

# Using Form-Based Codes to Implement Urban Design Plans

Communities on the Line:  
Transit and the Design of  
21<sup>st</sup> Century Communities

October 8, 2005

Bill Spikowski — Spikowski Planning Associates  
www.spikowski.com

## OVERVIEW

- Purpose of form-based codes
- Concepts behind these codes
- Components of these codes
- For further information...

## the public realm



## the public realm?



## Form-based code reform: applications

- ↑ bug fixes: setbacks, mixed use, parking
- greenfield / infill - t.n.d.'s
- ↓ splices: overlays, special area plans
- citywide: SmartCode

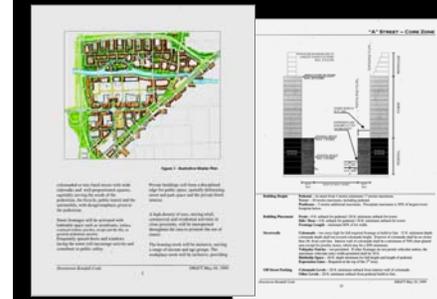
## start with a specific place...



## create a physical vision...



## embed the physical vision into local codes...



## VILLAGE OF EUCLID, OHIO v. AMBLER REALTY CO., 272 U.S. 365 (1926)

Euclid Ohio was an emerging village on the edge of suburban Cleveland. In order to promote sound orderly growth, the city adopted a comprehensive plan and zoning ordinance.

## Conventional Zoning

Section	Section Title	Description
Sec. 25-25	Permitted uses.	No building, structure or land shall be used in the professional office district (PO) for the display, delivery and storage of equipment, or any retail...
Sec. 25-26	Lot size.	The minimum size of lots in the professional office district (PO) shall be as follows:
Sec. 25-27	Lot coverage.	The maximum lot coverage in the professional office district (PO) shall be forty-five (45) percent.
Sec. 25-28	Building height.	There is no limit on the height of buildings in the professional office district (PO), except that...

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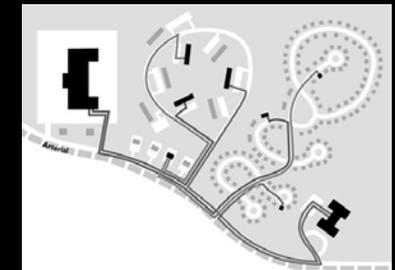
### Sec. 25-28. Building height.

There is no limit on the height of buildings in the professional office district (PO), except that...

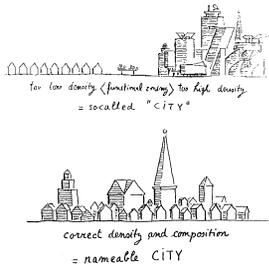
## Planned Unit Development Zoning

"The Planned Unit Development (PUD) zoning district is a special purpose zoning district that is intended to encourage innovative land planning and design and avoid monotony sometimes associated with large developments."

## Planned Unit Development Zoning



**How designers communicate:**



**How engineers communicate:**

Lee County Generalized Peak Hour Two-Way Service Volumes Urbanized Areas d:\nos02\input1						
Uninterrupted Flow Highway						
Level of Service						
Lane	Divided	A	B	C	D	E
2	Undivided	170	590	1200	1700	2,280
4	Divided	1,740	2,820	4,080	5,280	6,000
6	Divided	2,610	4,230	6,120	7,920	9,000

Arterials Class I (>0.00 to 1.99 signalized intersections per mile) Level of Service						
Level of Service						
Lane	Divided	A	B	C	D	E
2	Undivided	*	500	1,330	1,570	1,620
4	Divided	790	2,650	3,330	3,410	**
6	Divided	1,180	4,350	4,990	5,120	**
8	Divided	1,550	5,640	6,340	6,480	**

**How planners and lawyers communicate:**

4 25-82 FORT MYERS CODE

**Sec. 25-82. Permitted uses.**

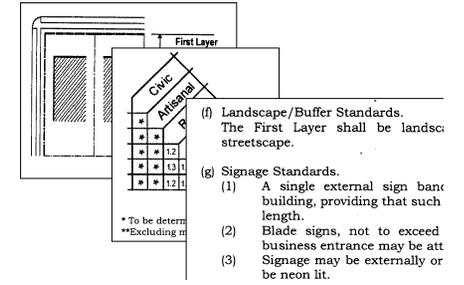
No building, structure or land shall be used in the professional office district (PO) for the display, delivery and storage of equipment, or any retail sales unless provided for herein, and no building or structure shall hereafter be erected, constructed, arranged or intended to be used or occupied for any purpose other than for one (1) or more of the following uses:

- (1) Any permitted or conditional use in residential (A-3), excluding boarding, rooming and lodging facilities, mobile home parks, multi-family over sixteen (16) units per acre and commercial wireless telecommunication facilities.
- (2) Banking (SIC 60 all).
- (3) Credit agencies other than banks (SIC 61 all).
- (4) Security and commodity brokers, dealers, exchanges and services (SIC 62 all).
- (5) Pharmaspheres centers.

Such uses shall be permitted only in a hospital campus. For purposes of this section, "hospital" shall mean a facility licensed by the state, provides full medical and emergency care, has on-site security and a minimum of three hundred (300) beds.

