

## ***Form-Based Codes: From Boston to Barcelona and Back to Honolulu***

***By John P. Whalen, FAICP***

The devil may be in the details, but the angels dwell there, too. That thought runs through my mind as I ruminate on the workshop on form-based codes that I (and three other Hawaii planners) attended at APA's National Conference in Boston, coupled with my impressions from walking the streets of the host city, and later of Barcelona during a trip I made to Portugal and Spain immediately following the conference.

The 4-hour APA workshop was too short to give more than a rudimentary exposure to the concepts and practice of form-based zoning. I would describe it as a Nescafe experience; that is, it gave the flavor of coffee and the kick of caffeine without the brewing and filtering for a fine espresso ...or the grinding of the public review process, for that matter. Workshop participants sat in groups of eight around circular tables. On each of the tables was a rough map showing land uses, streets and natural features surrounding a blank circle representing 40 acres. The task of each group was to prepare a form-based plan and code for this circular *tabula rasa*, taking the context into account.

The first step is to develop the Regulatory Plan, which articulates a vision for the form of the development. Since these were teams of planners, you can bet that all groups settled quickly on a vision of a walkable, mixed use community that integrates with surrounding areas and takes advantage of scenic views. The Regulatory Plan also lays out the circulation system, identifies nodes of activity and views and other features to be protected or highlighted, and sets forth a general land use scheme, which may consist of some single-use as well as mixed use districts.

The second step is to set the Standards for Public Spaces and Building Form to implement the Regulatory Plan. With respect to building form, standards in most form-based codes are relatively simple. Many go into detail on the treatment of ground floor building facades and uses and the design of public spaces, including street elements, but leave quite a bit of latitude to designers and developers on the use of the allowable building envelope and architectural expression. Many planners hold the misconception that form-based codes are highly prescriptive on architectural design, but in some ways they allow greater flexibility than conventional special design overlay districts that entail design review, and are more predictable in their outcomes.

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Because the workshop allowed no time to develop the administrative rules and definitions that would ordinarily be the third step in preparing a form-based code, participants were instead asked to forge directly ahead by arranging actual development projects, represented by cardboard rectangles of varying size, onto the Regulatory Plan map. The purpose of this exercise was to demonstrate the flexibility of the Regulatory Plan and test how well it achieved the vision of the Plan.

The real test of any plan plays out on the streets. Since the workshop was held early in conference, mobile workshops and casual strolling through Boston and Cambridge over the next few days offered a useful opportunity to reflect on the potential value of the form-based approach. A follow-up visit to Barcelona and other cities in Portugal and Spain expanded on this reflection. The urban form of all of these cities may have a deeper historic foundation than Honolulu's – with Boston's rooted in colonial times and Barcelona's and other Iberian cities' richly underlain with successive layers of Roman, Visigoth, and Moorish influence – Honolulu carries vestiges of its past, as well. It is evident not only in the designated historic districts such as Chinatown, but also, more subtly perhaps, in older neighborhoods with streets and lot sizes that do not meet present code standards, yet continue to shape the built form. Indeed, some of these neighborhoods – Mānoa, for example – are considered highly desirable places to live largely because they are not built to a modern template.

Large sections of Boston and Barcelona stray even farther from the uniformity of “modern” standards, but they are delightful places to experience and the residents have made lifestyle adjustments to fit the context, such as greater reliance on walking, bicycling and transit rather than the private automobile as a means of travel. The proliferation of outdoor cafes, window shopping and recreational strolling and biking in these cities clearly shows that their people enjoy this environment, even if the climate is not as ideal as Honolulu's, and their municipal governments are willing to respond to this by using concepts such as “shared streets”, multi-modal street design, pedestrian-friendly building façade and setback standards to a much greater extent than we have seen in Honolulu.

Perhaps this message can best be expressed in the brief photo essay that follows.

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## Boston



Form-based codes are as concerned about the details of the public realm – the streets, parks, and gathering places – as they are about land uses and the placement and design of buildings. It considers a place as an integrated whole, starting with the question: “What sort of urban environment do we really want to create (or, in some instances, preserve)?” There’s obviously something appealing about cities like Boston and Barcelona because so many people visit these places for the urban experience alone.

## Barcelona



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Would these two buildings – Casa Milo by Antonin Gaudi in Barcelona and an MIT research building by Frank Gehry in Cambridge MA -- have survived “design review” in a conventional overlay design district? Both buildings are regarded as “icons” today, but the work of these architects was once considered iconoclastic. Form-based codes remove the subjectivity of project-by-project design review.

**Casa Milo – Barcelona**



**MIT Research Building – Cambridge, MA**



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In Cambridge MA, curbs and narrow sidewalks were removed from a couple of alleys near Harvard Square so that it could more effectively be used as a “shared streets”, for vehicles, bicyclists and pedestrians without defining specific lanes.



This approach is common throughout large and small cities in Spain and Portugal. The concept is simple: “Drive with ‘aloha’, keep alert, and no one gets hurt.” Despite the common mantra of concern about “maintenance and liability”, narrow streets and alleys are not necessarily dirty, dangerous places, especially if there are doorways and windows to keep eyes and activity focused on the street, as in these examples from Spain. (*below and next page*)



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Form-based codes can create a strong sense of place, which may vary from block to block or by neighborhood, by establishing a “build-to” line with standards for the treatment of building entries. Front yards or grade changes may be used to separate residential building entries from the public realm, as in the Boston photo. In most parts of Spain and Portugal, secured residential entries come up directly to the public realm along quiet, narrow streets and alleys.



Front yards are uncommon in most European cities – especially the older sections, but even in the newer suburbs. The development pattern tends to fairly dense and compact. Yet, there is plenty of “green” in beautiful and well-maintained public parks and pedestrian promenades, on private patios, balconies and rooftop terraces, and even on the side elevations of buildings with windowless walls.



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Through attention to detail and willingness to depart from a standard template, it is possible to develop street environment that is beautiful as well as practical and functional. For example, in the photos below, a curb in Granada, Spain, is angled up from the sidewalk grade, diverting runoff to drainage inlets on either side, and to the planter well, providing irrigation and avoiding the need for a curb ramp at the crosswalk.





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In Cambridge, MA, mailboxes and newspaper racks are embedded into the façade of an adjoining building in order to free up more space for pedestrians on a narrow sidewalk.

