

Government Issue

An Insider's Guide

Redraw, Reboot

Lands of Opportunity

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THE POWER OF ACTION

A photograph of two men at a construction site. The man on the left is wearing a yellow hard hat, sunglasses, and a high-visibility orange and yellow safety vest over a white t-shirt. The man on the right is wearing a white hard hat and glasses. They are both looking at a large set of blueprints held by the man on the right. In the background, a tall building is under construction, with visible concrete floors and scaffolding. The sky is clear and blue.

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Government Issue

ABOVE
Detail, *Effects of Good Government on the City Life*, fresco painting by Ambrogio Lorenzetti, 1338–40.

COVER
Photo: Bear Cieri

Features

16

AT ISSUE

Notes From the Suggestion Box

From-the-trenches ideas for fixing government and fixing the economy.

John Nunnari, ASSOC. AIA

Chris Walsh AIA

Michael Litchfield

A. Vernon Woodworth AIA, LEED AP

Michael Davis FAIA, LEED AP

22

What I Learned: An Insider's Guide to Improving Local Government

By James G. Kostaras AIA, AICP

26

The Shadow Government

With little public oversight, the organization that invented the LEED system is remaking an industry.

By Michael Liu AIA, NCARB

30

Still Waiting?

The Stimulus Act has been both better and worse than you think.

By Derrick Choi AIA, LEED AP

34

GALLERY

Redraw, Reboot

Maps and information graphics

by Ryan Sullivan

Text by Elizabeth S. Padjen FAIA

40

CONVERSATION

Lands of Opportunity: Cities and Prosperity

How do you keep them down on the farm after they've seen Shanghai? Maybe you don't want to.

Edward L. Glaeser PHD talks with

Brent Ryan PHD

Departments

3 FROM THE EDITOR

5 LETTERS

9 UPFRONT

Plywood: Material, Process, Form

Reviewed by Alfred Zollinger

R. Buckminster Fuller

Reviewed by Pamela de Oliveira-Smith

Seen: 1111 Lincoln Road Parking Garage

Reviewed by David Carlson AIA

Received: Books by Local Authors

Letter From Idjwi

By Dan Sullivan

Focus: Painted Over

Photo by Aaron Dougherty AIA, LEED AP

Covering the Issues

By Gretchen Schneider AIA, LEED AP

Women and Modernism in Landscape Architecture

Reviewed by Nina Antonetti PHD

47 END NOTES

Books

Building a New Boston

Reviewed by Matthew J. Kiefer

Too Big to Fall

Reviewed by Ian Baldwin

The New Politics of Planning

Reviewed by Ellen Whittlemore

Site Work

52 OTHER VOICES

Old South Meeting House

By Paul Wainwright



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Step Right Up

Think of all the architects you know who have run for public office.

Maybe you know Harvey Gantt FAIA, the oft-cited mayor of Charlotte, North Carolina, who twice ran unsuccessfully against Jesse Helms for the US Senate. He's been out of office since 1987. Or Richard Swett FAIA, the congressman from New Hampshire and later the US ambassador to Denmark from 1998–2001. He was the only architect to serve in the US Congress in the 20th century. Or maybe you know one of the eight architects—including Massachusetts' Chris Walsh AIA—who are currently serving as state legislators, according to the AIA.

For a profession that is so deeply committed to the public good, the numbers are puzzling. Certainly, countless architects are working within all levels of government, but their presence hasn't correlated with elective office beyond local positions such as planning boards and conservation commissions. Yet most architects have some streak of idealism, an inherent optimistic sense that the world can be improved, which is why Howard Roark is an imperfect portrait of the profession: even the most apparently egotistical architects are sometimes simply those with the most unyielding vision of what constitutes the public good.

When it comes to public service, the architecture profession might be even more extreme than the Millennials, whose capacity for volunteer activity has already dubbed them the next "greatest generation." Among the 18- to 29-year-olds polled in a recent survey by the Harvard Institute of Politics, 69 percent agreed that community service is honorable, and one-third have performed some sort of community service in the past year.

Now consider the architects you know. If your circle of acquaintances resembles mine, it's pretty hard to come up with anyone, of any age, who hasn't done some sort of community service, either in the form of public boards and commissions or active participation in a nonprofit. And in most cases, this activity represents lifelong dedication that can't be discounted as a cynical effort to plump up a résumé or college application.

You can't be elected if you don't run. But even if the scrimmage of electoral politics is somehow less appealing

than negotiating change orders, architects can still make real, substantive contributions to the civic process. As government struggles at all levels to cut costs, to do more with less, architects must step up to offer their expertise on some of the most pressing issues: housing, economic development, infrastructure, sustainability, energy consumption. It's time for some creative thinking.

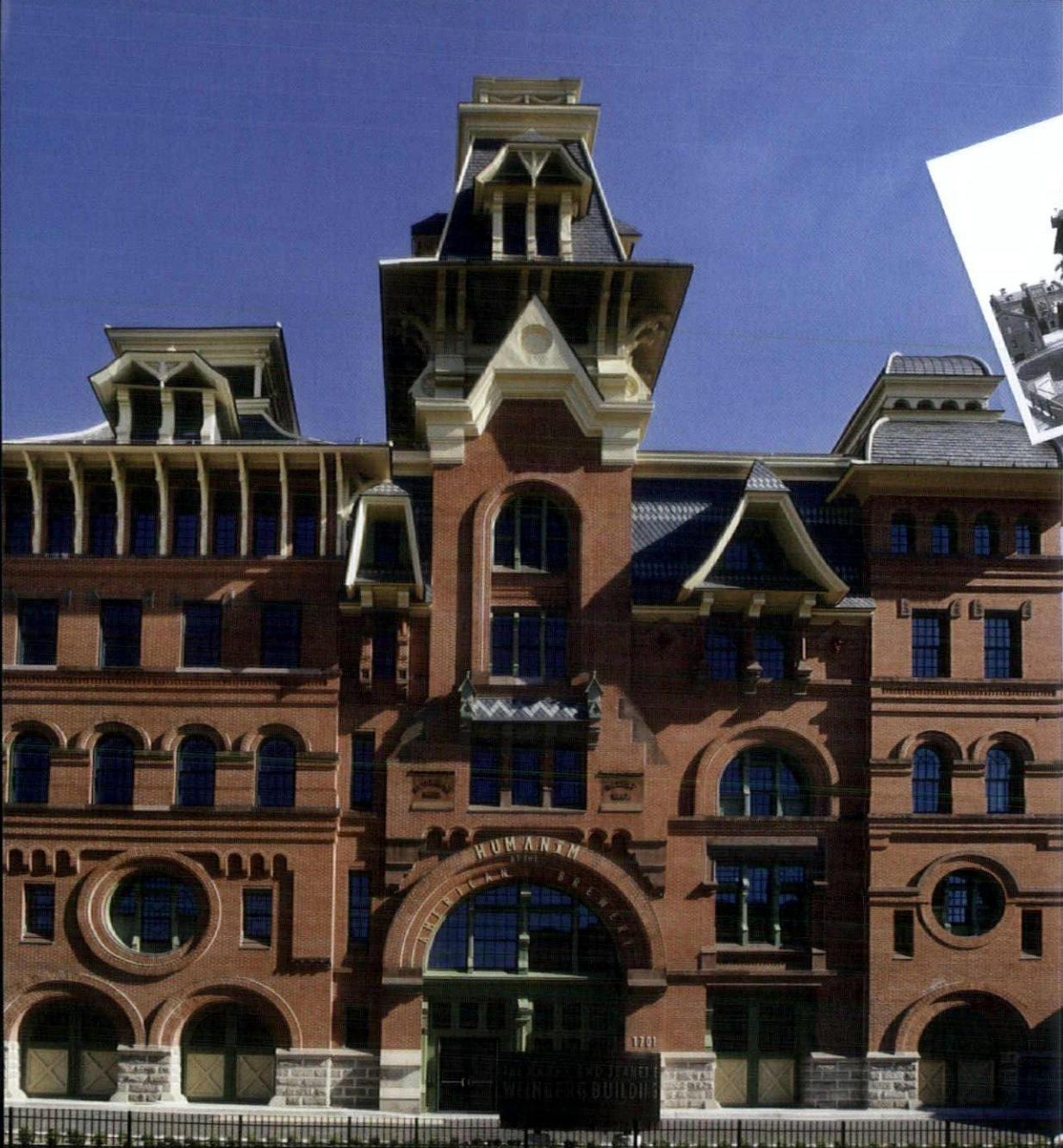
Close readers of *ArchitectureBoston* may notice some changes in this issue. "Upfront" is the new moniker for an expanded "front of the book" section that includes opinion and observation pieces in addition to reviews of exhibitions and events. Book reviews and "Site Work" are together called "End Notes" to underscore their function as continued commentary on each issue's theme. The "At Issue" feature serves as an introductory exploration of the theme. Our design has been tweaked, too, both to accommodate these changes and to allow more editorial and graphic flexibility, such as more effective use of margins for notes and reader resources.

Countless architects are working within all levels of government, but their presence hasn't correlated with elective office.

With this issue, we are also launching a new website—www.architectureboston.com—where you can find all our print content as well as exclusive online features. We hope you will visit often, both to comment on stories and to discover new material that will be continually added even after the print version has landed on your desk.

These changes are the most obvious manifestation of a process that began a year ago when we first incorporated some minor editorial and design updates. We anticipate additional fine-tuning in the coming months and welcome your reactions and comments. In this, *ArchitectureBoston* is much like the city that is its home: the product of an evolutionary process that is never complete. ■

Elizabeth S. Padjen FAIA
Editor



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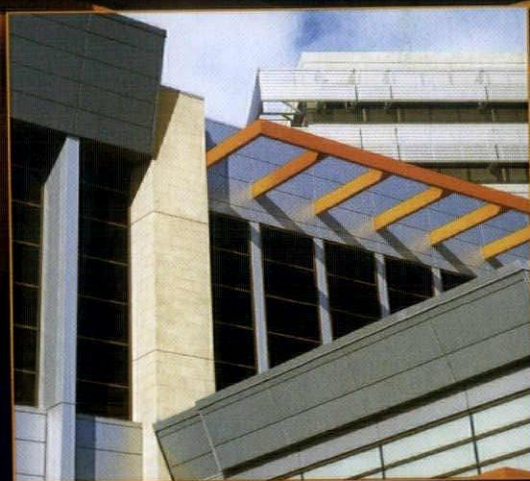
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On “Ben” (Spring 2011)

What a wonderful tribute to Ben Thompson! Thank you! He certainly brought joy to a huge number of people.

It was interesting to see mention of Bernard Rudofsky's *Streets for People* in the same issue. Somehow Ben was able to get some of the mounted photographs from Rudofsky's 1964–65 Museum of Modern Art exhibition, “Architecture Without Architects,” which traveled to each of the then-existing D/R stores—Cambridge, New York, and San Francisco. The lesson to me, at the time a salesperson in the San Francisco store, was that there is also design without designers—that good design is the result of good thinking not just by designers but by anyone who is thoughtful about how we live. Although many of the products D/R sold were created by “name” designers, many were made by talented craftspeople and manufacturers from around the world who believed in making things of lasting quality and usefulness. How many of us still treasure items we purchased from D/R many years ago for what then seemed a bit beyond what our pocketbooks could bear!

LU WENDEL LYNDON
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Gualala, California

Reading your rich issue dedicated to Ben Thompson brought me back to the wonderful years I spent working for him in the mid-'60s, first as his assistant at the Harvard Graduate School of Design and then as a public-relations/speech-writing person at BTA. I was in my mid-20s, recently moved to Cambridge after growing up in conservative Boston—and what a learning experience it was! People, creativity, and celebration: They all came together in those three-projector slideshows flashing images of glorious architecture, food markets, and flowers to the music of Sonny & Cher and Simon & Garfunkel.

As your articles said, Ben was a genius in bringing people together in surroundings that made them feel at ease, playful, and creative.

CLARA WAINWRIGHT
Cambridge, Massachusetts

The idea that a building represents a “legacy” is often suspect. Buildings and their uses change over time; their original design intention becomes subject to misinterpretations due to evolving trends and lifestyles and, worse, over-intellectualization. This is particularly true of retail projects which, by nature, have a shortened half-life and must be renewed every few years in order to stay viable in the marketplace.

Retail projects worked well for Ben Thompson because he had the same need to stay fresh. He was constantly changing them. And he was also constantly changing his studio/office. Ben had a habit of placing something new and fresh on his secretary's desk almost every morning. It might be a flower or a photograph or a piece of folk art, or simply a colorful fall leaf that he had collected on his walk to work. This was emblematic of the way he was constantly refreshing the studio with new, colorful furniture and fabrics, beautiful large-format photographs, and products of the “in-the-works” design processes for the wonderful projects and special clients that he also seemed to attract. Ben also “collected” the people around him. He attracted those who had a particular artistic bent or a way with words—people who had creative impulses and multiple skills. He didn't have an office of architects as much as a cast of characters who covered the waterfront, from writers and editors to food preparers and model makers.

Ben also employed a full-time photographer and photo librarian to help him put together his famous three-projector slideshows. These were not highly edited client presentations—they were colorful,

artistic collages that filled Ben's little windowless black box theater with wall-to-wall, floor-to-ceiling extravaganzas of light, color, and sound, meant to inspire creativity in himself and everyone else. Studio presentations, whether for a client or just the design team, were similar exhibitions of colorful drawings, models, and mock-ups, put on with a combination of rehearsed precision and improv.

Here is Ben's real legacy: Very often, I will run into someone whom I worked with at BTA. If we find ourselves alone in an elevator or walking down the street, we will reminisce about the studio, or the Harvest, or D/R, and we will inevitably marvel at the very creative and inclusive environment that Ben had created and conclude that it must have been rare, because there seem to be no firms today that even approach that level of artistic and creative stimulation. At one such encounter recently, as we parted, my colleague said, “Do you miss the old BTA studio as much as I do, after all these years?”

Yes, I do.

JIM VAN SICKLE
Cambridge, Massachusetts

As the successor owner of Ben Thompson's D/R building, I was one of the many who regarded Ben as a friend. Often when we met in the Square, he would ask me where I was going on my next trip. He would invite me to his office, show me slides of doorways, back streets, small parks. He helped me understand the soul of the city I was about to visit.

When Ben wanted to open the Harvest restaurant in my building next door in 1975, he showed me a sample menu he had drawn with sketches of half lobsters and champagne glasses. When I told him that I doubted whether those would be big sellers in Cambridge, he switched easily to a discussion of Harvest burgers, meatloaf sandwiches, and house wines, as well as the type of wood he wanted to use in constructing the bar.

Recently I was in Shanghai, sitting in the D/R Bar, an oasis in a renovated building in the middle of an exploding and fractionated metropolis. As a teacher myself, I began to think about Ben's role as a teacher. He taught by example. There were few boundaries between his professional and personal lives. To him, buildings were more than a collection of bricks and mortar, certainly more than numbers on a spreadsheet. They were an opportunity to share with others his view of the importance of a community, where people could work together productively and share joyfully and openly in the many pleasures life can bring. I thank *ArchitectureBoston* not only for putting together such a delightful and comprehensive series of vignettes covering Ben's life and the influence he had on so many of us but also for reminding us of what seems to be missing in what has become an increasingly polarized world.

WILLIAM J. POORVU
Cambridge, Massachusetts

Many thanks for bringing Ben back to us!

He is my hero, and because I once worked with Scott Wilson, one of Ben's former associates, I still use many of his techniques (colored yarn, pins, game cards) in interactive charrettes with my clients. They shift the discussion away from making an "object" to making a "container for activity."

I just have one small comment on "About Joy." The article misses Ben's point, which is: we don't *think* joy, we *feel* joy. Remember the awe of the cathedral, the sense of community of the street market, the warmth of the home? Sensuousness is the great, ineffable quality of architecture. Ben got it and tried to teach it in his "Ode to Joy" speech to the AIA. If only more of us could hear it (feel it, smell it, and en-joy it)!

TAMARA ROY AIA, LEED AP
Senior Assoc. Principal, ADD Inc
Boston

I left a recent presentation by Jane Thompson at the pinkcomma gallery excited again about the potential for a design community and collaborative practices. I

was comforted by her emphasis on the contextual necessity for designers to work toward a larger social goal. Jane explained BTA's role as one of facilitators and not dictators: "We are not the decorator," she stated. "We provide the space, and (users) fill it as they see fit."

As a young follower of the Tillian dictate that "mess is the law" [Jeremy Till, *Architecture Depends*, MIT Press, 2009], I have embraced the notion that our creations are not pristine—they are intended to be used and lived in. The willingness to relinquish a stranglehold on a project and embrace a community-based design strategy involving other designers along with clients and users shows restraint and communal care.

This continued emphasis on community made the event's location at pinkcomma that much more appropriate. As a young designer arriving in this city without any allegiances or connections to local institutions, the gallery has provided me a welcoming home. I scanned the gallery space to see my friends and colleagues as Jane spoke warmly about BTA's history the way a family member might reminisce about childhood memories, and recognized that Boston and other cities need more spaces like this, devoid of institutional allegiances, that allow the design community to gather in welcome and not exclusion.

The collaborative approach that Ben and Jane Thompson's work emphasizes reminds the community of young designers that the struggle to grow as creative practitioners is not meant to be undertaken alone. Not only that, but the fact that this struggle transcends generations provides the comfort that the goals we continue to pursue are not new but are part of a larger search for holistic design integrity.

JONATHAN HANAHAN
over,under
Boston

We want to hear from you. Letters may be e-mailed to epadjen@architects.org or sent to *ArchitectureBoston*, 52 Broad Street, Boston, MA 02109. Letters may be edited for clarity and length, and must include your name, address, and daytime telephone number. Length should not exceed 300 words.

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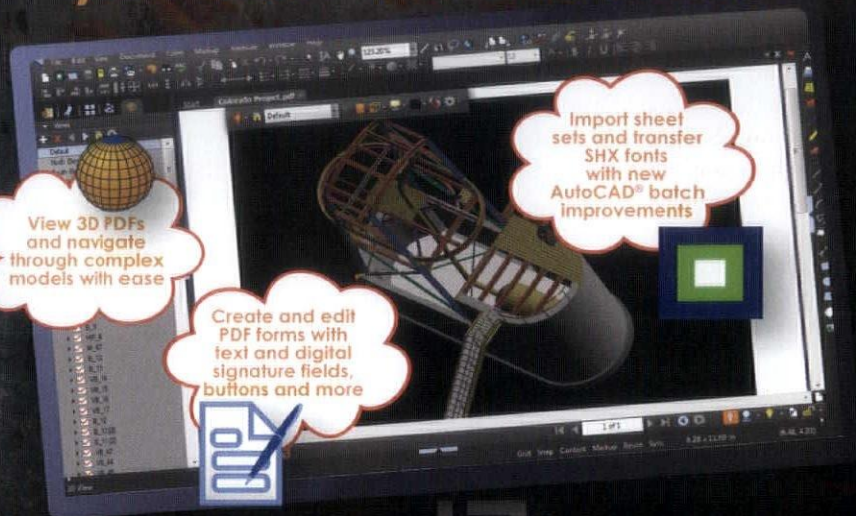
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LEFT
Lounge chair,
1934. Designer:
Gerald Summers.
Manufactured
by Makers of
Simple Furniture.
Photo: Museum
of Modern Art

Alfred Zollinger is the director of the Design Workshop at Parsons The New School for Design and is co-principal of Matter Practice, an architecture and exhibition-design firm that maintains its own prototyping and custom-fabrication shop in Brooklyn, New York.

Plywood: Material, Process, Form

Museum of Modern Art, New York City
February 2, 2011–ongoing

So you think you know plywood? Although the show's title promises an examination of this modern material, *Plywood* is mostly a display of mid-20th-century furniture. Bound by the stage-like installation in the Architecture and Design gallery, this show similarly lives on a single conceptual platform: like many exhibitions by the Architecture and Design department, it is a selection from MoMA's extensive collection organized around a theme. *Plywood* is a good teaser, and a visit may feel like a wonderful reunion with well-known older friends to whom you have come to pay your respects.

Not much is new here, as several of these iconic

furniture pieces can be seen at any Design Within Reach store. One of the few exceptions (and the smallest piece in the show) is a patent model for a one-piece plywood chair from 1873 by Isaac I. Cole. Who knew, or remembers, pre-Eames or pre-Saarinen plywood chairs? Yet it is the nonfurniture objects—such as a bow, a propeller, and a pair of skis—that speak of the flexibility of this material and its many possible applications. This is what makes plywood so fascinating.

The show lacks a binding agent—like the glue that holds together the many layers of wood veneer that make plywood—to meld the multiple readings that the title suggests. The unlabeled black-and-white photographs of other seminal plywood pieces and processes help but are not enough. We can only hope that this is a probe for a larger future exhibition that will delve more deeply into all the layers that make up this intriguing material and the designs it continues to inspire.

Pamela de Oliveira-Smith is a writer in Boston.