- (12) Legal services (SIC 81 all).
- (13) Membership organization (SIC 86 all).
- (14) Engineering, accounting, research, management and related services (SIC 87), excluding 8744 facilities support management services.
- (15) Services not elsewhere classified (SIC 899).
- (16) Transportation services (472 only).
- (17) Along First Street and McGregor Boulevard from U.S. 41 to the Edison Estate

**ALL modes of communication:**



**CONCEPTS behind form-based codes:**

- \* Based on a physical plan or shared vision for a specific place
- \* Priority on designed form, more than use or density
- \* Buildings shape the public space

**COMPONENTS of form-based codes:**

1. Regulating plan(s)
2. Building form standards
3. Architectural standards (optional)
4. Street standards

**Regulating plans start with a vision**

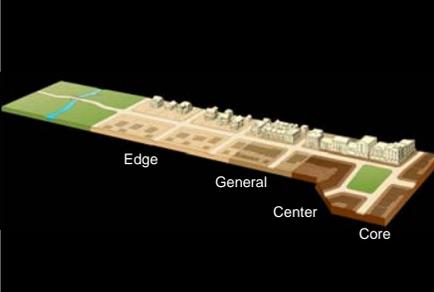


Downtown Kendall – Plan by Duany Plater-Zyberk and Dover, Kohl & Partners

**coding by transect zone**



**coding by transect zone**



**coding by street type**



**coding by open space**



**Metropolis Two to be launched on January 17**



**Regulating plans:**



**Regulating plans:**



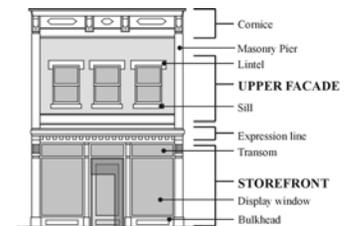
**Building form standards:**

**Height**

1. Maximum Height: 58 ft. above grade
2. Minimum Height: 2 stories at least 27 ft above grade. Dormers are not considered stories.
3. First Story Elevation: 10 ft floor to ceiling minimum.

University Heights neighborhood, Gainesville, FL

**Architectural standards, drawn:**



**Architectural standards, written:**

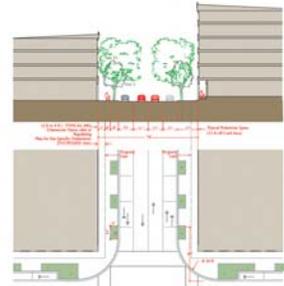
**Materials**

•--- Building walls shall be clad in lapped boards, wood shingles, boards, battens or fiber-cement exterior siding such as "Hardie-Plank."

--- Building walls may be finished in brick, stucco, stone or cast stone.

College Park neighborhood, Gainesville, FL

**Street standards:**



**FORMS of form-based codes:**

- **Floating overlay**, assigned by rezoning process
- **Optional code**, adopted but freely chosen by individual developers
- **Mandatory code**, sometimes an overlay, but often a complete replacement for a zoning district

**Codifying New Urbanism**  
How to Reform Municipal Land Development Regulations

APA American Planning Association  
PAS Planning Advisory Service  
Report Number 526

**Planning Advisory Service  
Report Number 526**

Congress for the New Urbanism

The New Urbanism  
Joined and Embellished Community

The magazine of the American Planning Association August/September 2004 \$7

**PLANNING**

**Planning -- Aug.-Sept. 2004**

FBCI Form-Based Codes Institute

Home Board Members Resources

The Form-Based Codes Institute (FBCI) was formed in early October 2004 at a meeting convened at the Dieckhaus Estate in Lake Geneva, Wisconsin. Leading practitioners in the disciplines of urban design, planning, architecture, public policy, and law met to consider various aspects of this emerging regulatory technique.

The goals of the institute include:

- Setting standards for the practice of Form-Based Codes (FBC)

**www.formbasedcodes.org**

FBCI Form-Based Codes Institute

ACADEMY for the NEW URBANISM

Form-Based Codes:  
An Introductory Course  
November 3-5, 2005 Alexandria, VA

**www.formbasedcodes.org**

**Pleasant Hill BART station,  
Contra Costa County, CA:**  
[www.geoffreyferrell.com/id69](http://www.geoffreyferrell.com/id69)

**Farmer's Branch DART station,  
Farmer's Branch, TX:**  
[www.ci.farmers-branch.tx.us/Planning/Codes1project.html](http://www.ci.farmers-branch.tx.us/Planning/Codes1project.html)

**Downtown Kendall,  
Dade County, FL:**  
[www.doverkohl.com/project\\_graphic\\_pages\\_pdfs/Downtown%20Kendall%20project%20page.pdf](http://www.doverkohl.com/project_graphic_pages_pdfs/Downtown%20Kendall%20project%20page.pdf)

**SPIKOWSKI  
PLANNING  
ASSOCIATES**

William M. Spikowski, AICP

1617 Hendry Street, Suite 416  
Fort Myers, Florida 33901-2947  
phone: (239) 334-8866  
fax: (239) 334-8878  
e-mail: [bill@spikowski.com](mailto:bill@spikowski.com)  
web: [www.spikowski.com](http://www.spikowski.com)