



This three-story building in Davidson, North Carolina, replaced the gasoline station shown with an arrow in the photo at left. Six years earlier the two-story CVS building at the top of that photo replaced a different filling station. Davidson accomplishes these kinds of improvements through design standards controlling building height, front setbacks, principal entrances, and glazing.

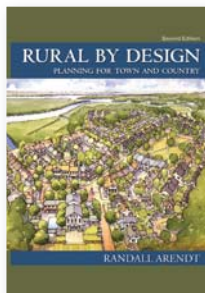
## Simplify That Code!

Drawing from the new edition of his book, *Rural by Design*, an experienced observer of rural and small town design reports that “lighter” form-based codes and design standards are being used to great effect. **By RANDALL ARENDT, FRTP**

**FORM-BASED CODES** are succeeding in a growing number of communities. Take the Nashville region, for example.

Many streetscapes there have markedly improved, and property values have increased by 115 percent (versus only 33 percent county-wide between 2005 and 2013) where FBCs have been applied, particularly in downtown locations and along highway corridors ripe for redevelopment, according to Rick Bernhardt, FAICP, executive director of the Metropolitan Nashville-Davidson County Planning Department. This large department has also trained its staff to write FBCs in-house for about 25 neighborhoods, tailoring each FBC to the needs of each locality and saving on the cost of consultants.

Although there is little doubt that FBCs have helped many metro areas and cities provide much-needed structure and physical form to new develop-



*Rural by Design*  
2015; APA Planners Press;  
552 pp.; \$109.95  
(APA members \$79.95).

ment and redevelopment, there is also a need for a larger number and greater variety of communities to achieve these kinds of results without spending small fortunes or creating long and detailed regulations. After serving as a juror on a recent award panel to select the best FBCs of the preceding year, I saw that codes running 250 to 350 pages, and often costing hundreds of thousands of dollars, are not uncommon. Such codes are unlikely to meet the needs of smaller cities and towns with modest budgets and limited staff.

Peter Katz, a cofounder of the Form-Based Codes Institute, is concerned that FBCs may have a hard time gaining wide acceptance. He notes that FBCs and the best practices with which they are associated, such as high-quality urban design and charrettes, are perceived as too costly by many communities. He points out that adopting FBCs generally requires strong political leadership, highly

skilled planning staff, and broad stakeholder support. To that one might add the multiyear process of public education that sometimes precedes code adoption, to ensure that all stakeholders fully understand and support this new three-dimensional paradigm for regulating development.

A number of communities have proven the feasibility of less-detailed and complicated FBCs. Boise, Idaho (pop. 214,237), uses a special Pedestrian Commercial FBC outside its downtown. Its incentives include a simplified review process, reduced parking and setbacks, and allowing commercial development where the comprehensive plan would otherwise prohibit it.

Smaller communities that have adopted shorter, simpler codes include Simsbury, Connecticut; Dover, New Hampshire; and Beacon, New York.

In Simsbury (pop. 23,650), an affluent suburb of Hartford, one key to success was a public planning process including a six-day charrette involving a half-dozen firms specializing in traffic engineering, historic preservation, urban design, economics, market analysis, landscape architecture, architecture, and visualization techniques. The budget for the charrette, FBC, and town center design guidelines was \$175,000 (small compared with sums spent in some larger communities—\$3 million in Miami, for example).

Simsbury's budget included new rules for low-impact development and "light imprint" processes to manage stormwater. Simsbury also adopted a process that lets applicants who submit plans complying with all requirements become eligible for administrative approval and placement on the zoning commission's consent agenda.

Simsbury's code and regulating plan, covering some 100 pages, is street-based and divides the town center into seven different code areas. For each street type it specifies building types, build-to lines, building mass and transparency (window to wall) ratios, facade articulation, building access, and various building elements that are required, allowed, or prohibited. Special setbacks for key places are established on the regulating plan. Building heights and roof configurations are specified within certain ranges depending on the street type. Permitted uses are somewhat flexible but not unlimited; they vary from floor to floor.

Simsbury's customized code identifies many historically significant buildings to be preserved in the town center, and infill buildings must respect these valued structures. According to town planner Hiram Peck, AICP, "this aspect alone makes this code different from typical smart codes where such sensitivity is not as easy to accomplish." Notably, Simsbury's FBC was unanimously adopted by the zoning commission with virtually no public opposition, a testament to the open and inclusive public process beginning with the 2007 comprehensive plan update. The planning commission engaged the community and stakeholders in a discussion about the town's future, and through those discussions a consensus emerged

that mixed uses were desirable, and that building and block form was the most effective way to organize new development.

