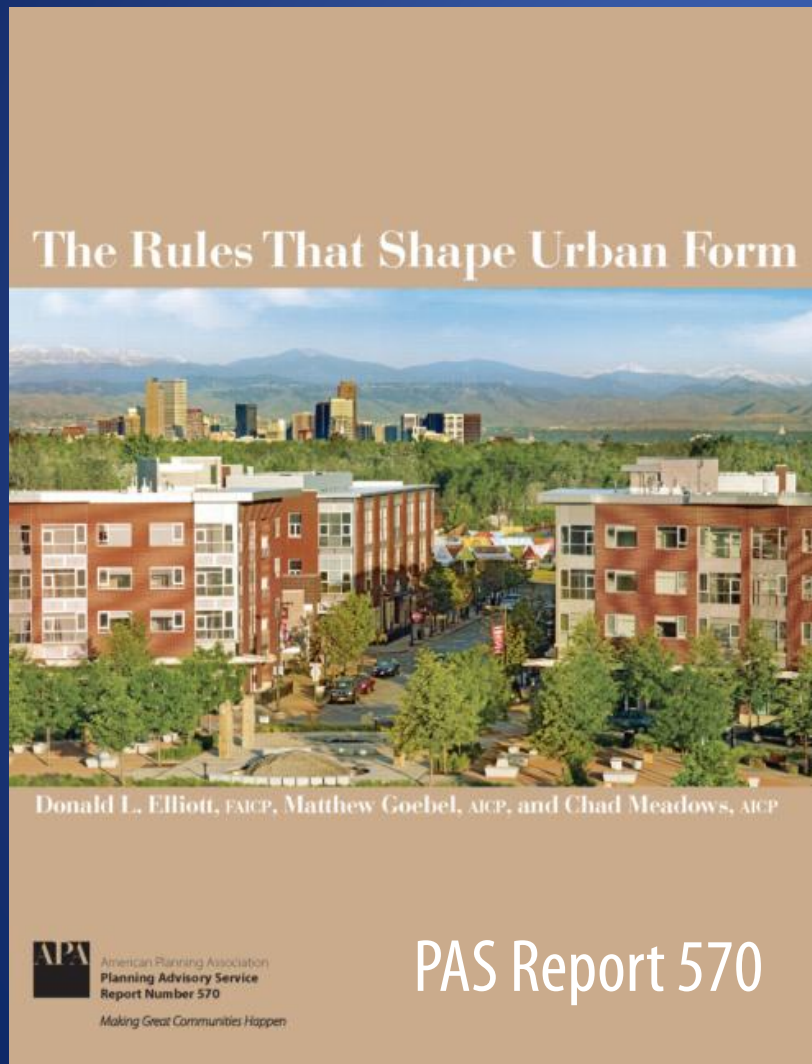


Form Controls for the Real World

2013 APA-PA Conference



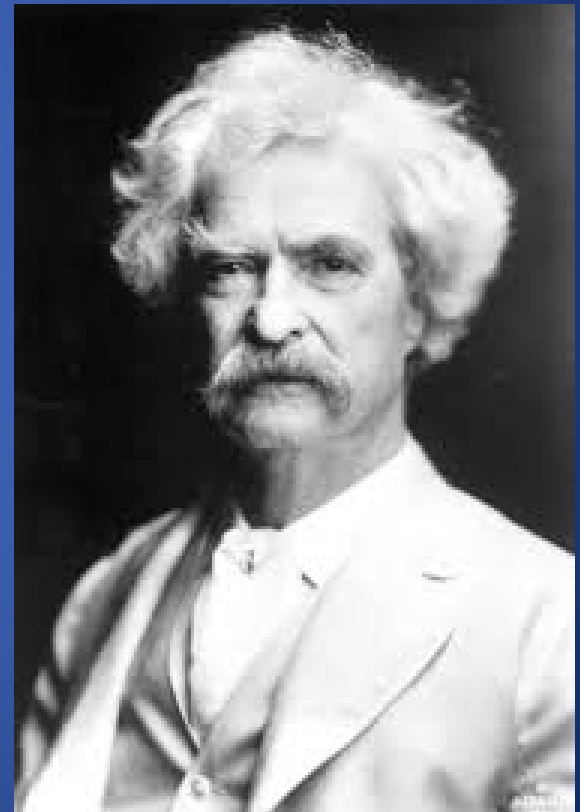
Don Elliott, FAICP
Chad Meadows, AICP
Clarion Associates

Form Controls for the Real World

What is it (from a new angle)?

How is it being used?

What are we learning?



Form Controls for the Real World

First . . .

There were nuisances

- From WAY back

Then there was zoning

- Remember Euclid

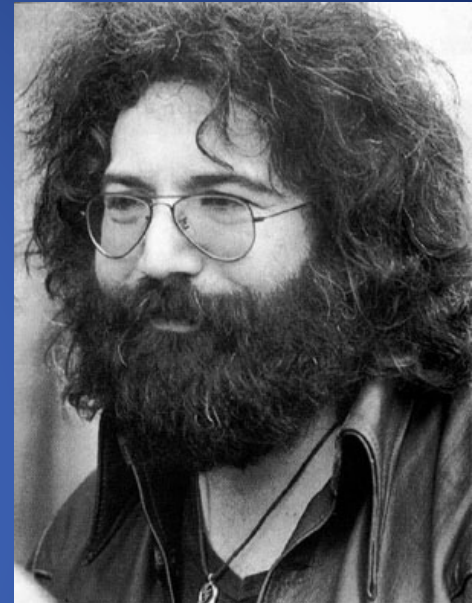
Then zoning got too rigid

- Too many districts and uses

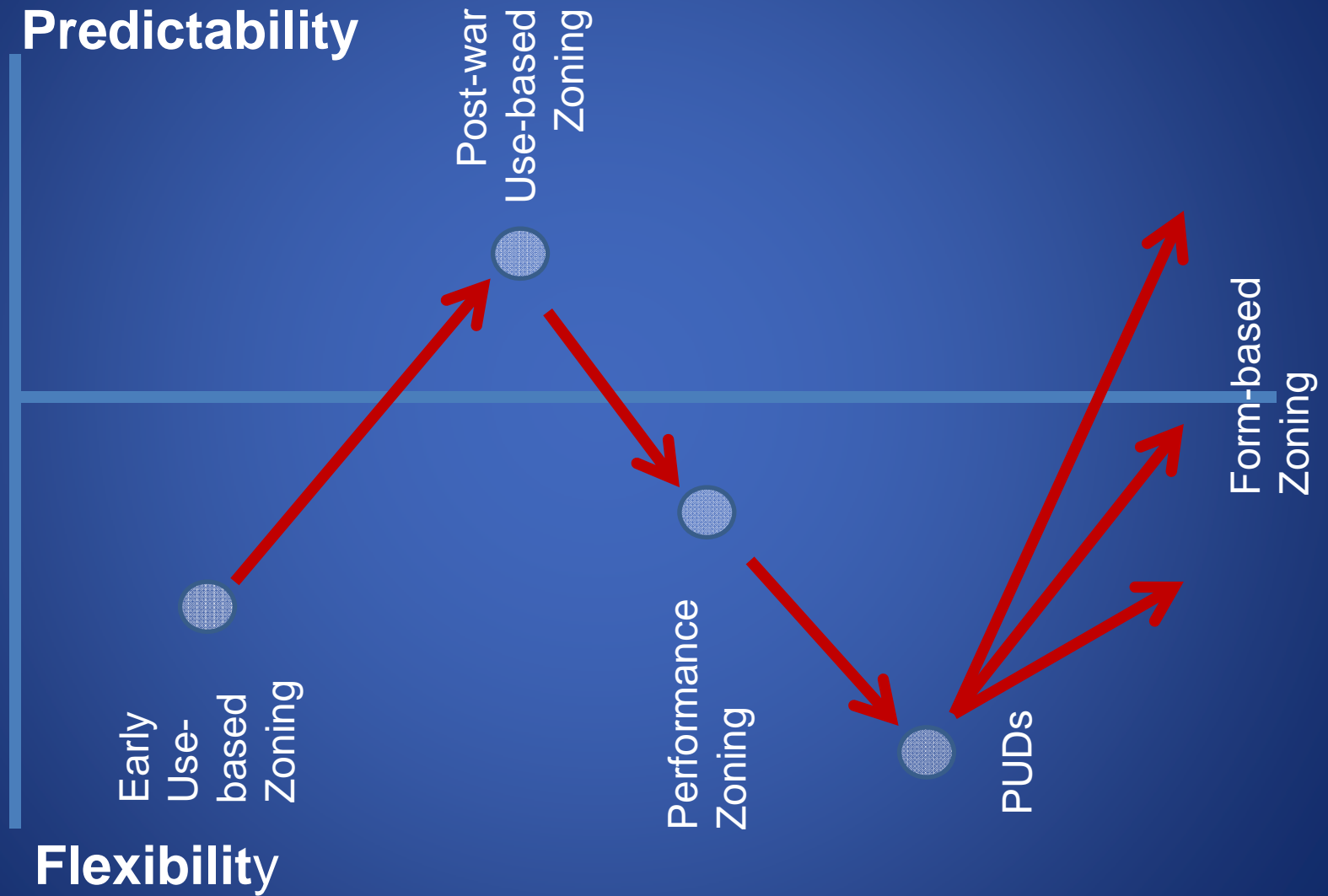
Then zoning got too flexible

- PUDs and performance zoning reduce predictability

Then zoning got form-based



The Path of Zoning Evolution

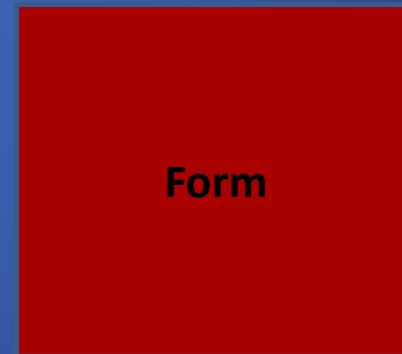
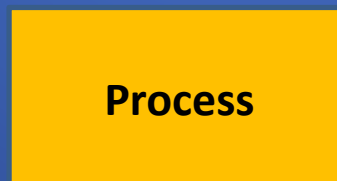


What is Form-based Zoning?