RIGHT
Actor Thomas Derrah as Buckminster Fuller.
Photo: Marcus Stern

R. Buckminster Fuller: The History (and Mystery) of the Universe

**American Repertory Theater
Cambridge, Massachusetts**
January 14–February 5, 2011

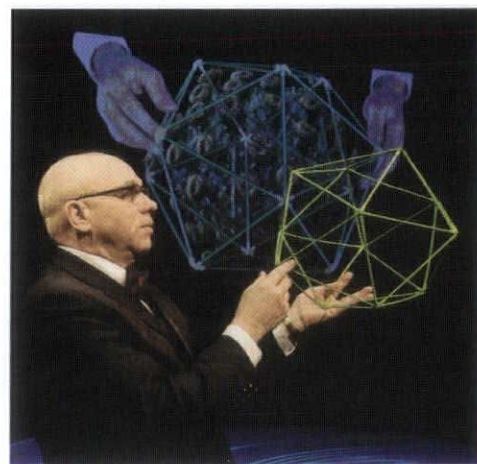
We know him as Bucky.

Buckminster Fuller—American inventor, designer, writer, engineer, and utopian futurist—was a benevolent genius who wanted to save the world.

In a one-man show at the American Repertory Theater, actor Thomas Derrah makes Bucky adorable, dynamically delivering a motherlode of ideas

in a performance that balances ecstatic optimism against lugubrious poignancy. Derrah succeeds at communicating even the most complex and esoteric notions by putting his heart first, making clear that Bucky's intellectual fireworks were fueled by love for the environment, his family, and the rest of humankind.

While the ART stages Bucky's life sparsely, using a couple of chairs, a desk, a few tiny geodesic dome-like baubles, and a sometimes-successful multimedia backdrop, the script could have been tightened. A second act felt wrong in a performance meant to honor a man who wanted the world to do more with less.



Seen

1111 Lincoln Road Parking Garage, Miami

David Carlson AIA is senior architect at the Boston Redevelopment Authority and executive director of the Boston Civic Design Commission.

ABOVE

The completed parking garage (the crane was required for completion of the interior construction of the developer's penthouse unit). Photo: James Cornet AIA



I would have ignored 1111 entirely had it not been on a shuttle-bus route from the Miami Beach Convention Center to the downtown hotels. Even then, it seemed a bit of an embarrassment, as if a derelict structure had been inhabited by squatters who added partitions and struts to hold the whole thing up, much like the 2-by-4s supporting the palm trees planted in front. I would not have been surprised to see laundry waving fitfully from the cables. It looked like money had run out for some developer.

I was taken aback to learn later that this was not only planned but also considered a “cutting-edge” design by the renowned architects Herzog & de Meuron. It’s mixed-use: you can drive up and park to visit a restaurant, retail shop, or residence or to attend one of the parties or events held on the parking decks after hours. It’s transparent: there are almost no walls and some very high ceilings. It’s clever: the developer used a

zoning loophole to match the height of the neighboring building. And it’s apparently very well lit, judging from the glamorous evening photos that appear in the press.

I get all that. The lighting, the views, the sense of space on the high floors, and the taut steel cables that almost invisibly restrain cars at the edge of the decks ... OK. The titillating sense of inhabiting a space that is somehow off limits—like a Roman ruin, or a Piranesian print, or a building under construction—is understood.

But this looks unfinished. The exotic quirks diminish in daylight. It shares almost precisely the massing of its older midcentury neighbor, which exacerbates the sense of a dream deferred. And to conceive of a structure that exalts the car in an age when we might more wisely be thinking along opposite lines seems an utter waste—much like the irony of sustainability seminars at a frigidly air-conditioned convention in Miami Beach on a hot June day.

Received

Books by Local Authors

Small Scale: Creative Solutions for Better City Living

Keith Moskow FAIA and Robert Linn
Princeton Architectural Press, 2010
Moskow and Linn have collected dozens of small projects that activate the human-scale spaces and define our urban experience. Frequently overlooked for grander visions, the work included provides insight and delight, and serves as a rallying cry to a new generation.

House in the Landscape: Siting Your Home Naturally

Jeremiah Eck FAIA
Princeton Architectural Press, 2011
A sustainable house design requires more than the latest green materials: it starts with a sophisticated understanding of the site. Eck presents case studies of projects by leading architects, illustrated with beautiful photographs.

Martha's Vineyard: Contemporary Living

Keith Moskow FAIA and Robert Linn
Monacelli Press, 2010
The title suggests a lifestyle guide, but the authors are really presenting a new regional design vocabulary. Featured projects marry the scale, palette, and restraint of New England vernacular architecture with Modernist minimalism. A book as lush as the houses within—and as ambitious.

Roller Coaster Symphony: An Architect's Journey

Wilson Pollock FAIA with Bruce Lynch
Design Leadership Press (PSMJ), 2010
Part memoir, part how-to, frequently entertaining, and always informative, this behind-the-scenes account of the growth of ADD Inc by its nationally respected founder and former CEO is a roadmap to a career in architecture. They don't teach this stuff in school.

Architecture as Revolution: Episodes in the History of Modern Mexico

Luis E. Carranza
University of Texas Press, 2011
A professor at Roger Williams University, Carranza offers a fresh understanding of Modernism within the social, cultural, and ideological context of Mexico in the early-20th century.

Letter From Idjwi

Democratic Republic of Congo

Dan Sullivan completed his MArch degree at the Harvard Graduate School of Design in January 2011 and is continuing to work on interdisciplinary strategies for introducing healthcare infrastructure to the Eastern Congo.

Photos online: www.architectureboston.com

We were dropped into chaos at the Port of Goma. Or, more accurately, our driver could not move any farther into the crowded street. So we each began lugging the 40 kilos of clothing and equipment that would support us over the next month on Idjwi Island, a three-hour boat trip away.

We are a group of seven graduate students representing four of Harvard's professional schools: public health, medicine, government, and design. Our goals for Idjwi are to perform a baseline health survey; develop a body of ethnographic and experiential research; and use that information to propose improved healthcare delivery, including designs for new healthcare facilities.

I wonder: How does an American designer responsibly work in this place? How does one respond to genocide; or comprehend the impact of introducing the first Internet connection where most buildings have no electricity; or understand how a visitor's innocent actions reverberate after departure? How can architecture deliver solutions for violence and poverty?

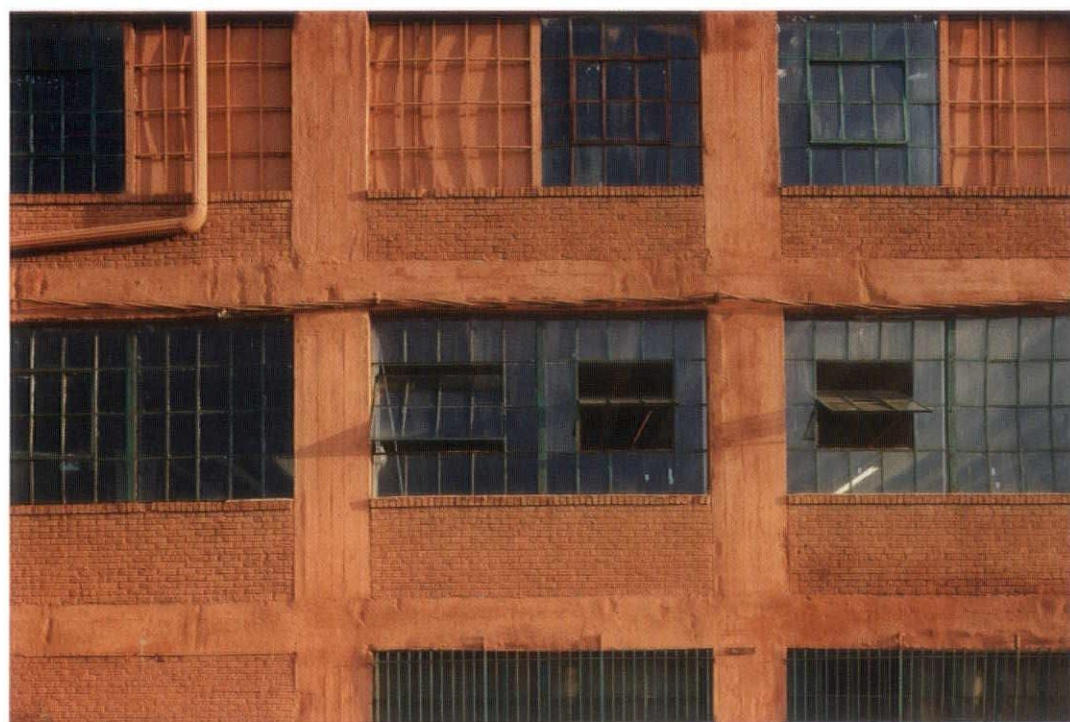
Hospital planning requires analysis of data such as disease prevalence, distribution of existing facilities and population, and the technical aspects of disease transmission. Yet the data that architects usually collect is of the ethnographic sort: examining how a culture uses buildings and public spaces, and what political, cultural,

religious, and personal biases affect that behavior. In the case of this project, our interdisciplinary student team means that scientific *and* ethnographic approaches can be integrated, creating what we hope will be more effective outcomes.

Immersion in Idjwi's daily life was our way to collect accurate information. On Wednesdays and Saturdays, we hiked 12 km to the market to buy our food. We haggled for vegetables and then carried the goods back, up and over the hills. Only by walking those roads did we begin to understand the challenge for a woman in labor to travel from home to the hospital. Only by visiting the remote villages did we understand the real impact of isolation.

As word spread that we were doing research to construct a hospital, local residents started collecting rocks for the structure's foundation, even though we weren't ready to build. Now, one year later, our team is still synthesizing our data; the project is ongoing; our recommendations and designs are forthcoming. I am committed to the people of Idjwi and haunted by the words of King Rubenga: "You're not the first group to come here wanting to help, but most people then go back and forget about us. Please don't forget about us. Please come back. Please do something."

We return this summer.

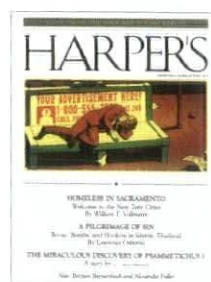
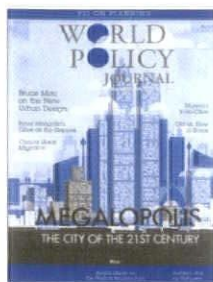


Focus

Painted Over

Aaron Dougherty AIA, LEED AP is a fine-art and architectural photographer in Kansas City, Missouri. His "Painted" series highlights brick, concrete-block, and metal-clad buildings—everyday, industrial buildings seemingly made deliberately more anonymous, even invisible, by coats of paint. www.aarondougherty.com

Online slideshow: www.architectureboston.com



Covering the Issues

Gretchen Schneider
AIA, LEED AP is the
principal of Schneider
Studio in Boston.

The really big city... *World Policy Journal* (Winter 2010/2011) tackles "Megalopolis: The City of the 21st Century," speculating especially about the rapidly urbanizing areas of Asia and Africa. In "The Architect and the City," the editors talk with architect Didi Pei—son of perhaps the most famous Chinese-American architect—about his firm's work in China, discussing population migrations, politics, cultural paradigms, and the implications of creating cities in a single generation. Meanwhile, in "Urbanity, Revisited," graphic designer and thinker Bruce Mau argues that even the most technologically advanced cities that we're designing today are based on outdated models, as if we're attempting "to re-build Paris ... everywhere."

Bridging the divide... *The American Interest* (March/April 2011) provides a collection of articles around the theme "Smart Infrastructure: How to Rebuild America (Without Breaking the Bank)." For a nondesigner's perspective, check out "Re-imagining Infrastructure" by Mark Gerencser, a vice president at Booz Allen Hamilton. While outlining the known problems of structurally deficient bridges and dams, contaminated water pipes, and an overloaded power grid, Gerencser observes that the underlying issues are ones of finance, management, and planning as much as invention, engineering, and construction. Leadership matters most. Gerencser presents a series of simple but important ideas: Government and private interest are interconnected; infrastructure must be understood as single, complex systems spanning multiple jurisdictions, rather than products of isolated fiefdoms; new systems must be designed with change in mind; and we need a clear, national vision.

Coming your way... Heat-releasing walls? Bird-friendly windows? Liquid glass? In "Material World" (*Fast Company*, March 2011), Rachel Arndt offers a brief but fascinating snapshot of these three innovative products. The walls incorporate a solid core that absorbs excess heat if the room is warmer and releases it if cooler. The windows are modeled on spider webs and include UV

patterns that are visible only to birds. The "glass" is a spray-on microscopic silicon-based coating that is resistant to bacteria and easy to clean, and is proving especially popular in hospital applications. You can't find these at Home Depot now, but you probably will some day.

Not quite there yet... Considering a rooftop windmill? *Slate* author Amy Westervelt suggests that you wait a while. In her "Rooftop Pipe-Dream" blog post (February 12, 2011), Westervelt reports on the runaway trend in rooftop windmills. Prompted by big tax credits in the federal stimulus act and promoted by positive media stories, more than half of current rooftop capacity has been built in the past three years. The problem? Much of this huge rise in "small wind" doesn't yet match the hype. Many of these recent rooftop units simply don't work, or they don't work enough. To produce useful power, rooftop units must receive continuous wind over five miles per hour, which in most city settings—with cell towers, and buildings, and other urban obstacles—is simply impossible. In fairness, industry self-regulation has begun, with the first certified turbines (guaranteed to meet certain performance criteria) due out in June. Or, reconsider a tall tower windmill. So long as you have an acre of land.

No place like home... In an unsentimental reminder that the first role of architecture is shelter, writer William T. Vollmann offers a sympathetic portrait of homelessness for *Harper's* (March 2011). Vollmann begins his "Homeless in Sacramento: Welcome to the New Tent Cities" chronicle as a tolerant building owner with a parking lot, on which he allowed squatters to camp. Vollmann's humanity grew into curiosity, as he, too, started to seek shelter at squatters' settlements, sleeping on rocky ground and concrete floors. While still a fiction—Vollmann had a home to return to—this rare, in-depth investigation includes a discussion of Safe Ground (a movement to protect the homeless), the sometimes conflicting mandates of police and park rangers, the history of itinerant towns, and the mosaic of common "solutions." Perhaps most important, he humanizes homelessness.

Women and Modernism in Landscape Architecture

Harvard Graduate School of Design
Cambridge, Massachusetts

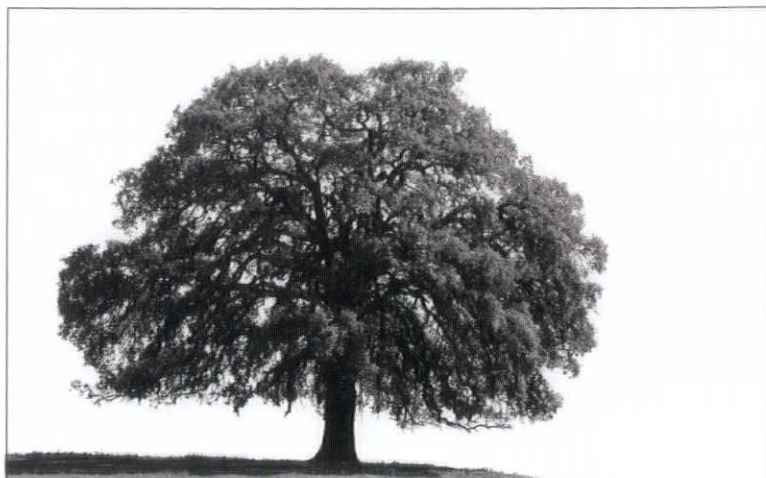
February 17–18, 2011

Why convene a symposium devoted to female landscape architects? The goal, according to Charles Waldheim, chair of Harvard's landscape architecture department, was to "reinvest" in landscape. Keynote speaker Thaisa Way, author of a recent book on the subject, set the stage by profiling an impressive 85 female practitioners in one hour. Arguing that neglectful historians have obscured the proliferation of women in Modern landscape architecture practices, Way challenged historians to move beyond monographic biographies to study constellations, or collective histories. Yet singular women were very much on display the following day.

Friday's biographical morning focused on scholarship pertaining to six women and their practices, and provided context for a compelling autobiographical afternoon, when Rosa Grena Kliass, Cornelia Hahn Oberlander, and Carol R. Johnson presented their own work. John Beardsley, a landscape historian and author, joined the three stars for a concluding panel discussion during which differences in ideology and methodology eclipsed the predetermined common ground of gender and Modernism. For instance, in addressing public-sector design, Kliass works on the premise that she knows what the client needs, Johnson solicits community participation when appropriate, and Oberlander advocates, "Be a good neighbor at every scale." Each is greater than the sum of her projects by virtue of her contributions to reforms or revolutions in education, professional organizations, and ecological design. The values are worthy, the achievements laudable.

Occasions such as this *can* contribute to the landscape canon, historiography of the landscape architecture profession, and landscape studies if they are well attended, which this one was not. (About 45 people were present at any given time.) If the Harvard Graduate School of Design is to challenge the canon, emphasize landscape history, and elevate landscape architecture—all of which were mentioned throughout the course of the symposium—then it also needs to underscore the obvious triple jeopardy of the words "women," "Modernism," and "landscape" that undermined this event. But is it helpful to profile women to mostly women? Perhaps the profession would be better served by generational and gender inclusivity and interdisciplinary points of view.

Nina Antonetti PhD is an assistant professor of landscape studies at Smith College and author of *Activism by Design: The Art, Science, and Stewardship of Cornelia Hahn Oberlander* (forthcoming).



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A close-up photograph of a steel beam that is heavily corroded with rust. The rust is a thick, brownish-orange layer covering most of the surface of the beam. The text "got rust?" is overlaid in white.

got rust?

A photograph showing the interior of a large stadium or arena. The steel beams of the roof structure are clean, shiny, and free of rust. The text "they don't!" is overlaid in white.

they don't!

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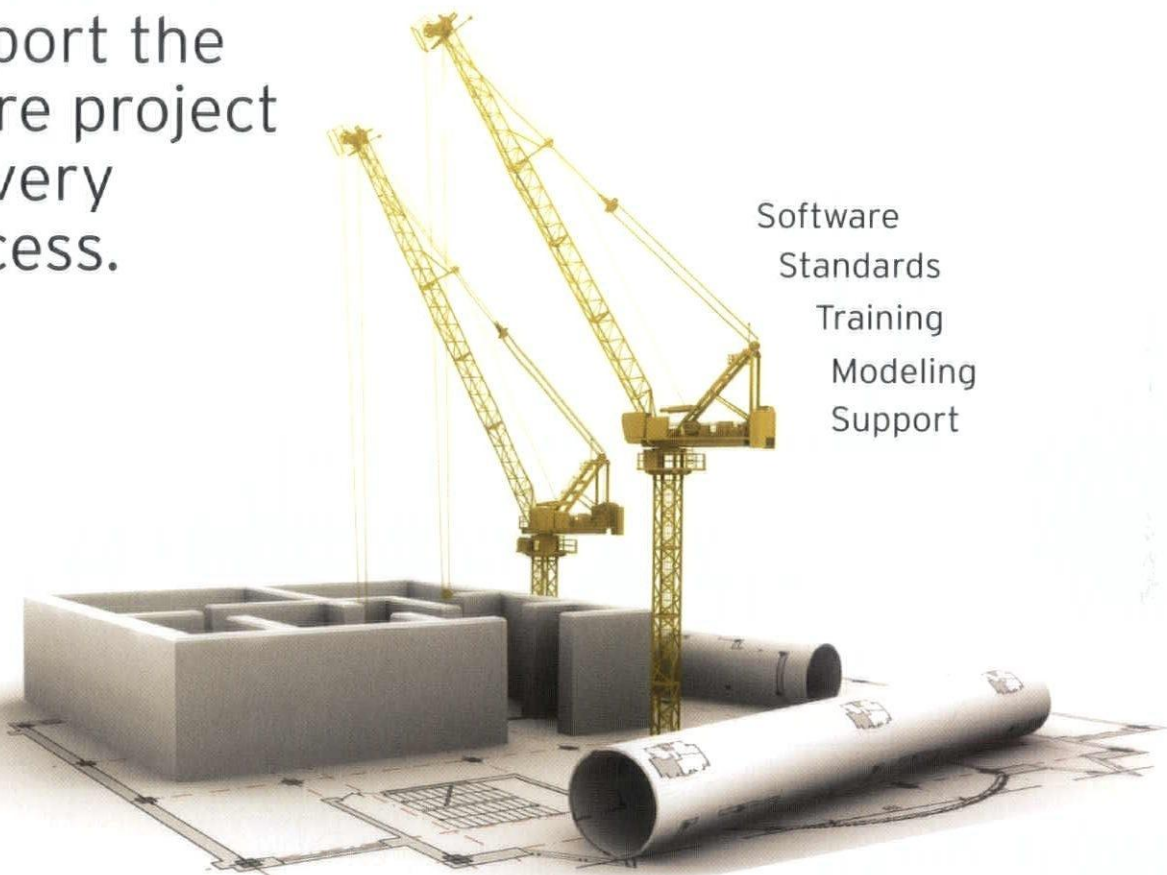
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Notes From the Suggestion Box

From-the-trenches ideas for fixing government and fixing the economy



One-Stop Shopping: Reorganizing the Oversight of Construction Codes

Picture this: As a last step to getting your certificate of occupancy, you and your general contractor are performing the final walkthrough with the local fire inspector. The inspector happens to look up and notes that a carbon monoxide detector needs to be installed on the ceiling above you and that a fire extinguisher is required at the end of the hall. You nod in agreement but mentally recall that your code review found no requirement for either a CO detector or a fire extinguisher in those locations. Furthermore, you know the inspector personally signed off on your design months ago before your general contractor pulled the building permit. You silently recognize that the ensuing occupancy delay will not be easy to explain to your client, nor worth the aggravation. When you return to your office, you call your general contractor and direct him to install the additional items.

