



Caring for Places
Donlyn Lyndon

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Suburban Retrofits, Demographics,
and Sustainability
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Speaking of Places
Retrofitting “Levittown”
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Stealing Home: A Suburban Public Realm

Roger Sherman



It's accessed off a typical suburban cul-de-sac in Encino, a suburb of Los Angeles in the San Fernando Valley. Here, where citrus orchards once proliferated, later to be supplanted by tract homes, a homegrown variety of suburban public space has been cultivated. A far cry from the typical developer-sponsored public space of the shopping mall, it has been created through a more grassroots form of entrepreneurship: the deal-making skill of neighboring property owners. Engineered from the very material of the suburbs itself—codes, norms and values—it unwittingly represents a homeopathic solution to the suburbs' ever-increasing privatization.

The perpetrator/instigator is Rick Messina, a successful talent agent for and friend of a number of prominent comedians (Drew Carey and Tim Allen among them). An acknowledged master of the art of negotiation, Messina's

modus operandi is not to craft an intricately worked out contract (plan), but to employ a *protocol* or set of rules or responses largely dependent on the offers and counteroffers of his bargaining partners. In this way, the agreements Messina forges *emerge* from the back-and-forth, give-and-take of negotiation itself, which can as often be cooperative as competitive.

Applied to the suburban landscape, skills such as Messina's may open opportunities in "extra-legal areas"—in this case, outside the margins of zoning laws which stipulate that suburban properties must remain exclusively residential, or that no usable structure may occupy the setbacks inscribed around their perimeter.

A Ballpark Is Born

Though he values his property for its desirable location and privacy, Messina soon also became frustrated with its inefficient pie shape (typical of lots around a cul-de-sac) and its lack of usable open space. Like many suburbanites, he also took to using the driveway down one side yard as a game court—although his passion was not basketball, but wiffleball, a sport his property seemed particularly suited to since it requires a wedge-shaped field.

An inveterate bachelor, wiffleball became an opportunity for Messina to invite over his buddies (many of whom were also clients) on Sunday afternoons to socialize and network. But one day it occurred to him that his neighbor had the *same* problem he did—a lack of usable side-yard space—and that were the two adjacent side yards combined, a larger wedge-shaped space would result that would not only make for a better wiffleball field, but even approach regulation size. Being entrepreneurially oriented, Messina sold his neighbor on the idea with the understanding that the latter would be entitled to equal use of the jointly owned field.

With that basic agreement in place, the project began to acquire a momentum and spatial logic of its own, one that like the bargaining process itself, propelled a sequence of revisions and improvements.

Though the splay of the field was now wide enough, since the rear of both properties ran up a hillside, the outfield was still rather shallow. In a move reminiscent of the building of the Green Monster at Fenway Park (the result of a similarly constrained site), Messina proposed excavating the lower portion of the hillside in both yards. By installing a fifteen-foot-high retaining wall there, he proposed creating a level playing surface extending all the way to the rear property line.

To accomplish this, however, the L.A. Department of Building and Safety told Messina he would have to regrade the hillside immediately behind to create a flat area three feet below the top of the new wall. *That* land belonged to his neighbor to the rear, the L.A. Department of Water and Power (DWP), which owns and manages a reservoir high above. Surprisingly, when Messina approached the DWP, the agency agreed to his plan on the condition that they would have continued access to the hillside above from his property.

This, in turn, gave Messina another idea. He would install bleachers in the newly graded area of DWP land, accessed by a ramp and stairs. As coincidence would have it, his building contractor had a cousin working on a demolition project at the New Jersey Meadowlands (stadium).

The cousin had access to the reuse/resale of the seating there, and within days, several rows arrived in Encino.

The last of Messina's deals was struck with the beer and liquor companies who supplied the commercial drink machines and bar in the "training room" that opened to the field off the left foul line (formerly the garage).¹ In exchange for receiving the wholesale beverage price, Messina agreed to advertise their products (along with the shows of his clients) on the right foul-line wall.

