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SPECIAL SECTION ON NEW URBANISM

The Not-So-Secret Code

Across the U.S., form-based codes are putting new urbanist ideas into practice.

By Philip Langdon

Coming up with a new kind of zoning was not the first thing officials in Mississippi's Gulf Coast communities had on their minds after Hurricane Katrina left their region a shambles.

There were many more pressing problems — including disposing of 540 million cubic feet of debris. Nonetheless, several of the coastal communities along the 120-mile stretch from Waveland to Pascagoula may be joining the growing number of local governments that are adopting the form-based codes advocated by new urbanist planners and architects as a way to shape a more compact, pedestrian-oriented style of development.

On October 11, some 120 new urbanists from 22 states and three foreign countries set up shop in the ballroom of a damaged casino hotel on the Biloxi beachfront. Working side by side with local planners, architects, and public officials, the group spent the next week crafting visions of the Gulf Coast's future. By the time the Mississippi Renewal Forum concluded a week later, many Gulf Coast leaders were talking seriously about enacting the new forms of zoning codes.

The conventional zoning and subdivision regulations now in place in Mississippi's coastal communities have encouraged a separate-use, automobile-dependent pattern of settlement, Jeff Taylor, deputy director of the Southern Mississippi Planning and Development District, a regional planning group serving 15 counties, said in an interview.

That mode of development is becoming untenable, he added. Municipalities need to find ways to reduce reliance on driving, and they need to build mixed use communities that would be more convenient for residents and arguably also better for the area's economy. Taylor and others see form-based coding as a tool that can help communities attain these goals.

The day after the Biloxi charrette concluded, the small city of Flowood, about 150 miles inland (near Jackson), became the first Mississippi community to adopt a form-based code. It approved a customized version of the SmartCode, which was introduced by Duany Plater-Zyberk & Company of Miami in 2002 and continually refined since then. Chad Emerson, a law professor at Faulkner University in Montgomery, Alabama, tailored the SmartCode to Mississippi laws and to the requirements of Flowood, a business center and bedroom community whose population of 4,750 is on the rise.

The process was initiated by developer Richard Ridgway, who wanted to build a 130-acre project that would include a center containing housing on top of retail, shops set close to the sidewalks, and on-street parking rather than parking lots.

At Ridgway's urging, Emerson gave a presentation to the board of aldermen about a code that would facilitate pedestrian-scale, mixed use development, and met several times with the city's lawyers, adapting the SmartCode to local ordinances and practices. "Three months later, the SmartCode was completed and put before the board of alderman, where it passed unanimously — without a single negative comment from the local community," says Emerson.

"If you keep the same codes you had before the hurricane, not only can the same storm damage occur again, but the same sprawling development patterns can occur again," Sandy Sorlien warned during the Renewal Forum, an 11-community charrette authorized by Mississippi Gov. Haley Barbour.

Sorlien, a photographer who has worked with Duany Plater-Zyberk on several updates of the SmartCode, noted that the code is becoming easier and cheaper for municipalities to use. The latest rendition, Version 7.5, is now available free of charge to local governments in Mississippi and elsewhere.

The charrette teams recommended new codes in nine of the 11 coastal cities. Several of them have since sent their planners, planning board members, or elected officials to instruction sessions in Alexandria, Virginia, and elsewhere.

Gulfport (pop. 70,000), the largest city on the Mississippi coast, and Ocean Springs (pop. 18,000) are two that have shown an especially strong interest in new codes. "We're very excited about it — and we're cautious, too, because it's so different from the Euclidean zoning that everyone is accustomed to," says Donovan Scruggs, planning director of Ocean Springs. The most likely scenario, Scruggs says, is that Ocean Springs will use a form-based code in some of the areas destroyed by the hurricane.

As Mississippi goes, so goes the nation. At least that's what some advocates of form-based codes are hoping.

Why change?

The desire for a new kind of code has been fed by flaws in the codes that most communities have been using for the past several decades. (See "Form First," by Peter Katz, November 2004.) One flaw is the inability of conventional codes to define and create "character," says Paul Crawford, FAICP, who directed planning and building for San Luis Obispo County, California, before becoming a principal in the consulting firm of Crawford, Multari & Clark.

