Place Making with Form-Based Codes

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"Form-based codes" are on the minds of developers, planning professionals, and even citizens. Most references to them are enthusiastic, but some express fear and trepidation. What are these codes really about?

FORM-BASED CODES ARE land development regulations that emphasize the future physical form of the built environment. This alone sparks public interest in the arcane field of zoning codes. Other enthusiasm stems from a widespread distrust of today's fragmented processes for approving new development—the system is broken on many levels, and new approaches are desperately needed.

Form-based codes are becoming increasingly popular in communities seeking practical ways to grow smarter. Most zoning and subdivision ordinances actually promote the sprawling development patterns that citizens oppose. Developers often agree with the citizens, yet find that mixed uses and pedestrian-friendly streets are difficult, if not illegal, to build.

Large cities have begun to consider form-based codes. In Denver, for instance, officials have started to rewrite their entire zoning code after discovering that it contains disincentives for the very types of development the city is seeking. Miami is in the midst of rewriting its entire code, using form-based techniques on a larger scale than ever before attempted.

But even with the enthusiasm they currently generate, form-based codes often are not well understood. How exactly do they differ from other regulatory techniques? If a city wants to evaluate form-based coding, what do elected officials, developers, and planning staffers need to know?

The Basics

Form-based code is a new term for the evolving techniques that regulate the development of land for the purpose of achieving a specific urban form. Cities and counties across the country are finding that conventional zoning is not fulfilling this essential goal of town planning.

The failure of zoning to carry out physical plans for a community's future

Building Envelope Standards: Shopfront Colonnade Sites

FERRELL MADDEN ASSOCIATES

More user friendly than conventional zoning, form-based codes are written in plain English and make liberal use of matrices, diagrams, and other illustrations.

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should not be surprising, because zoning originated as a means to isolate and segregate land uses. Eighty years after the U.S. Supreme Court authorized local governments to zone land, zoning practice is still mired in solving problems of that era rather than the current one.

Some land uses must be segregated because they create excessive noise or truck traffic. However, many other land uses can coexist and benefit from their proximity to each other, yet are forbidden from doing so because the techniques of zoning by use have become so entrenched as to seem utterly natural to citizens and elected officials alike.

One key to the harmonious mixing of land uses is to arrange them on streets and blocks that function together to create an attractive "public realm." This realm may be a dignified park or plaza, but it is most often a street of moderate dimensions and traffic flow with sidewalks and rows of street trees.

In urban settings, frontyards are small or nonexistent; in less intensive settings, they are ample and effectively extend the public realm to include the frontyards on both sides. When buildings and the public realm are consistently shaped in this manner, the uses within individual structures are far less important than in conventional suburban configurations.

Form-based codes regulate the key aspects of urban form, such as the height of buildings, how close structures are to the street, and windows and doors on walls facing streets and other public spaces. They also govern the streets themselves so that the streets and buildings work together to create a desirable public realm—adding value to every property in the process.

Form-based codes are sometimes confused with design guidelines, which try to control how buildings look. Design guidelines emerged from the historic preservation world

and are well suited to evaluating how a renovation or new structure would fit into the context of a historic district. Design guidelines are also used to influence the architectural style of buildings in other contexts.

Design guidelines usually require laborious reviews by public agencies, eliminating the predictability that is the hallmark of a good regulation. Well-written form-based codes are more objective and easier to implement than design guidelines and they avoid most of the types of quarrels that erupt over architectural style.

Beyond Greenfield Development

Initially, form-based codes were developed as sets of instructions for developers to use when developing greenfield sites. Later, they were

Downtown Kendall

THIRTY-FIVE YEARS AGO, Dadeland Mall's first buildings emerged on Kendall Drive, a narrow country road just beyond the Miami metropolis. Fast-forward to today, when two transit stops are located within walking distance—but who would walk clear across a mall parking lot in the Florida heat?

