25 JUNE 2008

WHAT IS THE BLUEPRINT AND WHY THIS PROJECT  
GREG CHEW

FORM-BASED CODES: WHAT ARE THEY, HOW THEY WORK  
DAVID KNOWLES

DEVELOPING A FORM-BASED CODE  
KEITH LIDEN

CASE STUDIES  
MARCY MCINELLY

DISCUSSION AND QUESTIONS
WHAT IS BLUEPRINT & WHY THIS PROJECT

FOUR CASE STUDY COMMUNITIES

• SACRAMENTO ALKALI FLAT—URBAN INFILL
• CITRUS HEIGHTS—SUBURBAN INFILL
• ROSEVILLE—GREENFIELD DEVELOPMENT
• AUBURN—SMALL CITY DOWNTOWN DEVELOPMENT
WHAT IS A FORM-BASED CODE?

FOCUS OF TODAY’S PRESENTATION

- WHAT IS A FORM-BASED CODE
- HOW DO YOU CREATE ONE
- CASE STUDIES OF FOUR CITIES AND FOUR DEVELOPMENT TYPE
WHAT IS A FORM-BASED CODE?

CONVENTIONAL ZONING CODES USED TO MANAGE DEVELOPMENT

- KEEP BAD THINGS FROM HAPPENING
- PRIMARY TECHNIQUE = REGULATE LAND USES TO MAINTAIN SEPARATION
- NUMERICAL STANDARDS TO REGULATE DEVELOPMENT FORM—FAR, SETBACK, ETC., BUT DESIGN RESULTS ARE UNPREDICTABLE AND OFTEN CONFUSING
- STREETS OFTEN PLANNED INDEPENDENTLY OF USES—TO SERVE CARS, NOT PROMOTE THE RIGHT LAND USES OR RIGHT FORM OF DEVELOPMENT

CONVENTIONAL ZONING REGULATIONS

Traditional zoning was developed to protect property values by separating incompatible uses in a particular area or district. This separation was typically accomplished by creating single or limited use zones, which segregated different land uses, such as residential and commercial. Development with spatially separate land uses became the norm. This separation of uses, along with the automobile becoming the preeminent transportation mode, created the character of suburban communities we have today. Many zoning ordinances originated during the ’50s and ’60s, and although virtually all have been amended since then, most retain the principles of segregating land uses and neglecting all transportation modes except the automobile. Examples include commercial zones, which prohibit residential uses, or development regulations that have detailed automobile parking standards but no on-site circulation requirements for pedestrians.

Because the original purpose of zoning was to prevent incompatible uses moving into the neighborhood, zoning regulations are often reactive, focusing on what is not allowed. These standards and design requirements are usually applied generically throughout the entire community. This preoccupation with separating incompatible uses often bears no relationship to the real transportation or land use issues in the community.

A second important characteristic of conventional zoning is the use of numerical parameters to regulate development form. These include floor area ratios (FARs), dwelling units per acre, building heights and setbacks, and parking ratios. These indirectly affect development form, but not in a manner that is easily visualized or predictable. Zoning regulations are often applied in a one-size-fits-all manner, without any specific planning or thought about what the community wants development character to be. Although the resulting development may be “compatible” in terms of density, for example, it can often be incompatible with the context of the surrounding neighborhood.

FIGURE 1.1 TRADITIONAL ZONING HAS RESULTED IN THE SEPARATION OF USES AND HAS CREATED AUTOMOBILE DEPENDANT ENVIRONMENTS.

AN EXAMPLE OF A MIXED USE NEIGHBORHOOD, WHERE SINGLE-FAMILY, MULTI-FAMILY, AND COMMERCIAL USES ARE ALL WITHIN EASY WALKING DISTANCE OF EACH OTHER.
### FIGURE 1.2

In many traditional zoning codes, tables explaining development standards, use regulations, FAR limitations, density requirements, and parking requirements can be cumbersome and difficult to understand.

---

**a traditional zoning table**

<table>
<thead>
<tr>
<th>District</th>
<th>Minimum Required</th>
<th>Maximum #Floor Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#Open Space Ratio#</td>
<td>Ratio#</td>
</tr>
<tr>
<td>R1 R2*</td>
<td>150.0</td>
<td>0.50</td>
</tr>
</tbody>
</table>

* R2A and R2X are subject to the provisions of paragraph (b).

<table>
<thead>
<tr>
<th>District</th>
<th>Minimum Lot Coverage#</th>
<th>Maximum #Open Space# (in percent)</th>
<th>Maximum #Floor Area Ratio#</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2A</td>
<td>30</td>
<td>70</td>
<td>.50</td>
</tr>
<tr>
<td>R2X</td>
<td>governed by #yard# requirements</td>
<td>65</td>
<td>.85</td>
</tr>
<tr>
<td>R3-1 R3-2</td>
<td>35</td>
<td>65</td>
<td>.50</td>
</tr>
<tr>
<td>R3A R3X</td>
<td>governed by #yard# requirements</td>
<td>55</td>
<td>.50</td>
</tr>
<tr>
<td>R4</td>
<td>45</td>
<td>55</td>
<td>.75</td>
</tr>
<tr>
<td>R4A R4-1</td>
<td>governed by #yard# requirements</td>
<td>45</td>
<td>.75</td>
</tr>
<tr>
<td>R4B</td>
<td>55</td>
<td>45</td>
<td>.90</td>
</tr>
<tr>
<td>R5</td>
<td>55</td>
<td>45</td>
<td>1.25</td>
</tr>
<tr>
<td>R5A</td>
<td>governed by #yard# requirements</td>
<td>45</td>
<td>1.10</td>
</tr>
<tr>
<td>R5B</td>
<td>55</td>
<td>45</td>
<td>1.35</td>
</tr>
<tr>
<td>R5D</td>
<td>60*</td>
<td>40*</td>
<td>2.00</td>
</tr>
</tbody>
</table>

