**Council of Governments of the Central Naugatuck Valley** 

# Form-Based Codes for Existing Contexts

November 18, 2010

Abe Barge Winter & Company Boulder, CO - White Plains, NY www.winterandcompany.net abe@winterandcompany.net

### Winter & Company & Boulder, CO - White Plains, NY

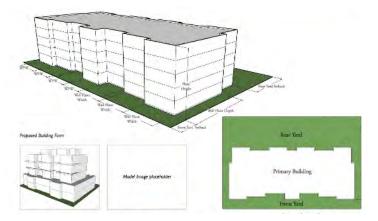
- Downtown and Subarea Plans
- Historic Preservation
- Regulatory Strategies
- Urban Design



### **Presentation Topics**

- I. Introduction to Form-Based Codes
  - What is a form-based code?
  - Code types of code are there and what elements do they include?
  - Where do they fit within the continuum of regulation?
- II. Defining Existing Context as a Base
  - The Role of Context
  - Framework, Site and Building Features
  - Matching Context to Goals
- III. Using Form-Based Codes
- IV. Implementation
  - Zoning Districts and Overlays
  - Integrated Systems





Denver - Development of a New Form-Based Zoning Code

### What is a Form-Based Code?

"Form-based codes foster predictable built results and a high-quality public realm by using physical form as the organizing principle of the code..." - Form-based Codes Institute

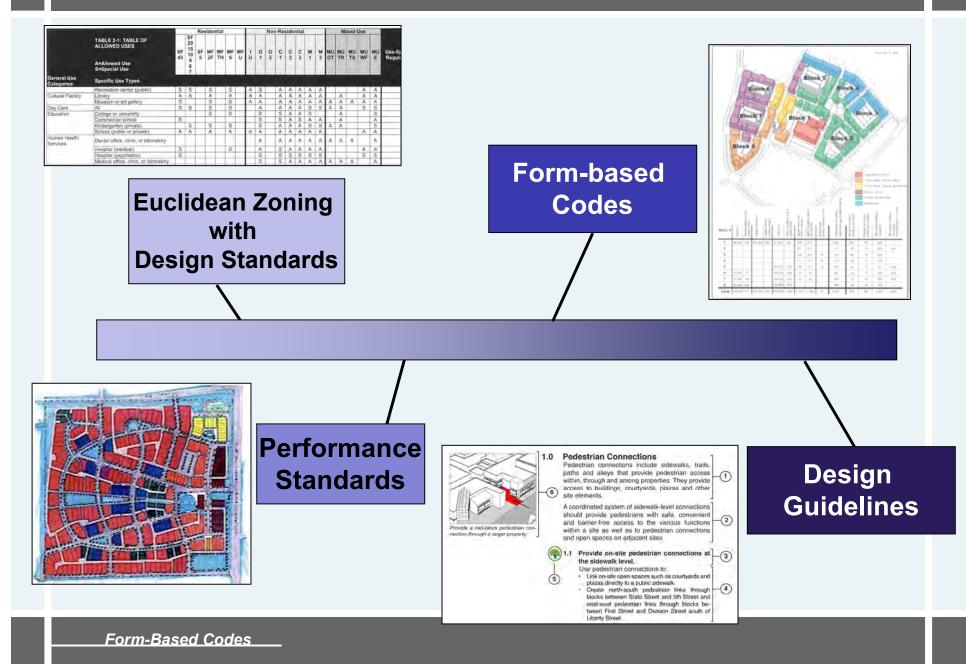
□ They:

 Promote specific urban forms

Are more focused on
 what *is wanted* vs. what
 *is not wanted*

 Are not overly focused on the activities that occur within buildings

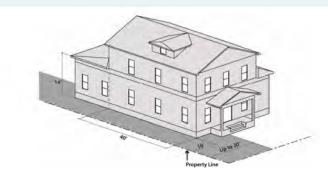
### **The Regulatory Continuum**



### **Types of Form-Based Code**

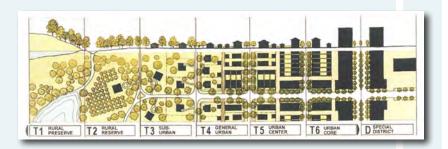
# Hybrid

- Elements of multiple code types
- May be layered over or combined with existing codes
- Pure Form-Based
  - Addresses public and private realm
  - Permits wide range of uses
- SmartCode
  - Comprehensive Planning Approach



- Exemptions: The following exemptions from the side yard wall articulation standards are permitted by the ordinance:
  - 1. Lots within the RL-2 zoning district that are less than 8,000 square feet.
  - Individual landmarks and buildings within historic districts, if found necessary and historically appropriate through the Landmark Alteration Certificate process.
  - 3. Lots less than 4,000 square feet and lots less than 45 feet average in width.
  - Lots that have an interior side yard adjacent to a nonresidential use or a multi-family structure for the length of the nonresidential use or multi-family structure.