Most municipal codes give builders "utterly inadequate direction" about what their projects should look like and how they should form public spaces, he says. As a result, most communities "have to beat each project into shape one at a time through discretionary review processes" — a contentious and time-consuming way of doing things.

Conventional codes, Crawford says, "focus excessively on fine distinctions between land uses, and not much on urban design." They regulate through setback requirements, floor area, limits on building height, and the like. Sometimes those regulations suffice, but rarely do they make public spaces (such as streets, sidewalks, and plazas) feel like appealing "outdoor rooms" — places whose proportions generate a pleasing sense of enclosure.

Conventional codes tend to push differing uses apart, says Crawford, whereas urban spaces often gain allure and vitality by having housing, offices, restaurants, stores, and cultural and civic uses brought close together in dense, mixed use centers. The result could be a boost in tax revenue.

"It's value capture," adds Scott Polikov, AICP, of the Gateway Planning Group in Austin, which helped write a variant on the SmartCode for Leander, Texas, the fastest growing city in the Austin region. According to Polikov, the mandatory code, adopted by local voters September 22, is the first application of the SmartCode in the state. It replaces conventional zoning and subdivision codes in a 2,000-acre area owned by seven separate landowners. The land, at the northwest terminus of a planned commuter rail line approved by area voters in November 2004, is now part of a transit-oriented development sector.

Polikov projects that the SmartCode's provisions will generate twice as much development, $2 billion worth, as would occur under conventional zoning. The city government and the Capital Metropolitan Transportation Authority collaborated with major landowners on the planning and code initiative, with landowners paying much of the cost.

The TOD initiative prompted Leander to revise its existing code, which it did in September, adopting a composite zoning code (which planner David Hutton, AICP, describes in this issue). The composite ordinance does not apply in the TOD area except when a landowner wants to rezone fewer than four lots in Old Town (the city's downtown).

Where it all began

To some extent, the form-based codes now being adopted are an evolution of the design codes initially devised for greenfield projects. For DPZ's Seaside, Florida, which started in the early 1980s, and later for dozens of Traditional Neighborhood Developments (TNDs), designers produced codes requiring buildings to stand close to the street, to have front porches, and to maintain a degree of architectural consistency.

A chief goal was the creation of sociable streets and passages. "It's about spatial, physical characteristics — what it feels like to walk down a street in a place," says Neal Payton of Torti Gallas and Partners, a Silver Spring, Maryland, firm that has designed many new urbanist developments.

Those codes have become known as "form-based codes" because they concentrate more on shaping the form of the built environment — the building exteriors, the placement of buildings on their lots, and the nature of streets and public spaces — than on uses.

Codes in TNDs are often enforced by developers at first, and later by home owners associations. The local government may have little or no role in implementing and administering the code. But this is changing. As new urbanism has gained acceptance among planners, there has been a proliferation of government-administered form-based codes. Municipalities use these codes to shape development in downtowns, in aging commercial strips, in historic districts, and around mass transit stations, among other places.

California is a hotbed of form-based codes. They have won adoption in the cities of Sonoma, Petaluma, Azusa, Ventura, and Hercules, according to Crawford. They are being prepared or considered in at least five other California communities: Palo Alto, Cotati, Grass Valley, Paso Robles, and downtown Newhall (part of the city of Santa Clarita). Sacramento is updating its general plan, which could set the stage for establishing a form-based code in the state capital. "We're constantly being invited by municipalities to give presentations," says Crawford.

But other states are catching up. Torti Gallas recently helped the city of Temple Terrace, Florida, draw up a form-based code for a 225-acre area that local officials hope to transform into a relatively dense downtown. In Virginia two years ago, Ferrell Madden Associates of Washington, D.C., and Dover Kohl & Partners of Coral Gables, Florida, worked with Arlington County on a code for 3.5 miles of the Columbia Pike, trying to turn "an aging, auto-oriented, suburban, commercial strip back into the more vibrant, pedestrian-friendly, 'Main Street' destination that it originally was and could be yet again," according to a county planning statement.

