

**A CRACK IN  
THE CODE?**

**FORM**

By  
ALAN  
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# FORM-BASED CODING

The hoped-for cure for use-based zoning ills hasn't quite taken off. But form-based coding's emphasis on form **has** had a big impact on modern zoning.



FORM-BASED CODING is going to lead a long hoped-for revolution in community planning, it has a way to go. It came on the scene more than a decade ago when adherents promoted it as a completely new planning and regulatory system, one cleansed of the sins of Euclidean zoning.

It promised to open a high road to successful, high-quality placemaking. Now, according to a collaborative study led by Hazel Borys of PlaceMakers LLC, there are just over 600 form-based codes adopted or in progress. In other words, just about three percent of the 20,000 municipalities in the U.S. have one.

So what happened? Adoption of form-based codes has been slow going and the results have been mixed. Some form-based codes have shown success while others have not fulfilled their communities' expectations.

A common objection is the cost—or perceived cost—to develop a form-based code, a process that could mean hiring a team of specialized consultants. Another, related to this, is the perception that a form-based code requires extensive community planning workshops or charrettes. Yet another is that communities fear losing control over approvals, since form-based codes are often praised for allowing easier administrative approval of development applications.

And then there's the term itself. Its meaning is opaque to non-planners, and among practitioners the phrase "form-based code" is often felt to be ambiguous. According to the Form-Based Codes Institute, they are regulatory (not advisory) codes primarily concerned with urban form rather than land use, with form standards keyed to specific places on a "regulating plan." Their purpose is to shape public space. Yet many dispute the idea that they offer a complete solution to the problem of achieving good urban form. (For more on identifying and evaluating form-based codes, go to [formbasedcodes.org/identifying-evaluating](http://formbasedcodes.org/identifying-evaluating).)

Nevertheless, the form-based code movement has been part of a larger flow in the planning profession, a rising wave in professional practice that embraces urban form as a counter to formless sprawl.

Form—which is to say, good urban form—has become an increasingly prevalent concern in development regulation, and is now coming into zoning codes in many interesting ways. But one

size indeed does not fit all, and planners are striving to find regulatory approaches that fit their communities' specific needs.

The importance of form in modern zoning regulations is not in question, but will the term "form-based code" remain relevant for much longer?

#### Back and forth on form-based codes

Randall Arendt wrote of a proliferation of approaches to achieve better form, in an article for *Planning* last year ("Simplify That Code!" June, 2015: [planning.org/planning/2015/jun/simplifythat-code.htm](http://planning.org/planning/2015/jun/simplifythat-code.htm)). A common concern, which Arendt addressed in his article, is the complexity and cost of the coding process. He became more aware of this while serving on a form-based code award jury, where he saw "codes running 250 to 350 pages and often costing hundreds of thousands of dollars," he wrote. Indeed, form-based coding is often associated with lengthy planning and public participation processes and expensive consultant fees.

So Arendt looked at several towns' lower-cost efforts to achieve good urban form on their main streets and elsewhere. Some created pared-down form-based codes for very reasonable cost. Others were hesitant about form-based coding but found ways to achieve better form through the addition of a few basic design standards to their zoning: maximum front setbacks in downtowns, minimum heights in key places, limited block lengths, reduced on-site parking requirements, and a broader mix of permitted uses in blocks and buildings.

"What's missing from this is the planning part of it," says Bill Spikowski, FAICP, of Arendt's short list of standards. Spikowski is a planning consultant and emeritus board member of the Form-

Based Codes Institute. “Where should the buildings be? It’s the planning that makes the difference, and that’s why planning has always been a fundamental part of form-based coding.”

Spikowski acknowledges that it’s an expensive endeavor, and that Arendt’s review of incremental measures is helpful for communities. Still, in regard to cost, he says that practitioners working in form-based codes aren’t “larding the budget; we’re trying to get to an informed public behind a plan.”