### Boulder, CO - Hybrid Code



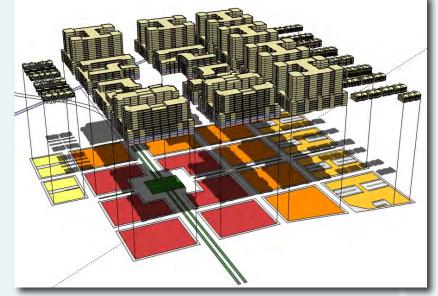
SmartCode

### **Form-Based Code Elements**

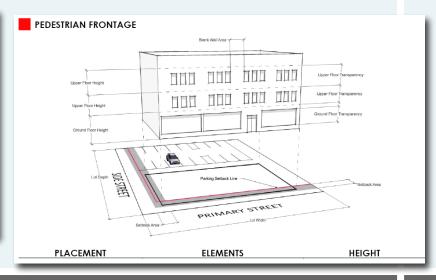
- Regulating Plan
- Public Space Standards
- Building Form Standards
- Additional Elements
  - Architectural Standards
  - Landscape Standards
  - Signage Standards

Massing Districts with Free-Standing Buildings	Street Elevation Height	Massing Articulation	Sethacks Adjacent R Massiny District
E East Huron	Max. Height-4 stories Min. Height-2 stories Offset-5' Average	60' Max. Surface Dimension, 5' Off-set Required	Side Yard -15' Setback -20' Offset at Streetwall Rear Yard -15' Setback at Property Line
IG Industrial/Greenway	Max. Height-4 stories Min. Height-2 stories Offset-5' Average	80' Max. Surface Dimension, 5' Off-set Required	-5' Setback at Alley -20' Offset
R Residential	Max. Height-3 stories Offset-5' Min.	40' Max. Surface Dimension, 5' Off-set Required	Side Yard -5' Setback Rear Yard -15' Setback at Property Line -5' Setback at Alley -20' Offset

Ann Arbor - Form-Based Zoning Standards

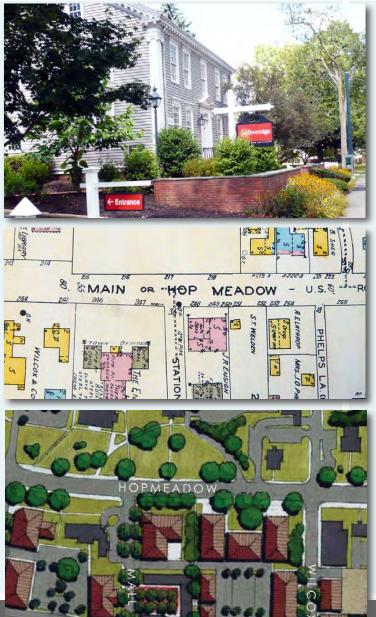


**Dallas - Form-Based TOD Standards** 



### Why Use a Form-Based Code?

- Implement a Plan Vision
  - Build Consensus
  - "Shape" Growth
- Streamline Approval Process
- Promote Historic Patterns and/or Desired Character





# Harford Courant COULTANL.COM

### **Region Agenda, Part 3: How To Act Regionally**

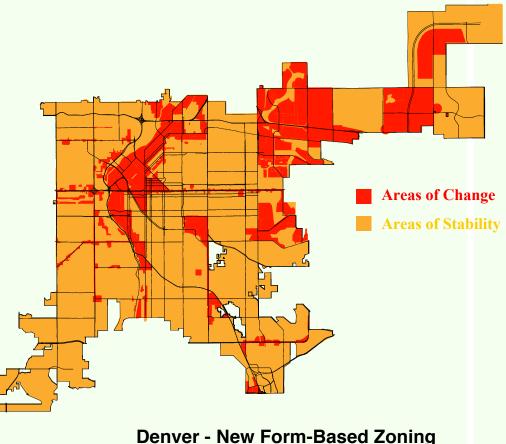
In recent years, state government has tried to counter this trend with smart, or responsible, growth policies. As Greater Hartford thinks about becoming a more cohesive metro region, it must plan to grow smartly to save energy, cut pollution, preserve open space and save farms. The region should:

4. CREATE MODEL ZONING REGULATIONS and other land-use tools so that towns are able to create the kind of mixed-use town centers envisioned by the regional and state plans. Traditional zoning separated uses; tried to keep the smelly factories away from the homes, etc. Now most of the factories are gone but the zoning rules remain, prohibiting what good planning is trying to encourage. **Hamden** this year became the first town in New England to embrace a different zoning philosophy, adopting a new code based more on the form of buildings rather than their use. Officials believe the new code will encourage mixed-use development along the town's three major north-south corridors. Some other towns, including **Simsbury**, are also looking at "form-based" codes.