Now that the region has sprawled as far as it can go toward the Everglades, great sites like the 338 acres (136.8 ha) that include the 1.4 million-square-foot (130,232-sq-m) Dadeland Mall seem wasted on a low-slung automobile-dominated pattern.

Redevelopment planning was instigated by a local business group, Chamber South. The resulting plan seemed unreal at the time. The parking lots and single-use apartment buildings were gone; the mall remained but was hidden behind new structures.

The master plan featured mixed-use buildings fronting on a network of interconnected streets, parking garages placed

The vision for downtown Kendall.

mid-block to replace the vast expanses of surface parking, and the transit stops becoming the focal points with the greatest intensity of development.

To implement this vision, a form-based code was adopted by officials of Miami–Dade County in 1999 to replace the prior suburban zoning. Downtown Kendall is now emerging from the ground, remarkably like the 1998 master plan.

adapted through the planned unit development (PUD) process as a regulatory tool for local governments to ensure that promised development patterns were carried out. Gaithersburg, Maryland, for example, used this approach to accommodate the development of the Kentlands during the late 1980s; there was no other regulatory technique available for creating new traditional neighborhoods in that city.

A dozen years ago, form-based codes began being used in redevelopment and revitalization scenarios. Coding techniques had to evolve once the interests of hundreds of different property owners would be affected. West Palm Beach, Florida, adopted a form-based code in 1994 for its entire downtown.

Columbia Pike

ARLINGTON COUNTY, VIRGINIA, has seen explosive development along the Metro (subway) corridors over the past 30 years, while Columbia Pike, the 3.5-mile (5.6-km) "Main Street" for the southern portion of the county, has languished.

Although it is a historic thoroughfare running from the Pentagon to the Arlington/Fairfax County line, its current form resembles strip commercial zones everywhere: an arterial that carries approximately 30,000 vehicles a day, varying in width from four to six lanes and lined primarily with parking lots and low buildings.

Columbia Pike was the most underdeveloped area in a county that is otherwise built out. County leaders wanted to encourage economic development and also create a mixed-use pedestrian environment that would allow for future light rail or bus rapid transit.

During an intensive two-year visioning process, the county recognized that its regulations would never produce the desired results, a traditional Main Street. The effort led to the adoption of a form-based code in 2003.

The Columbia Pike code is optional—all existing zoning remains in place—with incentives such as expedited review to encourage its use. Since passage, the vast majority of development proposals have opted to use the new form-based code.

Existing conditions produced by the conventional system along Columbia Pike.

The effect of new standards for the public realm and private building placement.

An illustrated vision for future private development.

STEVE PRICE/URBANADVANTAGE

In the wake of Hurricane Katrina, many coastal communities are discovering that their historic cores cannot be rebuilt after disaster strikes. The magnitude of the recovery effort has led many of them to explore a model form-based code known as the SmartCode to sidestep the need for customized codes for each community. The goal is to re-create the historic form of the older sections of town, rather than the sprawl around the edge, and to rebuild "better than before."

The next frontier for form-based codes is to carry out regional planning. By extending the tools used to regulate urban form in small areas, regional development patterns can also be coded (for instance, laying out interconnected road networks and allowing for regional stormwater management). It is no longer credible to believe that incremental development decisions are sufficient to shape regional growth patterns.

Form-based codes focus on end results—the creation of desirable physical places. They are ideal for jurisdictions seeking a fundamental change in urban form and character—for instance, when redeveloping areas that have become obsolete or which were poorly planned at the outset.

Whether it is a greyfield conversion of a dead mall or revitalization of an aging commercial corridor, a shared physical vision for the desired character is the essential first step. Form-based codes quantify that vision into physical parameters that replace the preexisting zoning standards.

Typically, the result is the regulation of private and public development to create valuable public spaces that did not exist before. For instance, overly wide streets can be converted into places where pedestrians and commerce can meet to their mutual benefit; new public spaces such as plazas can create centers of attention in homogeneous subdivisions.