* For #corner lots#, the maximum #lot coverage# shall be 80 percent and the minimum required #open space# shall be 20 percent.
Form-based code: Implementing a vision

Form-based codes differ from traditional zoning because they:

1. Are the result of a public design process, which creates a clear and articulate vision for a defined district or neighborhood. A form-based code is developed as an outcome of this process to help implement the vision.

2. Pay greater attention to the design of the public realm and the importance that streetscape design and individual building character have in defining public spaces and a special sense of place. Of special significance is the integration of street standards with the desired physical character of the abutting development.

FIGURE 1.4
In order to ensure that a clear and articulate vision is formed for the planning area, form-based codes are the result of a thorough public design process.

FIGURE 1.5
Form-based codes focus on the design of the public realm as well as individual building design, resulting in more unified and coherent public spaces.

the public realm
FORM-BASED CODE APPROACH

- FOCUSES ON THE FORM OF DEVELOPMENT, NOT THE USE
- EMPHASIZE THE DESIGN OF BUILDINGS AND THE PUBLIC STREETS AND STREETSCAPE—THE PUBLIC REALM BECOMES THE FOCUS
- DIFFERENT FROM THINKING ONLY WITHIN THE FOUR CORNERS OF THE DEVELOPMENT SITE
- USE ILLUSTRATIONS TO SUPPORT THE TEXT OF THE REGULATION

FIGURE 1.6
FORM-BASED CODES EMPHASIZE BUILDING DESIGN RATHER THAN USE.

FIGURE 1.7
FORM-BASED CODES BOTH ENCOURAGE AND ENABLE A BROAD MIX OF USES AND HOUSING TYPES WITHIN A PLANNING AREA.
MIX AND DISTRIBUTION OF HOUSING TYPES
POTENTIAL ADVANTAGES

- Created with active public participation
- Focus on what the community wants
- Easier to understand
- Easier to match community character
- More predictable
DEVELOPING A FORM-BASED CODE
five steps

DEVELOPING A FORM-BASED CODE

- WHAT IS THE PROJECT SCOPE AND ORGANIZATION
- WHAT DO WE HAVE?
- WHAT DO WE WANT?
- WHAT DO WE NEED?
- HOW DO WE GET THERE?
step one

WHAT IS THE PROJECT ORGANIZATION?

- GENERAL PLANNING SCOPE AND OUTCOME
- REGULATORY APPROACH
WHAT DO WE HAVE?

- PUBLIC REALM AND STREET CHARACTER
- SITE DESIGN AND CIRCULATION
- BUILDING FORM
- LAND USE
- ARCHITECTURAL DETAILING
step two

WHAT DO WE HAVE?

analysis of existing conditions...block and street network
step two

WHAT DO WE HAVE?

analysis of existing conditions...land use and architecture
WHAT DO WE HAVE? PLAN AND CODE AUDIT

PUBLIC REALM AND STREETSCAPE

- FINE-GRAINED STREET SYSTEM
- PLEASANT SIDEWALKS
- ACTIVE GROUND FLOOR USES
- STREETSCAPE AMENITIES
WHAT DO WE HAVE? PLAN AND CODE AUDIT

SITE DESIGN AND CIRCULATION

- PEDESTRIAN CONNECTIONS
- DIRECT ACCESS TO BUILDING ENTRANCES FROM THE STREET
- SURFACE PARKING TO THE REAR OR SIDE
- ALLOW DENSITY OVER TIME
step two

WHAT DO WE HAVE? PLAN AND CODE AUDIT

BUILDING FORM

- PROPER BUILDING SCALE TO STREET
- TRANSITIONS BETWEEN DIFFERENT USES
step two

WHAT DO WE HAVE? PLAN AND CODE AUDIT

LAND USE

- DIFFERENT LAND USES WITHIN WALKING DISTANCE
- HIGHEST DENSITIES NEAR TRANSIT
- ACTIVE GROUND FLOOR USES
WHAT DO WE HAVE? PLAN AND CODE AUDIT

ARCHITECTURE

- INTERESTING BUILDING FEATURES
- WINDOWS FACING THE STREET
- RESPECT EXISTING COMMUNITY CHARACTER
step three

WHAT DO WE WANT?

- COMMUNITY INVOLVEMENT
- VISION
step four

WHAT DO WE WANT?

STANDARDS

• ESSENTIAL
• CLEAR AND OBJECTIVE

GUIDELINES

• DESIRABLE
• SUBJECTIVE

APPLICATION

• MANDATORY
• FLOATING
• OPTIONAL
step five

HOW DO WE GET THERE?

- PROPER INTEGRATION
- MAKE IT READABLE
- ROAD TEST
- MONITORING