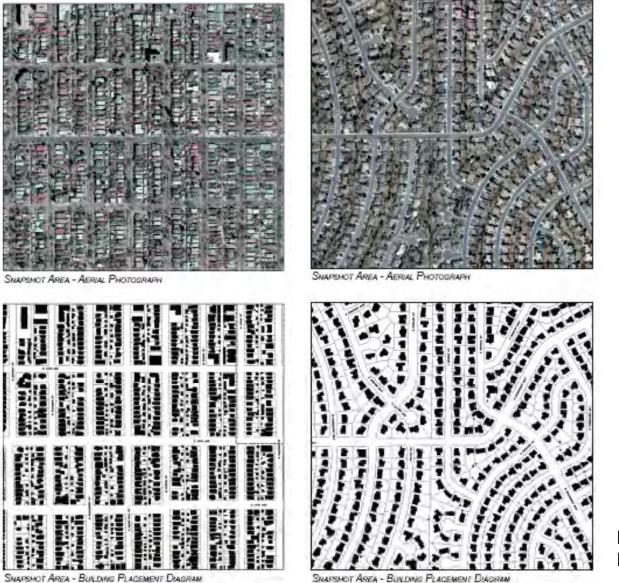
## **The Role of Context**

- What are the Key Characteristics?
   Framework Level
   Site Level
   Building Level
- What are the Goals?
  - Established Areas
  - Redevelopment
     Areas