If you are an architect, you can probably relate to this scenario. You may even have thought, Wouldn't it be great to have some predictability in code enforcement or, barring that, an understandable, uniform appeals process? For that matter, wouldn't it be great to have a coordinated set of construction codes that have a predetermined schedule for updates and revisions? Why is it so hard for the state to do this?

Under the current Massachusetts regulatory system, nine separate boards and two state agencies promulgate construction codes related to: buildings; elevators; fire prevention; fuel gas and plumbing; electrical work; accessibility; boilers; public health ("sanitary"); drinking water; sheet metal; and pipefitting, refrigeration, and sprinkler fitting. With the exception of sanitary and drinking water, which are each regulated directly by one of two state agencies that report to two separate secretariats (executive offices serving directly under the governor), the remaining nine boards report to one of two separate departments that in turn report to two different

secretariats. If this sounds confusing, it is. In all, four different secretariats have jurisdiction over Massachusetts state construction codes.

Recognizing the problem, Governor Jane Swift established the Building Code Coordinating Council (BCCC) in 2002. The BCCC, comprising all the construction code promulgating boards, was charged with resolving the problems of inconsistency, redundancy, and conflict within the various competing codes. This was the first time all the boards and state agencies actually sat in a room together to discuss code development. Although their charge was clear, the members of the BCCC chose not to retroactively address issues predating its existence and therefore left a variety of problems in place. As a result, architects have often been caught in this code conflict "crossfire."

In 2007, state senator Richard Moore proposed legislation that would consolidate some of these boards and agencies under a single department overseen by a single secretariat. Unfortunately, the legislation died in committee because of an incorrect perception that it would affect previously negotiated union employee benefits packages.

With the 8th edition of the building code going into full effect in February and a 9th edition in the works for 2013, a new accessibility code due by the summer of 2011, and continuing jurisdictional battles between building officials and fire officials, the time may be right for a new version of Senator Moore's legislation. By moving the 11 separate boards and state agencies under the charge of a single secretariat that can provide clear decision-making authority, the entire construction industry has the potential to finally move toward some predictability in enforcement, the establishment of a uniform appeals process, retrospective coordination of the codes, and a set, predetermined schedule for code updates and revisions.

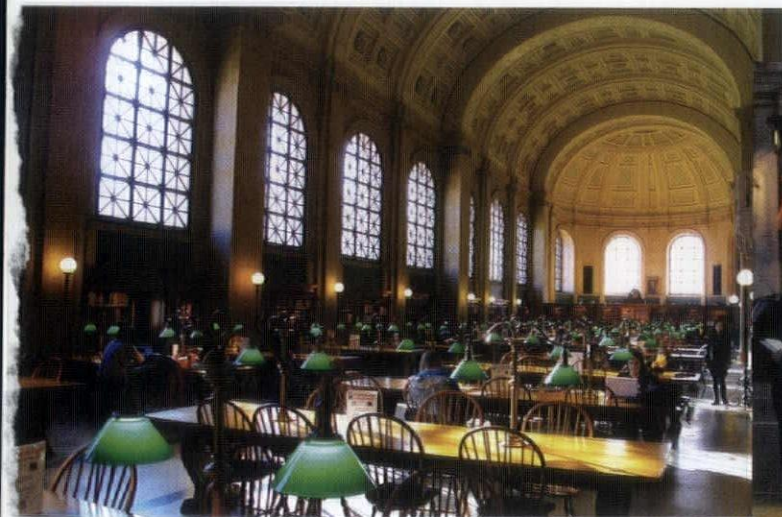
John Nunnari, Assoc. AIA is the executive director of AIA Massachusetts.

OPPOSITE

Photo: Tim Davis, courtesy of the artist and Greenberg Van Doren Gallery

PHOTO SERIES

Traces of Government
Although government might be an abstract idea, its presence can be seen everywhere.
Photos (left to right): Terry Miller, Jeffrey Engel



We Can Do Better: Rethinking Chapter 40B

Chris Walsh AIA is the Massachusetts state representative from the 6th Middlesex District.

PHOTO SERIES

Traces of Government

Photos (left to right): Rachel Haller, Jeffrey Engel

Architects will probably agree that affordable housing is an important part of the community puzzle; a good mix of affordable housing options for people of different income brackets has been the El Dorado of housing advocates, architects, and community planners since the 1950s—with sometimes spectacularly disastrous results. The question to be asked, however, is if we in Massachusetts are really achieving that goal by our policies. The Comprehensive Permit Law (Chapter 40B) was enacted in 1969 to help address the shortage of affordable housing, concurrent with the discrediting of the conceptual thinking behind many large urban housing projects, such as the Columbia Point project in Dorchester.

As of 2009, only 51 of the 351 communities in the Commonwealth had reached the 10 percent threshold of affordable housing required by Chapter 40B; that is less than 15 percent of our cities and towns, even after 40 years—a pretty dismal statistic by any accounting. This number is actually worse than it might seem, as three-quarters of the units in a typical 40B project count as “affordable” even though they are actually “market rate”; only one-quarter are actually deed-restricted as affordable units. Since most of the state’s efforts to create affordable housing are through 40B legislation, it’s easy to see why Massachusetts is losing ground proportionately to other states in creating true affordable housing: we are building expensive units at a 3-to-1 ratio in every 40B project. Moreover, starting in 2010, the deed restrictions on about 53 percent of the “affordable” units began to run out, so these units are reverting to market rate, moving many communities even further away from meeting the 10 percent goal without massive new building projects.

Because the incentive through the Department of Housing and Community Development promotes new building projects rather than the renovation of existing housing stock or programs that “pioneer” blighted urban

areas, 40B projects have been eating up open space in the semirural areas and suburbs at an alarming rate. The program has thus become in reality the antithesis of good planning, sustainability, and Smart Growth; the American Planning Association has gone so far as to single out 40B as the “most regressive planning legislation in the country.” With 40B’s ability to sidestep planning boards, site-plan reviews, and other planning safeguards, communities often swallow the poison pill of unwanted or unneeded growth in an attempt to retain minimal control over their own zoning laws and infrastructure costs. Municipalities often underwrite the cost of 40B developments with infrastructure projects and services without receiving a corresponding increase in revenue.

As a means of advancing affordable housing in the communities, 40B is a failure; as a tactic to promote sustainable and “smart” building practices, it is a failure; and as a strategy to create high-quality, livable, and equitable communities, it is a failure.

If the Commonwealth shifted its focus away from new construction to more sustainable redevelopment strategies, we would be able to mitigate the substantial inefficiencies of our older housing stock, better utilize and even expand the existing public transportation systems, reinvigorate the traditional urban centers, promote flexible uses such as accessory dwelling units for our seniors, and preserve the minuscule open space and habitat that remain—all at what appears to be a fraction of the cost of what we are spending per unit of actual affordable housing. Our desire to achieve affordable multitiered and high-quality communities is not advanced by the aggressive attitude that 40B engenders, and it should not be the business of the Commonwealth to give over the rights of a public community for the benefit of private developers. We can do better, both for our communities and for our citizens.



The Homeowner's Ace in the Hole: Accessory Dwelling Units

Homeowners walloped by the one-two punch of a listless economy and mortgage malaise are finding windfalls in the most unexpected places: in garages, attics, basements, backyards, and anywhere else there's room to create accessory dwelling units (ADUs), commonly known as "in-law suites" or just "in-laws."

The surge of interest in ADUs is spurred by the many virtues of these cozy digs, most of them well under 1,000 square feet—the maximum allowed in many Massachusetts towns. There's a lot to like, especially for boomers who now have elderly parents needing care, an underfunded retirement to put back on track, or adult children who have boomeranged back home. Homeowners with a little extra space can create a secondary dwelling to meet these needs or to generate income as a rental property.

This housing option meets so many needs, in fact, that scores of cities and a handful of state governments have revised statutes to encourage the creation of ADUs. In California, residents can create second units "by right." Portland, Oregon; Vancouver, British Columbia; and Santa Cruz, California, go even further, offering residents a choice of preapproved ADU plans to save money and streamline the process. Even red-state governments are getting in on the act: Miami and El Paso, Texas, have recently adopted form-based codes, which smile on second units.

ADU statutes offer one area of governance where the liberal can lie down with the libertarian. That is, private homeowners who create ADUs also increase the pool of affordable housing. What's not to like?

But as desirable as ADUs are, they frequently run into the brick wall of zoning—a patchwork of NIMBYism more fueled by fear than informed by fact. Too often, zoning codes adopted in the 1920s and modified in the 1950s serve the needs of a world of cheap oil, open land, and nuclear families—a world that is fast fading into memory. These outdated codes would be quaint, but for the harm they do to today's diverse households, which need flexible housing choices such as ADUs to weather economic storms and provide for their families. Even when ADUs are

allowed, as in many Massachusetts towns, tenancy is too often limited to actual family members, and the units must revert when they are vacated. Ultimately, this lack of choice hurts all of us: The AARP estimates that, "on average, Medicaid dollars can support nearly three older people and adults with physical disabilities in home- and community-based settings for every person in a nursing facility."

So what should be done by local and state governments?

Face the facts. We're poorly served by exclusionary, single-family-homes-only residential zoning. To cite just one example, the US now has the highest percentage of single-parent households among industrialized nations, and too many of them live in underused spaces that could be put to productive use.

Educate the public. ADUs are a commonsense housing option. Discuss ADUs in public meetings and have architects on hand to answer questions. Concerns about noisy tenants and property values are often mollified when ADU zoning provisions require owners to live on the premises.

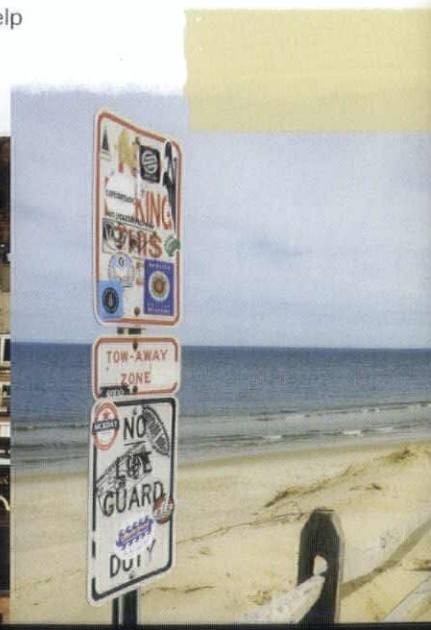
Take it step by step. Lexington, Massachusetts, had no provisions for ADUs till 1984, when they were first envisioned as renovations benefiting elderly people in big houses who needed care or companionship. In 2005, when the town rewrote its bylaws, ADUs were allowed in new construction as well, and lot size requirements were reduced.

Offer amnesty programs for existing units. To ensure that ADUs meet local building codes, towns have periodically waived fees and penalties on un-permitted units if they are inspected and brought into compliance.

There are many good reasons to modify zoning and regulations to allow and encourage ADUs. But in the end, one stands out: Government should help people help themselves.

Michael Litchfield is a founding editor of *Fine Homebuilding* magazine and the author of 10 books on home renovation and design, including most recently *In-Laws, Outlaws, and Granny Flats: Your Guide to Turning One House Into Two Homes* (Taunton, 2011). A former Vermonter, he presently lives in an ADU created from a pair of farm outbuildings in northern California. www.cozydigz.com

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Photos (left to right):
Jen Murray, Alicia Carlson



Mapping, Measuring, Metering, Managing: An Environmental Monitor

A. Vernon Woodworth AIA, LEED AP, is the chair of the BSA Codes Committee and active in the development of the International Green Construction Code.

PHOTO SERIES

Traces of Government

Photos (left to right):

Anton Spaans, Paul

Keleher

You can live free or die in some parallel universe. But here on Spaceship Earth we have to get real—in a hurry. We have to care enough about the reality of energy, emissions, ecosystems, and biodiversity to be monitoring these flows, processes, and interfaces constantly, meticulously, fanatically.

Economists do it. They watch every penny, every trend, every hiccup in the marketplace. Why do we care so little about our natural and man-made environment that we throw away energy, air quality, ecosystems, and biodiversity like so much refuse, unworthy of our regard? Imagine the effect of daily news reports of a Worldwide Environmental Health Index, understood at a gut level, much like the Dow Jones Industrial Average, as a predictor of our well-being.

Computers and the Internet have arrived just in time. Technology now allows us to generate, digest, collate, and share data collected from all sources.

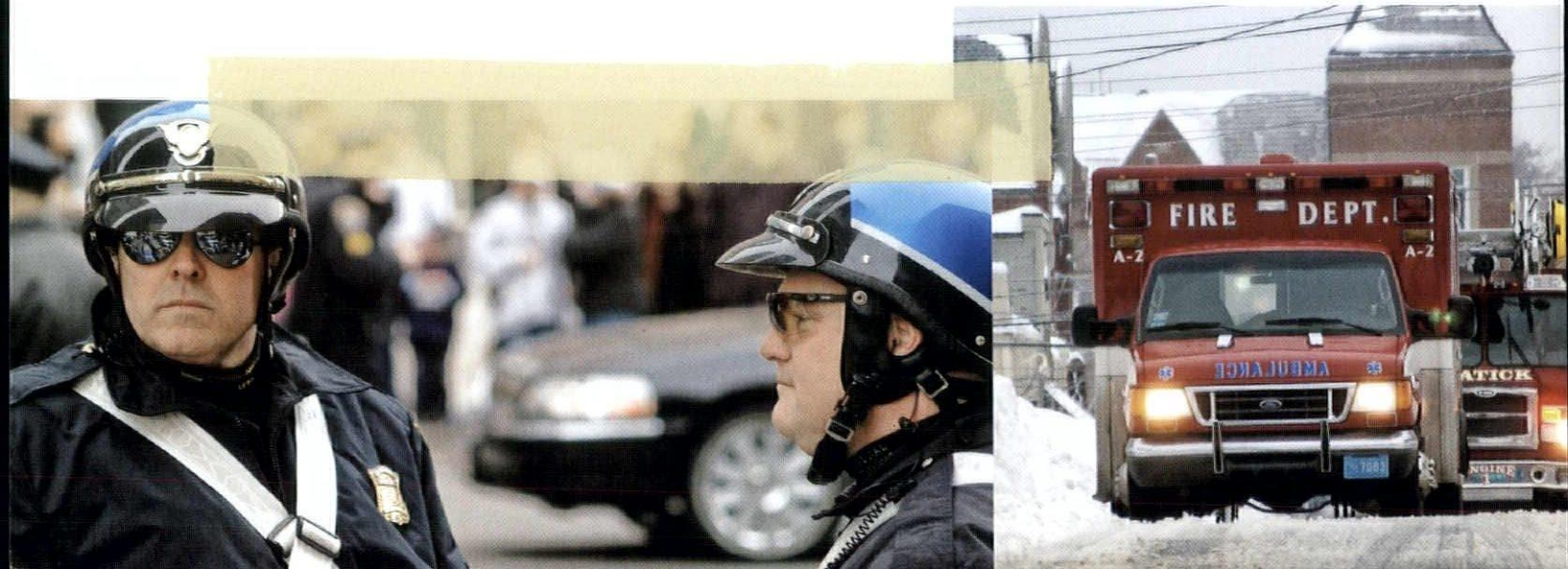
Imagine: Every application for a building permit will be online, and the data on economic activity, building use, construction materials, lifecycle costs, ecological footprint, and code compliance will be incorporated into an ongoing electronic numerical assessment of our environmental trajectory. BIM files submitted for permits will be incorporated into an increasingly accurate and comprehensive model of the built environment. The model will track actual energy use and other building-operations data (such as solar heat gain, moisture content, and air quality) using sensors and meters installed in accordance with applicable code requirements. (This model will also facilitate evacuation and emergency response in the event of a fire, an earthquake, or other disaster).

Imagine: Transportation, public and private, will report similar metrics. Grocery-store scanners will contribute shipping and consumption data; and required manufacturer's reporting will provide lifecycle information. Planning decision makers and investors will have instant access not only to economic investment trends and infrastructure status but also to ecosystem health, soil

acidity, and water temperature and salinity. Google Maps and similar programs will include overlays of zoning, conservation, and planning regulations, with links from street addresses to data on construction-permitting activity. Policymakers will have real-time information about investment in the built environment and environmental health, and will be able to identify trends and trajectories that will inform future planning decisions.

With the exception of a database of permitting information and links to codes and regulations, these ideas depend on the private sector—the realm of supply and demand—to provide the technology to produce and gather accurately measured and reported data. The worst-case scenario is insular governmental data collected at its own pace and for its own purposes. But a structure of regional data collection that acknowledges weather and watersheds as well as homebuilding and habitat, that is tracked beyond jurisdictional borders, requires a public/private partnership of unprecedented proportions. The business model is murky. Where will the investment capital come from? How can government regulations requiring private parties to collect data for public use, monitor building energy use, and track environmental consequences, become profit centers?

In fact, many of the pieces are in place, requiring only a kick-start from a government pilot program or adequate incentive to start the ball rolling. Building energy monitoring will become a universal mandate under either state or federal programs within this decade. (San Francisco has already done so.) Centralization of building-permit data (following universal electronic application processes) is an inevitable market-based development with enormous beneficial implications for both the private sector and the public good. IBM's "Smart Planet" initiative has the scope, if not the particulars, of these ideas in its sights. Architects, planners, and environmentalists can fill in the blanks from the demand side, as we continue our trajectory toward utopia or oblivion.



Ripple Effect: A Green Gateway City/Creative-Economy Tax Credit

Of life's two great inevitabilities, only one is an instrument of public policy. Taxation, the primary means to our government's ends, defines the nature of the relationship between the public authority and private enterprise.

Real estate development has a profound and lasting effect on the quality of the public realm, but it is not a fundamentally altruistic activity. When government wishes to influence real estate development, it must rely on either regulation or incentive to extract a benefit (such as universal accessibility) that it sees as having a public good equal to the private benefits being created.

One of the modern tax instruments that are most effective in promoting private development is the tax credit. A tax credit is just that: permission granted by the government to subtract a sum of money from taxes owed. It is more valuable than a tax deduction in that it directly reduces taxes on a dollar-for-dollar basis.

As a stimulus, tax credits work very well: programs targeting historic preservation, affordable housing, and "new market" development in distressed areas are all considered successful. When projects become feasible through tax credits, the benefits extend not only to the public realm but also to a huge chain of people in a variety of industries such as architects, construction workers, vendors, and material suppliers.

In Massachusetts, tax credits have been used primarily to retain and support industries, such as life sciences, that improve our economic competitiveness. The recent film-industry tax credit has seemingly transformed Boston overnight into a Hollywood set—although the net public benefit of a subsidy that amounts to 25 percent of a film's entire production cost is debatable. As a videogame-industry tax credit receives serious consideration, we should imagine incentives that would have a greater impact on the health of our communities.

Massachusetts has an opportunity for just such an incentive—an even more innovative application of the tax-credit tool that would support three sectors that have been

the recent subjects of public-policy concern: sustainability, the Creative Economy, and the Gateway Cities.

Sustainability is a matter of economic competitiveness as well as a greater public good. Recent initiatives have addressed both green building and Smart Growth—how and where we build.

The Creative Economy has recently been recognized as one of the state's most significant industry sectors: With 3,100 design firms employing 44,500 industrial, graphic, fashion, exhibit, and landscape designers as well as architects and engineers, Massachusetts is home to one of the largest design communities in the nation. But most Creative Economy firms don't need to be here; their work is often exported to clients around the world, and they are famously nomadic in their search for inexpensive real estate, preferably in urban areas.