In 2009 Dover (pop. 30,510) became the first town in New Hampshire to adopt a FBC. During the public discussions preceding adoption, one developer offered a proposal in the study area, which generated further interest and support for this new regulatory approach, one that appealed to many residents and officials because it ensures that new development will better harmonize with the town's traditional building stock and streetscapes. Since ordinance adoption, four multistory, mixed use buildings have been constructed, with two more approved and expecting completion next year, according to Chris Parker, AICP, director of planning and community development.

Proving the efficacy of FBCs in a state where zoning is often considered suspect, these projects have brought vibrancy to several run-down areas. The initial \$62,000 cost included \$14,000 for in-kind services, but another \$35,000 was spent to expand the district and code. At 20 pages, it's a model of brevity (<http://tinyurl.com/oud5gxm>).

In Beacon, New York (pop. 14,389), a small Hudson River city struggling to reverse commercial decline and population loss following the closure of most of its factories during the 1980s and '90s, a consultant and the Dutchess County Department of Planning and Development collaborated in 2013 to produce a 46-page FBC (covering two districts), costing about \$40,000. These FBCs received broad support as a vehicle for incentives that could spur redevelopment in two commercial districts.

In one of them, the Linkage District, seven previous zoning districts were consolidated into a single flexible mixed use district to simplify and encourage redevelopment. The *Illustrative Plan* offers key planning principles through a map showing a potential network of new streets flanked by different uses and intensities, where quality of life will be improved by several small new parks. In the Central Main Street district, a shadow analysis demonstrated the feasibility of four-story buildings on the south side of the street (with upper-story setbacks) and five-story buildings on the north side (<http://tinyurl.com/pfwhxlx>).

### 'Minimalist' approaches

Other options exist for communities with small staffs that are hesitant to embrace the form-based approach, with its minimal restrictions on uses and density, and its many detailed provisions and graphics. In such communities, many of the physical streetscape benefits of FBCs can be achieved relatively simply with several basic design standards.

Chief among these standards are *minimum* building heights and *maximum* front setbacks in downtown centers and along highway corridors. (It should be noted, however, that front setback rules should allow for alcoves, courtyards, and stepped-back build-

ing facades to relieve the monotony of rigid “build-to” lines.) Those two parameters (sometimes called “FBC lite”) embrace the essence of traditional townscape planning, and will help repair decades of suburban-style infill that has eaten away at the historic fabric of many downtowns.

Maximum setback requirements should be accompanied by standards requiring that street sides be designed with primary doorways opening onto sidewalks, and that a minimum percentage of the facade be glazed. Also, minimum building height requirements should be accompanied by standards specifying that upper floors be functional, not *faux*. Three other essential standards are those limiting block length (usually 500 to 600 feet), greatly reducing or eliminating on-site parking requirements (or at least locating parking to the rear), and permitting a broad mixture of uses both within blocks and individual buildings.

Standards governing such parameters might cover several dozen pages, including graphics. According to Joel Russell, executive director of the Form Based Codes Institute, FBCs should contain right-of-way cross-sections delineating the public realm and a catalog of building forms or frontage types to ensure that buildings create a harmonious, inviting outdoor room, with building heights proportional to street width. Parking should be located behind buildings or on the streets, and buildings must occupy a specified minimum percentage of street frontage. These are also excellent goals for communities opting for design standards.

Although some communities add floor area ratio bonuses for reducing impervious surfaces, and bonuses allowing new street right-of-way areas to be calculated into density allowances, it should be noted that in true FBCs, both FARs and density limits are merely *byproducts* of form-based regulations controlling building size, height, and volume, and are not standards with any design rationale.

If such lighter regulatory improvements are well received and produce impressive results, that success can provide a springboard for adopting a basic FBC such as those in Dover, Beacon, or Nashville. An instructive case can be found in Davidson, North Carolina (pop. 11,750), which requires two-story minimum commercial building heights and zero front setbacks in its downtown and gateway corridor.

Davidson’s ordinance also contains building type descriptions and a design review process administered by a design review board. According to former planning director Kris Krider, who was trained as an architect, these elements are critical because they control important visual and functional aspects of buildings. Examples: ensuring a minimum percentage of windows on shopfronts and front doors opening onto sidewalks.

Davidson does not limit density in any of its nonrural planning areas, and it allows a broad range of permitted uses, provided the building type is attractive and fits into its context in terms of scale

and detail. Density tends to be regulated more by limitations on building height and parking requirements. Its commercial leasing space therefore tends to be of a relatively high quality.

This community achieves outstanding results without elaborate form-based codes; it is a model for others where shorter, simpler (but well-illustrated) approaches are more politically feasible. However, because most design codes do not regulate interconnected street networks and pedestrian-scaled blocks, these aspects (and reducing on-site parking requirements) should be included if FBCs are not adopted.