Denver - New Form-Based Zoning Code

### **Framework Level Features**

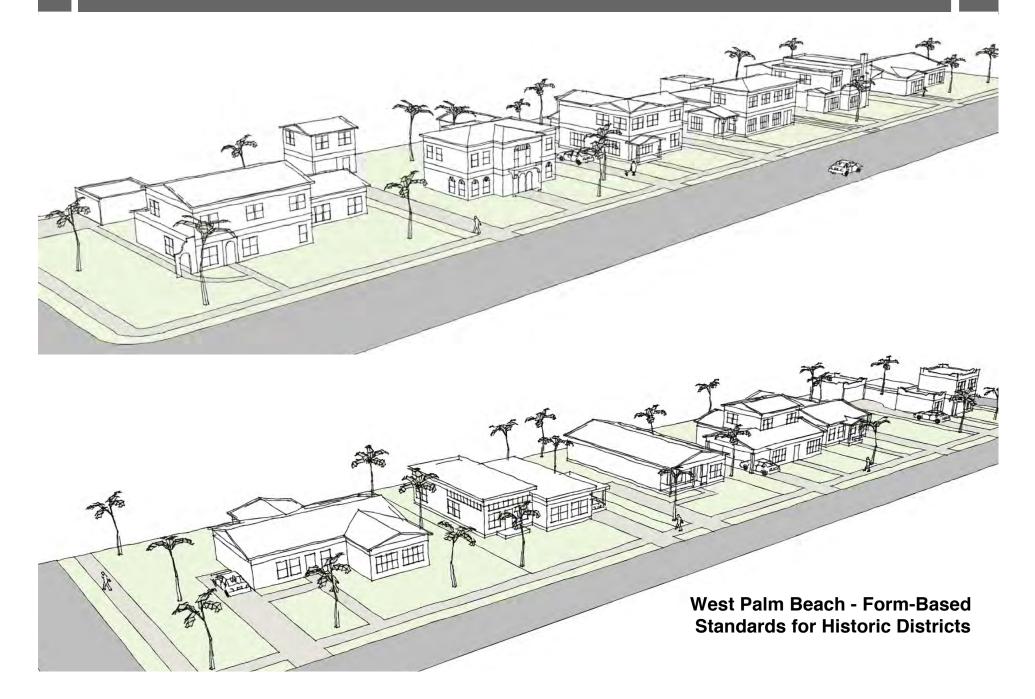


Denver - New Form-Based Zoning Code

## **Site Level Features**



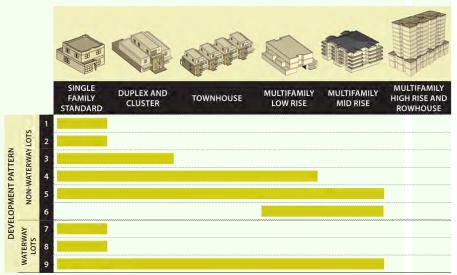
### **Building Level Features**



### **Community Identified Features**



Ft. Lauderdale - Neighborhood Development Criteria





### **Matching Context to Goals**

#### ARTICLE 4. URBAN EDGE (E-) NEIGHBORHOOD CONTEXT

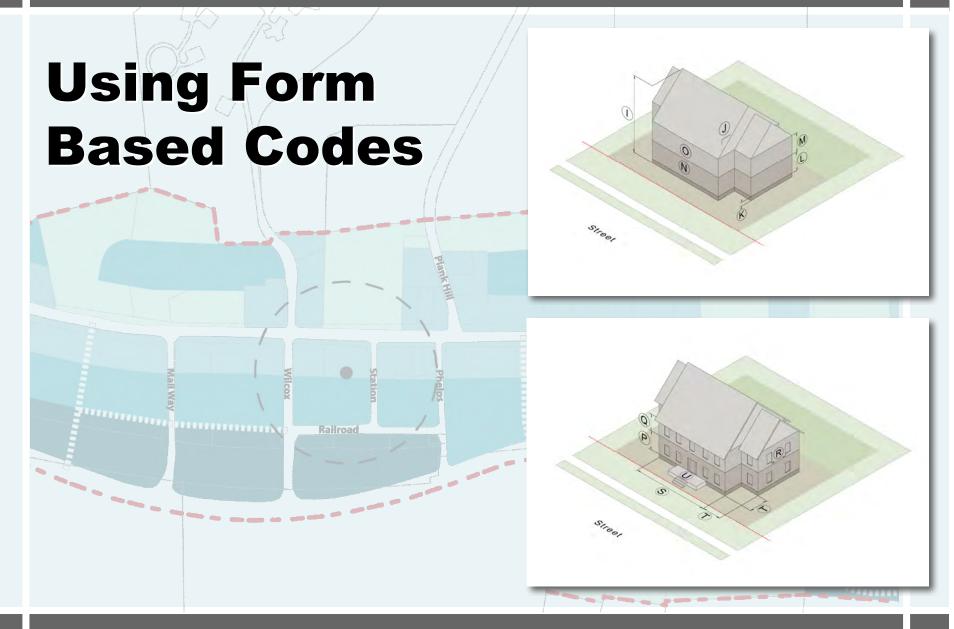
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	Zone District:	s	Suburban House	Urban House	Detached Acc. Dwelling Unit	Duplex	Tandem House	Town House	Garden Court	Row House	Courtyard Apartment	Apartment	Drive Thru Services	Drive Thru Restaurant	General	Shopfront
-	E-SU-A	Single Unit A		20								1				
	E-SU-B	Single Unit B														
1.1	E-SU-D	Single Unit D		1												
	E-SU-D1	Single Unit D1														
	E-SU-Dx	Single Unit Dx												1		
	E-SU-D1x	Single Unit D1x														
Urban Edge Neighborhood Context	E-SU-G	Single Unit G		1												
Q C	E-SU-G1	Single Unit G1		- <b>1</b>												
hoo	E-TU-B	Two Unit B														
hboi	E-TU-C	Two Unit C		din S		1		11								
Neig	E-TH-2.5	Town House 2.5														
lge	E-MU-2.5	Multi Unit 2.5														
an Eo	E-CC-3	Commercial Corridor 3														
Urb	E-MX-2x	Mixed Use 2x												1		
	E-MX-2, -2A, 3, 3A	Mixed Use 2, 2A, 3, 3A									•		٠		۰	
	E-RX-5	Residential Mixed Use 5														14
	E-MS-2x	Main Street 2x														
	E-MS-2, -3	Main Street 2, 3														
	E-MS-5	Main Street 5														

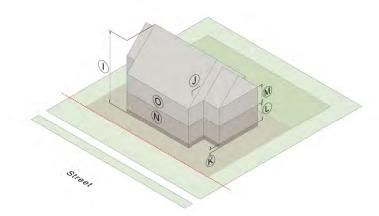
= Allowed

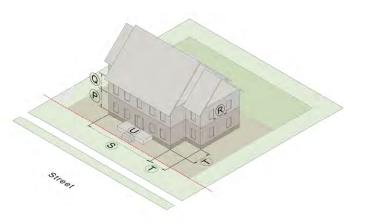
= Allowed subject to limitations

### Denver - New Form-Based Zoning Code



### **Building Form Standards**





#### **HEIGHT AND USE**

Hei	ght	
()	Building height (max)	Varies (see height map)
J	Roof pitch (min/max)	5:12 / 12:12
K	Ground story finished floor elevation	
Ŭ	Residential (min/max)	2' / 4'
	Nonresidential (min/max)	0' / 2'
	Ground story height, floor to floor (min/max)	9' / 12'
M	Upper story height, floor to floor (min/max)	9' / 12'
Allo	owed Use Summary*	
$\mathbb{N}$	Ground story	Residential, public, commerce
0	Upper story	Residential, public, commerce

\*See Chapter 4 for specific use requirements

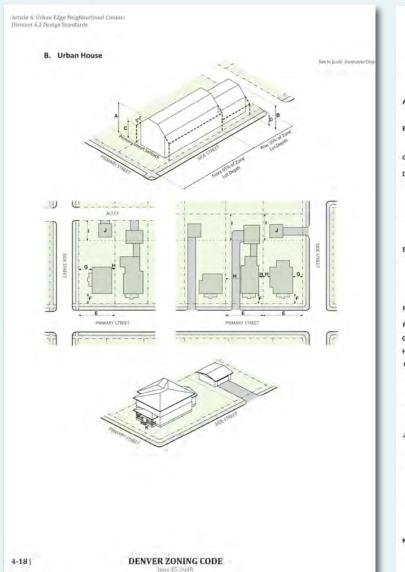
#### FORM

Transparency						
P Ground story (min/max)	20% / 40%					
Upper story (min/max)	20% / 40%					
Blank wall area (max)	35'					
Facade Articulation						
S Front wall length without offset (max)	40'					
① Front wall offset length & depth (min)	10'					
Building Entrances						
① Street facing entrance	Required					
(V) Entrance spacing (max)	n/a					
Allowed Building Element Summary*						
Public	Gallery, awning					
Semi-Public	Porch, stoop, balcony					
*Soo Soo 2.11 for specific building element requirements						