Negotiation is King

The real lesson of “Strawberry Field,” as Messina now calls the wiffleball venue (after the street on which it is located), is that its public status was not preordained. Rather, it emerged as a *de facto* product of entrepreneurship and negotiation. Furthermore, with each new deal struck, another stakeholder was welcomed into the fold, and the web of interests arrayed around the project widened.

It is not so much its final form, then, as the process by which its shape was forged that qualifies it as public. Yet the fact that its formal attributes and qualities are striking and stimulating, rather than banal, *is* still important, because they affirm that such a process is not merely valuable and productive socially, but in terms of the form of the suburban landscape as well. It also allows for continuing revision as other interests and opportunities present themselves.

The latest addition emphatically illustrates this point. Very recently, Messina constructed a narrow, second-story bridge spanning between his own residence and his neighbor's. The bridge both houses an announcer's booth and serves as a more formalized portal to the field.

Every Sunday afternoon the booth is occupied by one of Messina's comedian-friends who treats the neighborhood/audience to a humorous monologue/play-by-play. The booth also possesses a magnificent Louis XIV overview of the field. But the power being celebrated is not the public interest as monarchy, but as represented by the muse of negotiation.

Note

1. Other bells and whistles include a closed-circuit system that televises the action on the field on monitors throughout the house, often side-by-side with major-league baseball games; a left field "dugout"; a "bullpen" in Messina's backyard; and boulders on the hillside that disguise their function as speakers.

[illegible]

Ossified Dwelling: Or Why Contemporary Suburban Housing Can't Change

Renee Chow

To find sites for suburban change, planners and designers normally look to malls, big-box retail, commercial strips, office parks, and institutions such as schools or libraries—places with large dimensions that can take on smaller scales of use. It will come as no surprise then that there are fewer sites to be found in single-family residential settings. This lack of potential raises a pair of questions: Why can't the suburban housing stock change? And is this significant?

A short historical perspective helps answer the first question. By tracing the development of single-family residential settings since World War II, one can see how American suburban houses and their settings have become increasingly resistant to change.

The second question begs an issue of values. Although the formal attributes of housing are not deterministic, they are material in enabling choices in everyday living over time. In this sense, present trends in suburban house design should be a cause for concern. Suburban settings should have the potential to convey and receive impressions, to inspire a dialogue between place and inhabitant that grows rich over time with a range of interpretations. But this will not happen unless planners and designers become advocates for new approaches that seek not just to solve immediate program requirements but build the capacity for transformation.

Suburban House Types since the 1950s

As June Williamson describes elsewhere in this issue, present trends in suburban single-family housing may be traced to the post-World War II development of Levittown, NY. This Long Island community introduced an industrial model for mass-producing housing based on what was then considered the minimum activity spaces required for a typical family.

The drawings here illustrate the internal layout and external relationships of these houses. Based on FHA standards, the Levitt and Sons house was 750 sq.ft. in size (25 by 30) and contained a living room, eat-in kitchen, two bedrooms, and a bathroom. Potato fields were plowed under to create a network of streets to provide access to lots of 6,000 sq.ft. (60 by 100), on which such houses were offered with four basic choices of exterior appearance.

A combination of forces—the postwar housing shortage, government financing, and a belief in efficiency of production—made the Levittown model a huge success. In the years that followed many other developments followed its lead, spawning an industry that changed the American landscape. Typical of these is the second example shown here. Built in the Midwest city of Lincoln, Nebraska(?), it

contained similar, compact houses erected on lots about half the size of those in the original Long Island development.

By comparison, the third set of drawings show how today's suburban houses have grown much larger. A typical program now includes more spaces: separate informal and formal eating areas, great rooms as well as living rooms, a guest room in addition to separate bedrooms for each family member, and multiple bathrooms. And two or more cars usually need to be sheltered.