Everyone's favorite example

After years of trying other ways to preserve and add onto the historic fabric of its downtown, Saratoga Springs (pop. 36,000) in Upstate New York finally adopted a form-based code in 2003. The code was devised for the city by consultant Joel Russell of Northampton, Massachusetts, and Environmental Design & Research of Syracuse, New York.

For more than two decades, the resort community had attempted to enhance the urban qualities of Broadway, its grandly proportioned main downtown thoroughfare. Old buildings underwent renovation or restoration, but new construction lagged except for the Congress Park Centre, a mixed use block that began in 1994 under a planned unit development ordinance.

The five-story center is transforming six acres that once contained a single-story Woolworth's strip shopping center with a parking lot in front. Above its first-floor shops are offices and balconied apartments. "Several more buildings, including parking in the middle of the block, are coming," says Geoff Bornemann, Saratoga Springs's planning director.

By the time construction of Congress Park was under way, the city had realized that pedestrian-friendly, mixed use development could be encouraged through a form-based code. "It was a logical progression," says Bornemann. That's when it hired Russell and EDR. They drew up a document establishing three districts, using Duany's concept of the "transect" — the systematic gradation of a community from its most urban to its most rural sector.

The SmartCode calls for six transect zones, from T-1 (natural) to T-6 (urban core). It is up to each community to decide whether to demarcate all six zones and where to establish each zone. Saratoga Springs chose to use the transect and the form-based code only in the denser parts of the community's 28 square miles. The downtown became the T-6 zone. Areas adjoining downtown became T-5 (urban center) or T-4 (general urban).

Saratoga Springs carried out the rezoning process "on a shoestring budget, using volunteer committee members and existing planning staff," Bornemann says. The consultants then were hired to help the city amend its zoning ordinance and introduce the form-based code.

Some municipalities use a "visioning process to reach agreement on how development should be shaped. At these sessions, often a week-long charrette, sketches and other visualizations help citizens and planners alike determine how high the buildings should rise, how close they should come to the street, and how to modulate

development from block to block or neighborhood to neighborhood.

In Saratoga Springs, Geoff Bornemann says, "the key mandated items are that buildings must be close to the street, must occupy most of the frontage of their property, and must be two real stories but less than 70 feet high. We wanted true mixed use neighborhoods, and we wanted new development [in the older areas] to look like the traditional neighborhoods."

Getting it

One advantage of form-based codes is that after some study at the outset, they are simple to comprehend. "It's a whole lot easier to understand than conventional zoning codes, where you keep getting referred to a different page," said Laura Hall of Fisher & Hall Urban Design in Santa Rosa, California, at the Mississippi forum. Hall is working on a code for Pass Christian (pop. 6,800).

"My experience is that the term and the concept initially appear arcane, but once you walk people through the concept, they get it," says Paul Crawford.

Whereas conventional codes rely largely on words, form-based codes are supplemented with drawings that most people find extremely helpful. Illustrations in the Temple Terrace, Florida, downtown code, for example, show a variety of design techniques that address the street and achieve the city's goals. There are illustrations for frontage types, massing, dooryards, arcades, windows, doors, planters, paving, and other elements that affect the public environment.

New urbanist planners say that applying the transect concept — making decisions on such matters as which areas are to be classified as "urban core," "sub-urban," and so on — is not as difficult as some might think. The SmartCode requires that the community be laid out as "pedestrian sheds" with a quarter-mile radius. Each pedestrian catchment area must contain at least one civic space or commercial institution. That aspect of neighborhood planning does not appear in all form-based codes, however.

What is challenging about form-based coding, says Joel Russell, is specifying the forms of buildings and streets that are to be required within each zone. The code "is very place-specific," he points out. "If you're doing a good job, you might need 12 street types. You're going to call for different building types."

In many cases, he admits, the level of physical detail in a form-based code exceeds that of a conventional land-use plan. That's why Russell believes it's "prohibitively expensive" to do form-based coding for an entire community, unless it's a very small place. "Most of what a form-based code regulates is at the neighborhood scale or smaller," says Peter Katz, a lead organizer of the recently established Form-Based Codes Institute in Alexandria, Virginia.