\*See Sec. 2.11 for specific building element requirements

#### Simsbury - Simsbury Center Draft Form-Based Code

### **Building Form Standards**



Article 4, Urban Edge Neighborhood Contest Invision 4.3 Doilgn Standards

#### URBAN HOUSE

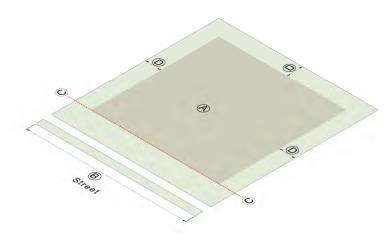
URBAN HOUSE	E-SU-A	E-SU-R	E-SU-D E-5U-D1	E-SU-Dx E-SU-D1x	E-SU-G1	E-TU-B	E-TU-C	E-TH-2.5 E-MU-2.5	
Stories (max)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Feet, front 65% of lot depth (max)	30'	30'	30'	30 <sup>+</sup>	30'	30	30'	30'	
Feet, front 65% of lot depth, allowable height increase	P	for every	5' increase	in lot width	over 50'up	to a maxin	num heigh	t of 35"	
Feet, rear 35% of lot depth (max)	17	17'	17'	17	17	17'	17'	17'	
Feet, rear 35% of lot depth, allowable height increase		1'for ever	ry 3' increa	se in side se	tback up to	a maximu	m height c	f 19'	
Bulk Plane Vertical Height at Side Interior and Side Street Zone Lot in front 65% of lot	17	17'	17	17'	17"	17	17	17'	
Bulk Plane Vertical Height at Side Interior and Side Street Zone Lot in rear 35% of lot	10'	10'	10'	10'	10'	10'	10'	10'	
Bulk Plane Slope from Side Interior and Side Street Zone Lot	45"	45°	45*	45"	45"	45"	-45"	-45*	
SITING	F.Sti.a	E.SILR	E-SU-D	E-SU-Dx E-SU-D1x	E-SU-G	E-TU-B	E-TU-C	E-TH-2.5 E-MU-2.5	
ZONE LOT	L DU H	2.30.0	2.30.01	E-90-014	E DU GI	FIGD	0100	6-1110 A.	
Zone Lot Size (min)	3,000 ft7	4,500ft	6.000 ft <sup>2</sup>	6,000 ft <sup>2</sup>	9,000 ft <sup>-</sup>	4.500 ft <sup>3</sup>	5,500 ft1	4,500 ft	
Zone Lot Width (min)	25'	35'	50"	50'	62.5'	35'	50'	35'	
Dwelling Units per Primary Structure (min/max)	1/1	1/1	1/1	1/1	1/1	1/2	1/2	1/2	
				AILE-SU, TU,	TH, MU Districts				
SETBACKS AND BUILDING COVERAGE BY ZONE LOT WIDTH	30.0	riless	31.	to 40'	41.0	0 74	75'0	r Greater	
Primary Street, block sensitive setback required (see Sec. 13.1,2.2)	У	es	. I	yes		is .	yes		
Primary Street, where block sensitive setback does not apply (min)		Ó.,	3	20	20'		20*		
Side Street (min)	3	£	5		3	F		7,5	
Side Interior (min)		3.	10' min	one side/ combined	5'			10'	
Rear, alley/no alley (min)	12	/20'	- 12	720'	12/20		12/20		
Building Coverage, including all accessory struc- tures (max)	50	996	37	.5%	37.	5%	3	7.5%	
PARKING BY ZONE LOT WIDTH									
Parking and Drive Lot Coverage in Primary Street Setback (max)		20 ft <sup>x</sup>	and	paces 320 ft/	20 ft/ 33			33%	
Vehicle Access	Fn	om alley;	or Street a	ccess allowe	d when no	alley prese	int See Sec	4.3.7.6	
ACCESSORY STRUCTURES				(10.00)					
Detached Accessory Structures Allowed				(see	Sec. 4.3.4)	_			
DESIGN ELEMENTS	E-SU-A	E-SU-B	E-SU-D E-SU-D1	E-SU-DH E-SU-D1x	E-SU-G	E-TU-R	E-TU-C	E-TH-2.5 E-MU-2.5	
BUILDING CONFIGURATION	and the second		220 31	2 2 2 2 14	JI	2.20			
Attached Garage Allowed	(1) Shall not project closer to the front line of the zone lot than does any other part of the Front Facade of the dwelling (2) If located entirely within the rear 35% of the zone lot depth, the attached garage shall comply with the Detached Garage building form								
Loor width in first 50% of lot depth(max)	standards 35% of the entire width of the front facade of the dwelling or 16, whichever is greatester								
GROUND STORY ACTIVATION									
Pedestrian Access, Primary Street	Entry Feature								