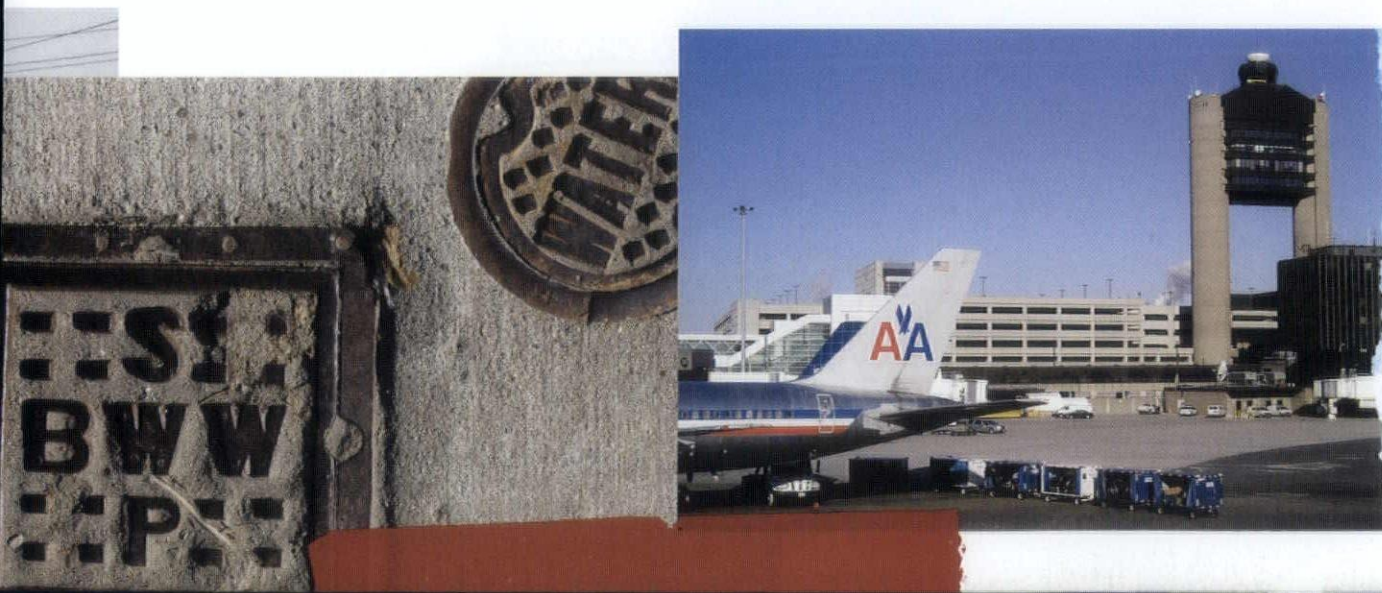
The Gateway Cities are 11 former mill towns identified by MassINC and the Brookings Institution. (See *ArchitectureBoston*, Summer 2009.) Largely left out of the state's economic growth in recent decades, they are now considered key to a new statewide Smart Growth strategy.

Individual tax credits could promote each of these sectors. But by combining them, Massachusetts has the opportunity to promote sustainable Smart Growth with economic development. With a Green Gateway City/Creative Economy Tax Credit, Creative Economy Districts could be designated within the Gateway Cities; bonus tax credits could be allocated for projects meeting thresholds for green redevelopment of existing buildings.

Design businesses thrive when in close proximity with similar firms; when located in districts, they also promote investment and stabilize our urban centers. A Green Gateway City/Creative Economy Tax Credit would be the key to a truly enlightened Smart Growth strategy for Massachusetts, tipping the balance for economic investment where it is needed most, and providing an economic ripple effect for citizens across the state. ■

Michael Davis FAIA, LEED AP, is co-chair of the AIA Massachusetts Government Affairs Committee and public policy commissioner on the board of directors of the Boston Society of Architects.

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Photos (left to right):
Doc Searls, John Sie
Yuen Lee



What I Learned: An Insider's Guide to Improving Local Government

by James G. Kostaras AIA, AICP



Local government in America is in trouble, and I have some modest proposals to fix it. I also have a few scars and bruises to show for a 20-year career in municipal government as an architect and urban planner with the Boston Redevelopment Authority (BRA) and later as executive director of the Somerville (Massachusetts) Office of Strategic Planning and Community Development. When government works efficiently to meet the aspirations of the citizens, it's an inspiring enterprise. But the coming fiscal crisis will break local government.

Writing in *Forbes*, Joel Kotkin says, "In the next two years, America's large cities will face the greatest existential crisis in a generation." Wall Street investors are in a panic. What happens when nervous investors in the \$3 trillion municipal-bond market decide that lending to cash-strapped local government is a risky bet? Smaller cities in Massachusetts are in triage mode as they struggle mightily to provide services in the face of budget cuts, staff reductions, and cuts in state aid—reducing the core functions of municipal government to police, fire, schools, and streets. More daunting are the unfunded pension obligations of municipal workers, exploding health-insurance costs, and the diminishing property-tax revenue due to a battered real-estate market.

Local government faces another critical crisis: most Americans don't trust government. "Politics have poisoned the well in terms of trust in government," according to Andrew Kohut, director of the nonpartisan Pew Research Center. Americans trust politicians about as much as they esteem Goldman Sachs bankers. The pathetically low voter turnout in local elections reflects the sentiments of cynical, disillusioned citizens.

To improve local government, we must see it for what it really is and how it actually functions. I started my career in local government at the BRA not long after returning from Morocco, where I had served as a Peace Corps architect building rudimentary health clinics and community buildings. In the Peace Corps, I was a pragmatic idealist; after 20 years in municipal government, I turned into a somewhat idealistic pragmatist. Machiavelli, in *The Prince*, justified duplicity as a means to power; nevertheless, he told truth to power as he saw it, emphasizing realism—or *realpolitik*—over idealism. A realist sees local government as a collection of competing interests. Government, like other organizations, is made up of individuals striving to pursue their own conflicting self-interests.

Solving local government's most critical fiscal problems is beyond my pay grade. What follows, however, are some modest "fixes" to local government.

Don't trust government.

In my experience, local government runs better and is more efficient in delivering services when it's not trusted—provided that politicians and their operatives understand and appreciate that they are not trusted. So don't trust government, and let politicians and public-sector managers know this. Keep them on their toes. You will actually be empowering the best-intentioned people in government to do the right thing and putting less-than-well-intentioned people on notice that they are being scrutinized. I confess that, even when I was in government, I often didn't trust government—or have full confidence that elected officials and political operatives would use the apparatus of government to serve the interests of average citizens rather than those of politically connected interests. I felt like an embedded insurgent waging guerrilla war to advance the public interest. I learned early in my career that you can't serve the public interest unless you're willing and prepared to be fired from your government job. A skeptical citizenry can give aid and comfort to the insurgents.

Reconfigure local government around a strategic mission.

Political geographer and urban planner Edward Soja argues that: "Of all the sectors of contemporary life, government and forms of governance have probably changed least. This has made it increasingly difficult to respond democratically and effectively to the many problems arising from the enormous concentration of population, wealth, and power in a small number of megacity regions." Local government needs to be reconceptualized from time to time. The organizational chart of departments within municipal government should reflect a strategic mission. From my insider's point of view, municipal government can become calcified with departments and staff organized to solve yesterday's problems. A critical fix is to engender a bias for rethinking and rearranging the organizational structure of government around clear missions.

When I was the executive director of Somerville's Office of Strategic Planning and Community Development, I believed our mission required a different kind of org chart. Somerville typifies, in microcosm, the

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OPPOSITE

Photo: Darin Mickey

A realist sees local government as a collection of competing interests.

problems and challenges of big cities: new gentrification resulting in displacement of low-income families, a large low-income population, a community of immigrants that constitutes almost half the city's population, large swaths of environmentally degraded former industrial properties, and decades of economic disinvestment. With the support and encouragement of Somerville mayor Joe Curtatone, I organized a 65-person, multi-operational development agency by merging several unlikely city departments—zoning, the building department, historic preservation, parks, economic development, and housing—into an integrated development agency and gave it a new name, the Office of Strategic Planning and Community Development (with an emphasis on “strategic”). We structured the agency around the execution of a clear mission: to attract investment into the city and plan for the redevelopment of a large area of vacant and underused industrial land. Consolidating city functions into one department—not unlike the 1960s Boston


Redevelopment Authority—has proven to be a good platform from which to revitalize Somerville's economy.

Let people in local government be more entrepreneurial.

Create a culture in government that will attract creative, committed, and idealistic people. Value and encourage a bias for entrepreneurship and experimentation in government workers to counter the political pressures, entrenched parochial interests, and other disincentives.

Leadership sets the tone. My former boss, Mayor Curtatone, urged us to “be abnormal,” signaling that he valued people with provocative ideas that challenged convention. In 2005, Somerville was our laboratory for innovation and experimentation in urban policy.

I took a page from the cutting edge of the private sector and ran the Office of Strategic Planning and Community Development like a design firm or an Internet start-up—a radical departure in ossified municipal government. I recruited talented, young professionals to join me in planning and launching a bold strategy to transform and “reinvent” the city. I gave them room to be creative and take initiative and the flexibility to make their own schedules—another departure from the 9-to-5 (and not a minute more)



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punch-the-clock culture in local government. We got results. In less than three years, my staff launched a major economic-development strategy, attracted more than \$900 million in anticipated public and private investment, and secured the state's commitment to build the Green Line transit extension and transit-oriented development (TOD) corridor through Somerville. In the process, we positioned Somerville in metropolitan Boston's globalizing economy as a place for innovation and creative industries by advancing provocative architecture and urban design. My staff re-envisioned Somerville and advanced the idea that architecture and urban design could be leveraged as a means of attracting new investment and dynamic development.

Architects should be mayors.

This is not ego-stroking for design professionals. It is a clarion call. Architects (as well as landscape architects, urban designers, and planners) should be mayors of cities, elected members of city councils and boards of aldermen, and chairs of elected planning boards. In light of the coming crisis, local government will require the precise competencies that architects offer. The electorate, worn down by the current nasty, divisive political gamesmanship, is yearning for positive inspiration

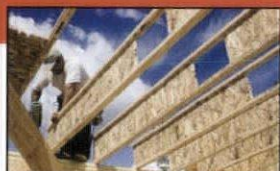
and will demand it in the future. Architects know how to inspire people. There are precedents for architects serving as successful and transformative mayors. Jaime Lerner, an architect and former mayor of Curitiba, Brazil, launched a revolution in city building. Today, Curitiba is a model of sustainable 21st-century urban planning recognized by UN-HABITAT and UNESCO.

Imagine if members of the Boston Society of Architects (BSA) were mayors of cities in Massachusetts. With the resources and the political power afforded by government, BSA architects could advance the impressive civic-minded BSA initiatives over the years, such as *The Civic Initiative for Smart Growth*. My recommendation to architects and associated professionals: fundraise, form PACs, press the flesh on a campaign trail, and run for local office.

Even in crisis, local government is where democracy is most direct and tangible in the average person's everyday life: educating kids, making the streets safe and clean, approving new zoning, issuing building permits. Crisis brings out creativity and builds resilience—provided creative government workers are allowed to be entrepreneurial and are not stymied by narrow political interests. Therein lies the problem—but also the opportunity—in local government. ■

"An Insider's Guide to Improving Local Government" continues online at www.architectureboston.com with more ideas and recommendations.

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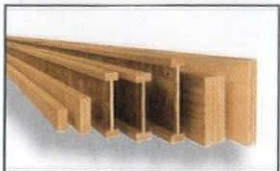
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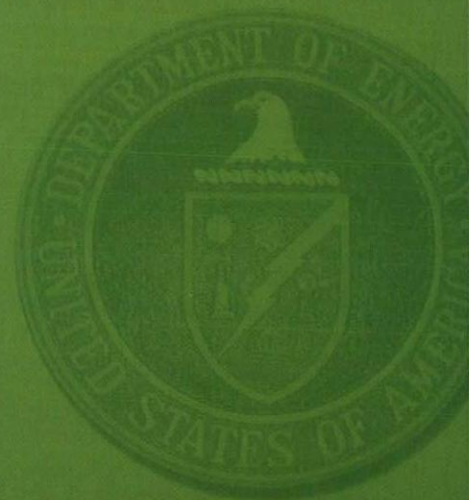
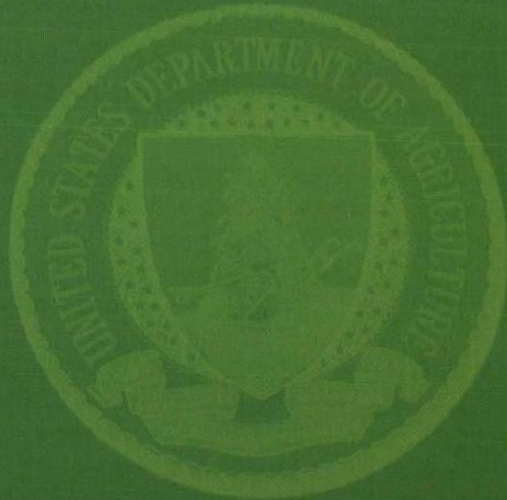
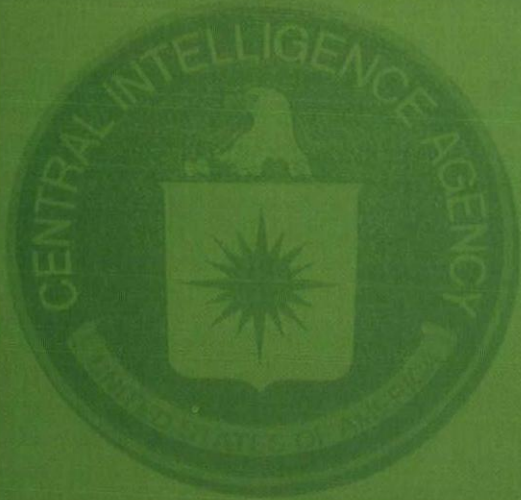
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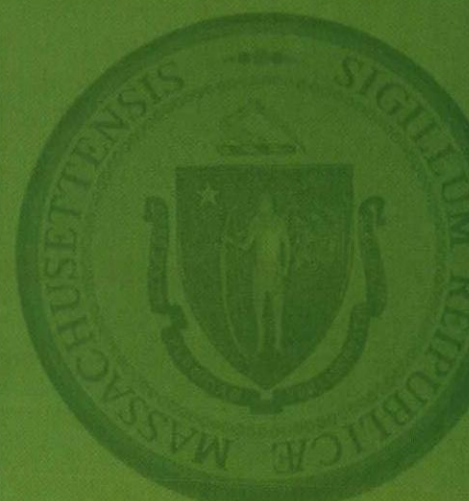
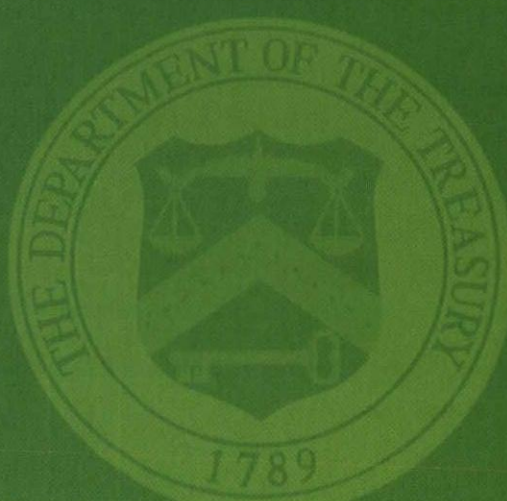
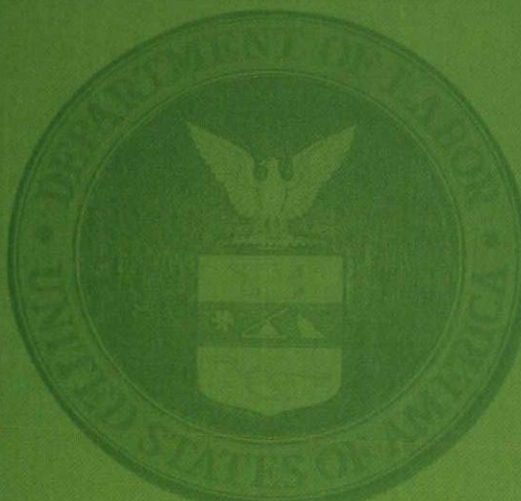
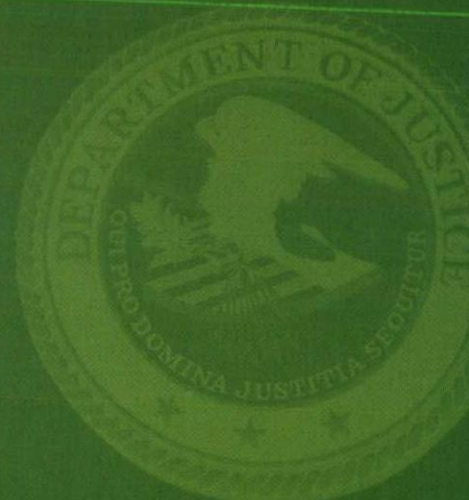
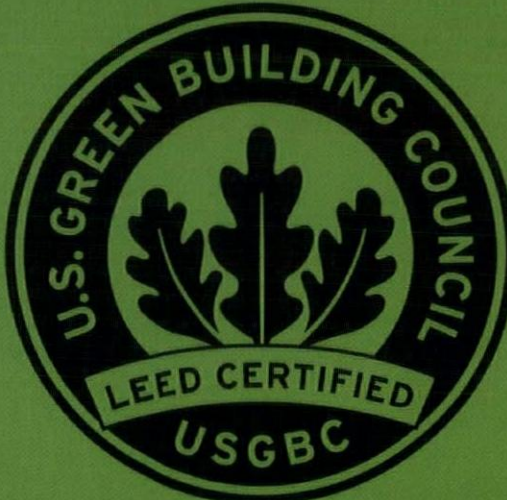
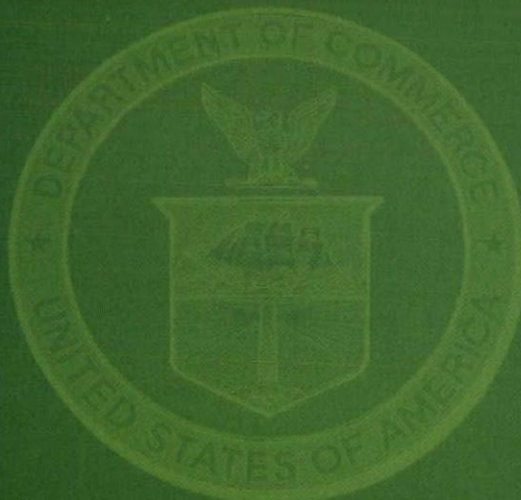
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The Shadow Government

With little public oversight, the organization that invented the LEED system is remaking an industry.

by Michael Liu AIA, NCARB



In October 2010, Henry Gifford, perennial scourge of LEED, filed a class-action suit against the US Green Building Council (USGBC) in US District Court, citing a heady mix of allegations including monopolization through fraud, deceptive trade practices, and unjust enrichment. (Gifford also included an allegation of wire fraud for good measure.) A mechanical designer and contractor, he purports that the USGBC's claims of improved energy performance of LEED-certified buildings are unsubstantiated and that the organization has defrauded the public with a system that promotes implementation of expensive green technologies while positioning itself as a lucrative fee-generating monopoly. He has since amended the complaint to one of false advertising and deceptive trade practices, maintaining that he and other professionals implementing alternative sustainable strategies have been harmed.

While *EcoBuilding Today* has tartly observed that Gifford is no Rosa Parks, it was perhaps inevitable that the emergence of the USGBC, a nongovernmental private organization, and its LEED rating system as the dominant arbiter of sustainability would come under challenge. The shrill original allegations aside, at its core, the case raises the question of whether it is appropriate for a private fee-generating nongovernmental organization to assume what amounts to a regulatory role in the building industry.

Certainly examples of government regulators relying on private profit and not-for-profit institutions abound, both in the certification of professionals and in the promulgation of standards. Few would quarrel with the role of organizations such as ASTM International (formerly American Society for Testing and Materials) or American National Standards Institute (ANSI) and the incorporation of their standards in countless governmental regulations. In fact, the National Technology Transfer and Advancement Act of 1996 requires the federal government to use such privately developed "consensus" standards where possible. Other organizations whose varying degrees of self-interest are generally not questioned also come to mind: the National Fire Protection Association is one, Underwriters Laboratories is another. The difference between these institutions and the USGBC is that while government regulators rely on the standards, regulations, and research such organizations produce, the USGBC has become, in effect, a regulator itself.

On a federal level, LEED certification has been adopted as either an outright requirement or a programmatic goal by any number of governmental

agencies including four branches of the armed forces, the General Services Administration, the State Department, and the Department of the Interior. At least nine states require actual certification for public building projects, while another half dozen, including Massachusetts, are presently considering such requirements. Still others do not require certification but promote the use of LEED guidelines or encourage certification by offering tax credits or other incentives. Many municipalities and some county governments also require certification. Countless private institutions, such as the Partners HealthCare system, pursue LEED certification of their building projects as a matter of policy. For projects over a certain size, Boston requires building projects to be LEED "certifiable," which is a significant distinction in that it adopts the standard but not the process.

The issue then is not the LEED rating system, the virtues and shortcomings of which can be separately discussed, but the process of certifying buildings and the creation of a fee-generating bureaucratic structure to do so. Along with this has come the creation of a new class of professional to administer that process and, as of 2008, the creation of the Green Building Certification Institute (GBCI), a separate subsidiary organization to grant, administer, and maintain the accreditation of these new professionals. It is the accreditation of LEED professionals in particular that has evolved into an ever more elaborate administrative process.