Form-based codes can also be used for finer-grained projects, such as infill redevelopment downtown or in bypassed city neighborhoods, or as a tool for regulating new construction in historic districts. These codes can be written to protect the existing urban fabric, or they can serve to transform it.

National Trends

Cities and counties across the country are replacing parts of their conventional zoning with form-based codes, to enable local governments to carry out visionary place-making plans.

One prominent example is in unincorporated Dade County, Florida, where land around the Dadeland Mall, a regional shopping attraction, is being converted into a downtown for the sprawling community of Kendall.

Another is Columbia Pike, where Arlington County, Virginia, officials seek to revitalize an aging commercial corridor that has seen little development over the past 40 years. Even under the current strong market conditions, redevelopment under existing zoning has proven virtually impossible.

In St. Lucie County, Florida, 28 square miles (72 sq km) on the outskirts of Fort Pierce have been planned by county officials for several new towns and villages. A new form-based code has just been adopted to ensure that the towns and villages are built with traditional neighborhoods while the surrounding countryside is preserved for agriculture and habitat restoration.

Municipal officials in Petaluma, California, have created a new vision for Central Petaluma, which has been dominated by freight transport along the Petaluma River and rail lines. A new form-based code has replaced the city's conventional zoning for the entire area and promotes narrower streets, wider sidewalks, and minimum building heights to create urban character near the historic downtown.

Advantages

More user friendly than conventional zoning, form-based codes are written in plain English and make liberal use of matrices, diagrams, and other illustrations.

Form-based codes are written to fulfill a specific physical vision for a place. Which neighborhood patterns should be retained and protected? Which are obsolete and should be replaced? These decisions need to be based on a broad public consensus.

This "upfront" agreement on the desired future, often reached through a public participation charrette or some other visioning method, allows for the creation of precise and objective codes that can remove much of the politics and uncertainty from the approval process.

A code with clear and concise rules can deliver predictability for both the developer and the community. For fundamental issues about the creation of public spaces, such as avoiding blank walls or parking lots along sidewalks, the rules are very strict. Other issues are truly less important for urban form, such as micromanagement of parking or of what uses can take place in each building

St. Lucie County

WAVES OF DEVELOPMENT across Florida are rendering many communities unrecognizable. As the wave began to displace valuable agricultural lands on the outskirts of Fort Pierce in St. Lucie County, it collided with local residents who understood the damage inherent in poorly planned, widely dispersed development.

After growth was temporarily stopped, residents began to realize it was the form of new development—not growth itself—that was their real concern.

Assisted by the Treasure Coast Regional Planning Council, the community and county officials agreed on a master plan for 28 square miles (72 sq km) of farmland. This plan included several new towns and villages surrounded by countryside that would be preserved for agriculture and habitat restoration. A central backbone system for water management would

TREASURE COAST REGIONAL PLANNING COUNCIL

Concept for Towns/Villages/Countryside plan in St. Lucie County.

replace the current system of straight-line agricultural canals that overdrain the land and pollute the Indian River Lagoon.

A new form-based code has just been adopted to ensure that the towns and villages are built with traditional neighborhoods while the surrounding countryside is permanently preserved through the transfer of development rights.
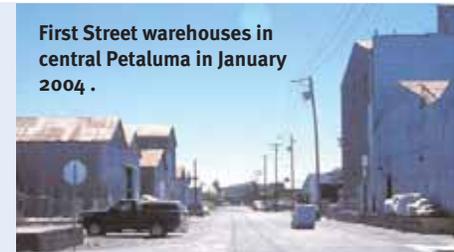
Central Petaluma

CITY OFFICIALS IN PETALUMA, California, have created a new vision for Central Petaluma, a 400-acre (162-ha) area adjacent to Petaluma's historic downtown.

This plan would extend the form and character of the pedestrian-oriented downtown into an area historically occupied by industrial uses that depended on a river-based economy and transport system that no longer exists.