In California, form-based codes are being used in what the state calls a "specific plan" — a plan for a particular section of a city, frequently a redevelopment area. In states where form-based codes are not authorized for mandatory general use, a municipality may nevertheless apply them in renewal or redevelopment areas. California, Connecticut, Pennsylvania, and Wisconsin have enacted enabling legislation that allows municipalities to adopt form-based codes and require compliance with them throughout their jurisdiction, not just in urban renewal districts. Similar legislation is expected to be proposed this year in Mississippi.

Which side are you on?

There's considerable debate on whether to make codes optional or mandatory. Alabama law professor Chad Emerson favors an "optional overlay" code, one that may be used in part or all of a community if a developer chooses to employ it rather than being regulated by the conventional zoning ordinance. Emerson says he has been able to get optional codes adopted in Mississippi and Alabama towns in six to nine months, since no landowners are forced to use them. A mandatory code, by contrast, may take years to win a local government's approval. He thinks that since mixed use, new urbanist developments are becoming popular in the South, many developers will decide it's good business sense to use a form-based code.

Others contend that some locations, such as downtowns and areas around commuter rail stations, are so important that a form-based code should be mandatory. On the basis of what he's seen in Texas and elsewhere, Polikov argues that a wise approach is "to identify key corridors and sectors for new development and redevelopment, completely redo the master plan, and apply a mandatory code."

However, Polikov doesn't favor making the code mandatory for an entire municipality. Doing so may trigger strong opposition from people who prefer a less urban style of development — thereby causing the code to be defeated, postponed for years, or watered down.

Incentives such as fast permitting and higher density are often offered to make pedestrian-oriented, mixed use development enticing to developers. In fact, in communities where the real estate fundamentals are favorable, developers seem happy to work within form-based codes. Bornemann says 12 major projects, worth $182 million and containing 850,000 square feet, have been approved since Saratoga Springs became the first Upstate New York city to institute form-based coding.

Laura Hall says more than $100 million worth of development has been constructed or announced in a 400-acre section of central Petaluma since adoption of a SmartCode there in July 2003. "The SmartCode reduced the entitlement time from two years to 5.5 months," she notes. On the Columbia Pike, about a dozen projects, collectively worth more than $1 billion, have been approved or have entered some stage of approval or conceptual development since establishment of the code in February 2003.

Russell says there are at least two ways to shift the cost of devising a form-based code to developers. One way is to require the developer to prepare the code. But, he adds, "that involves some risk of the developer not doing a good job." The second way is to have the municipality devise the plan through a charrette and then, when the developers request permits, charge them a fee for doing the plan. "A developer is often willing to do that because it saves a lot of time," he says.

A caveat

All this is not to say that a form-based code solves every problem — or that conventional zoning, with its regulation of uses, is rendered unnecessary by well-shaped buildings and streets. Even in the areas regulated by a form-based code, the local government typically exerts some control over uses. In Saratoga Springs, for example, a special-use permit is required in the "urban center" and "general urban" neighborhoods.

Still, the rise of form-based codes has generated optimism among many urban designers. Local governments finally appear to have a tool capable of fostering settlements with lasting appeal. "If all you have to code with is height, setback, use, and quantity, you're going to have communities with a coarse character," says Neal Payton. With the more fine-grained regulation supplied by a form-based code, he believes, "you can get the characteristics you want."

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Resources

Images: Top — Central Petaluma before (top) and after the city adopted a version of the SmartCode in 2003. Petaluma is one of the five California jurisdictions that have approved form-based codes. Photos courtesy Fisher & Hall Urban Design. Middle — More than $100 million worth of development has been constructed or announced along the Petaluma River since the code was introduced, says consultant Laura Hill. Bottom — A newly adopted form-based code in Leander, Texas, calls for denser development in an area near the terminus of both a planned commuter rail line and a planned toll road. The city collaborated on the code with the Capital Metropolitan Transportation Authority. Images courtesy Gateway Planning Group.

SmartCode. Available on the web at www.placemakers.com.

Workshops. Click here for information on AICP's New Urbanism Workshop. Instruction on form-based coding is offered in Alexandria, Virginia, by Virginia Tech's Academy for the New Urbanism in partnership with the nonprofit Form-Based Codes Institute.