Proponents of the building certification process argue that the USGBC's LEED system offers what other programs do not: disinterested third-party verification that buildings live up to points claimed under the rating system. Disinterested in this case means a private nongovernmental entity.

Recent embarrassments to the Energy Star program, which was created and is administered jointly by the Environmental Protection Agency and the Department of Energy, argue in favor of such third-party nongovernmental verification. The vulnerability of the Energy Star program to fraud was tested by the Government Accountability Office (GAO) last year. The GAO, not usually known for its comic flair, submitted and won Energy Star certification for several bogus products including an "air purifier" constructed of a space heater with fly paper and a feather duster attached.

On the other hand, compliance with the building code is administered and monitored by public servants, relying in part on their oversight and in part on the professionalism of the architects and engineers who must certify the compliance of their designs. To date,

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The issue is the process of certifying buildings and the creation of a fee-generating bureaucratic structure, along with a new class of professional to administer it.

there has been no movement to privatize the review and issuance of building-permit applications, and it is hard to imagine that it would be considered a good idea. The Massachusetts building code includes an energy code and, within the energy code, provisions to build an admittedly crude energy model via Comcheck or similar software programs. The "stretch code," an adjunct code adopted by 63 communities at the time of this writing, raises the energy-savings bar and requires a more sophisticated energy model. Such programs determine whether the proposed design passes or fails. They don't particularly raise the consciousness of the designer or owner with regard to sustainability issues, but they do have the advantage of being straightforward.

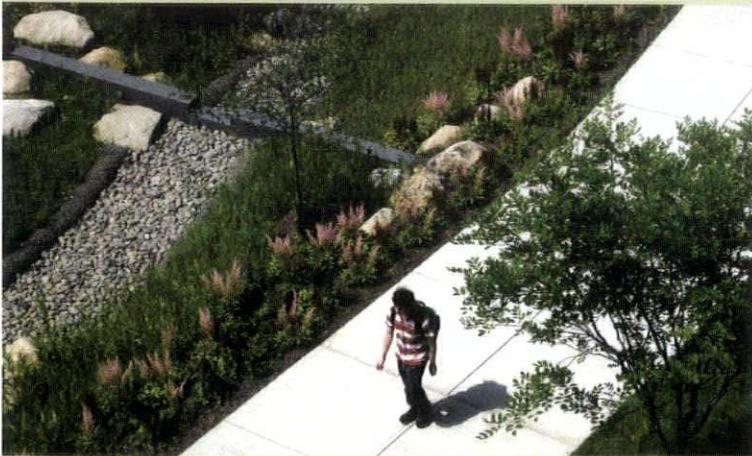
Another rigorous governmentally administered energy compliance process is the Massachusetts Environmental Protection Act's (MEPA's) Greenhouse Gas Emissions Policy and Protocol of 2010, which applies to all projects that require an Environmental Impact

Report. The MEPA process, which considers many of the same sustainability issues addressed by LEED but is more design-oriented, also involves the construction of a sophisticated energy model, based on one of the same computer modeling programs used in the LEED process.

Unlike the MEPA process or the stretch code, LEED follows the life of a project from inception through construction, requiring ongoing documentation and adjudication of points (functions that could be added to the governmental processes). This can be considered either more effective or more cumbersome, depending on one's point of view, but certainly it requires a greater degree of bureaucracy on both the reviewer's and proponent's behalf. Such a bureaucracy, however, does not necessarily require administration by a separate and new class of professional, the creation and maintenance of which is perhaps the most controversial aspect of the USGBC program.

The certification and licensure of professionals is a function that has long been contracted out to nongovernmental organizations to varying degrees. Doctors, lawyers, and hairdressers all have to pass examinations that are developed by private organizations under governmental oversight. The problem of self-declared professional certifications is that the

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organizations that create and regulate them tend to become ends in themselves.

As first conceived, the LEED Accredited Professional (AP) was a generalist, having passed a one-time examination that granted a LEED point in the rating system and allowed the individual to use the LEED AP credential indefinitely. After July 2009, however, new LEED AP designations (LEED AP+) were granted within five specialties. To maintain the accreditation, the individual was obliged to either pass biennial exams or, more likely, participate in continuing-education programs via USGBC's Credentialing Maintenance Program (CMP). The continuing-education program for a single specialty is 30 hours over a two-year period, graduated to a maximum of 54 hours if a candidate is accredited in all five specialties.

The rigors of maintaining multiple specialties seems designed to winnow the field of prospective candidates, especially among rank-and-file practicing architects, engineers and contractors. Some legacy LEED APs, those generalists who were accredited prior to July 2009, speculate that their designation is destined to be phased out altogether. The prospect then is that LEED AP+ accreditation becomes less generalized throughout the design and construction industry to become a distinct

occupation. It is telling that up to 50 percent of possible continuing-education hours can be granted for giving presentations, serving on committees, and authorship related to LEED programs, activities one would associate with a full-time sustainability consultant.

In addition to specialization, a tiered accreditation program was introduced. Now candidates can be accredited as a LEED Green Associate (the required precursor to a LEED AP+), a LEED AP+ or, soon, a LEED Fellow, which parallels the AIA designation. According to the GBCI, the LEED Fellow is its "new and most prestigious professional designation." It seems fair to ask whether so much administrative complexity and hierarchy actually advances the cause of sustainability.

Since the 1980s, Americans' distrust of government has been expressed as contempt, perhaps justifiable, of its inefficiency. The privatization of roles formerly the province of government was celebrated as the remedy and has remained received truth in American political thinking ever since. However, although the USGBC's LEED system has done more to bring the cause of sustainability into the public consciousness than any other, perhaps the time has come to revisit that assumption in the case of a private regulatory body that is not answerable to governmental authority. ■



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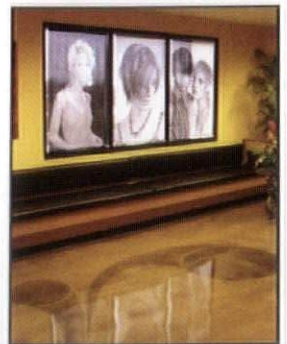
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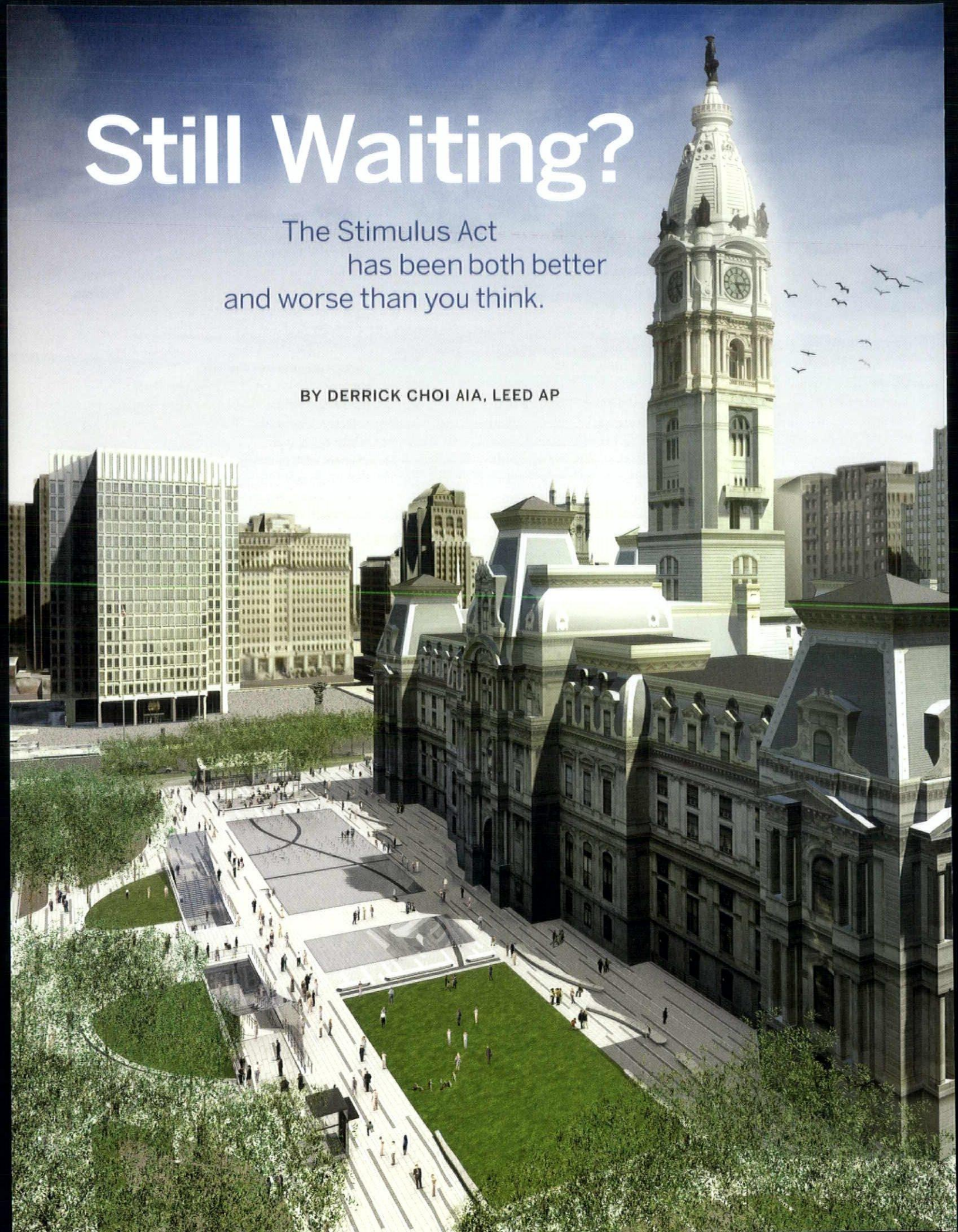
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Still Waiting?

The Stimulus Act
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and worse than you think.

BY DERRICK CHOI AIA, LEED AP



Derrick Choi AIA, LEED AP is the principal of XChange Architects in Brookline, Massachusetts, where his work focuses on infrastructure, transportation, and urban design.

OPPOSITE

The Dilworth Plaza and Concourse Improvement Project in Philadelphia is a beneficiary of stimulus funds, combining a renovated commuter rail and extensive improvements to a civic space. Designers: KieranTimberlake and Olin. Rendering courtesy Center City District.

The American Recovery and Reinvestment Act (ARRA)

of 2009—better known as the Stimulus Act—represents an unprecedented response by the US government to the global economic crisis, committing nearly \$800 billion in stimulus funding to counter its effects. The ARRA is an amalgam of near-term economic stimulus (job-creation programs, tax credits, and incentives for 3.5 million new jobs) and longer-term investments in public health, education, infrastructure, and clean-energy initiatives. The AIA estimates that ARRA funding includes approximately \$87 billion for the built environment, including school and federal building modernizations, Department of Energy programs, public transportation, housing and urban development, and Small Business Administration assistance.

In the wake of pervasive unemployment in the building sector, many designers and construction workers wonder what happened to *their* recovery. The answer may be increasingly complex as the ARRA continues to unfold. As a political high-wire act of short-term recovery and calculated long-term payoffs, the government's message of "investing in the future" has been lost within the context of the stark realities of a tepid recovery: prolonged near-double-digit unemployment, dormant credit markets, and a stagnant gross domestic product.

Bumps Along the Road

The ARRA struggles with its public-relations paradox: On the one hand, it touts transformative public works and infrastructure initiatives (high-speed rail, clean energy) that are comparable in scope and economic impact to the 1930s Works Progress Administration, and on the other, it heralds a mishmash of "shovel-ready" projects. Small wonder, then, that the building industry is generally skeptical of the ARRA's efficacy, questioning its viability as either a comprehensive national infrastructure renewal program or a legitimate jobs-creation act.

Persistent (mis)representations of infrastructure—merely one-fifth of ARRA funding—as the linchpin of the recovery have unnecessarily elevated expectations for an economic panacea. But dismissing the ARRA as an incoherent hodgepodge of pavement projects fails to acknowledge the far-reaching scope and vision of the administration's infrastructure agenda. As the building industry grapples with the ARRA and its opportunities (or the lack thereof), some aspects of the legislation should be understood, including:

Broad scope of ARRA funding: Infrastructure aside, 80 percent of ARRA funding permeates myriad sectors of the economy. Many initiatives are taking shape in 2011 and, if approved, will leave lasting legacies. However, the programs remain slow to generate jobs. In numerous situations, local debates rage over the appropriateness of some ARRA investments—such as multimillion-dollar TSA baggage-screening devices and subsidies

for emerging clean-energy technologies—versus more pragmatic ways of getting Americans working again.

Scale and complexity of projects: As the president readily admits, numerous projects were not as "shovel-ready" (already designed and permitted) as advertised. The process-intensive nature of planning, designing, and getting the projects permitted belied the hype of "shovel-readiness." According to the Federal Highway Administration, of the 13,300 committed transportation projects from March 2010, roughly half were completed as of this year. In Massachusetts, the time-intensive process of vetting public work meant that many projects were unable to align with the ARRA funding cycle. Public-works legislation in Massachusetts, such as MGL 149A for Construction Manager-at-Risk projects, mandates a review by the state inspector general for public projects in excess of \$5 million. The review alone is a minimum 60-day process. Of the recent round of the Department of Transportation (DOT) "TIGER II" transportation-related development grants, there were no recipients from Massachusetts.

Decentralized administration of projects: There is often a disconnect between plans for nationwide systems that emanate from federal policy and the complicated reality of the local political process. The example *par excellence* of a failed outcome within the complex calculus of balancing a state's fiduciary duties with broader regional or national policy is New Jersey governor Chris Christie's well-publicized recent decision to terminate the trans-Hudson rail project. The project—already one year into construction with \$600 million spent in design and planning over the past decade—would have provided new tracks and tunnels to double the capacity of the Manhattan–New Jersey commute at a cost of nearly \$9 billion, with about half of that eligible for DOT and ARRA subsidies. The cost-sharing nature of many public projects puts the onus on municipalities to share not merely a vision but also the fiscal accountability. Alternatively, a "National Infrastructure Bank" concept has been proposed as a more objective means to evaluate and fund projects based on merit and relevance. While the ARRA may propose forward-looking programs with global visions, most of the politics in the US remain fairly local, fiscally conservative, and unable to realize large-scale, coordinated outcomes.

Barriers to entry: Firms with limited public-work experience may find ARRA opportunities elusive as they face tough competition from firms with established public-project portfolios. Some firms have neither expertise nor capacity to take on the specialty tasks or tight schedules required of some ARRA assignments. Generally, to win ARRA-funded work, firms must not only demonstrate competence but also invest in performing well in the various "designer selection"

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processes established by municipal and state agencies. In Massachusetts, designer selection boards have been established for major construction-funding agencies including Division of Capital Asset Management and Maintenance (DCAM) and the Massachusetts School Building Authority (MSBA), to name a few. At the federal level, the General Services Administration's Design Excellence Program has been lauded as a qualifications-based (rather than cost-based) designer selection process that reinforces the value of design in the public realm.

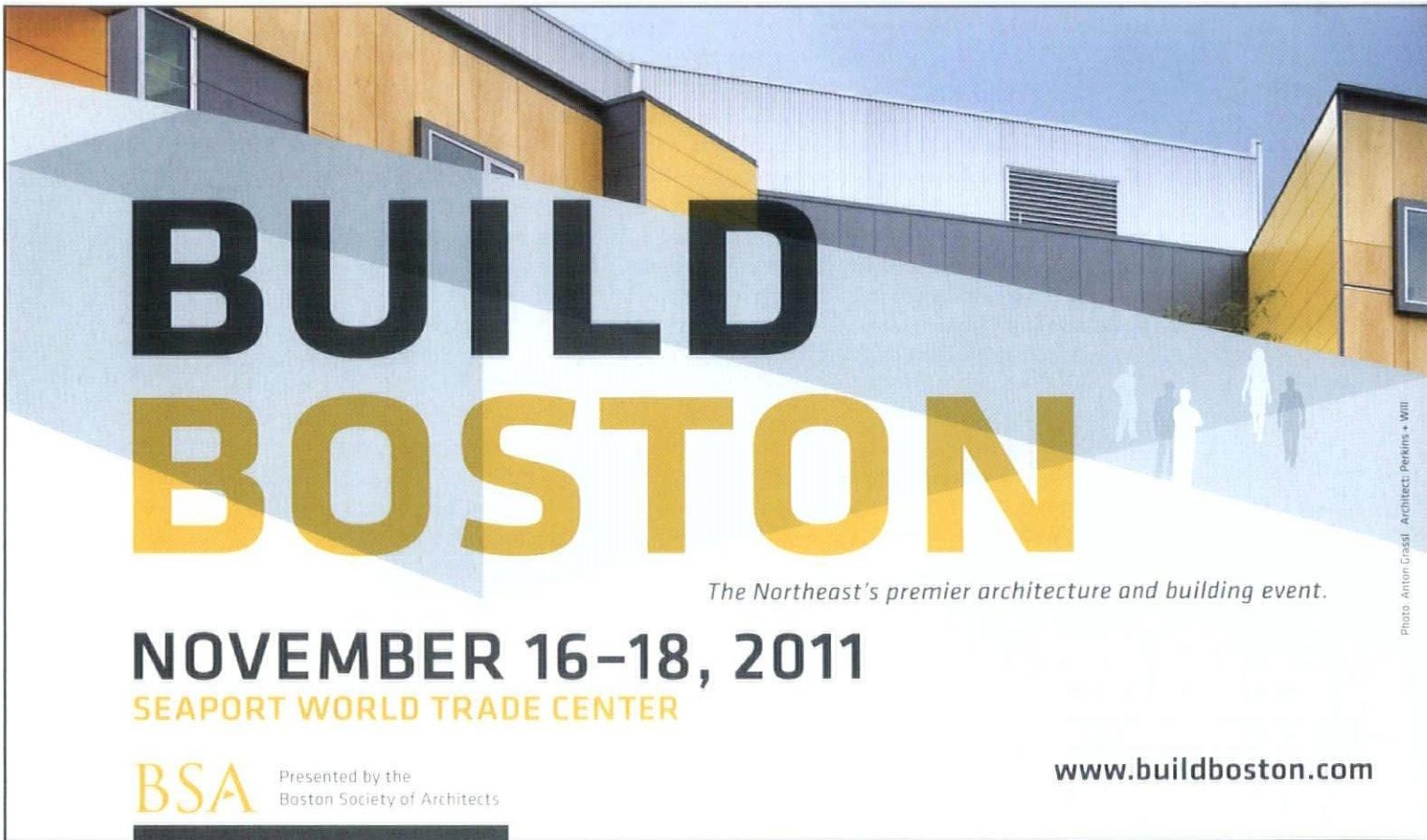
The Road Ahead

Half of Massachusetts' \$7.1 billion ARRA funds has been spent, some of which has enabled a diverse range of new buildings, including community-health centers, fire stations, regional transit hubs, IRS buildings, commuter-rail stations, and building rehabilitation and weatherization projects. According to a report in the *Boston Business Journal* based on data from the Associated General Contractors, the cumulative effects of these public and transportation-focused projects yielded an increase of 1,300 construction jobs in the state in 2010. As the Obama administration redoubles its focus this year on the private sector's role in the recovery,

opportunities for the building industry to rebound with ARRA opportunities are not out of reach.

The \$2.1 billion Transportation Investment Generating Economic Recovery (TIGER) grant program continues to invest in a range of transit-oriented development projects, including public transit, passenger and freight rail, and port improvements. The second round, TIGER II, has already received proposals worth more than \$19 billion for \$600 million in funds. The Dilworth Plaza and Concourse Improvement Project at Philadelphia's City Hall, the recipient of a \$15 million TIGER grant in 2010, is an excellent illustration of opportunities for the design profession in transportation projects: a dynamic, multiuse urban plaza sitting atop a renovated multimodal commuter train station.

Private-sector projects have also benefited from stimulus funding. Although the state government is the largest ARRA beneficiary in Massachusetts, institutional and private-sector entities here have been particularly successful in leveraging stimulus funds: UMass, Harvard University, and the Broad Institute are among the top five ARRA recipients in the state, with nearly \$700 million in funding. On the local level, state government also serves a critical role in the private-sector rebound. In Massachusetts, several major building projects—most



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notably, the once-moribund Fenway Center "Parcel 7" mixed-use development—broke ground in 2010 thanks in part to contributions from the Commonwealth's MassWorks construction and infrastructure renewal program, a Massachusetts funding source that is independent of the ARRA. MassWorks' financial commitment to the \$13.5 Yawkey Commuter Rail Station—one of the country's first net-zero-energy rail stations—is the cornerstone of the \$450 million project.

On the legislative front, the AIA's Rebuild and Renew program continues to work with Congress to reinvigorate the private-sector construction market by loosening the credit market and easing regulatory burdens on small businesses. In early February of this year, the administration announced the five-point Better Buildings Initiative featuring AIA-recommended subsidies and credits for private-sector and institutional retrofits, and a national Race to Green grant competition for states to propose innovative retrofit and energy-conservation programs similar to last year's Race to the Top for education funding.

