.

Car Charging Stations. Provide electric charging stations to promote the use of alternate-fuel vehicles.

Recycling and Compost Bins. Encourage establishments to have an area for compost and recycling bins, in addition to trash bins.

Vegetated Roofs. Promote vegetated roofs, skylights or directed sunlight to improve the quality of life in interior apartments.

Residential Access. Provide residential access to flat rooftops, creating usable open space.

Private Driveway. Require minimal curbcuts and curb return radii.

Roof Materials. Use high SRI roof materials where PV or vegetated roofs are not practical.

Covered bicycle storage.

T5: Mid-Rise Building Type

Urban Rooftop Farming/Gardening.

Roof Access. Encourage rooftop access to maximize value of views and open space.

Outdoor Seating. Activating sidewalk space in front of mixed-use development encourages community vitality.

Awnings. Awnings provide street-level shading and rain shelter.

Diverse Rooftop Usage. Encourage both commercial and residential use of roof space.

Urban Gardening. Garden space available for residential tenants.

Bioswales. Bioswales improve stormwater quality, mitigate urban flooding, and give opportunity for infiltration where subsurface conditions allow.

Bike Racks. Encourage tenants and patrons to cycle by providing regular amenities for bike parking.

Street Trees. Tree boxes/wells improve thermal comfort and street character.
ZONING PRACTICE
AMERICAN PLANNING ASSOCIATION

ISSUE NUMBER 5
PRACTICE FORM-BASED ZONING

ISSUE NUMBER 6
PRACTICE FORM-BASED ZONING
Good Resources for Form-Based Codes:

www.form-basedcodes.org

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
Operating System Based on Form: Think Simple

Small

Medium

Large

Overall Scale
Setbacks
Size of Uses
END