Built in the early 1990s in Clayton, California, the development shown contains lots that are 600 sq.ft. smaller than those of Levittown; but its houses are more than three times larger. Whether 1,200 or 3,500 sq.ft. in size, such houses are usually located near the middle of their lots. In front, a 20-foot yard holds a parking apron; a 15- to 20-foot back yard is deep enough for a barbeque and a swing; and 3- to 5-foot side yards (depending on local zoning) provide minimal separation between neighbors.

Sources of Resistance

Retrofitting implies that an existing setting needs to be modified for some new component or use. Beyond a general updating of equipment and finishes, most residential modifications aim to make a house better match a desired lifestyle—either because there is a mismatch between the spaces of the house and the needs of an incoming household, or because the needs of an existing household change. By observing how residents make changes to the settings above, it is possible to see several trends that have increasingly limited the potential for retrofitting newer suburban homes.

First is an increasing inability to change the uses and configuration of spaces within a house to suit different or changing lifestyles. Since Levittown, much suburban development has been based on the idea of a model home. A developer first identifies a market, then defines its lifestyles, then programs spaces to meet them. Along the way, normative assumptions direct the design of spaces—their sizes, configurations and adjacencies. In this programmatically driven process, each assumption about a way of living increases the specificity of spaces for prescribed activities. This is not to say that other activities cannot take place within a space, but the potential for other uses diminishes as it becomes increasingly difficult to use specialized layouts in ways other than intended in the initial design.

If change cannot be absorbed within a house, then residents may seek to enlarge it to accommodate new needs. Yet this option also has become difficult in newer suburban settings because of a tendency to size lots to their program-



matic minimum. In Levittown—developed when land costs were insignificant compared to construction costs—the original building footprint covered only 12.5 percent of the lot. Furthermore, the house was positioned to one side of its yard, allowing car access and parking on the other. Such positioning embedded the capacity to expand the house sideways, and over the years homeowners have done just that. They have also built into the rear yards of the house and added second floors. The result today is that the small, highly programmed core houses still sustain the community and remain visible along the street, even though additions have created considerable variation between them.

The possibility for alteration is far more limited in the Levitt-like development in the Lincoln. Here the original building footprint covers nearly 30 percent of the lot, and every space, indoor and out, has an assigned use and minimal dimension: 25 feet for a front yard, 15 feet for the rear, 10 feet for the side yard with the car, and 5 feet on

the other side. Such tight dimensional structures and the position of the house limit the potential for change; and, indeed, only a few small interior and exterior modifications have been made.

In the California example, options for change are even more constrained. Here the lot size is 45 feet by 120 feet, but the lot coverage is nearly 40 percent (in some contemporary developments coverage may be nearing 50 percent). Indeed, as the trend toward bigger houses on smaller lots advances, front and rear yards have come to function largely as zones of protection, while residual side-yard spaces become too narrow to accommodate any use at all.

The organization of building systems in a new suburban house also works to limit change. Mechanical, electrical and plumbing systems (as well as window, door, and other household products) have all been developed to take advantage of light, flexible, wood-frame construction. Such features may fit neatly in structural cavities or run



freely through stud walls and joist floors. But the web of systems they produce spreads uniformly throughout the house, making it difficult to reconfigure. Likewise, the loadbearing structure of the house supports only its initial configuration, ignoring any potential for change easily derived from repositioning nonloadbearing walls.

Beyond physical design, economic and legal issues also reinforce stasis. U.S. tax policy and financial systems, designed to promote homeownership, have transformed the home into most Americans' largest source of equity. The desire to protect this asset reinforces demands for a moat of green to isolate one house from the next. Zoning guidelines and homeowner regulations further reinforce the status quo, as any random, unplanned change is perceived as a threat to everyone's property values.