“It’s the combination of public process and detailed design work that drives up the cost,” says Joel Russell, a planning consultant and former executive director of the Form-Based Codes Institute. He’s weary of a doctrinaire approach that requires extensive public participation linked to intensive design work. He likes Arendt’s examples, and in fact worked on one of them—the creation of two adjacent form-based codes in neighborhoods of Beacon, New York (pop. 14,347).

One of the coded areas, encompassing the main street, has no regulating plan. While a regulating plan that replaces a use-based zoning map is considered by some to be an indispensable component of a form-based code, Russell says that for Beacon they were able to make good progress on form without it. “We didn’t need it,” he says, “because the area already has good ‘bones’ and the street system is fine.” The other area, however, will eventually need a regulating plan—mostly to fix its street network, he says.

Russell questions other aspects of generally accepted form-based code orthodoxy, such as their much-vaunted capability to improve the development approval process. “There’s a lot of room for things to go wrong, with a form-based code as with any other kind of code,” he says. “A code is only as good as the willingness of a community to stand by it, to enforce it.”

While remaining a strong advocate, Russell takes exception even with the name. “I think the term ‘form-based code’ scares people,” he says. “‘Form-based’ is such an abstract label that people read their worst fears into it. It evokes fear of high consultant fees, fear that it will favor one’s opponents in contentious development issues, and just the plain old fear that adopting a type of document whose name one doesn’t understand will cause confusion, delay, paralysis, and worse.”

Despite his qualms, Russell sees good work occurring with form-based codes—and with efforts to get urban form principles embodied in more conventional codes. “The point is that form is entering widely into regulatory codes, and nearly all communities are taking it seriously,” he says.

### Taking a crack at code reform

“PlaceMakers has counted 600-plus form-based codes, and of these, how many are effective?” asks Lynn Richards, president and CEO of the Congress for the New Urbanism. “There are issues with form-based codes. There’s no silver bullet.”

“Look, there are a number of coding practices in the United States today,” she says. “There are different varieties of Euclidean codes, form-based codes, hybrid codes, and other special types of codes.” CNU, she says, doesn’t advocate for any one of these. “Instead we want to enable a streamlined regulatory environment that fosters the development of great places, using all the tools in the toolbox.”

Richards’s non-doctrinaire, inclusive approach led CNU to em-

brace a new effort called the Project for Code Reform. It will likely begin with a workshop this fall, initiated by Jim Tischler, FAICP, who is Michigan’s community development policy director. The Michigan workshop will bring representatives of local governments together with coders of different disciplines. “It’s a hands-on approach with no preconceived solutions to creating the right regulations for different communities,” says Richards.

Dan Slone, an attorney and a Congress for the New Urbanism board member, emphasizes the value of engaging different planning perspectives in the nascent project. “We want to broaden the toolkit and neutralize the tools by avoiding dogmatic statements,” he says. “And we want to understand what communities are doing now, not as a desired end state, but as a beginning to building better places.”

### Communities take control to lower cost

One community with a “pared-down” code mentioned in Arendt’s article is Dover, New Hampshire (pop. 30,880). Steve Whitman, AICP, principal of Resilience Planning & Design, based in Plymouth, New Hampshire, worked closely with Dover Assistant City Manager Chris Parker, AICP, who oversees planning and development, on codes for several areas of the city beginning with the central business district. In crafting the code, the city sought to preserve the good urban character of its center and avoid single-story minimalls.

It took just a year to survey assets and needs, interview stakeholders, hold a design charrette, and draft the code, says Whitman. The new code, adopted in 2009, incorporates strong form elements, including a shift from set-back minimums to build-to lines, and from a focus on use to building size, placement, and massing. A two-story minimum and requirement to put parking behind or on the side of buildings mitigate the potential damage caused by strip malls.

“The central business district code does not have a full-blown regulating plan,” says Whitman. “But it features core elements of a form-based code woven into the existing zoning ordinance.” Parker has been pleased with the results. He points to nine project approvals and five completed projects, four of them multistory, mixed-use buildings. “The code has allowed the community to embrace character-based and context-based zoning,” he says. “But we had to drop the term ‘form-based code,’ because it was not something that property owners understood, it didn’t resonate.” Instead, the community used the term “context-sensitive zoning” when it amended the zoning code in 2010.