Myth 1: Traditional zoning is based on use separation.

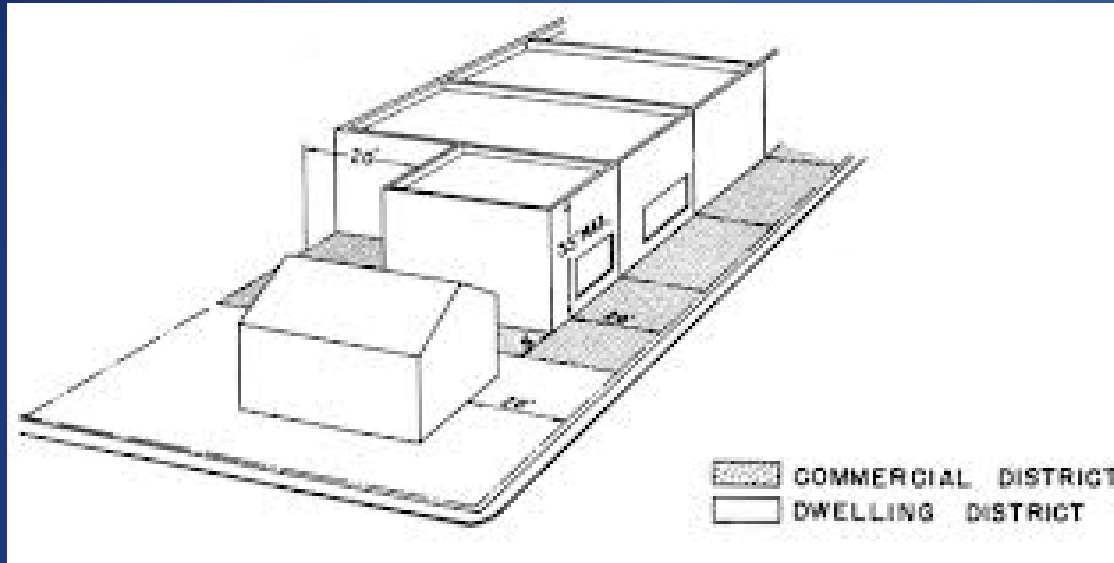
False: It is based on use regulation – but mixes are always allowed



Myth 2: Form-based zoning ignores uses – anything goes anywhere

False: Uses are regulated – just more lightly – and secondarily

What is Form-based Zoning?

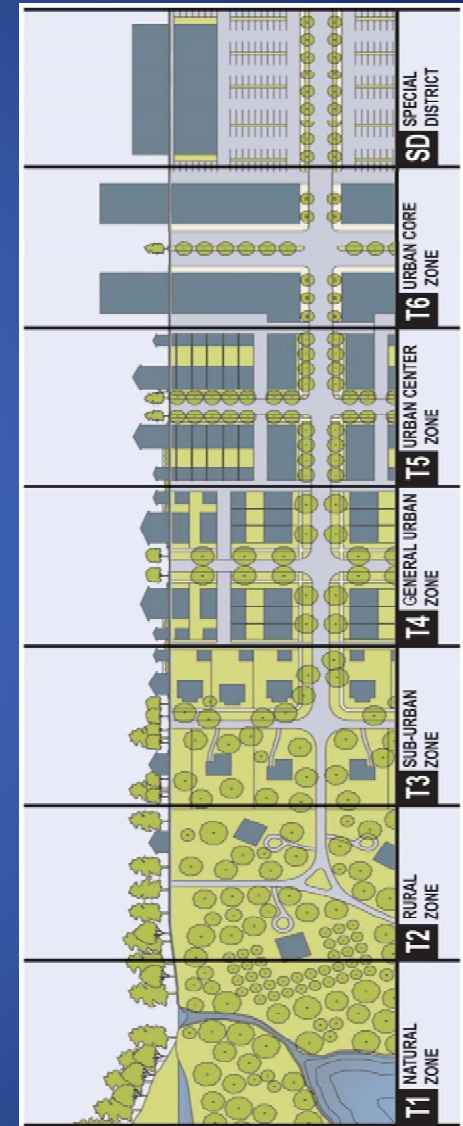


Downtown Building

What is Form-based Zoning?

FBCI Core Elements List

- Building Form Standards
- Building Type Standards
- Frontage Type Standards
- Public Space Standards
- Block and Subdivision Standards
- Regulating Plan



What is Form-based Zoning?

Building Forms & Types



Downtown Building



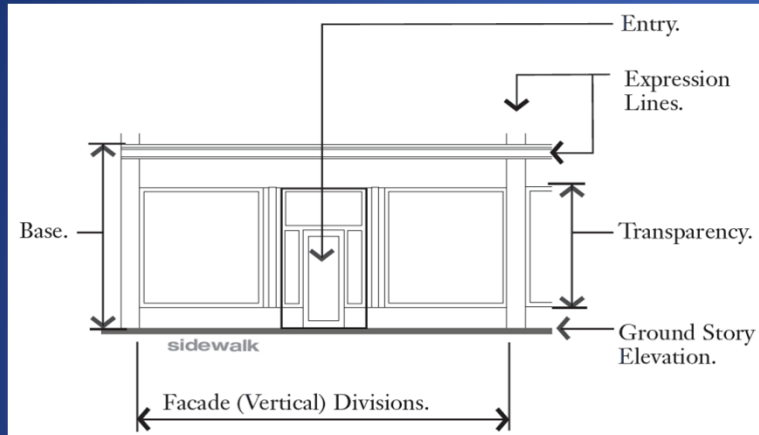
		Building Types by Districts					
		Districts					
		MS-1 (Main Street)	MS-2 (B Street)	MS-3 (Transitions)	DT-1 (High Street)	DT-2 (Support)	DT-3 (East High)
Building Types	Storefront Building	●		●	●	●	●
	General Stoop Building		●	●		●	●
	Cottage Commercial	●	○	●			●
	Civic Building		●	●	●	●	●
	Row Building		●			●	
	Parking Structure					◐	

● = Permitted within district
 ○ = Permitted only on corner parcels
 ◐ = Permitted on secondary street only

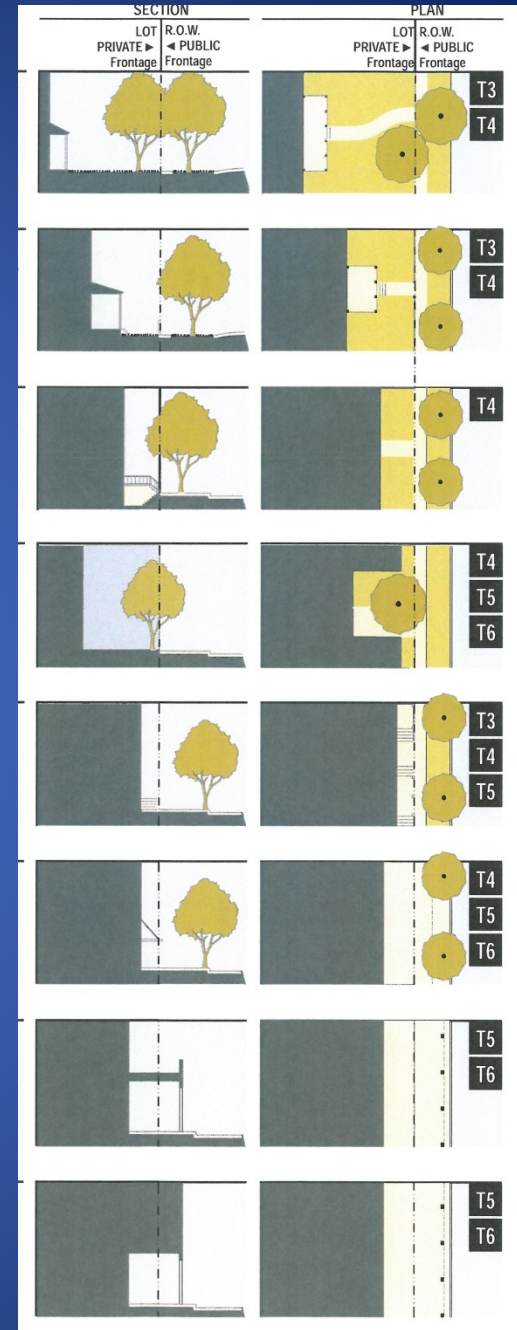
Table 1129.40 (1). Permitted Building Types by District.

What is Form-based Zoning?