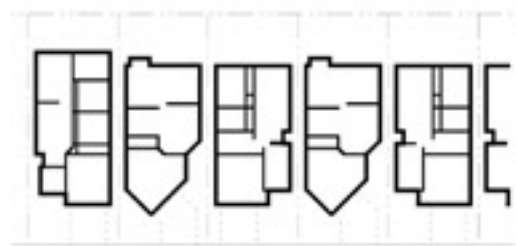
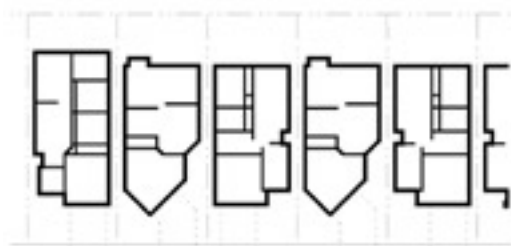
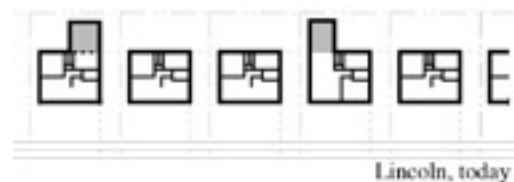
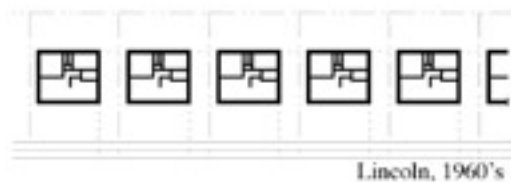
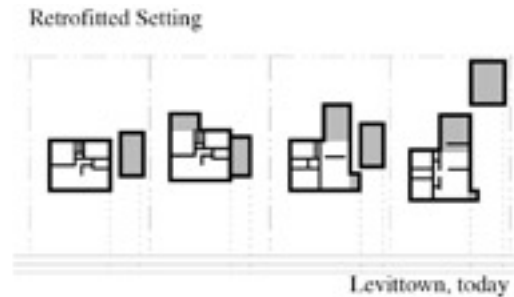
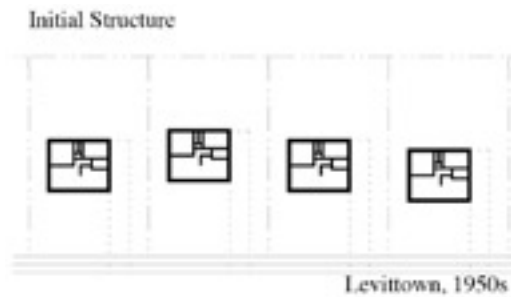
Embedding Capacity

Is it significant that suburban settings are becoming more difficult to change? When houses cannot support change, our choices become limited—we must adapt the way we live, or move. In the present environment of ossified houses, the most common way to accommodate evolving lifestyles therefore has become to “trade



up”—from starter home, to family home, to home-office, to retirement home. But this means residents often find themselves in a bind, moving from one neighborhood to another to find more appropriate space, or choosing to stay in place despite the inconveniences. Our choices become bifurcated—between commodity and community.

Good communities have the ability to reinvent themselves. They have the capacity for incremental modifications that allow people to participate in and trans-



form them. And they become richer and more complex by supporting a diversity of ways of living while sustaining the overall character of the setting.

Places like Charleston, Cambridgeport, and San Francisco have large areas of single-family houses that illustrate this ability for house and setting to become more layered through time. Yet, as the examples here indicate, even Levittown held some capacity for change that has been eliminated in newer suburban communities.

Retrofitting residential areas of suburbs implies incremental modifications, not the wholesale clearing of houses and neighborhoods. The challenge will be to find more ways to embed capacity in housing fabric. But unlike the retrofitting of large industrial, institutional or retail structures, residential retrofitting will require build capacity that is fine-grained and that can better accommodate choices for different ways of living—an array of dimensions and forms from the room to the neighborhood.