Parker also appreciates the formula of a consultant working closely with a staff planner. “We dedicated the resources of in-house and in-kind work to offset the limited resources we had available,” he says, noting that the planning department’s involvement left staff well prepared to administer the code. Whitman benefited from the experience, expanding his practice by developing a streamlined process for coding small to mid-size New England towns.

### An activist’s overlay

Sandy Sorlien has been working in the realm of form-based codes for years. As the principal of Smartcode Local, she is closely involved in ongoing updates of the SmartCode form-based code

template and she helps show communities how to use it. (The SmartCode is a model code based on “transect zones” that specify gradations of urban intensity and regulate appropriate character.)

Recently, Sorlien found herself in a grassroots rezoning effort to conserve the character of her own neighborhood in Philadelphia.

The Philadelphia City Planning Commission worked with a consulting team led by Clarion Associates in a major zoning code overhaul that consolidated base zoning and overlay districts, incorporated improvements in form and design controls, and created a shorter, improved list of permitted uses. The new code became effective in 2012. (The commission won the National Planning Excellence Award for a Planning Agency from APA in 2015: [planning.org/planning/2016/apr/planningagency](http://planning.org/planning/2016/apr/planningagency).)

Since then, Sorlien has been impressed with the results. “There are good form elements in the new Philadelphia code, for sure,” says Sorlien, who had years earlier been invited to talk to the planning commission about how form-based codes work. “It has much more form control and more helpful graphics than the old code.” She’s seen excellent infill development, traditional in form though not necessarily in style, in near-in neighborhoods such as Northern Liberties and Fishtown.

But she also saw that the code’s focus on form mostly concerned the central area, and was not sufficiently protecting her northwest Roxborough neighborhood. New town houses were being built with driveways and garage fronts, breaking up the traditional city environment. “The zoning was disconnected from the reality of a walkable block,” she says. “New development was becoming more and more auto-oriented, which can happen lot by lot until whole blocks are ruined.”

She worked with her neighborhood association, and over the course of two years, they were able to create two Neighborhood Conservation Overlays that were successfully added to the zoning code. Sorlien calls them “lean overlays,” each just a page and a half with map, intent, and a few key standards. They address frontage to control garage placement, limit curb cuts, and try to ensure the survival of a signature Philadelphia form—the front stoop.

Despite positive developments in Philadelphia, Sorlien says she would prefer a citywide application of the SmartCode, as occurred in Miami. “Overlays are like a stopgap,” she says. “With transect zones (as applied by the SmartCode template) zoning occurs in terms of human habitat and character, and there can be different habitats in an area, which can evolve gradually to higher density. It’s quite fine grain.”

Like Russell, she is a form-based code advocate who thinks there is a problem with the term. “In my work, I talk about ‘type’ and ‘character,’ and I talk

about the form of buildings and their frontages,” she says. “But I hesitate to use the term ‘form-based code,’ because I find that phrase to be confusing.”

#### **Use and form: separate but equal**

“It’s all semantics,” says Lee Einsweiler, principal of Code Studio in Austin, Texas, expressing his skepticism with arguments that there are only a few set ways to foster good urban form. “There have been elements of form in zoning since the beginning, since New York in 1916.”

Einsweiler’s firm is leading the re:code LA project, an initiative to rewrite the Los Angeles’s zoning code for the first time since 1946. The new code will need the capacity to efficiently handle dozens of approvals annually in some districts. “The challenge is to create what we call ‘straight zoning,’” he says, referring to an effort to create a zoning tool kit for an immense area that can be managed at staff level.

They’re bringing form elements strongly into the new code. “We’re putting form on a par with use, much more consistently than in the current zoning,” says Tom Rothmann, principal city planner with the Los Angeles Department of City Planning. “We’ll also be dealing with use very much in the new code,” he adds. “Both form and use will receive much better treatment than in the current code, where we use a lot of overlays, special districts, and other tricks to fine-tune the zoning.”