Frontage Types

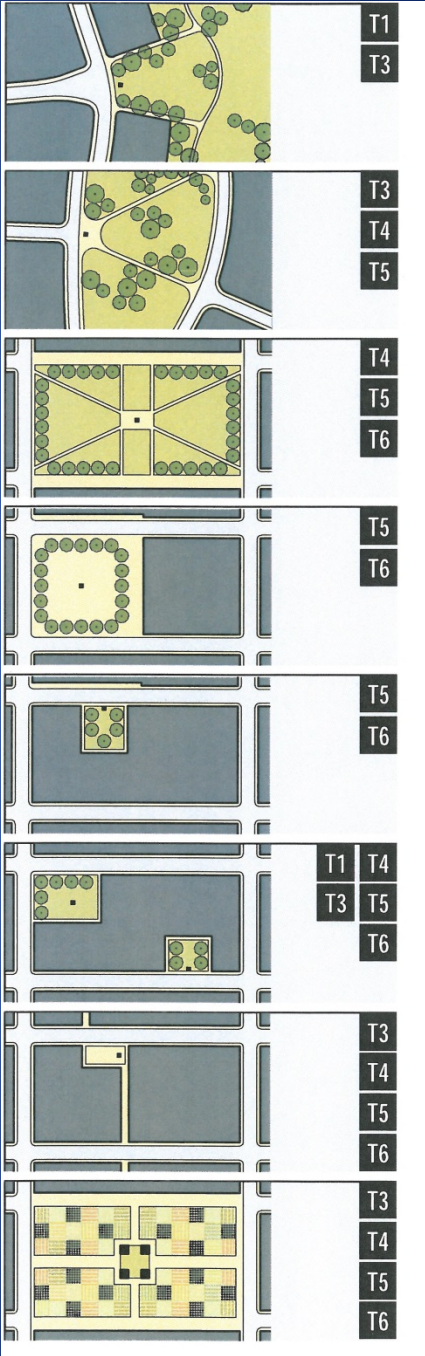
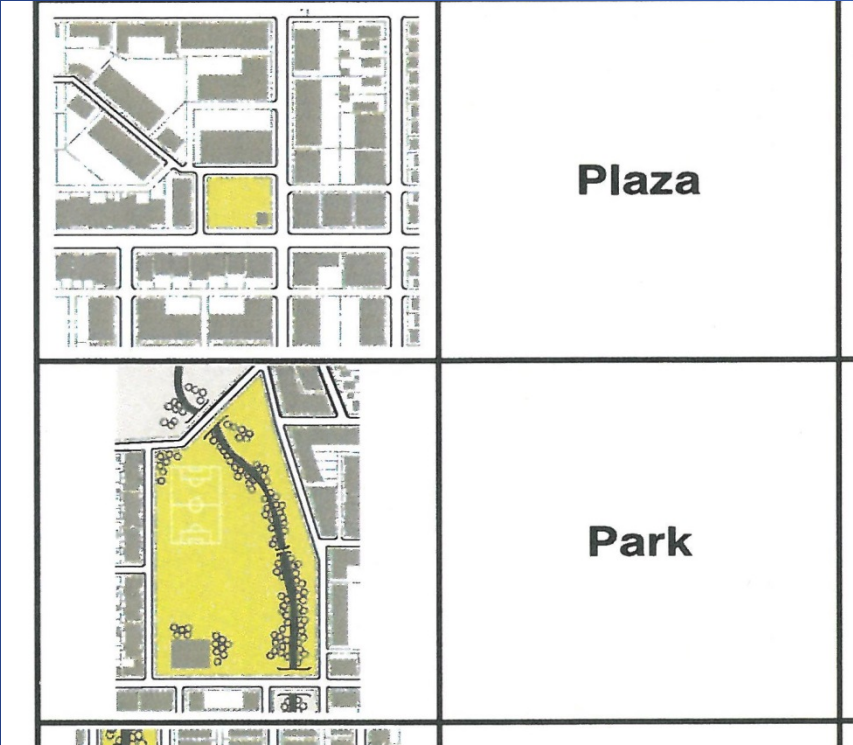


Storefront Frontage



What is Form-based Zoning?

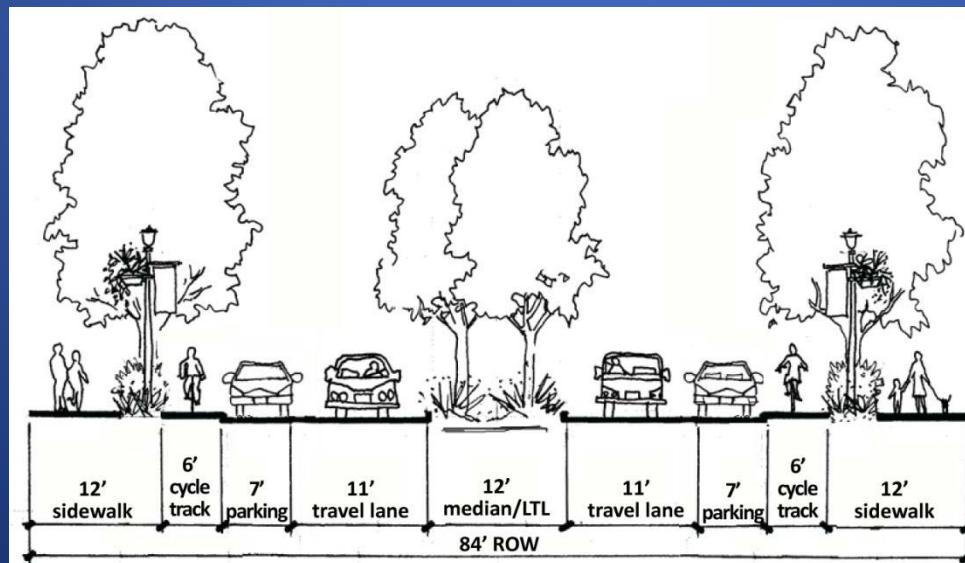
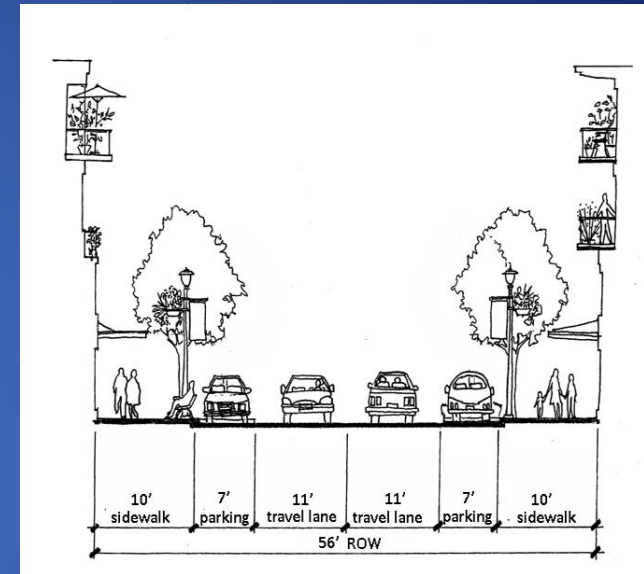
Public Space Standards



What is Form-based Zoning?

Public Space Standards

Sometimes Include Thoroughfare Standards



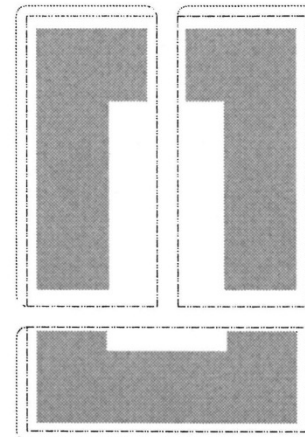
What is Form-based Zoning?

Block and Subdivision Standards

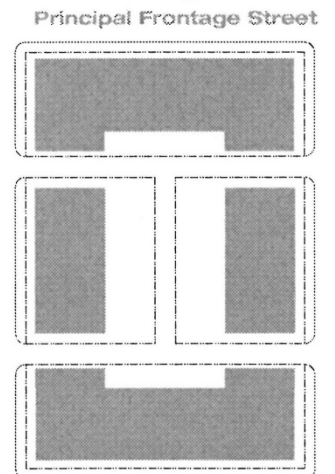
Table 153.060-A. Maximum Block Dimensions

MAXIMUM BLOCK DIMENSIONS		
BSC DISTRICTS	LENGTH (FT)	PERIMETER (FT)
Residential	425	1,450
Office Residential	500	1,750
Office	500	1,750
Commercial	500	1,750
Historic Residential	200	800
Historic Core	200	800