In today's high-priced real estate markets large lots can

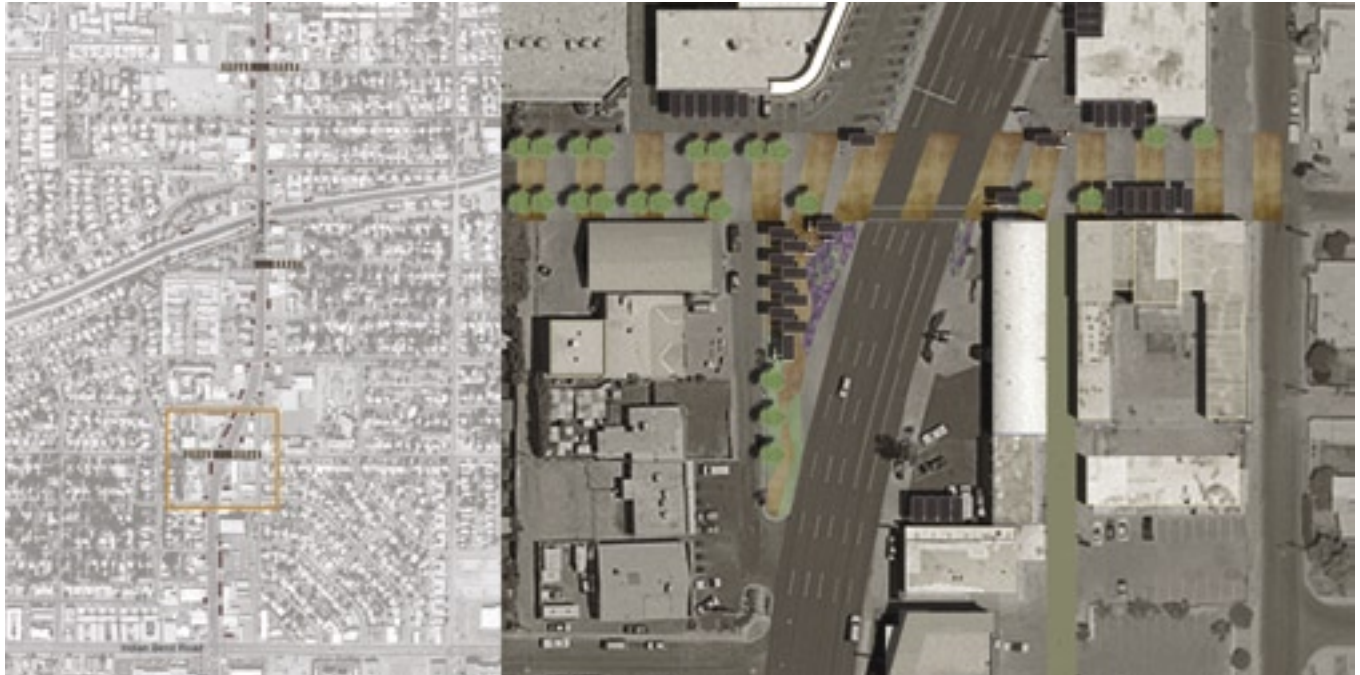
no longer be seen as a solution. Planners and designers must begin by reorganizing building systems to embed a hierarchy that distinguishes the more permanent from the transformable. The suburban fabric can also be restructured to control public to private relations so that growth can be anticipated between neighbors. Finally, model houses can be re-formed to create the potential for simple additions that do not increase their footprint.

None of these propositions are drastic or new. What residential retrofitting in the suburbs will require is a paradigm shift that recognizes the value of change.

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Stripscape: Pedestrian Amenities along 7th Avenue

Darren Petrucci



In his essay “Programming the Urban Surface,” the urbanist Alex Wall described the commercial areas of post-World War II American cities as “generic zones, peripheral sites, middle landscapes that are neither here nor there, and yet [that] are so pervasive as to now characterize the dominant environment in which most people actually live.”¹ The project “Stripscape” attempts to graft a new type of infrastructure onto this generic landscape in an attempt to develop a connective tissue that can facilitate the rich complexity of urban life.

The demonstration site is a one-mile section of 7th Avenue between Indian School Road and Camelback Road in Phoenix, Arizona, chosen for reasons both physical and economic.² In 1968, 7th Avenue was widened by the Arizona Department of Transportation to create a high-volume transportation corridor. Widening, however, meant the area where normal landscape improvements might typically be located was sacrificed to increased road width. The City of Phoenix also proved unable in the

years that followed to make conventional “beautification” improvements. These conditions, combined with increased competition from regional malls, created the conditions for grassroots citizen action.