With other parts of Petaluma already built out, this area represented a unique opportunity for new development that could complement the historic downtown and connect it to the river.

Central Petaluma will contain a range of residential and commercial uses that can coexist in proximity to one another to create a lively urban environment. The historic Petaluma Depot would be restored for passenger service and become the bus transit center while the river itself becomes the focus of civic life.

A new form-based code, based on the model SmartCode, has replaced the city's conventional zoning for the entire area. Dif-

First Street warehouses in central Petaluma in January 2004 .
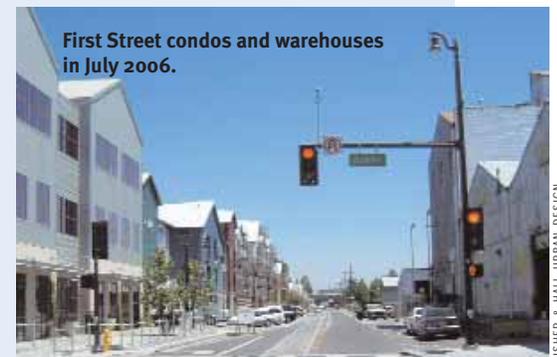
First Street condos and warehouses in July 2006.

FISHER & HALL URBAN DESIGN

ferent sections of the site are coded for varying densities, minimum and maximum building heights, parking areas, and percentages of frontage types. The code clearly describes new streets, open spaces, roads, and even structures facing the river. Of greatest importance, the new code allows for the mixing of stores, homes, and workplaces as found in the historic downtown.

over time; those rules are much more lenient than in today's zoning codes.

A well-written form-based code avoids the typical scenarios facing developers:

▷ Wasting time and money on a concept that ends up being unacceptable to a community.

▷ Fearing to propose something desirable because too many variances or discretionary approvals would be required.

▷ Inquiring as to desirable uses on a site and being told with a shrug to come back with a proposal.

The guessing game is removed when a community writes what is desired into its codes. The new process can replace grueling public hearings in which each proposal is picked apart, redesigned from the dais, or sent back to the drawing board, only to end up with unexpected special conditions or outright denial influenced by whoever shows up at the final public hearing.

When consensus has been built at the beginning of the planning and coding process, and the rules are clear and concise, the approval process can be much quicker, if not absolutely streamlined. As Peter Park, Denver's planning director, has asked, "Why shouldn't Denver streamline permitting of development that matches what the city wants?"

Disadvantages

The advantages of form-based codes come with certain costs. Building consensus on a physical vision takes time, patience, and resources—and there is no guarantee of success.

Once a shared vision has been reached, it must be converted into objective code provisions that replace contradictory provisions in the existing ordinances. Without this step, a visionary plan stands little chance of influencing the future of a community.

It is a true test of patience and perseverance for elected officials to stay the course when the inevitable naysayers appear at the last minute and want to rethink the shared vision that they were too busy to help formulate. Developers, who stand to benefit from the new system, often remain silent or even block the new code's path if they are focused only on their current project rather than the long-term vitality of the community.

Developers who are locked into old development patterns may also object to form-based codes. Change can be difficult; developers of conventional strip centers may admire more intense mixed-use buildings, but fear the risk of a different development pattern or fear out-of-town competitors with more experience with mixed-use buildings or traditional neighborhood development techniques.

The development approval process in much of the United States has proven to be antagonistic, expensive, unpredictable, and unsustainable. Form-based codes are crafted around consensus, straightforward to implement, and built on the ideal of creating places of enduring value. As Arlington developer David DeCamp stated when discussing the Columbia Pike experience, "It helps to begin with the end in mind."

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The Role of Banks in Community Reinvestment

MIKE SHERIDAN

Regional and community banks are helping lead the way in community revitalization, noting that not only is it a profitable niche, but that it also is rewarding to make a difference in their communities.