“T” Configuration

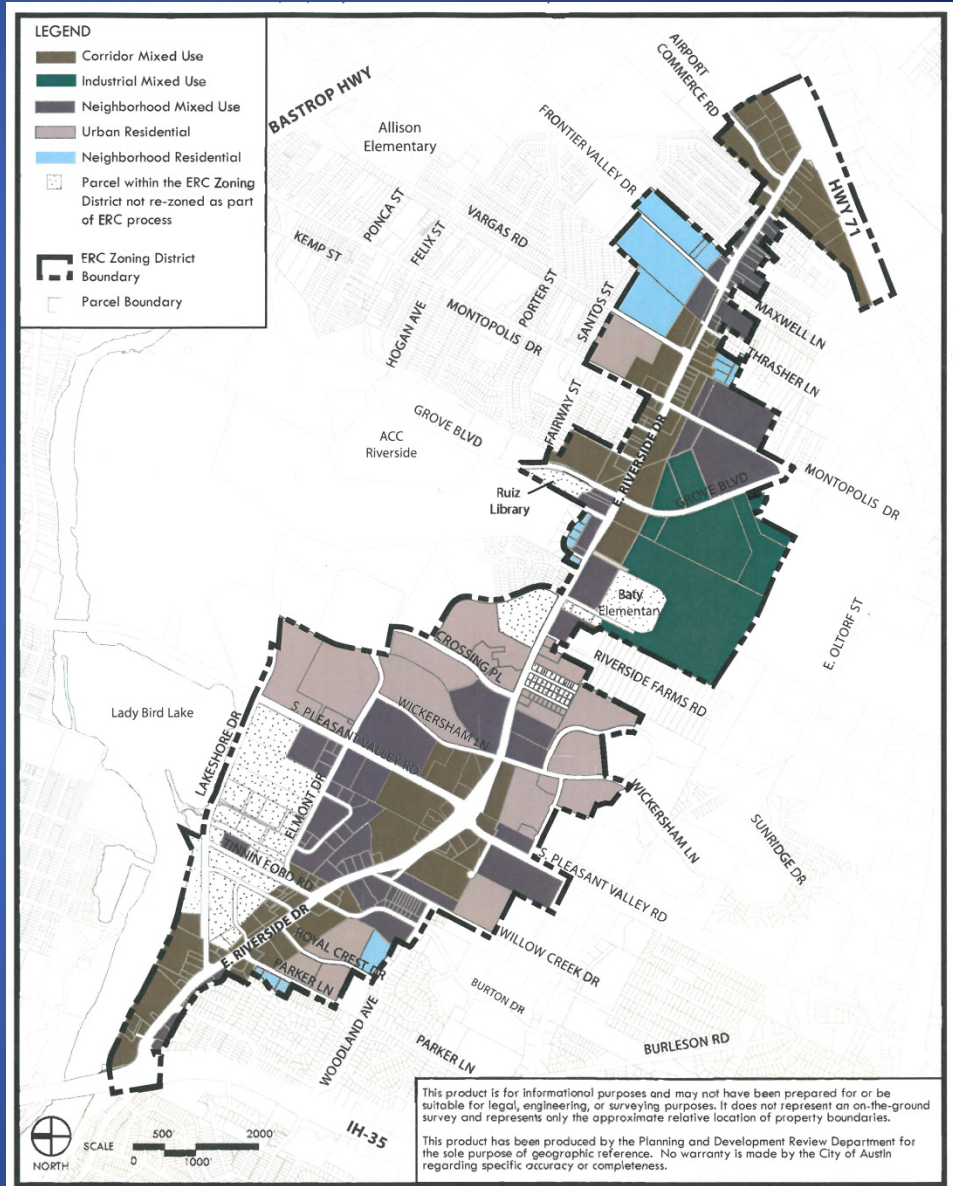


“H” Configuration



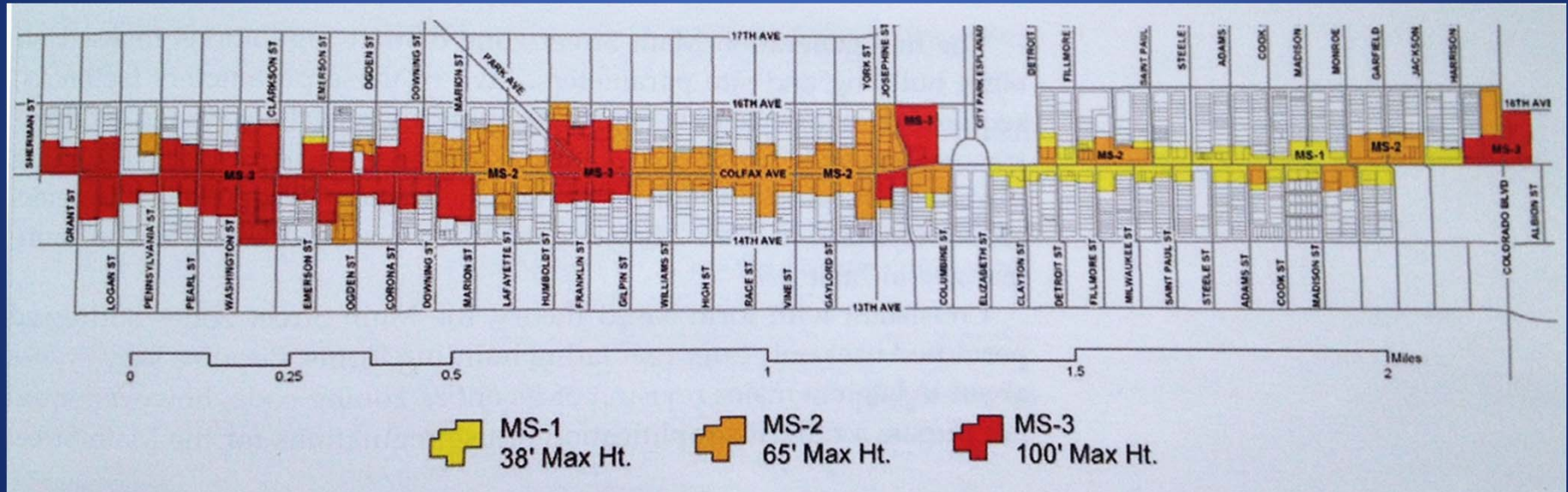
What is Form-based Zoning?

Regulating Plan



What is Form-based Zoning?

Regulating Plan



What is Form-based Zoning ?

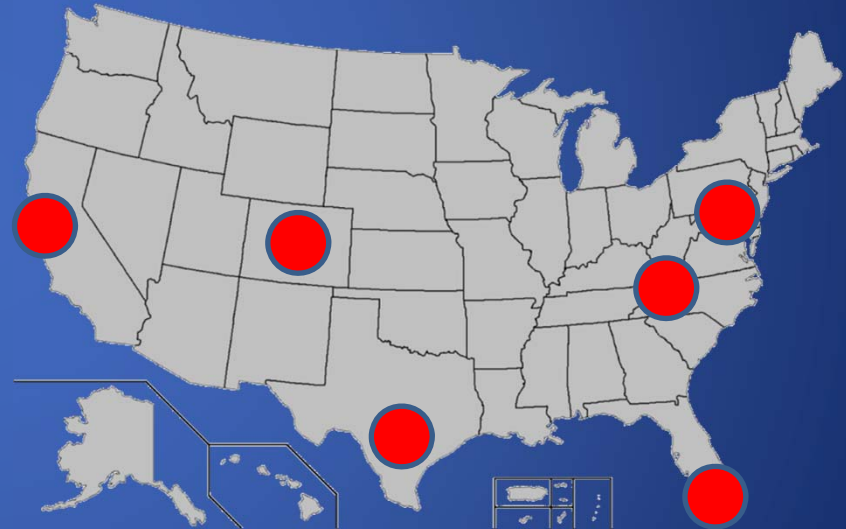
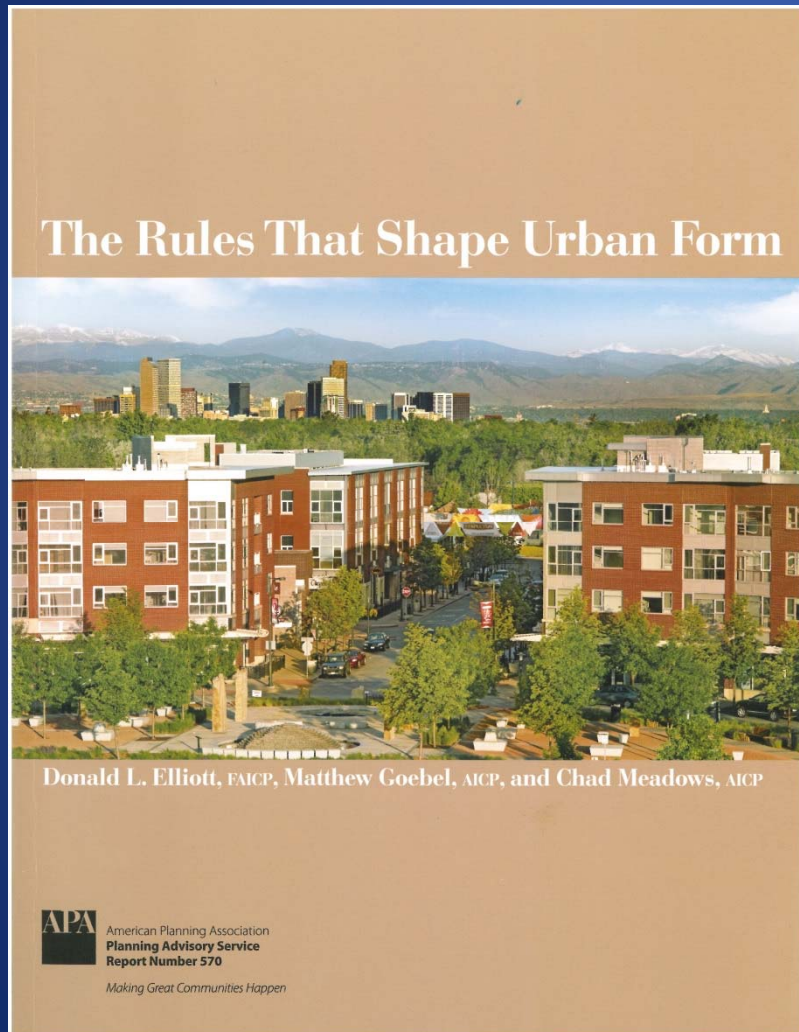
By-right Development?