In 1997 more than sixty property owners along the corridor formed the 7th Avenue Merchants Association, and began to lobby the City of Phoenix to create a redevelopment strategy that could restore value to their properties and businesses. The City contacted Arizona State University’s Joint Urban Design Program (JUDP), and the JUDP in turn contacted me, knowing that my previous research and design had explored alternative revitalization methods for such underused/undervalued sites.

The project that has since emerged is the result of a three-year public/private research and design partnership aimed at developing general new infrastructure prototypes for public and private spaces.³ It also represents a holistic approach to urban design—one that is not imported but emergent from place.

The Process

In 2000, after the city received a \$500,000 Federal Transportation Enhancement (T-21) grant, which it matched, we set to work on the project. Our first step was to convene a series of predesign meetings to understand the desires of stakeholders. We eventually arrived at three

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principal objectives: to establish a character for the strip that would be identifiable within the metropolitan area; to increase business by promoting renovations and new development; and to form stronger pedestrian connections with surrounding neighborhoods.

The project next required both tactical analysis based on individual merchant improvements and the development of an overall strategic plan that would be of use to the city. To accomplish this, we combined the better aspects of conventional master planning with smaller tactical interventions typical of “everyday urbanism.”⁴ We also decided to concentrate the \$1 million in funding at one demonstration site, in hopes that intensive intervention and rehabilitation could provoke and catalyze further capital investment elsewhere.⁵

Completed in May 2004, the built result of our research and design is a series of landscape gateways that establish a strong connection between the 7th Avenue commercial strip and surrounding neighborhoods. Installed at each quarter-mile cross street, they are composed of combinations of standard new components that we call the Lamp-Shade, Art Panel, Bands, Vine Wall, and Color Palette.

Unlike conventional street infrastructure, which is generally focused only on life safety, the new elements were designed with the experience of the pedestrian, motorist, merchants and neighborhoods in mind. Although the prototypical elements were first installed only in the public right-of-way as part of a demonstration project by the city, they are also available for purchase by merchants and private property owners. In this way they may one day create a seamless transition between the public and private realms, and so encourage a sense of activation and ownership (both actual and imagined) across traditional boundaries.

Major Design Elements

The new design elements—bands, vertical panels, canopies, and trees—are “amenity infrastructures” because they seek to create desirable conditions other than those typical of the dominant order.⁶ Along 7th Avenue such amenities might include the modification of public space to provide for pedestrian shade and refuge, commercial display by local merchants, and recreation and leisure activities. The prototypical elements are also a flexible, “emergent” infrastructure that will develop with the city, reflecting the specific conditions present at each site they are installed.

In terms of design, new architectural elements that connect with the ground share a rusted material palette that is “self-healing” and resistant to graffiti. Elements raised off the ground are lighter and more refined, made of aluminum and translucent materials. The distinction will allow the lighter-framed elements to be refreshed or replaced as needed, providing a dynamic image commensurate with the commercial nature of the corridor, while the structures that support these elements will be encouraged to weather and embed their materiality within the context.

Bands. The bands are constructed of concrete into which fine iron fillings have been broadcast and allowed to rust, creating a colored surface. The dimensions of the bands help mediate between the scale of the automobile and the pedestrian. They also visually connect block to block, across streets, and into surrounding neighborhoods. Since their construction is simple and durable, they will also be easy for the city to maintain.

Vertical Panels. The vertical panels serve either as Art Panels or as an armature for growing vines. As Art Panels they consist of two 6-inch diameter rusted poles supporting a 6x8-foot aluminum and Lexan illuminated panel.

The Phoenix Public Art Department has agreed to curate an “urban art gallery” using these panels. This will change every six to twelve months, providing display space for local artists, school art programs, and local cultural groups.

Additional vertical panels are deployed as vine screens to help soften the hard urban context. The panels are grouped with other architectural elements to block the south and west sun and form transportation hubs (bus stops) and/or create pedestrian “cultural rooms of retreat” from the harsh desert climate.