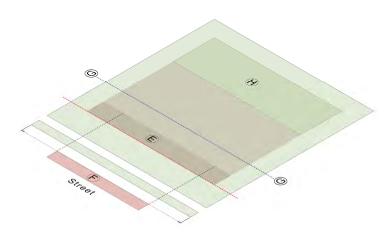
Form-Based Codes

**Denver - New Form-Based Zoning Code** 

## **Frontage Standards**

### SEC. 2.4 SIMSBURY CENTER - 1 (SC-1)





#### LOT

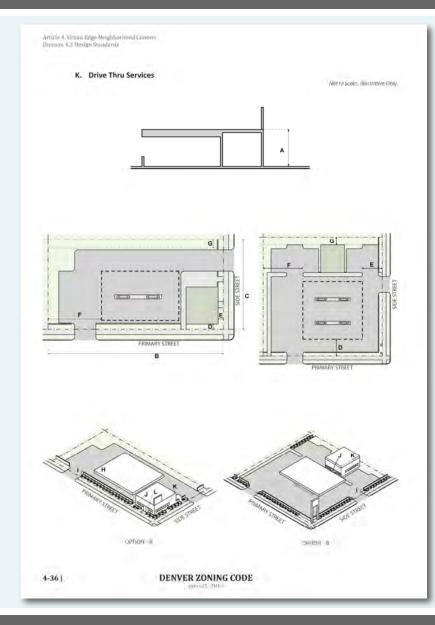
Lot Dimensions	
Area (min)	5,000 sf
B Width (min)	50'
Building Setbacks	
© Setback line, street (min)	Varies (see regulating plan)
D Setback, protected district (min)	20'
D Setback, unprotected district (min)	0' or 15'

#### PLACEMENT

Bui	ld-to	
E	Street setback area (min/max)	0' / 15'
Ð	Building width in setback area (min % of lot width)	50%
Pa	king Location	
G	Setback line, street (min)	Varies (see regulating plan)
	Setback, protected district (min)	10'
	Setback, unprotected district (min)	0' or 5'
Ор	en Space	
H	% of open area on the lot (min) By-right By Special exceptions	50% 20%

### Simsbury - Simsbury Center Draft Form-Based Code

### **Frontage Standards**



Article 4. Urban Rdge Neighborhood Context Division 4.3 Design Standards

#### DRIVE THRU SERVICES

	DRIVE THRU SERVICES	E-CC-3	E-MX-2-2A E-MS-2	E-MX-3, 3A E-MS-3, -5				
	Stories (max)	3	2	3				
	Feet (max)	45'	35'	45'				
			E-MX-2-2A, -3, -3A E-MS-2, -3, -5	E-MX-2,-3 E-MX-2A, 3A				
	SITING	E-CC-3	Option A	Option B				
	ZONELOT							
	Use Restrictions	Automobile Services, Light and/or Primary Use with Accessory Drive Thru Use, excluding Eating/Drinking Establishments Additionally, in E-MX-2A, 3A Option 8 is limited to Gasoline Service Station Use Only						
	REQUIRED BUILD-TO							
	Primary Street (min % within min/max)*	na	50% 07/15	na				
	Side Street (min % within min/max)*	na	50% 0'/15'	na				
	SETBACKS							
	Primary Street (min)	0'	0,	0'				
	Side Street (min)	0.	0'	0.				
	Side Interior (min)	0'	0'	0'				
	Side Interior, adjacent to Protected District (min)	10	10'	10'				
	Rear (min)	0'	Q,	0.				
-	Rear, adjacent to Protected District , alley/no alley (min)	0'/10'	0'/10'	0'/10'				
	PARKING Surface Parking between building and Primary Street/Side Street	Allowed/Allowed	Not Allowed/Not Allowed	Allowed/Allowed				
	DESIGN ELEMENTS	E-CC-3	E-MX-2 -2A, -3, -3A E-MS-2, -3, -5 Option A	E-MX-2, -3 E-MX-2A, 3A Option B				
	BUILDING CONFIGURATION							
	*Canopy	na	Building shall be used to meet a portion of the Primary and Side Street Build-To. Canopy may be used to meet a portion of the Pri- mary and Side Street Build-To.	nă				
	Screening Required	See Article 10	Garden Wall required within 0/15' Primary and Side Street frontages, e portions of building within 0'/15', f Article 10, Sectio	cluding access points a plowing the standards				
	Upper Story Setback Above 27; adjacent to Protected District: Rear, alley/ Rear, no alley and Side Interior (min)	15%25	15'/25'	15'/25'				
	GROUND STORY ACTIVATION							
	Transparency, Primary Street (min)	40%	40% E-M5: 60%	40%				
	Transparency, Side Street (min)	25%	25%	25%				
	Pedestrian Access, Primary Street	Pedestrian	Entrance	Pedestrian Connectio				
	Pedestrian Access, Primary Street	Connection	Entrance	Pedestrian Connec				
		DENVER ZO	ONING CODE	14-37				

Denver - New Form-Based Zoning Code

### **Streetwall Standards**

- Address the height of buildings at the sidewalk edge
- Promote uniformity or variation in the street character



Existing , varied, streetwall rhythm



Potential infill development with varied stepback to preserve existing streetwall rhythm