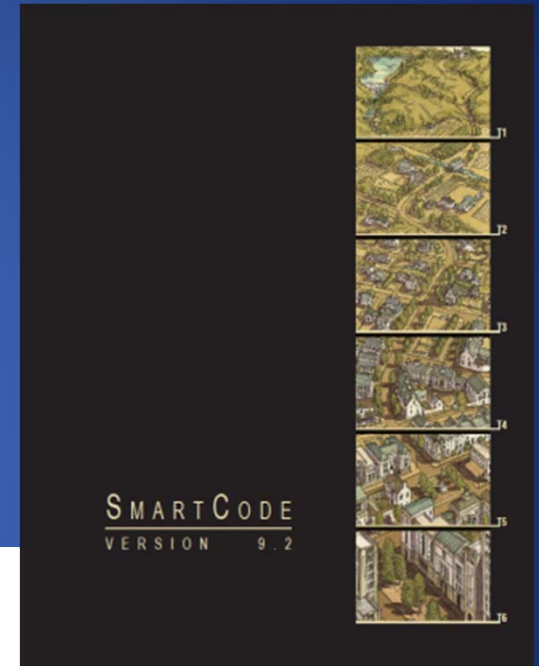
Not Really – All New Codes Try to Do That

- All code reforms simplify uses
- Most code reforms try to define permitted shapes, forms, or types development to avoid site plan hearings whenever possible
- Form-based controls are a good way to sell use simplification

The Rules That Shape Urban Form

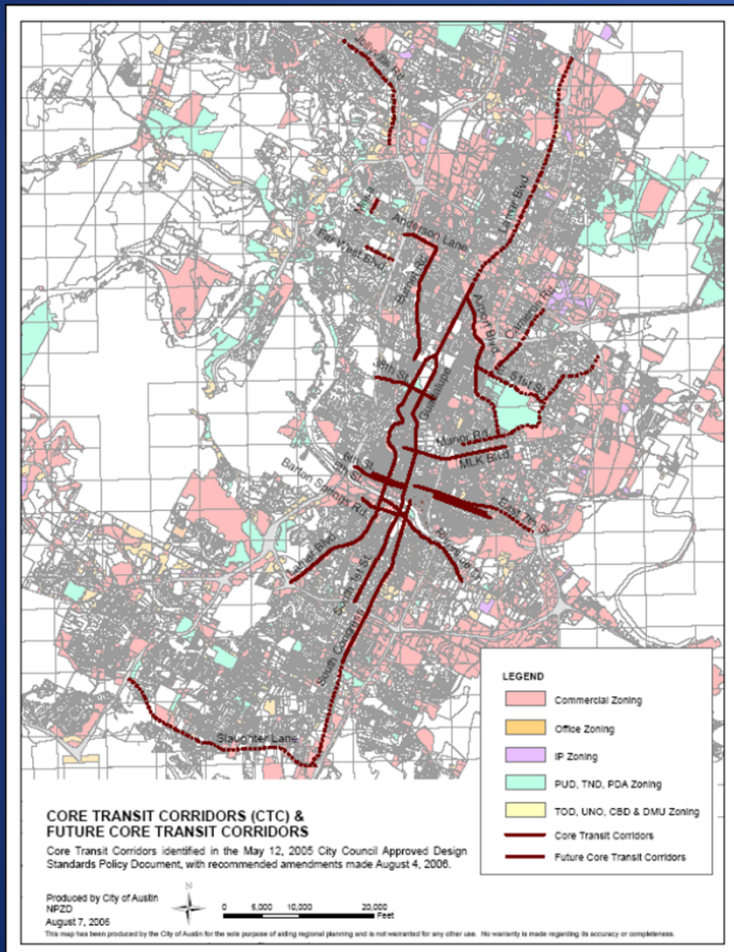


The Rules That Shape Urban Form



The Rules That Shape Urban Form

Austin TX



1-POINT OPTIONS
Achieve City of Austin Green Building Program 1-star rating.
Provide for liner stores in building façade.
Provide façade articulation meeting specified standards.
Provide primary entrance design meeting specified standards.
Provide roof design meeting specified standards.
Provide building materials meeting specified standards.
2-POINT OPTIONS
Achieve City of Austin Green Building Program 2-star rating.
75% of façade facing principal street consists of storefronts with at least 2 separate entrances facing principal street.
Provide sustainable roof meeting specified standards.
Integrate solar power generation into building design.
3-POINT OPTIONS
Develop VMU building.

The Rules That Shape Urban Form

Mooreville NC

TABLE 5.1.4: TABLE OF ALLOWED USES [1]

		ALLOWABLE BUILDING FORMS																				ADDITIONAL REQUIREMENTS									
USE CATEGORY	USE TYPE [2]	R-2		R-3		R-5		RMX		RMX-MH		TND-C		NMX		CMX		HB		VC			TC		GI		EI		PC-C		
		USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM		USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	
Restaurant	Restaurant without Drive-Through Service							C	SF			C	SF	P	SF WR	P	SF WP CR	P	SF WP CR	C	CV SF WP	P	CV SF WP					P	CV SF WP	5.3.3 (7)	
	Restaurant with Drive-Through Service													C	SF WP	P	SF WP CR	P	SF WP CR					C	WP CR			C	CV SF WP	5.3.3 (7)	
Retail Sales and Services	Bar, Nightclub, or Similar Establishment											C	SF			C	CV SF	P	SF WP CR	C	SF WP	C	SF WP	C	WP CR					5.3.3 (8) (A)	
	Crematory																	C	CV WP					C	WP	C	CR WP				
	Retail/Service Use with Gasoline Sales											P	SF WP	C	SF CR	P	SF CR	P	SF CR	P	SF CR	C	CV SF WP	C	CV SF WP	C	WP CR		C	WP CR	5.3.3 (8) (B)
	Type I Retail Use							C	DH AR SF	C	DH AR SF	P	DH AR SF WP	P	DH AR CV SF	P	DH AR CV SF WP	P	DH AR CV SF WP CR	P	DH AR CV SF WP CR	P	DH AR CV SF	P	DH AR CV SF	C	SF WP		P	SF WP	5.3.3 (8) (D)

The Rules That Shape Urban Form

Mooreville NC



Commercial/Retail



Workplace



Shopfront

TABLE 5.1.4: TABLE OF ALLOWED USE

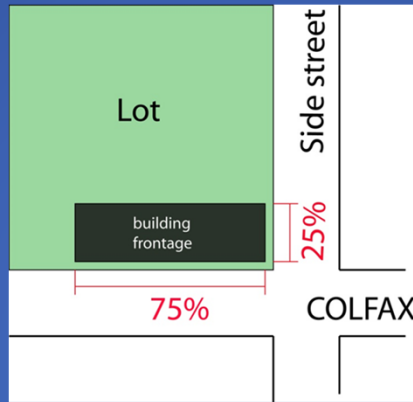
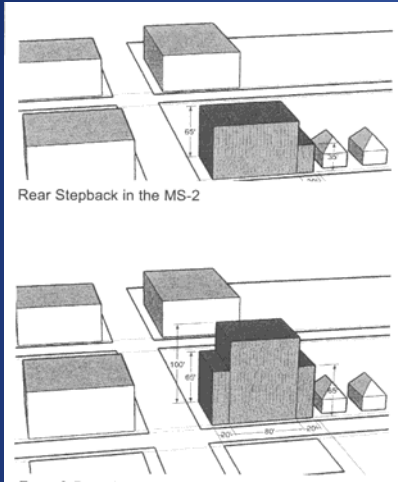
ALLOWABLE BUILDING FORMS

DH = DETACHED HOUSE **AR = ATTACHED RESIDENTIAL** **CV = CIVIC**
MA = MANSION APARTMENT **NA = NOT APPLICABLE** **SF = SHOPFRONT**

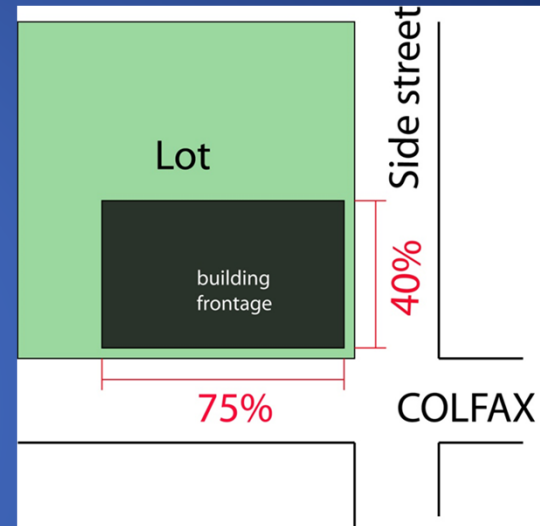
USE CATEGORY	USE TYPE [2]	R-2		R-3		R-5		RMX		RMX-MH		TND-C		NMX		CMX	
		USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM	USE	BLDG. FORM
Restaurant	Restaurant without Drive-Through Service							C	SF			C	SF	P	SF WR	P	SF WP CR
	Restaurant with Drive-Through Service													C	SF WP	P	SF WP CR
Retail Sales and Services	Bar, Nightclub, or Similar Establishment											C	SF			C	CV SF
	Crematory																
	Retail/Service Use with Gasoline Sales											P	SF WP	C	SF CR	P	SF CR
	Type I Retail Use							C	DH AR SF	C	DH AR SF	P	DH AR SF WP	P	DH AR CV SF	P	DH AR CV SF WP