### More rural options

Communities more rural than Davidson sometimes begin with something simpler, such as a character-based development plan focusing on the physical design attributes of the community, followed by a code containing either voluntary guidelines or regulating standards. Such is the case in Varna (pop. 1,100), one of seven hamlets and two villages within the rural town of Dryden, New York, four miles east of Ithaca. Varna’s main street is Route 366, a two-lane rural highway. Apart from a curvilinear subdivision of manufactured homes dating from about 1960, it has no side streets or traditional grid of residential blocks, and the principal design issues relate to several roadside businesses and to a few dozen residences.

Dryden hired a planner who took a neighborhood design course with drawing classes which enabled her to complete the site plan drawings incorporated in the Varna community development plan (<http://tinyurl.com/ohpaqdr>). The planning director had studied community-based design in graduate school and was specifically looking for an assistant with design experience.

Among the subjects addressed in the plan are sidewalk improvements, traffic calming, gateway treatments, facade improvements, mid-block medians, public spaces, building form, landscape standards, and performance zoning. It concludes with design guidelines in a zoning amendment. Its drawings illustrate ideas the community endorsed, and serve as examples to guide developers regarding the desired type of layout and buildings.

Durango, Colorado (pop. 16,687), adopted design guidelines in 1983 for its central business area. After hearing from several leading new urbanists in 2003, and considering adopting FBCs, city staff and officials chose instead to supplement and improve their existing design guidelines and to create new guidelines for all new commercial uses across the entire city.

With its design guidelines in place, Durango enjoyed additional success in transforming a corner site along its main street from an unremarkable single-story building into a distinguished 2.5-story brick structure, greatly reducing parking requirements to make it possible. The design review board then approved plans for the building.



Varna, New York's new gateway from the west arranges buildings around foreground open space framing two corners of an intersection (top). Its traditional neighborhood design (above) acknowledges the usual absence of alleys in small northeastern towns, and instead provides a landscaped greenway with a pathway behind the homes and mid-block crosswalks to encourage walking for exercise, enjoyment, and running errands. A local planner with neighborhood design experience prepared the hamlet's design guidelines in a zoning amendment; the community-endorsed illustrations serve as examples to guide developers.

The unusual metal framework atop the two street facades reflects the roof line of the old Strater Hotel, built on the opposite side of the street in the 1880s. As is true elsewhere, the city's design guidelines discourage the mimicking of historic building styles on new structures, instead encouraging contemporary designs that are respectful of, and harmonize with, the surrounding structures, according to Greg Hoch, director of planning and community development.

Some of the examples noted in the new edition of my book, *Rural by Design*, were created by builders who employed skilled

designers, but others were shaped by local staff using design standards that address key issues such as maximum front setbacks, minimum building heights, and requirements that buildings front onto streets with front doors and a minimum percentage of glazing.

Such has been the situation in Freeport, Maine (pop. 7,879), which has achieved excellent results with design standards, combined with increased flexibility for permitted uses. The town has avoided FBCs partly because existing regulations are working well and because eliminating prescribed uses and allowing higher densities would be a very tough sell, politically.

Although design standards are particularly attractive to smaller communities that lack the professional staff to administer the new FBC "operating system," the land-use enabling statutes in some states (such as Pennsylvania) make it difficult to implement design controls on buildings outside designated historic districts or in "traditional neighborhood design" districts.

In these situations, communities can encourage desired results by offering a higher density option conditional upon compliance with design standards regulating area and bulk (including building heights and setbacks), paired with strong standards for landscaping and pedestrian circulation, according to Ann Hutchinson, AICB, senior director of municipal conservation services at the Natural Lands Trust in Media, Pennsylvania.

In addition, parking requirements should be flexible so they can be waived or reduced. A basic rule: Every community should supplement its regulations with performance standards to maximize flexibility in allowing different land uses without sacrificing basic protections (such as regulations controlling noise, odor, and glare). As always, codes should be unambiguous and easy to understand and apply.

Unless one is fortunate enough to live in the Nashville Metro region, where the planning staff at the agency's Urban Design Studio are trained to write basic FBC regulations in-house for a modest cost, other approaches—such as design standards as described above—could provide a solution that bridges the gap between current zoning and full-fledged FBCs with all their usual bells and whistles.

Another approach would be to follow the examples set by Nashville (and Dover and Beacon) to create pared-down FBCs—which, according to Nashville's Rick Bernhardt, are sometimes so short that applicants need to read only four pages to determine what they must do to build at a specific location. These direct approaches, less laden with regulatory details, could help many communities improve the physical form of new development and redevelopment. ■

Randall Arendt is the author of *Rural by Design*, published by APA Planners Press. This article is adapted from the second edition of the book, issued this April. Learn more here: [planning.org/store](http://planning.org/store).