Perhaps the healthiest and most productive response to the ARRA would be an expanded understanding of what constitutes opportunity for the design and construction industry. Blair Kamin, the *Chicago Tribune's* architecture

critic, recently wrote about the design and construction industry's opportunity to transcend its complaints about stimulus projects and to make meaningful contributions in a transformative opportunity to green, rebuild, and renew American buildings. Noting that building-system retrofits may not always inspire, he asked, "But what if the fan-coil heating and cooling unit happens to be in the Ludwig Mies van der Rohe-designed Chicago Federal Center, which is getting \$155 million in stimulus money for energy retrofits and other upgrades? That wouldn't be a bore." ■



ABOVE

The \$12.8 million Franklin Regional Transit Center in Greenfield, Massachusetts, a recipient of ARRA funding, is among the first net-zero-energy transportation facilities in the country. Architect: Charles Rose Architects. Courtesy rendering.

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REDRAW Reboot

Maps and information graphics by Ryan Sullivan

Google “upside down maps,” and you will discover an entire industry based on the thrill of messing with our perceptions. Change the premises on which a map is based, and your understanding of the world changes, too. Put South at the top, Asia at the center—well, you can see why management consultants love these things.

The famous “blue marble” photo of Earth from space, free of any geopolitical boundaries, is credited with promoting the environmental movement. More recently, and far more subtly, Google Maps is continuing to change our perceptions. Zoomed in past state borders, the maps dispense with municipal boundaries; the lines that are important are roadways.

Whatever that might say about our cultural values or Google’s canny understanding of consumer needs, it does suggest a tantalizing prospect: What if those boundaries were actually erased? How would we redraw them? And how could new municipal boundaries better align government with our needs today?

Many of Massachusetts’ town lines were based on geographic features; forgotten disputes among parishes; long-dead landowners’ property lines; and, yes, craven political gamesmanship—this is, after all, the state that invented the gerrymander. Now, as the Commonwealth contends with the politics of congressional redistricting, we realize how arbitrary many of these designations are.

Which is not to say that they don’t have meaning. Towns have developed their own histories, their own personalities, their own customs. Through the accretion of planning and zoning decisions they often develop distinct physical character. Moving across a town line can represent real differences in daily life: access to afterschool activities; the need to buy a filter for your drinking water; weekly trash regulations; the affordability of property taxes in retirement.

Just as important as town identities are the regional affinities that have been established through school sports rivalries, local daily newspapers, regional hospitals, even proximity to grocery stores or shopping malls—the de facto communities that have evolved over the last century. Perhaps similar bonds of community will develop over the coming century with increasing awareness of environmental affinities such as watersheds and wetlands.

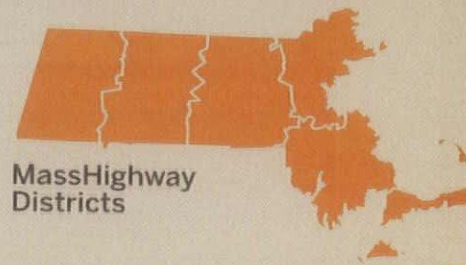
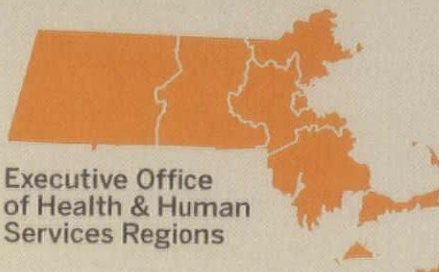
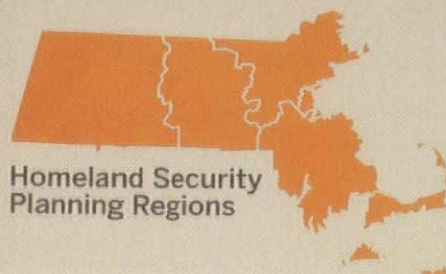
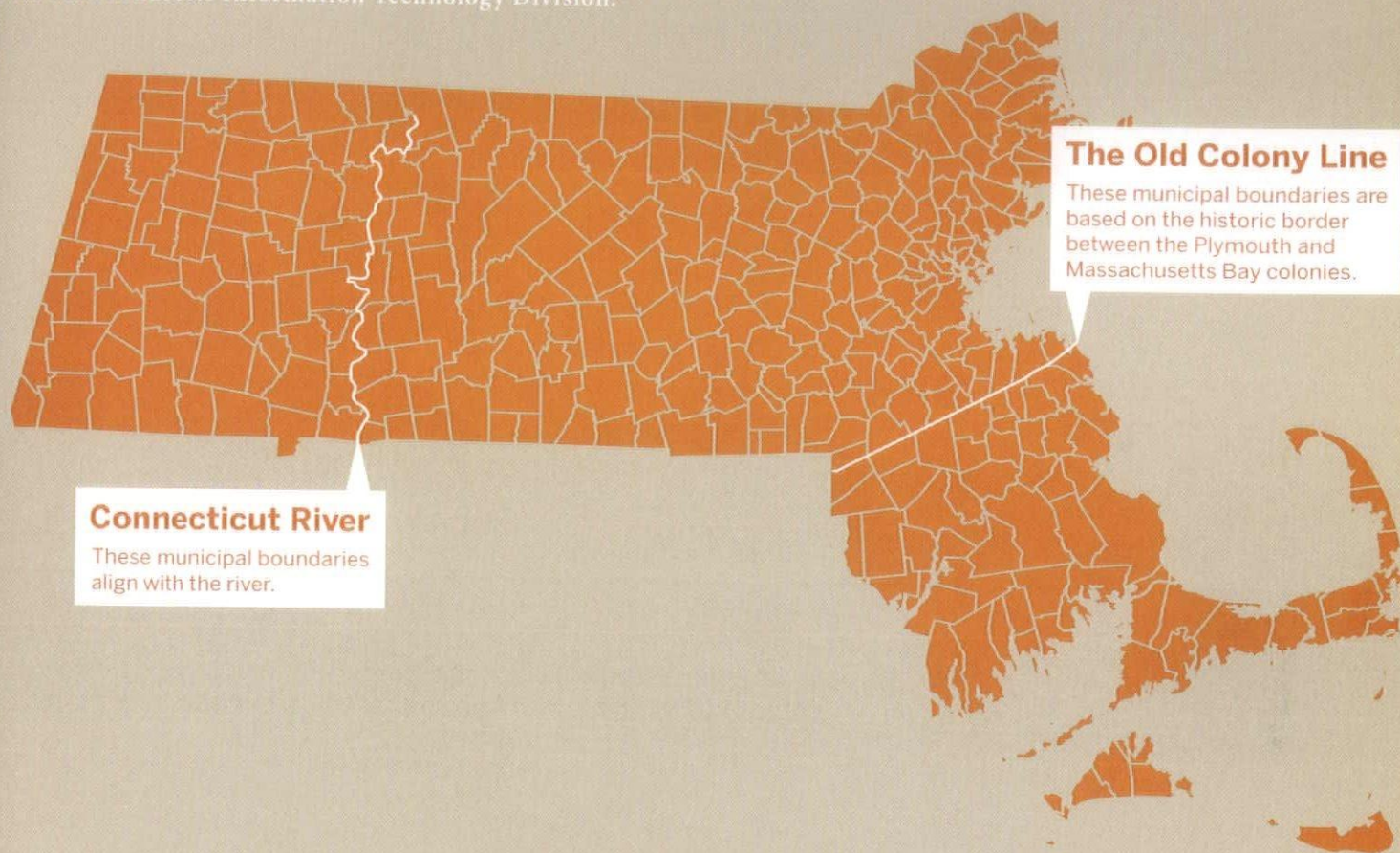
However arbitrary they may be, municipal boundaries are unlikely to change. But pondering an alternative map does have value: the very act of weighing the criteria for change—geographical, political, cultural, economic, social, environmental—can change our perception of what government should be.

—Elizabeth S. Padjen FAIA

Municipalities

MASSACHUSETTS' BASIC UNIT OF GOVERNMENT IS THE MUNICIPALITY. MUNICIPAL BOUNDARIES WERE DETERMINED BY HISTORIC SETTLEMENT PATTERNS, TRANSPORTATION ROUTES, AND NATURAL FEATURES.

SOURCE: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts Information Technology Division.

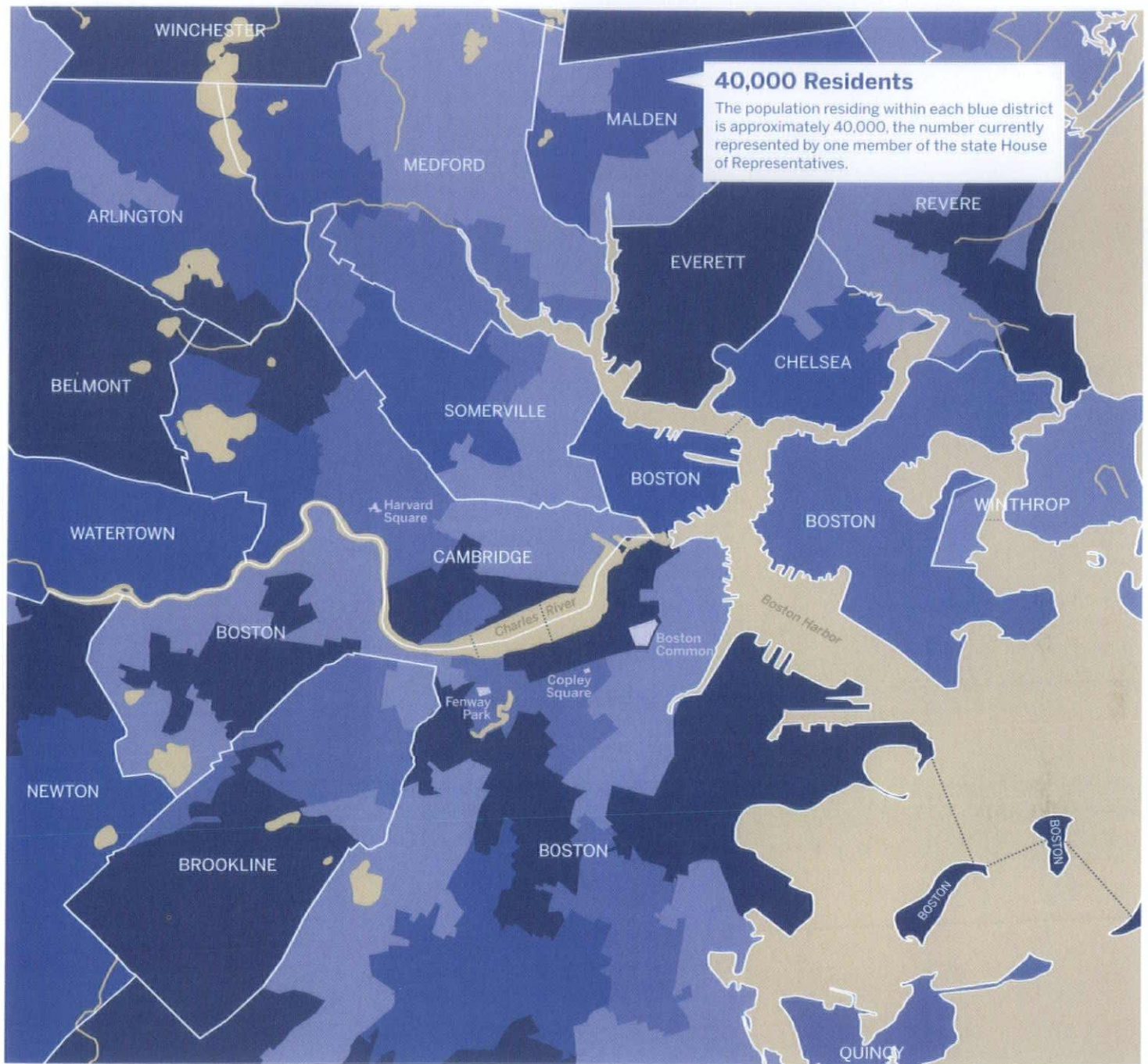




Town**Meetings**hips

**MUNICIPALITIES REORGANIZED TO ENABLE TRADITIONAL
TOWN HALL MEETING GOVERNANCE**

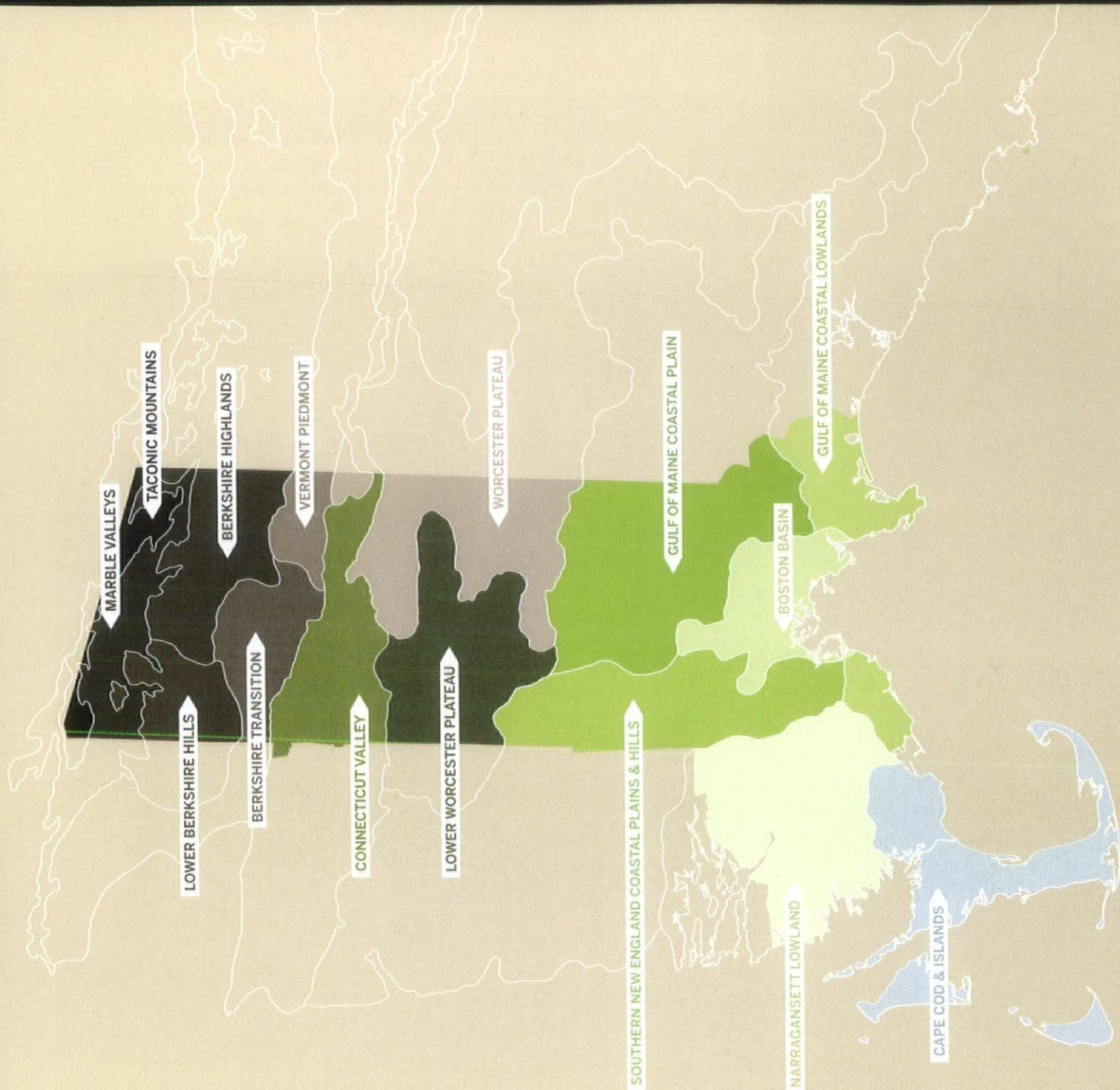
SOURCE: Based on Census 2000 data; census block groups aggregated into regions with fewer than 6,000 residents. Municipal boundaries could be redrawn with each census. MassGIS.



Housetowns

MUNICIPALITIES REORGANIZED BY ELECTORAL DISTRICTS
IN THE MASSACHUSETTS HOUSE OF REPRESENTATIVES

SOURCE: Massachusetts House legislative districts. MassGIS.



NORTHEASTERN HIGHLANDS

NORTHEASTERN COASTAL ZONE

ATLANTIC COASTAL PINE BARRENS

Ecotowns

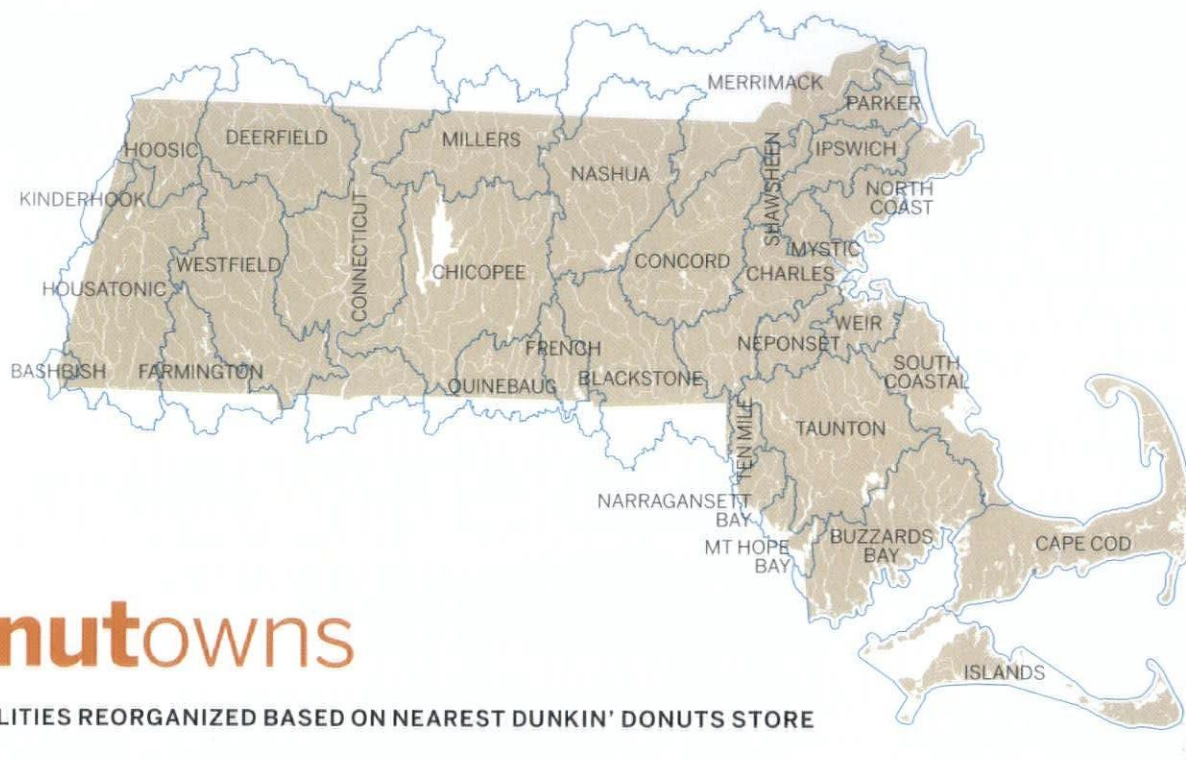
MUNICIPALITIES ORGANIZED INTO AREAS WITH SIMILAR GEOLOGY, PHYSIOGRAPHY, VEGETATION, CLIMATE, SOILS, LAND USE, WILDLIFE, AND HYDROLOGY

SOURCE: Environmental Protection Agency's Level IV Ecoregions, MassGIS.