The Rules That Shape Urban Form

Denver Main Street

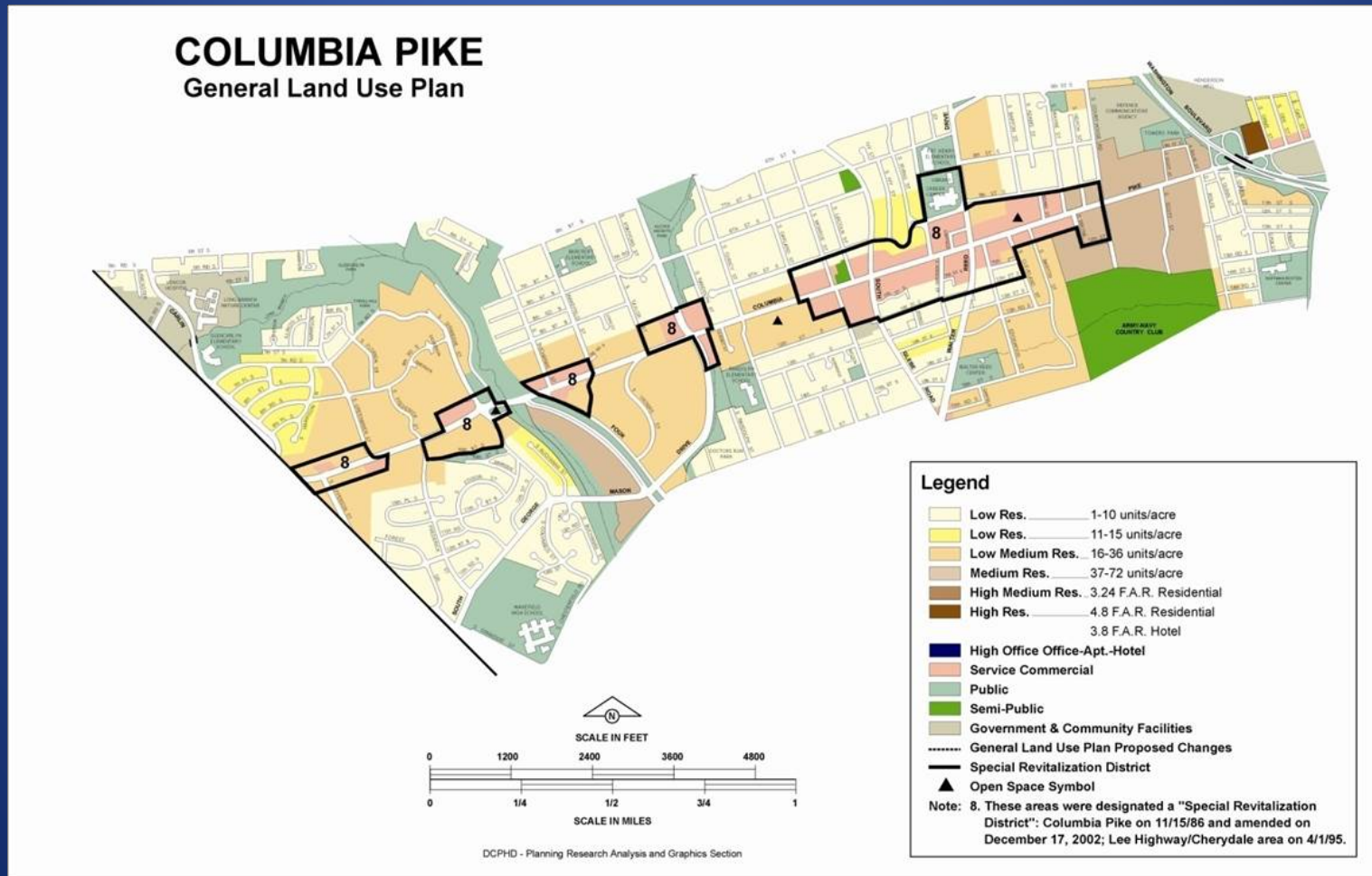


MS-1 & MS-2



The Rules That Shape Urban Form

Arlington County VA Columbia Pike



The Rules That Shape Urban Form

Arlington County VA Columbia Pike

Very Detailed Standards

- Blocks and Alleys,
- Streetscape,
- Parking,
- Retail,
- Historic Preservation,
- Public Improvements, and
- Buildings



- Height,
- Use Requirements,
- Building Placement,
Building Elements,
- Architecture



- Building
- Walls
- Roofs and Parapets
- Street Wall Required
- Windows and Doors
- Lighting
- Signage
- Mechanical Equipment



The Rules That Shape Urban Form

Livermore CA Hybrid Code

Smart Code Structure for Entire Mandatory Code

Form controls only for T3 and T4 areas

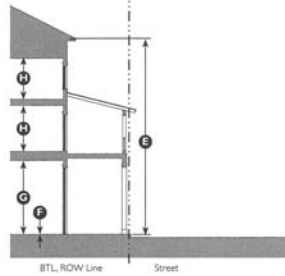
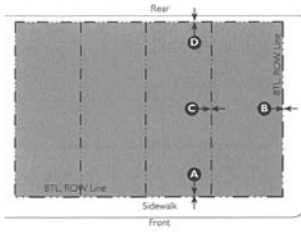
Form controls apply to <5% of land

Remainder left in traditional /PUD zoning

3.02.110

T4 Main Street (T4MS) Standards

Transect Zones



Key

- ROW / Property Line
- Build-to Line (BTL)
- Building Area

C. Building Placement

Build-to Line (Distance from ROW / Property Line)

Front ^{1,2}	0'	A
BTL defined by facade	80% min.	
Side Street ^{1,2}	0'	B
BTL defined by facade	30% or 50' min. for buildings deeper than 50'	

Setback (Distance from ROW / Property Line)

Side	0' min.	C
Rear	0' min.	D

¹ On cross-slope lots the BTL may be set 12' back from property line, when using a Terrace Shopfront frontage.

² BTL set 12' back from property line when using a Gallery frontage.

Miscellaneous

Street facades must be built to BTL along first 30' from every intersection, except for chamfered corners up to 10' in width and depth.

Entire BTL must be defined by a building or a 2'0" to 3'6" high decorative fence or stucco or masonry wall, except for entry ways, driveways and walkways.

Distance between Main Buildings on same lot 0' or 8' min.

D. Building Form

Lot Size

See Part 5 (Building Types).

Height

Main Building¹ 3 stories max. up to 35' to eave/parapet **E**

Ground Floor Finish Level 6" max. above sidewalk **F**

Ground Floor Ceiling 14' min. clear **G**

Upper Floor(s) Ceiling 8' min. clear **H**

¹ Does not apply to accessory structures. See 4.02.030 (Accessory Structures)

Footprint

Ground-floor Commercial/Flex/Residential space along primary street frontage shall have a minimum depth of 40', excluding vertical circulation and parking.

Miscellaneous

50' max. distance between ground floor entries.

All floors must have a primary entrance along the front facade or to a courtyard.

No planting strips allowed between sidewalk and building

Mansard roof forms are not allowed.


The Rules That Shape Urban Form

Miami 21

	T1	T2	T3	T4	T5	T6-8	T6-12	T6-24
LOT OCCUPATION								
a. Lot Area			5,000 s.f. min.	1,400 s.f. - 20,000 s.f. **	1,200 s.f. - 40,000 s.f.**	5,000 sf. min 40,000 s.f. max.**	5,000 sf. min 70,000 s.f. max.**	5,000 sf. min 100,000 s.f. max. **
b. Lot Width			50 ft. min.	16 ft. min / 50 ft. min.**	16 ft. min / 50 ft. min.**	50 ft. min.	50 ft. min.	50 ft. min.
c. Lot Coverage			50% max. 1st Floor 30% max. 2nd Floor for T3 R & T3L only	60% max.	80% max.	80% max.**	80% max.**	80% max.**
d. Floor Lot Ratio (FLR)						5	8	7
e. Frontage at front Setback				50% min.	60% min.	70% min.	70% min.	70% min.
f. Green / Open Space Requirements			25% Lot Area min.	15% Lot Area min.	10% Lot Area min.	10% Lot Area min.	10% Lot Area min.	10% Lot Area min.
g. Density			9-18 du/acre max.**	36 du/acre max.	65 du/acre max.	150 du /acre *	150 du /acre *	150 du /acre *
BUILDING SETBACK								
a. Principal Front			20 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.
b. Secondary Front			10 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.
c. Side			5 ft. min.**	0 ft. min. / 5 ft. min.**	0 ft. min.**	0 ft. min.**	0 ft. min.**	0 ft. min.**
d. Rear			20 ft. min.	20 ft. min.	0 ft. min.**	0 ft. min.**	0 ft. min.**	0 ft. min.**
OUTBUILDING SETBACK								
a. Principal Front			20 ft. min. (T3 L only)	30 ft. min.				
b. Secondary Front			10 ft. min. (T3 L only)	10 ft. min.				
c. Side			5 ft. min. (T3 L only)	0 ft. min. / 5 ft. min.				
d. Rear			5 ft. min. (T3 L only)	5 ft. min.				
PRIVATE FRONTAGES								
a. Common Lawn			permitted	permitted	prohibited	prohibited	prohibited	prohibited
b. Porch & Fence			permitted	permitted	prohibited	prohibited	prohibited	prohibited
c. Terrace or L.C.			prohibited	permitted	prohibited	prohibited	prohibited	prohibited
d. Forecourt			prohibited	permitted	permitted	permitted	permitted	permitted
e. Stoop			prohibited	permitted	permitted	permitted	permitted	permitted
f. Shopfront			prohibited	permitted (T4 L, T4 O)	permitted (T5 L, T5 O)	permitted (T6-8 L, T6-8 O)	permitted (T6-12 L, T6-12 O)	permitted (T6-24 L, T6-24 O)
g. Gallery			prohibited	prohibited	permitted **	permitted **	permitted **	permitted **
h. Arcade			prohibited	prohibited	permitted **	permitted **	permitted **	permitted **
BUILDING HEIGHT (Stories)								
a. Principal Building			2 max.	3 max.	2 min. 5 max.	2 min. 8 max.	2 min. 12 max.	2 min. 24 max.
b. Outbuilding			2 max.	2 max.				
c. Benefit Height Abutting T6, T5 & T4 only						4 max.**	8 max.**	24 max.**

The Rules That Shape Urban Form

The Take-aways

	Austin	Mooreville	Denver MS	Arlington	Livermore	Miami
Building Types						
Frontage Types						
Public Space Standards						
Block & Subdivision						
Regulating Plans						
By Right Development						

The Rules That Shape Urban Form

The Take-aways



The Rules That Shape Urban Form

Form-based controls and other planning goals

- Sustainability
- Demographic change
- Housing affordability
- Historic preservation



Sustainability

- No widely accepted definition of sustainability
- Zoning-related elements
 - Air quality / climate change
 - Energy conservation
 - Water conservation
 - Food supply
 - Community health



Do form controls aid in promoting sustainability?