Canopies. The other major architectural element, the LampShade, is constructed from a single 8-inch diameter vertical rusted pole that supports a 9x18-foot light box. A standard urban unit, the parking space, provided the basis for the lateral dimensions of the Lampshade, while its height (12 feet clear to grade) was based on the need for a garbage truck to pass beneath. In the chaotic environment of the strip, the Lampshade’s standard vertical dimensions will establish an important new design datum.

By being able to combine covered parking, pedestrian lighting, and signage into one flexible unit the Lampshade does in one move what typically requires three. During the day it can provide shade for a multitude of activities, while at night it can provide illumination for pedestrian safety and evening events. In the demonstration project, the vertical faces of the Lampshade are adorned with an enlarged image of an Evergreen Elm branch—the species planted nearby. But merchants will also be able to purchase the LampShade to replace less effective signage (as well as provide shaded parking).

Single LampShades can be adapted to accommodate photovoltaic cells and battery storage for off-grid use. They can also be multiplied in a variety of configurations, depending on the conditions of a site. Bus stops, parking areas, commercial display, and outdoor eating are among the uses they could complement. In 2004, the Phoenix Department of Street Transportation established the LampShade as one of its standard details.

Trees. Tree planting provided the final layer of intervention on the demonstration site. As mentioned, when Seventh Avenue was widened in mid-1960s it largely eliminated the possibility for landscape improvements in the right-of-way. Thus only the cross-street right-of-ways provided any area for tree planting. The trees chosen (a drought-resistant species called Evergreen Elm) work well with the rusted concrete bands. They create a shaded gateway to surrounding neighborhoods, an effect augmented by rusted tree grates and up-lighting.

Final Touches

In addition to the new amenity infrastructures, other tactics were employed to help the merchants along 7th Avenue. A consultant was employed to establish a common color palette they can refer to when repainting their buildings. Graphic designers created a new letterform and logo for the district—now called “Melrose on Seventh Avenue” after the surrounding Melrose Neighborhood. Others collaborated on signage and graphic elements for the LampShades.⁷

Such identity-creating measures—now reproduced on letterhead, banners, business cards, and T-shirts—are helping the Merchants Association create a new vitality for their district within the Phoenix metro area.

Notes

1. Alex Wall, “Programming the Urban Surface,” in James Corner, ed., *Recovering Landscape* (New York: Princeton Architectural Press, 1999), p. 234.
2. This section of 7th Avenue lies within the 85013 zip code. The 2000 U.S. Census found this to contain 20,842 people, with a median age of 36 and a median household income of \$36,150 (median family income of \$46,047). The median value of a single-family, owner-occupied home was \$119,100.
3. The design of these prototypes is the result of a unique partnership among Arizona State University’s School of Architecture, the 7th Avenue Merchants Association, the Melrose Neighborhood, and the Departments of Streets and Transportation, Neighborhood Services, Public Art, Planning, Community and Economic Development, and Development Services of the City of Phoenix.
4. See John Chase, Margaret Crawford, et al., *Everyday Urbanism* (New York: Monacelli Press, 1999).
5. Subsequently, an additional \$500,000 was granted for Phase 2 of the project, which will be completed in August 2005.
6. In his book *Points + Lines: Diagrams and Projects for the City*, Stan Allen gives an appropriate definition of infrastructure. He states that the primary modes of operation for infrastructures are the division, allocation and construction of surfaces; the provision of services to support future programs; and the establishment of networks for movement, communication and exchange. In the 7th Avenue context, then, amenity infrastructures could be considered any public or private modification to existing right-of-ways, alleyways, utility easements, setbacks, and retention areas perpendicular to the street that help create a connective tissue of experience.
7. The following collaborators and consultants were hired to provide specific expertise for the project. Janet Waibel, Landscape Architect, of Waibel and Associates, collaborated on the hardscape design. Celia Conover, of Conover Design, produced the color palette. Prof. Jennifer Brungart collaborated on the graphic design for the canopies. Prof. Andy Weed collaborated on the graphic design for the Melrose on Seventh Avenue identity package. Prof. Matthew Innes collaborated on the structural design for the LampShades. The realization of this project is indebted to Lisa Hubbard, Neighborhood Specialist, City of Phoenix; Tom Simplot, Councilman District 4; and Phil Gordon, Mayor of the City of Phoenix.