Their approach is to separate form and use in the new code, employing what Einsweiler calls “a very bright line” between use and form standards. “The form pieces are envelope-like, avoiding architectural style prescriptions,” Einsweiler explains. “But they deal with mass, bulk, and frontages. They tell how buildings relate to the street with setback and height, and frontage for some details, in a way that can achieve good results across the city.”

The proposed zoning system will mix and match form and use elements or “packages” through a rezoning process. Rezoning will occur citywide, led by staff planners after the new code is adopted. The mix-and-match system, with a streamlined use table, will give planners a broad palette to work with, whether they’re planning for areas around new Metro stations or working in the vast swathes of single-family residential districts that cover half the city’s area. Planners will work with communities in the city’s 35 planning areas, suggesting appropriate combinations of form and use in each area for city council approval.


“The new system will give them premade elements to choose from, so they can focus on all the right things, whether on use or on form, according to community needs,” says Einsweiler. “We’re excited about it as a framework.”

As part of re:code LA, Einsweiler’s team has been

**NEIGHBORHOOD CONSERVATION KIT**

The NCK project won a 2015 Knight Cities Challenge award to create templates and teach residents to create their own Neighborhood Conservation Overlays, which are short, locally calibrated additions to the Philadelphia Zoning Code. The purpose is to protect local character and walkability.

**PHOTOGRAPHY SURVEY GUIDE**



**Purpose:**  
The Philadelphia City Planning Commission requires every building in a Neighborhood Conservation Overlay (NCO) area to be photographed. This survey is used when an application comes in for a property under the NCO. Planning staff will consult the photographs to assess the context of the new development. It is important to shoot and label the images consistently. This guide has instructions for Trainers, Surveyors, and Organizers.



Above: Neighborhood Conservation Kit interns hired through the Knight grant head off for Urban Survey training. Center left: Suburban-style front-loading garages and parking pads don't suit neighborhoods used to stoops, porches, or gardens. Bottom left: One of the first projects that complies with an NCO in Philadelphia's Ridge Park neighborhood.

working closely with the city's planners on a concurrent remapping effort of two downtown districts. In these, he sees a need for perhaps 26 form districts and 20 use districts, with just over 40 combinations of these needed for the downtown area. It's greatly reduced from the 129 zones in the base zoning and overlays there now.

**A code by any other name . . .**

Clearly, zoning and coding today is a discipline in flux, with practitioners working out different ways to embrace a common concern for form. As more codes of different type show success in guiding good urban form, it may be that the need for a phrase such as "form-based code" will fade. A range of regulatory approaches, fit to the specific needs of diverse communities, will encompass form as common practice.

Joel Russell sees a powerful trend in this direction. "A lot of form principles are being gradually integrated into standard practice," he says, including code revisions.

In retrospect, Bill Spikowski believes that the idea that form-based coding would become dominant practice was never realistic. "Form-based coding remains a movement limited to a small number of places, which have the money for it, and have the economy for expected development," he says. "But where it has occurred, the results on the ground have been very good," he adds. ■

Alan Mammoser is a Chicago-based writer and regional planner.

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"Legal Issues with Form-Based Codes," a two-part series in *The Commissioner*

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*Planning*, August/September: [tinyurl.com/h693j8d](http://tinyurl.com/h693j8d)

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NEIGHBORHOOD CONSERVATION KIT, COURTESY WYNN GEARY; PHOTOS BY SANDY SORLIEN

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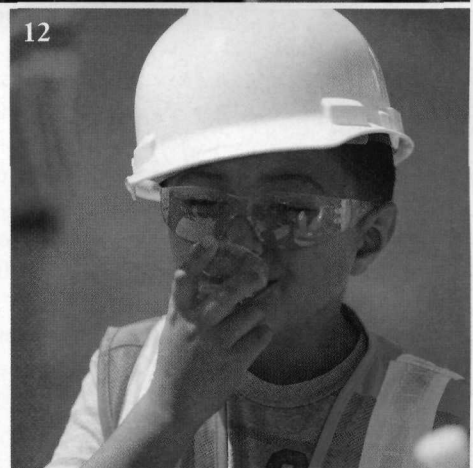
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