TownSheds

MUNICIPALITIES REORGANIZED BASED ON WATERSHEDS

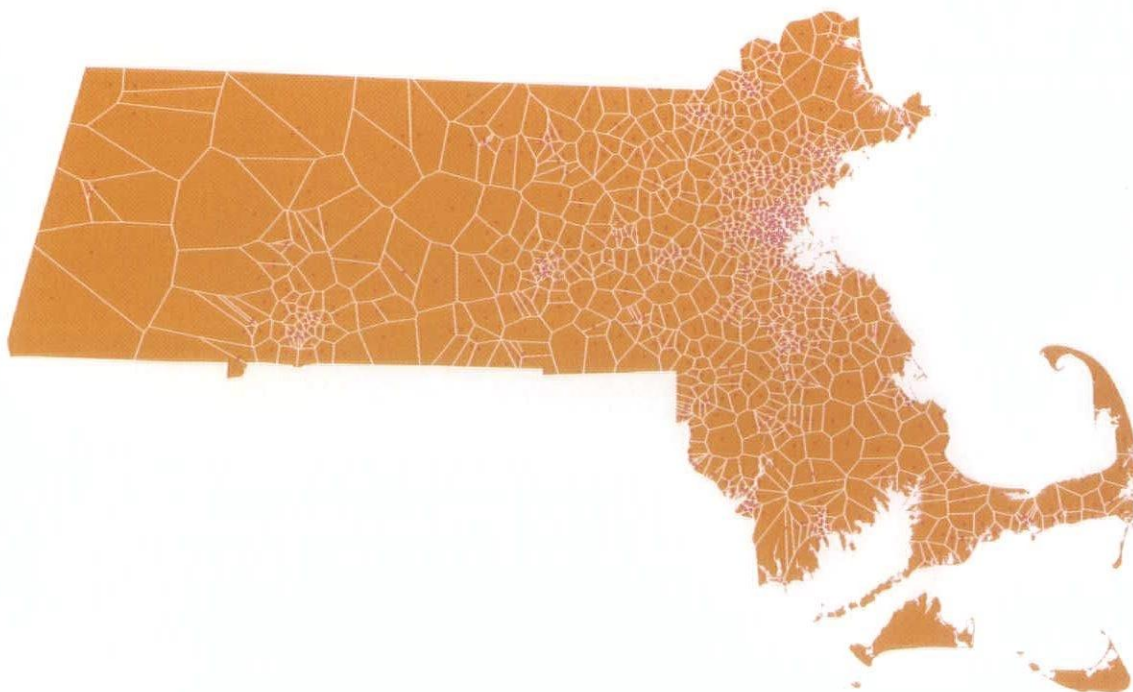
SOURCE: US Geological Survey Water Resources Division and the Massachusetts Water Resources Commission. MassGIS.



Donutowns

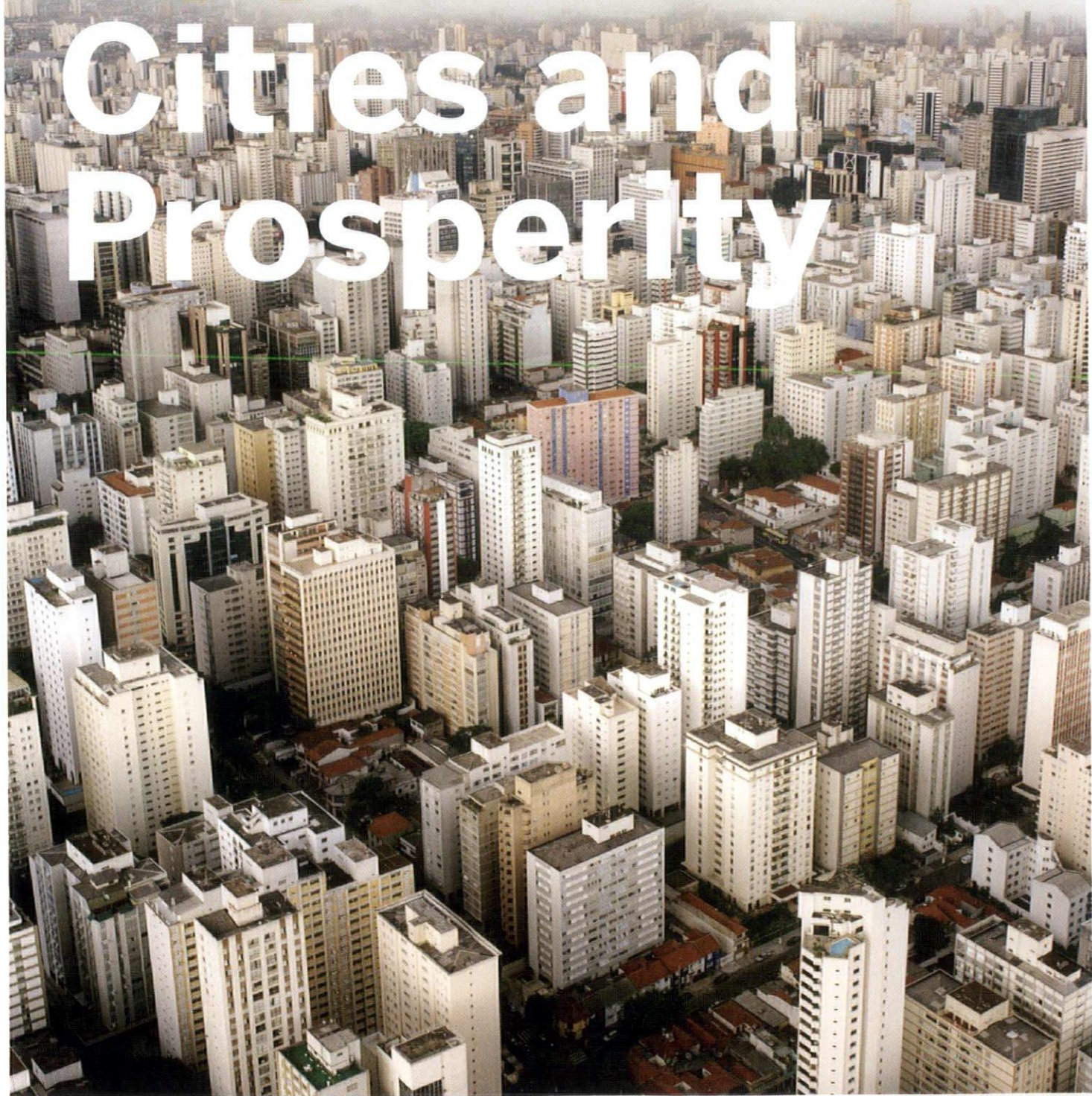
MUNICIPALITIES REORGANIZED BASED ON NEAREST DUNKIN' DONUTS STORE

SOURCE: Dunkin' Donuts locations from POI Factory; boundaries established by generating the Voronoi diagram based on store locations. MassGIS.



Lands of Opportunity:

Cities and Prosperity



How do you keep them down on the farm after they've seen Shanghai? Maybe you don't want to.

Edward L. Glaeser PhD talks with Brent Ryan PhD

Brent Ryan: You're an economist interested in themes like the relationships between government regulations and land markets, and between innovation and urban prosperity. In recent years, you've also become well known for your work on affordable housing. What are some of the connections among your interests?

Edward Glaeser: Most of my early work was about the effects of geographic concentration of industries in cities—for example, the reasons why wages are higher in cities. Until a decade ago, my work was remarkably free of any focus on the importance of physical structures in the growth of cities. But then I became more involved in land-use issues and came to the view that housing is an important determinant in how cities grow and change. I tried to understand why some places, like Boston and San Francisco, have very high wages but very little housing and population growth, and some areas, like Las Vegas and Houston, have relatively low incomes but relatively high population and housing growth. Those two models are incomprehensible without looking at the physical world and acknowledging that it's much easier to build in Houston than it is in Boston. So I started out with a focus on the classic economic issues of cities but came to the belated recognition that you can't understand cities without understanding their physical aspects as well.

Brent Ryan: You've just published *Triumph of the City*, which has the wonderfully wide-ranging subtitle "*How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier and Happier*." By writing a book about the city as a whole, would you say you're returning to your early interests? Or exploring the latest of your interests?

Edward Glaeser: I would say it's trying to synthesize 20 years of work on cities. The book lies on the bed of economic research and statistics, but it's filled with both history and ground-level observation. Nobody understands cities without actually walking the streets.

Brent Ryan: Two major themes of the book seem to be the idea of megacities—the world urbanizing rapidly—and the idea of prosperity, the notion that cities generate prosperity and innovation. How do cities create prosperity?

Edward Glaeser: You might think that globalization and technology would have made cities largely obsolete, that we would all telecommute from what Alvin Toffler called "electronic cottages" off in the middle of nowhere. But of course the opposite has happened: in fact, cities are healthier, more important, and more economically vibrant than ever. The reason, which is also why I think cities are places of prosperity, is that the most important function of cities is spreading knowledge and promoting innovation. Cities make us smarter.

One of my favorite examples is the creation of Renaissance painting in Florence, which starts with Brunelleschi figuring out some of the rules of linear perspective, which he then passes along to Donatello, who puts it in a low-relief sculpture on the wall of Orsanmichele and passes it along to their friend Masaccio, who puts it on the wall of the Brancacci Chapel and passes it along to his student Fra Filippo Lippi, who passes it along to Botticelli, and so forth—each artist riffing on another and figuring out new ways to use this gift to create wonders that the world still treasures. I interpret the murky origins of the skyscraper in Chicago—the debate about the importance of the Home Insurance Building, and the relative prominence of Burnham and then Sullivan's aesthetic innovations—as being a similar chain of smart people connecting with one another. There's no great invention that isn't in some sense collaborative. And cities, by pulling together really brilliant people, as Chicago did in the world of architecture in the years after the fire, are able to create these wonderful things that make all of our lives better.

Brent Ryan: Of course, cities also present some extreme challenges, and you've written quite a bit about urban problems and solutions. The US has a number of

Edward L. Glaeser PhD is the Fred and Eleanor Glimp Professor of Economics in the Faculty of Arts and Sciences at Harvard University. The director of the Taubman Center for State and Local Government and the director of the Rappaport Institute of Greater Boston at the Kennedy School of Government, he writes regularly for *The Boston Globe*. He is the author of *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier and Happier* (Penguin Press, 2011).

Brent Ryan PhD is an assistant professor of urban design and public policy in the department of urban studies and planning at MIT. An architect and urban designer, he has also practiced planning and urban design in Chicago, Boston, and New York City. His current research focuses on shrinking cities, the subject of a forthcoming book.

OPPOSITE
São Paulo, Brazil, one of the world's megacities, with a metropolitan population of 20 million. Photo: Scott Peterman

successful cities, and Boston is certainly one of them. But 50 years ago, Boston's future wasn't so bright. I have a book from 1981 that identified Cambridge as the second most steeply declining city in the US. What happened to turn Boston around?

Edward Glaeser: One of my predecessors vehemently insisted that, unless the federal government bailed out the candy industry, Cambridge would never come back. The Boston story is remarkable in its comeback sense, but not remarkable in its broad arc. At the beginning of the 20th century, Boston was an industrial town built around its transportation connections. But with declining transportation costs, industry was able to move to cheaper places. And then the center city was hit by the onslaught of the automobile, which encouraged people to move out.

Think about the 19th or late-18th century: the things that made cities successful were small firms, smart people, and connections with the outside world. Proximity mattered. Those are still the things that are most important to urban success today.

—Edward L. Glaeser

But Boston came back. I think it's because there was a countertrend: these same changes in technology increased the value of being smart. The first wave was driven by people associated with MIT—people like Arthur D. Little, who gave us one of the first consulting firms; Vannevar Bush of Raytheon; and An Wang, a computing pioneer. The concurrent development of Route 128 as the place for new technology companies supported the growth.

That was followed by the relative stagnation of Route 128, which AnnaLee Saxenian so eloquently dissects in her book comparing Route 128 and Silicon Valley. She argues, and this is something that Boston still struggles with, that the large-firm corporate mentality of Route 128 stifled growth. And she is empirically right. Places with lots of small firms tend to do much better than places with big firms. Today, Boston's Suffolk County has one of the largest average firm sizes of any significant county in the country, which is not a good sign. Luckily, our education seems to make up for that difficulty, and we have also benefited from the connections among very smart entrepreneurs. So Route 128 faltered, but financial services and management consulting have grown, and we have benefited from other innovations, such as biotech.

Brent Ryan: You also write about cities that are not growing but are, in fact, shrinking. So urban growth isn't inevitable, and you even argue that innovation can be self-destructive.

Edward Glaeser: Sure, it can. Henry Ford's innovation is an example of that. Detroit in 1900 felt a lot like Silicon Valley in the 1970s. There was a genius on every street corner. And they did this amazing thing: they figured out how to create the mass-produced, cheap automobile.

For the city of Detroit, it proved to be a very mixed blessing, because Ford's solution was to create vast, vertically integrated factories that were in effect walled off from the outside world. Think about the 19th or late-18th century: the things that made cities successful were small firms, smart people, and connections with the outside world. Proximity mattered. Those are still the things that are most important to urban success today. Yet that's the opposite of, say, Ford's River Rouge plant, which is walled off from the outside world. Once you create a walled-off, vertically integrated firm, you don't need to be in a city. So when transportation costs declined, which meant access to the Great Lakes wasn't important, plants could move to cheaper regions—right-to-work states, or even China.

The problem was that Ford created a city that lost the ability to reinvent itself. In Boston, a chain of smart innovators continues to come up with new ideas and build on each other. Even today, only 12 percent of Detroit's adult population has a college degree, as opposed to the 27.5 percent national average. That's a real impediment.

Urban decline happens. Part of the real tragedy of Detroit has been the mistakes made in trying to fix it, especially the strategy of building structures instead of investing in people. That's always a mistake. I hate to tell this to an architecture magazine, but I believe very strongly that the real city is the people.

Brent Ryan: Buildings don't matter?

Edward Glaeser: The buildings of course matter. But the real heart of the city is always the people. Buildings are ultimately about making accommodations and bringing joy to people. But the hallmark of declining areas is having a lot of infrastructure relative to people. In a place that's declining, it's almost impossible to imagine that it makes sense to add more infrastructure. Yet the federal government was there, ready to subsidize urban renewal and transportation and to build new structures. So Detroit now has a people mover that glides over essentially empty streets, which is about as nonsensical an idea as you can possibly have. And that makes me angry, because they should have been investing in the children growing up in the city, to help them find success.

Brent Ryan: It's impossible to talk about cities in this country without also talking about suburbia and sprawl. You've written about energy-wasting suburbanites, contrasting them with energy-saving Manhattanites.

Edward Glaeser: I want to make it clear that I've been one of those energy-wasting suburbanites for about five years, so I know whereof I speak.

Brent Ryan: And as you've noted, it's a popular choice, one that often reflects a certain economic efficiency.

Edward Glaeser: People make these choices for very understandable reasons. If you want cities to compete and succeed, you need to understand what the suburbs are delivering and figure out why cities can't deliver something comparable.

Why would middle-income Americans choose Houston over New York City? Just run through the numbers. I assume they're earning slightly more money in New York. But after housing, after taxes, a slightly lower initial income ends up translating to a 50 percent larger after-tax, after-housing real income in Houston. It's not unusual to find homes in Houston for \$150,000 because of its unfettered housing industry. I'm not advocating a full Texas solution here. But you have to understand that the people who are choosing Texas are not crazy, and they shouldn't be treated as if they were deranged. We should figure out how to make Greater Boston more appealing to them, and one way is cheaper homes.

Brent Ryan: And cheaper housing is one of the principal advantages of sprawl.

Edward Glaeser: Yes, it's a huge advantage of sprawl. As an economist, I'm not comfortable criticizing any individual's decision about where to live, but I am very comfortable criticizing government policies that artificially push people away from cities into suburbs. And there are three sets of policies that warrant examination.

The first issue is our fetish for home ownership. Approximately 85 percent of single-family detached houses are owner-occupied; they tend to be in the suburbs. And approximately 85 percent of the units in multifamily dwellings, which are the basis of urban housing, are rented. The American Dream dictates that we're going to have a massive subsidy for home ownership—and I'm talking not just about the home mortgage interest deduction but also Fannie Mae, Freddie Mac, the whole shooting match—which essentially pushes people out of urban apartments and into suburban homes. It's hard to see why that's the job of the federal government. There's a lot of nonsense spread about how this is about creating an

ownership society where everyone has more assets. But then why would we structure it as a subsidy to debt? We're giving people the incentive to take out every ounce of equity they have in a house because they are subsidized based on the amount that they owe. That badly needs to be rethought.

The second policy that's important to examine is our subsidization of transportation, especially of roads. A study by Nathaniel Baum-Snow shows that each new highway that cuts into an urban core reduces that city's population by 18 percent. But we continue to do this. In the latest stimulus bill, the infrastructure spending was twice as high per capita in low-density states as it was in high-density states. If infrastructure means more roads going into low-density areas, we shouldn't be subsidizing it.

The third issue, and this is the really intractable one, is our schools problem. For so many parents, the education gap between cities and suburbs is huge. And it's very difficult to figure out how to change that. Again, I'm going to show my economist side on this, but I believe that cities at their best succeed because they have lots of competition and innovation. One possible solution to the schools problem is to encourage more competition. If you think about what makes the restaurant scene in Boston or New York great, you'd have to point to the ability of new entrants to start and then to fail if they're lousy—that's what creates overall success. Imagine if you instead handed over all the restaurants in Boston to a single food superintendent.

Why would middle-income Americans choose Houston over New York City? Just run through the numbers. The people who are choosing Texas are not crazy.

—Edward L. Glaeser

Brent Ryan: So you argue that suburbia represents a rational choice for Americans faced with conditions that our policies have created. But at the global scale, where some of these policies don't apply, suburbia also seems to be the choice that people are making. There is sprawl around Brussels and sprawl around Shanghai. What do you think of other world cities, particularly megacities, following America's lead with respect to its built environment?

Edward Glaeser: Anyone who worries about carbon emissions needs to worry deeply about the future of urban reform in the developing world. Quite honestly, because Europe has a relatively stagnant or declining population, Brussels amounts to a rounding error in

terms of the global emissions of the world. But China, India—that's something else. Right now, China has very little air conditioning and only moderate car usage; that's going to change as the country gets rich. Many of the great environmental battles of the 21st century will be about urban form in the growing cities of Asia. The really big payoff will come from creating a denser, more sustainable world in India and China relative to the US. That doesn't get us off the hook—we can't exert any moral persuasion unless we get our own greenhouse in order.

Cities need government much more than low-density areas do.

—Edward L. Glaeser

Brent Ryan: What is leading to this explosion of urbanity across the world?

Edward Glaeser: Cities have always been part of the process of development. We are witnessing a world in which poor countries are becoming rich countries, and cities are helping to make that happen. One of the critical roles that cities play in the development process

is that they're conduits across countries and continents. They enable people from India, for example, to connect with people from Europe and the US. Gandhi may have thought that the future of India was in its villages, but there is no future in rural poverty; the future of India is in its cities because they enable it to be part of the world economy and to export its remarkable human skills. And obviously China is doing the same thing.

Of course, these growing megacities face enormous challenges; I'm not trying in any sense to sugarcoat it. If I'm close enough to exchange an idea with you face to face, I'm also close enough to give you a contagious disease. And if I'm close enough to sell you a newspaper, I'm close enough to rob you. Cities need government much more than low-density areas do. They require infrastructure: paved roads; sewers; and, most of all, clean water. That's an enormous challenge, particularly for weaker governments to meet. We shouldn't forget that at the beginning of the 20th century, American cities were spending as much on water infrastructure as the federal government was spending on everything except for the Army and the Post Office. It was an extraordinary investment.

Brent Ryan: Some architects and planners are beginning

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to focus on the ways that design can serve these cities more productively. The slums or favelas that ring these cities, for example, are getting more attention. What are some ways that you think design might be deployed more effectively in those areas?

Edward Glaeser: One of the greatest needs in these very rapidly growing cities is also one of the most counter-intuitive: producing nondurable housing. New housing needs to be affordable and environmentally sensitive but built for the short term. If incomes are growing quickly, then that country is going to look very different in 30 years, and it's almost unimaginable to believe that the housing built today will be appropriate in 30 years. That said, these cities already have richer people and need higher-end housing as well as commercial space. And it's absolutely crucial that the collective architectural genius thinks about how to make these cities more beautiful, more sustainable, more interactive.

Brent Ryan: You've argued that the urban growth that's occurring is something that we shouldn't resist but accept. Should we be attempting to shape the growth of these cities in any way, or should we let the market do that?

Edward Glaeser: We do absolutely need to think about shaping them. I just wish that shaping them, in many cases such as India, didn't mean floor-area ratios of 1.33—which severely limit average heights and guarantee that office space is extremely expensive and that the city sprawls out. That's not the kind of shaping that they need. There's great opportunity for urban planners to be heroes in the growing cities in the world where their services are so badly needed. But they have to recognize these places are going to continue changing.

Brent Ryan: Their designers and planners need to be as agile as entrepreneurs, paying attention to events as they change, and responding quickly and innovatively as they happen.