Air quality / climate change	Yes	Mixed-uses and alternate modes reduce VMT & CO2, but slower vehicle speeds increase emissions
Energy conservation	Somewhat	Shading from street trees and controls favor walking over driving
Water conservation	No	Higher intensity and lot coverages prevent infiltration & increase run off
Food supply	No	Dense development patterns reduce the land availability for planting
Community health	Yes	Encourage walkability and civic areas foster human interaction
Limit sprawl	Somewhat	“Locking” T2 prevents sprawl, but locking T3 prevents density increases

Demographic Change

- Average age increasing
- # of kids decreasing
- Household size decreasing
- Ethnic diversity increasing
- Multi-generational households increasing
- Average home size decreasing
- Income decreasing
- Percentage of renters increasing
- Telecommuting increasing



Do form controls aid in addressing demographic change?

Slower growth rate	Somewhat	Place-making attracts talent which can foster innovation and economic output
Aging population	Somewhat	Fosters housing diversity in T3-T6, but limits on first floor residential can impede mobility
Declining household size	Yes	Smaller lots and units
Changing ethnic composition	No	Higher home prices and emphasis on urban locations
Changing locational preference	Somewhat	Favors urban housing, but seldom applied in suburban contexts
Reductions in retail/office uses	No	Mixed-use requirements can foster over-supply

Housing Affordability

- Average market prices of housing have been rising faster than average wages for the last 50 years
 - % of income spent on rent:
 - 1960: 19%
 - 2005: 29%
 - From 2001-2005:
 - Home ownership costs rose 18%
 - Median income rose by 11%
 - Real income declined during the 2000's for the first time in nation's history



Do form controls aid in addressing housing affordability?

Housing variety	Somewhat	Multi-story and mixed use requirements foster variety, but these units are often expensive
Ease of evolution	Yes	Decreased emphasis on use allows upper-story conversion and by-right development removes procedural obstacles
Controlling building costs	No	Façade design elements and minimum heights increase costs
Increasing density	Somewhat	Smaller units, but few bonuses and reduced over-supply of residential land
Lowering other costs	Yes	Reduced auto dependence and transportation costs

Historic Preservation

- The desire for historic preservation is becoming more pronounced
- The range of tools available for preservation is limited
- There can be significant opposition to district designation
- Form controls can help address these problems

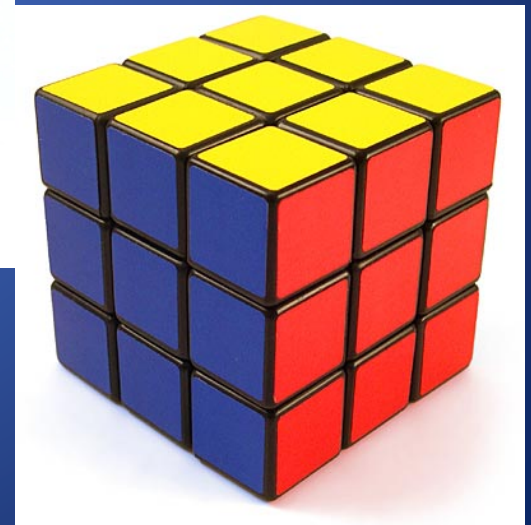
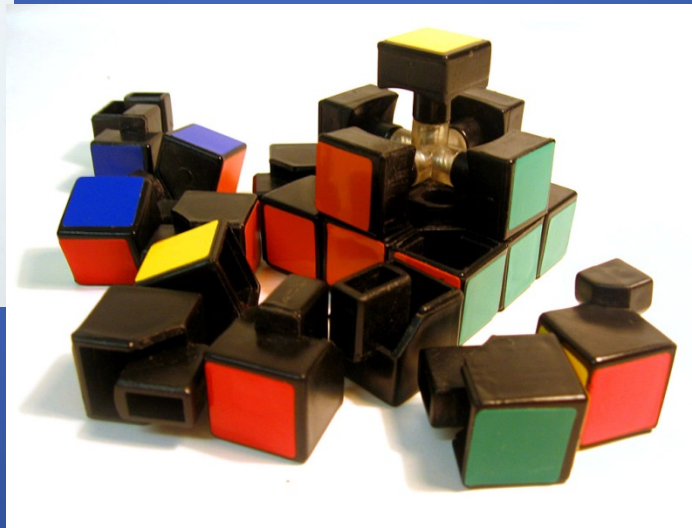


Do form controls aid in addressing historic preservation?

Reinforce historic patterns	Yes	Protects character but avoids opposition stemming from district designation
Tailored building forms	Yes	Clarifies acceptable infill and redevelopment parameters up front
Ease of administration	Yes	By-right approvals simplify the process and encourage preservation
Ease of establishment	No	Significant effort to codify context
Application to other techniques	Somewhat	Potentially useful in neighborhood conservation overlays

The Rules That Shape Urban Form

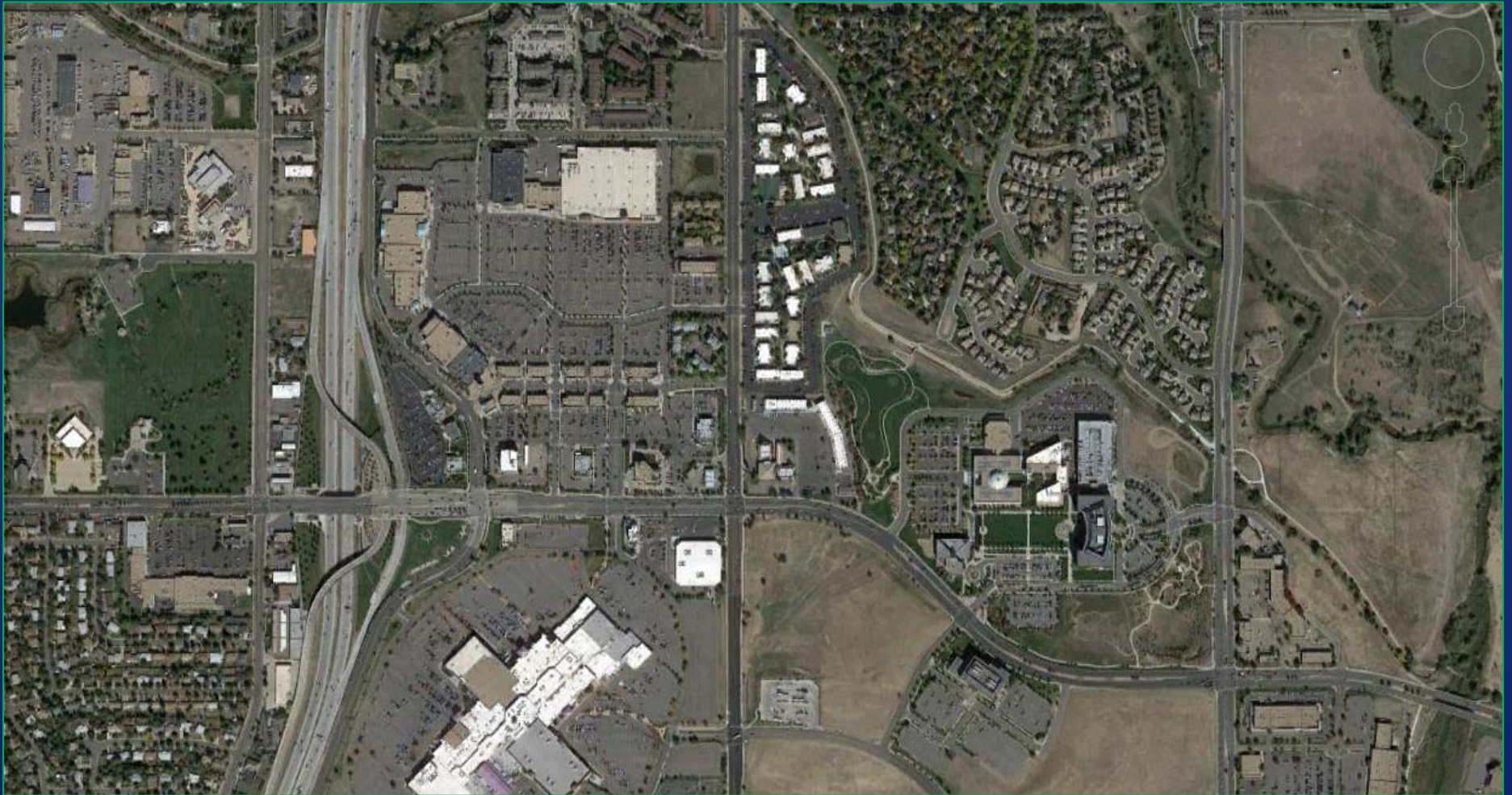
When using form controls, “unpack” the concepts and use only the pieces you need



Six Questions to Consider Before Preparing Form Regulations...