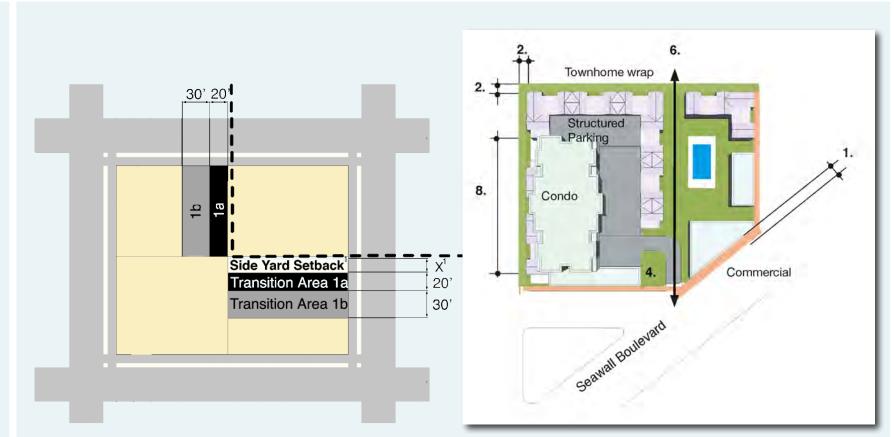
Ann Arbor - Form-Based Design Standards and Guidelines

### **Transition Area Standards**

Stepping down towards neighbors
 Preserving views and connections
 Presenting an attractive face

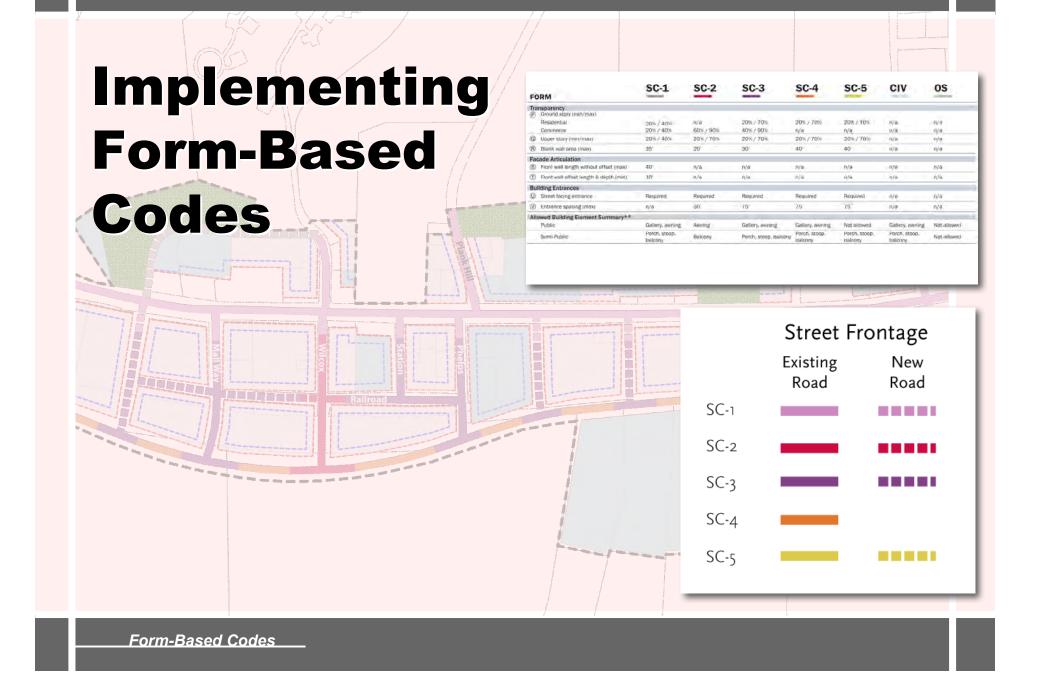
Galveston - Form-Based Zoning Standards and Design Guidelines for the Waterfront

### **Transition Area Standards**



Setbacks and height transitions
 Preservation of historic street corridors

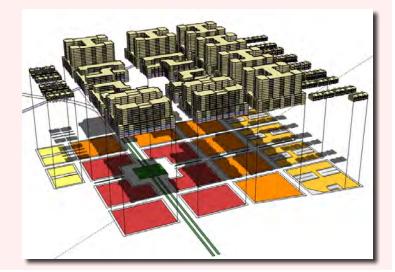
Galveston - Form-Based Zoning Standards and Design Guidelines for the Waterfront