Edward Glaeser: That's a great way of putting it. I guess we should now be advising "Go east, young man." This is a time in which, if I were in your industry, I would want to be in China and India. Extraordinary things will happen there, things that will require a lot of innovation and a lot of thought. ■

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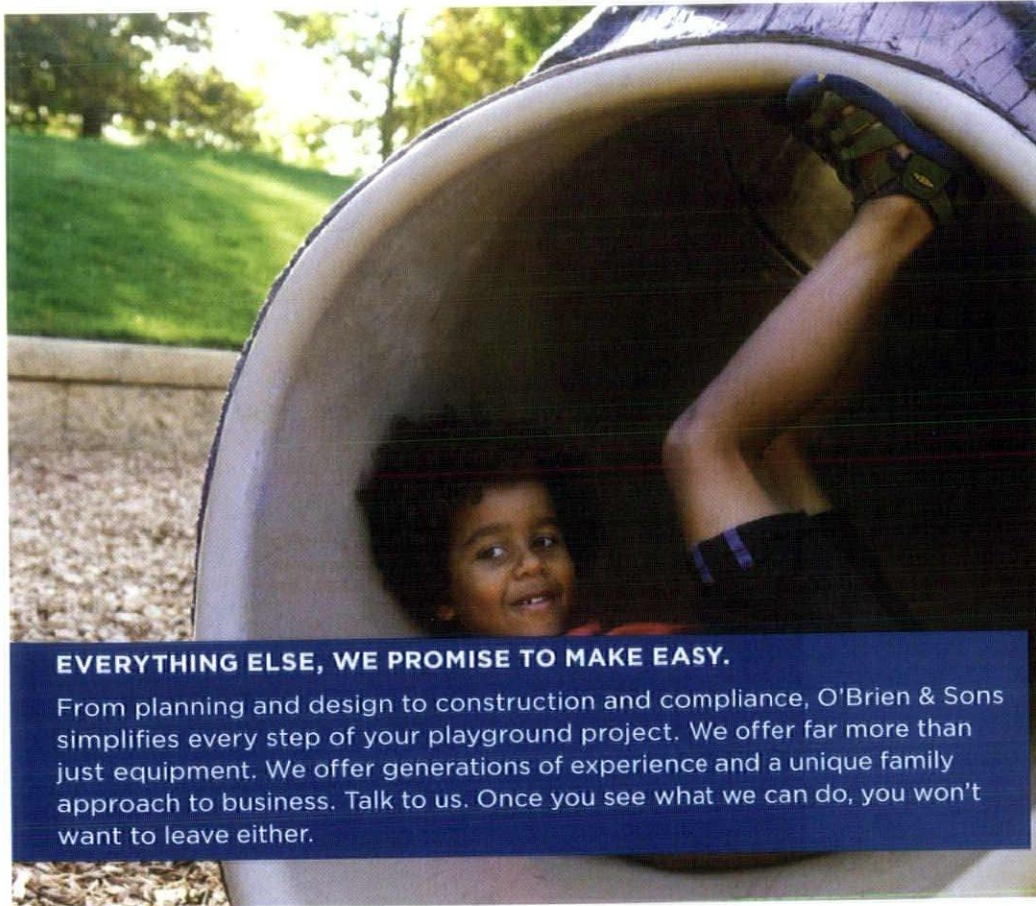
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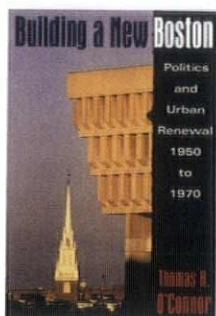
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Matthew J. Kiefer is a land-use attorney at Goulston & Storrs in Boston. He teaches in the urban planning program at the Harvard Graduate School of Design.

Building a New Boston: Politics and Urban Renewal, 1950 to 1970

by Thomas H. O'Connor
Northeastern University Press, 1993

How Boston has changed in the last 20 years! A cleaned-up harbor, a buried highway, loads of downtown housing, and myriad incremental improvements everywhere. But it's nothing compared with how much Boston changed from the end of Mayor James Michael Curley's reign in 1949 to the completion of the new City Hall in 1969: Think of the Central Artery and the Turnpike, the Prudential Center and Hynes Auditorium, Government Center and the West End, the first downtown skyscrapers since the Custom House Tower, and enormous public housing projects in virtually every neighborhood.

What accounts for the difference? In two words: urban renewal, a federal program practiced in Boston with unmatched vigor and ambition. Boston College historian Thomas O'Connor treats this as essentially a political story, telling planning stories along the way. Despite the book's subtitle, he begins with the Curley era in the 1930s and ends with the rebirth of the waterfront and Faneuil Hall Marketplace in the late 1970s.

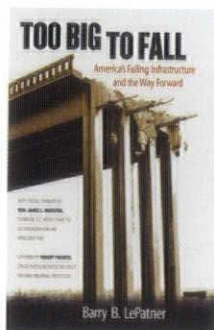
Though associated with Mayor John Collins, the "New Boston" really began with his predecessor John Hynes, who vanquished the parochial Curley machine. Hynes tapped federal funds, the idealism of returning veterans, and popular faith in government, uniting the business community, the cardinal, and the newspapers (all of which really mattered) behind reshaping downtown

Boston. Collins, with the benefit of a newly created Boston Redevelopment Authority (BRA) and increased federal largesse, embarked on a citywide makeover and presided over the implementation of what Hynes had started.

The promise of economic redemption for a once-proud city overcame the old Irish/Yankee divide. But over time, a backlash against forced relocation, sweetheart real estate deals, and social engineering engendered a downtown-vs.-the-neighborhood divide that acquired a racial dimension during the explosive 1960s.

Under Ed Logue, the BRA learned from its mistakes, adopting historic preservation, citizen participation, and pedestrian orientation—ideas that dissenters such as Lewis Mumford, Jane Jacobs, and Walter Muir Whitehill championed during the Modernist ascendancy of Victor Gruen and I.M. Pei. Vindicated by the improbable success of Faneuil Hall Marketplace, this change in approach came relatively quickly—it was, after all, only a dozen years from the annihilation of the West End until the Rouse Company was tapped to rehabilitate the moldering Quincy Market in 1973.

The book—and the era it recounts—provokes an uncomfortable mixture of revulsion and nostalgia. Though now embedded in local mythology, the naive planning ideas and ruthless methods of the early days are still shocking to read about. But the notions that central cities warrant federal government support and that planning can be a transformative endeavor are beguiling during an era of limited government, strained municipal resources, endless negotiation of development exactions, and cautious intervention in adapting the city for the changes ahead.



Too Big to Fall: America's Failing Infrastructure and the Way Forward

by Barry B. LePatner
Foster Publishing, 2010

Beginning with the 2007 collapse of the I-35W bridge in Minneapolis, *Too Big to Fall* shows us the equally shocking failure of the Minnesota Department of Transportation (MN/DOT) to avoid it. Scarily, Barry LePatner finds, this cynical neglect of bridges is entrenched nationwide.

This persuasive indictment comes, not surprisingly, from a lawyer. LePatner's autopsy of the hem-and-haw correspondence between MN/DOT and its sundry

consultants leading up to the disaster is a gripping—and infuriating—read. He also debunks the report by the National Transportation Safety Board (NTSB) blaming a 40-year-old design flaw in the gusset plates and reveals that MN/DOT itself may have hastened the collapse by progressively increasing live and dead loads on a structurally deficient bridge designed for 60,000 cars a day but carrying 160,000.

There is plenty of unease to go around. The Longfellow Bridge connecting Boston and Cambridge stands out as an example of the cost of neglecting regular upkeep. Its renovation is estimated to cost \$267 million, or three times one estimate for simple maintenance over the years. And I won't be enjoying the view from

Ian Baldwin is an architect and writer in Providence.

the Mount Hope Bridge as long as 22 percent of Rhode Island's bridges are logged as structurally deficient, one of the worst rates in the country.

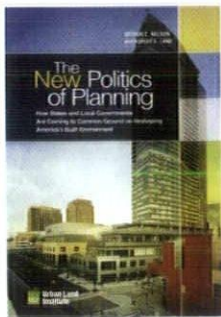
Some may find LePatner's explanation of how we got here simplistic (Jane Jacobs plus MBAs equals cowed engineers), but he demonstrates that public-sector engineering departments have also marginalized themselves, becoming indecisive, overly thrifty, standards-reliant, and politicized. The NTSB report that LePatner adeptly discredits was produced under a nonengineer chairman, a political appointee with a background in public relations.

LePatner holds up New York's iconic Williamsburg Bridge as a counterexample to I-35W. After inspections in the mid-'80s found a split column, a 10-foot rip in the deck grating, and 400 holes in the bridge's steel, the ugly legacy of deferred maintenance was clear. Elizabeth Dole, then secretary of transportation, initially blocked funds

for repairs, preferring a replacement meeting federal standards. Fortunately, the city was able to negotiate a rehab, saving an estimated \$300 million in the process.

This governmental penchant for rebuilding is at the heart of the crisis. "America is always about the next new thing," LePatner writes. Politicians know that hooking federal funds for a new bridge creates jobs and photo ops, but raising taxes for routine maintenance creates angry voters. LePatner calls for leadership, but a society grown fat on first-rate infrastructure at little cost to end users tends to create entitled citizens, not bite-the-bullet officials.

LePatner's other suggestions—an infrastructure bank, reformulated funding, better inspections, and national coordination—are laudable, but I wonder if time may trump technique. When a healthy economy returns, so will business as usual. We will round the curve, touch the accelerator, and sail out over the void once more, oblivious to what lies beneath.



Ellen Whittemore is deputy director of programming for the Division of Capital Asset Management for the Commonwealth of Massachusetts.

The New Politics of Planning: How States and Local Governments Are Coming to Common Ground on Reshaping America's Built Environment

by Arthur C. Nelson and Robert E. Lang
Urban Land Institute, 2009

In the US, land-use controls have always reflected our values in terms of how we choose to develop our metropolitan areas. As Arthur C. Nelson and Robert E. Lang report, these values have recently shifted, swinging away from a market-driven, piecemeal approach to planning that is lacking in environmental accountability to one that measures success against environmental criteria and the impact on our quality of life.

Concerned by the nation's exponential population growth, the authors argue that "the way we grow now is broken" and that a "new dialogue" between private and public property rights is emerging to rebalance the situation. To substantiate their view, they present a brief history of land use in the US and a statistical analysis of recent state legislative action, and ground their proposition in six case studies of states that show the effect of this legislative change.

Overall, their analysis finds that this "new dialogue" is taking place on several fronts. First, legislation has become more favorable toward environment planning and increasingly committed to planning in general. Second, voters are willing to raise taxes for Smart Growth initiatives. Third, private, nonprofit land trusts and public land acquisitions have been gaining in popularity

as alternative ways to control development. Fourth, private governance, in the form of homeowner's associations (HOAs) and the like, has been expanding along with special taxing districts, such as business improvement districts (BIDs). Fifth, and finally, legislative protection for private property rights and compensation for lost value due to new Smart Growth initiatives have increased, a rebalancing of protections in the wake of the *Kelo v. New London* eminent-domain decision.

The way we grow may indeed be broken, but what the authors characterize as alternative development strategies (HOAs and private, nonprofit land trusts) is somewhat troubling. It is true that these mechanisms can fill a void that local public governments often cannot. However, they need to be looked at in terms of their impact on the public domain or, perhaps more precisely, the diminution of the public domain. Also, the authors focus on US planning trends but, in an era where new cities are forming on a regular basis worldwide, a mention of what is happening on the international front would be well placed, especially as the book's publisher is the Urban Land Institute, a worldwide organization.

This is a small book with a lot of depth. The authors have brought their experience, resources, and intellect to a complex situation in order to provide the reader with a cogent and useful definition of the problem facing planners in an era of exponential growth and an increasingly fragile environment. Let's not forget, after all, that a well-defined problem is, in large part, the beginning of a solution.

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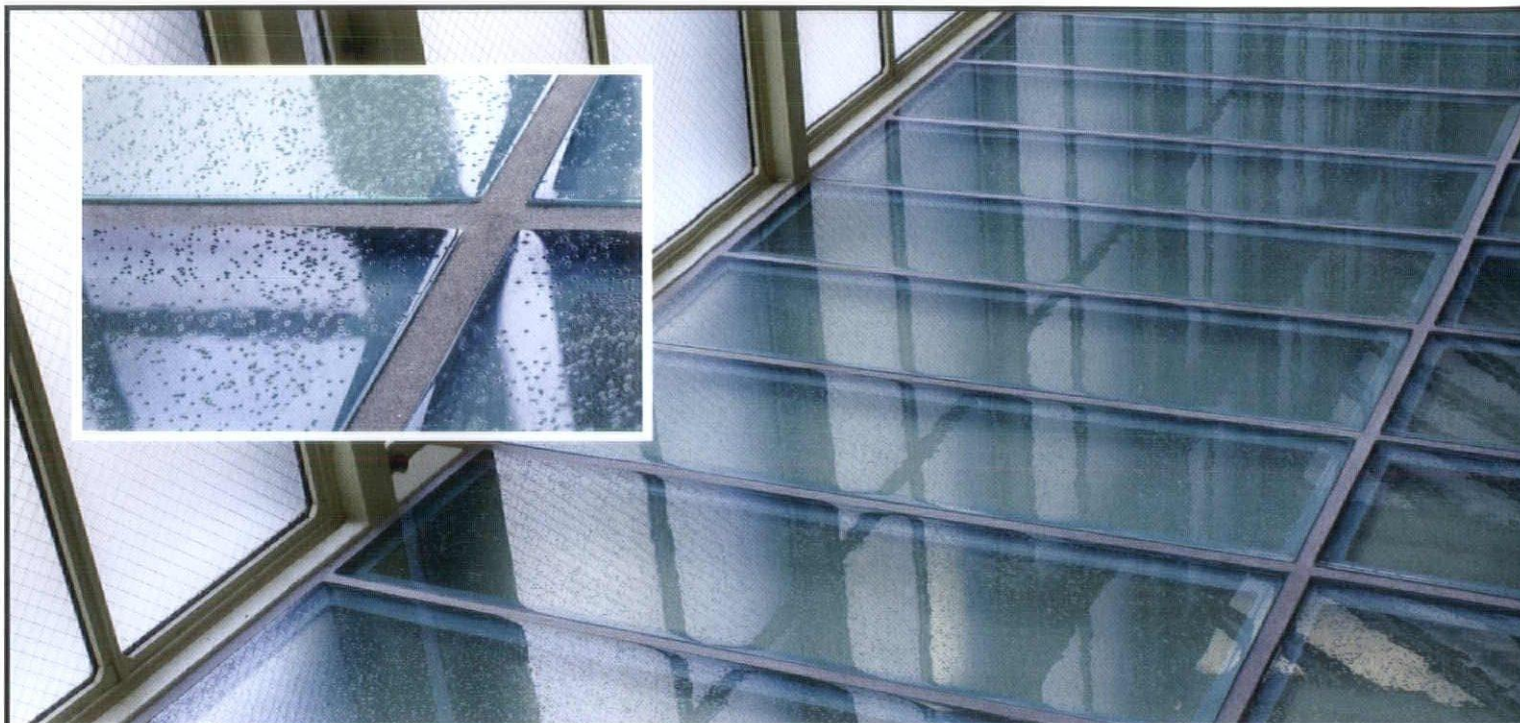


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These images show Martin Case playing blown-glass cymbals, through which patterns of light and shadow were cast onto the surrounding architecture that night.



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www.cityofboston.gov/doit/apps/citizensconnect.asp

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The Boston Atlas

www.mapjunction.com/bra

Managed by the Boston Redevelopment Agency, this digital database includes city and private map collections covering Boston over the past four centuries, as well as current City of Boston information. If you haven't yet incorporated this into standard site research, you will now. ■

Old South Meeting House

Paul Wainwright is a fine-art photographer who works with a large-format camera, sheet film, and a traditional darkroom. His prints are in numerous public and private collections, including the Boston Public Library. His meetinghouse work has recently been published in his first book, *A Space for Faith: The Colonial Meetinghouses of New England* (Jetty House, 2009), www.aspaceforfaith.com.

RIGHT

Photo: Paul Wainwright

Early on a Saturday morning in January 2008, I drove my car up and up and up to the top level of a mostly empty 10-story parking garage on Washington Street in Boston, where I proceeded to unload bags of equipment. In retrospect, I'm surprised someone did not send a security officer out to see what I was doing.

What I was doing was positioning myself to make a photograph of the steeple of the Old South Meeting House, which was built in 1729. Old South was one of the final structures I needed for my photographic study of Colonial meetinghouses. Unlike most of my previous meetinghouse images, I made no attempt to eliminate elements from the 19th, 20th, or 21st centuries. I wanted an image in which the stately steeple stood as a sentinel against the passage of time. I was not disappointed.

New England's (mostly Puritan) meetinghouses were once the backbone of every colonial New England community. Built with tax money before the separation of church and state, they were municipal structures that were used both for town business and for religious worship. The government of the Massachusetts Bay Colony was a theocracy—a system of government that was one and the same with the established church—so it was only natural to construct such buildings at taxpayer expense.

I first became interested in Colonial meetinghouses when I photographed the one in Fremont, New Hampshire, in 2004. I was intrigued by the qualities of the light that filtered through centuries-old glass, the textures of the unpainted wood, and the stark simplicity of the design. I wanted to find more.

My quest meant I needed to do some reading, and as I did so, I was impressed with the historical significance of these places. For example, the American principle of participatory government—commonly referred to as the town meeting—was formed and refined within these buildings. The separation of church and state, which was included in the First Amendment to the Constitution, specifically addressed the long-standing debate over the funding of these buildings with tax money. And the *original* Tea Party was organized in a meetinghouse—Old South—which still stands on Washington Street in Boston.



The popularity of meetinghouses rapidly declined in the first decades of the 19th century. The religious beliefs and culture that led to the separation of church and state in the First Amendment also led to a desire to worship in a building that was not just a plain municipal structure. The early Puritan settlers had abandoned the rich architecture of England's cathedrals for the simple, stark meetinghouse, and after more than two centuries of change and refinement, popular tastes had swung back to a desire for a church-like structure in which to worship. Asher Benjamin, in his 1797 book, *The Country Builder's Assistant*, included a plan for a church building (Plate 27) that was based on a Christopher Wren church in London, and which closely resembles the now-ubiquitous white (usually Congregational) church on many a New England town green.

Many meetinghouses were torn down or were remodeled into buildings similar to Benjamin's design, often requiring them to be rotated 90 degrees so the gable end faced the street. With true New England frugality, when faced with the necessity to separate church and state, many towns built a second floor at the balcony level of the meetinghouse and held church services upstairs and town meetings downstairs. Until the 1990s, the town of Ringe, New Hampshire, still had this arrangement.

New England's meetinghouses embody a fascinating chapter of American history, and the surviving ones represent a unique architectural form that is distinctly New England. But most of all, they serve as reminders of a very different time, when the boundaries among government, religion, and community were nearly invisible. ■

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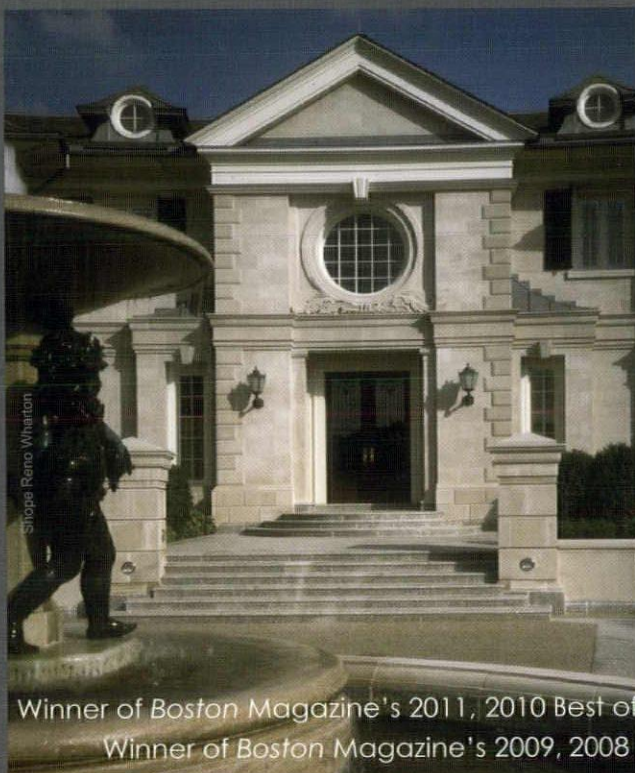
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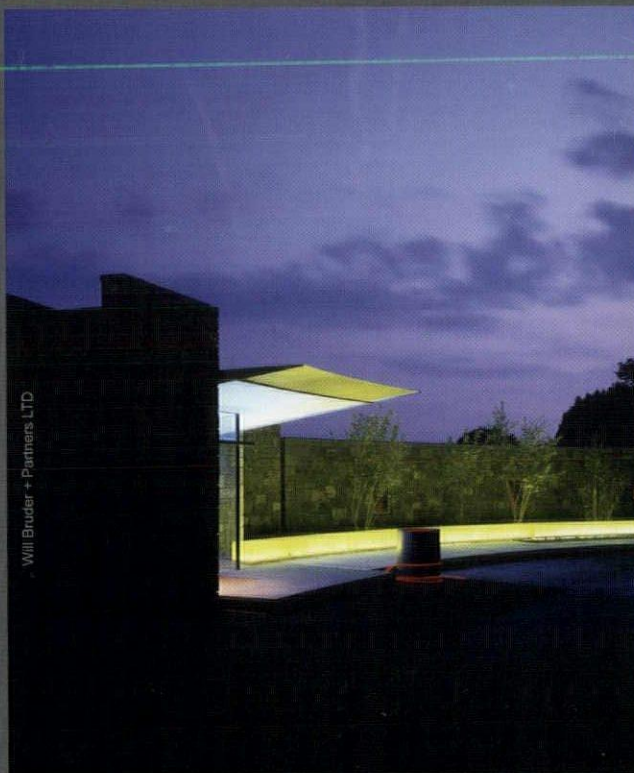


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