1. Will the form controls cover the entire community, or just certain areas?

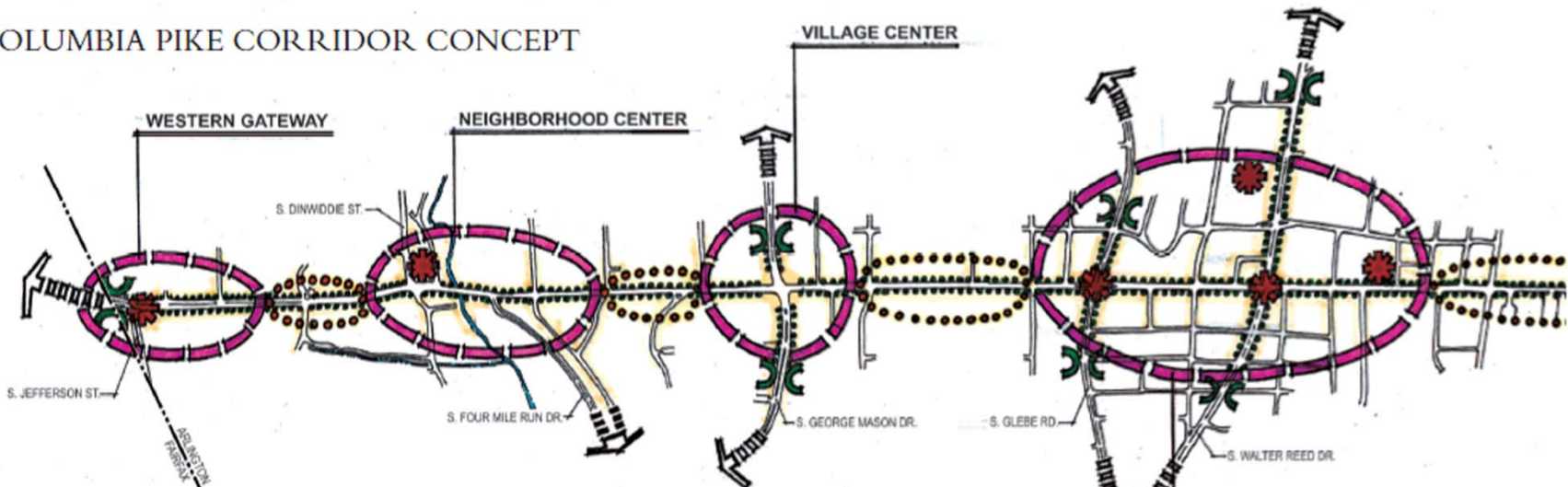


2. If applied to a particular area, has a place-based plan been prepared?

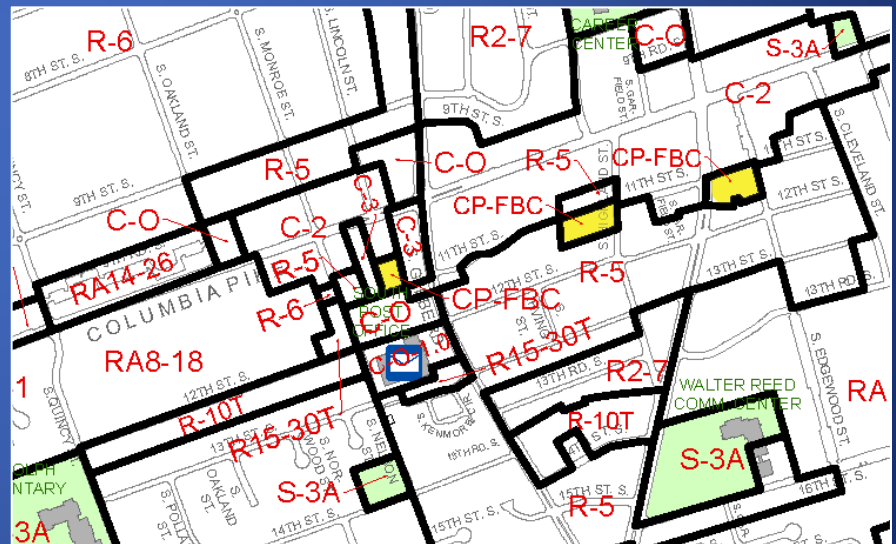
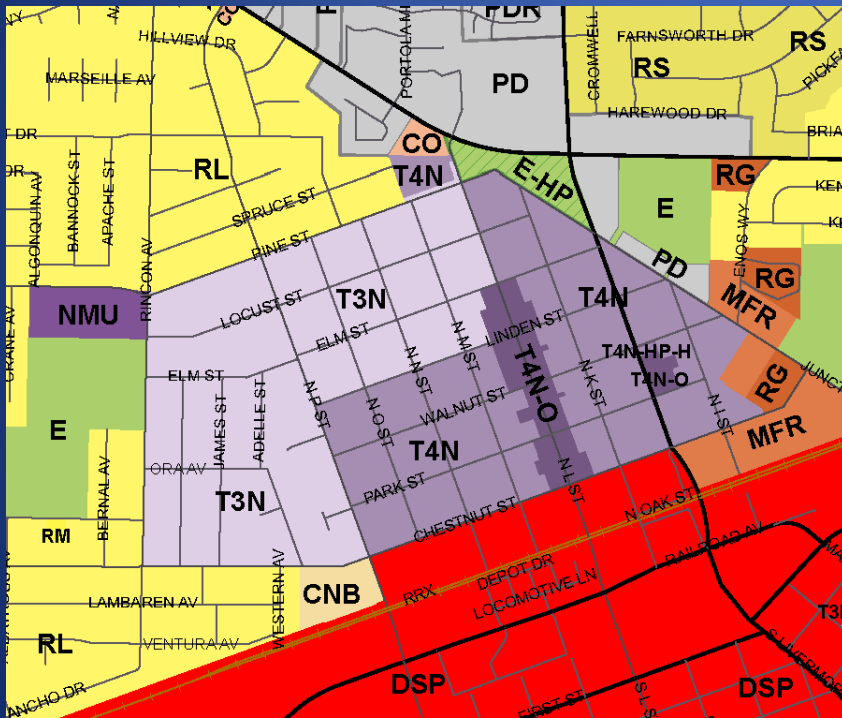
COLUMBIA PIKE CORRIDOR ILLUSTRATIVE PLAN



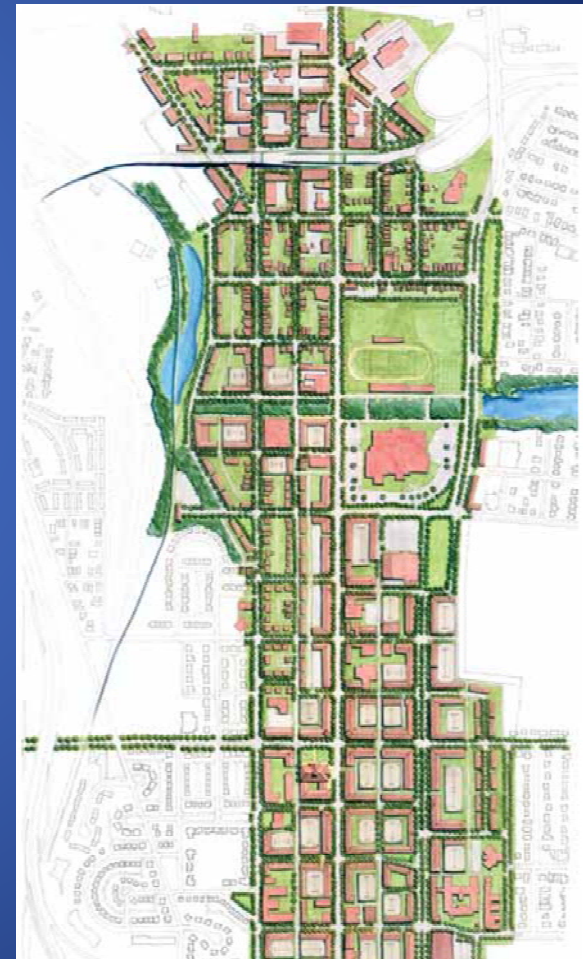
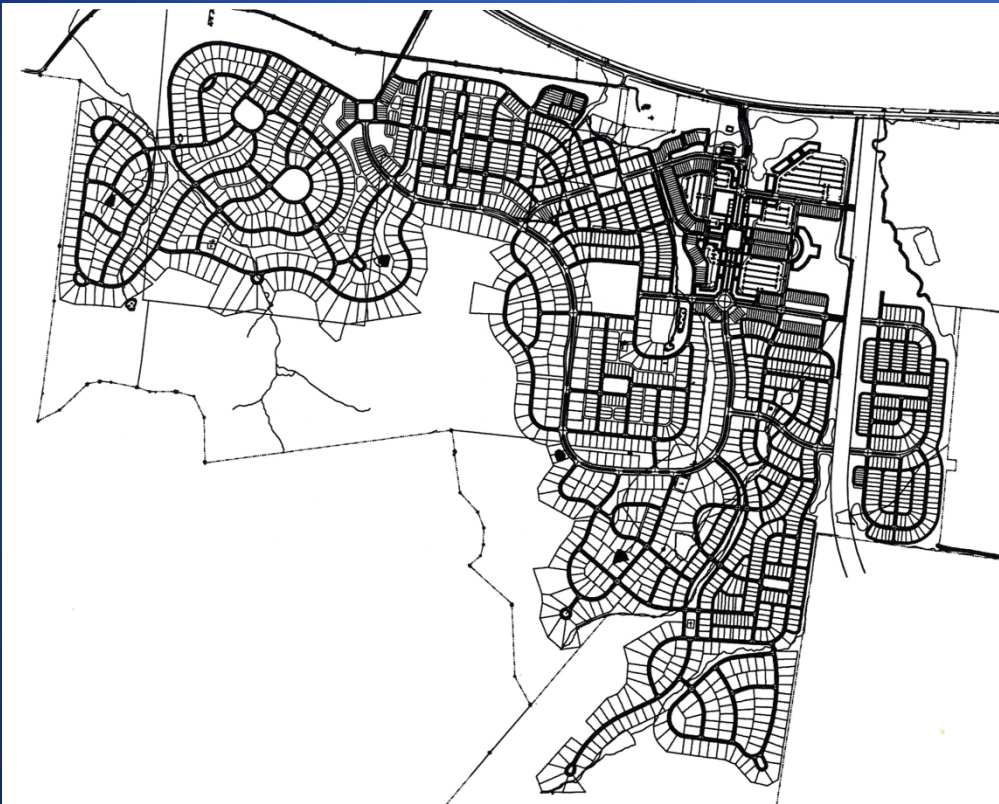
COLUMBIA PIKE CORRIDOR CONCEPT



3. Will the regulations be mandatory or optional?



4. Are the regulations for greenfield, major redevelopment, or small infill?



5. Will the form controls be “contextual” or “prescriptive”?



6. How will you handle nonconforming development?



Form Controls for the Real World

Questions?

Clarion Associates