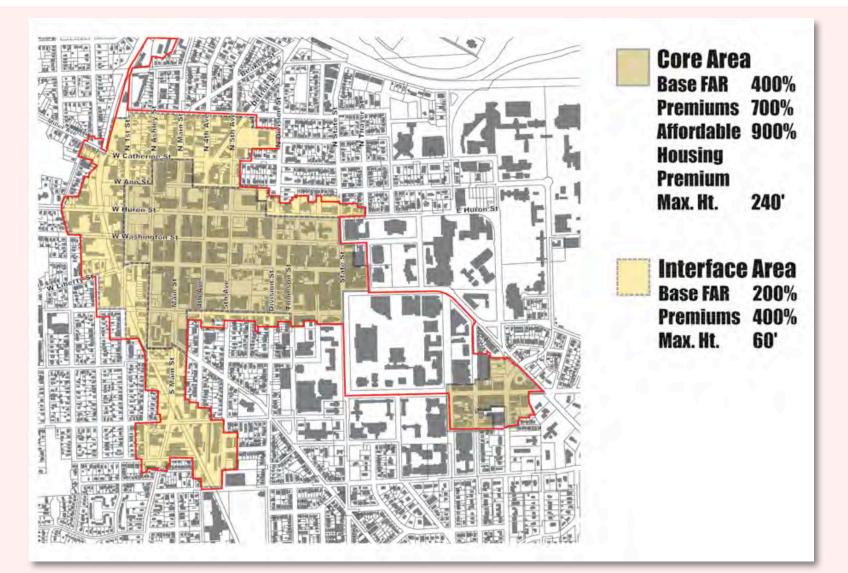
## Implementing Tools

 Base Zone Districts
 Zoning Overlays
 Frontages
 Conservation Districts
 Historic Districts





### **Base Zone Districts**

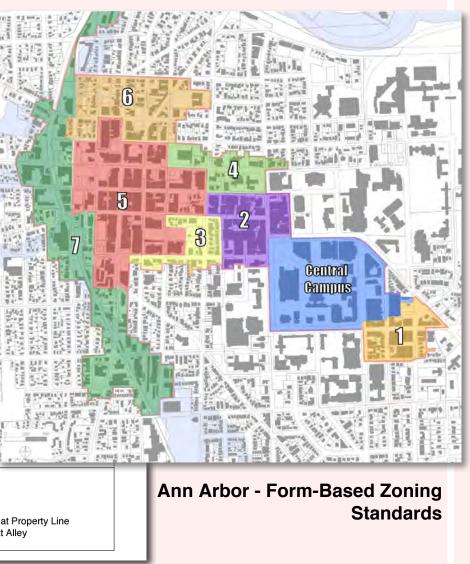


Ann Arbor - Form-Based Zoning Standards

### **Zoning Overlays**

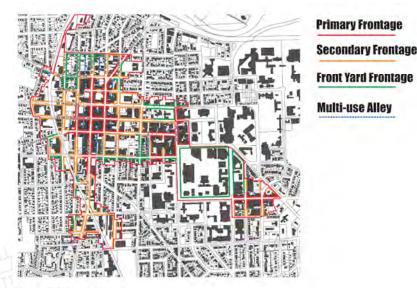
 Supplement Underlying Zoning
 Provide Additional Context Sensitivity

Massing Districts with Free-Standing Buildings	Street Elevation Height	Massing Articulation	Sethacks Ad
E East Huron	Max. Height-4 stories Min. Height-2 stories	60' Max. Surface Dimension, 5' Off-set Required	Side Yard -15' Setback -20' Offset a
10	Offset-5' Average	202 May Curford Dimension	Rear Yard -15' Setback -5' Setback
IG Industrial/Greenway	Max. Height-4 stories Min. Height-2 stories Offset-5' Average	80' Max. Surface Dimension, 5' Off-set Required	-20' Offset
R Residential	Max. Height–3 stories Offset–5' Min.	40' Max. Surface Dimension, 5' Off-set Required	Side Yard -5' Setback
			Rear Yard -15' Setback at Property Line -5' Setback at Alley -20' Offset



### **Street Frontages**

- Address the Character of Specific Block Fronts
- Generally Supplements
   Base or Overlay Districts



Ann Arbor - Form-Based Zoning Standards

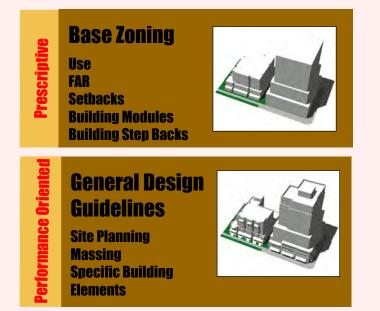
Simsbury - Simsbury Center Draft Form-Based Code

Simsbury Center Regulating Plan

### **Combining Tools**

- Most Tools are not Mutually Exclusive
  - Design standards

     (zoning) and design
     guidelines are often
     used together

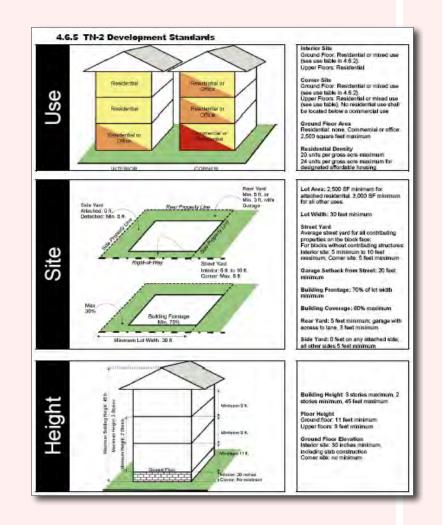




**Ann Arbor - Form-Based Zoning Standards** 

### **Discussion**

- Where are form basedcodes most appropriate?
- Could they result in cookie cutter development or stifle creativity?
- Can they replace discretionary review processes?



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