Suburban Retrofits, Demographics, and Sustainability

Ellen Dunham-Jones

By 2050 the Census Bureau expects the U.S. population to increase by half again what it was in 2000. Where will this additional population live and work? Can this growth be directed to where it both contributes to economic development and inflicts the least environmental damage?

If present trends continue, most of this growth will likely be accommodated in new sprawl development extending out from the exurban fringe. This has been the dominant trend in the U.S. for the last one hundred years, and it only accelerated during the last quarter of the twentieth century.¹ In 2000, for the first time, the U.S. suburban population exceeded that of rural and urban areas combined.

The reasons for suburbia's popularity are many, but its expansion has created many problems. As overall densities have been reduced, automobile use has increased, causing great environmental harm. Leapfrog development has also caused many bypassed, existing settlements to decline. Even in the newest, booming sprawls, the demands of incessant mobility have cut into leisure time, family life, and communal interaction.

Will the next half century continue this pattern of decentralization? Or can new growth serve as a catalyst for change, allowing existing suburbs to evolve into more urban, sustainable places?

Why "Retrofit"?

American legal and cultural attitudes have long accepted the idea that cities are dynamic and should be expected to grow. Less obvious is the corollary that suburbs were not supposed to change. Gradually, however, suburban leaders are beginning to recognize that change has come to them.

Most regional economies no longer operate according to monocentric, core-periphery models. Indeed, competition between suburbs for jobs, tax base, and infrastructure expenditures is now more heated than between the suburbs and the central city.² In such circumstances, physical change may be vital to older suburbs, where aging, outmoded buildings no longer accommodate contemporary tastes and needs.³ But even in newer communities, change may be unavoidable, as residents grow increasingly frustrated with traffic, inadequate affordable housing, and loss of open space.⁴

In thinking about ways to create greater social, economic, and environmental sustainability in such situations, it is important to recognize the particular difficulties created by suburban development. In a city, infill and redevelopment may augment positive attributes—for example, increasing support for services, from transit to restaurants. But in a suburban location, every addition only tends to increase traffic, stress the social infrastructure (including schools), and reduce prized open space.

In other words, ordinary infill and redevelopment projects normally detract from a suburb's most desirable and marketable qualities—one reason they tend to be so fiercely resisted by existing residents. Such NIMBY (not-in-my-back-yard) attitudes in turn become an important factor propelling continued patterns of land consumption. By contrast, "retrofits" are projects that seek to improve the sustainability of the system as a whole. By seeking to create the basis for change beyond their immediate property lines, such projects offer the best chance to overcome entrenched resistance and help suburbs evolve to meet changing needs.

A growing number of successful retrofits across a range of conditions have now raised public awareness of the possibilities. For example, both older suburban towns and younger "edge" and "edgeless" cities are inserting mixed-use residential pockets and town centers—some with significant public amenities—between existing office parks, malls and subdivisions.⁵ Such projects are helping improve connectivity and the sense of place, meet affordable housing needs, and mitigate congestion. In bypassed first-ring suburbs an even more pronounced trend has seen the redevelopment of once-vibrant but now hard-pressed malls, commercial corridors, office parks, park-n-rides, and residential subdivisions.

Do such individual projects imply the possibility of an even more ambitious effort to retrofit the very systems that produce sprawl? There is every reason to approach such a vision with caution. However, emerging social and economic trends may be working in favor of just such an outcome.

New Markets and Opportunities

Three significant demographic trends indicate how promising retrofitting may be as a means to increase the economic, social and environmental sustainability of American suburbs: the aging of the baby-boom generation; the growth of single and nonfamily households; and the nation's growing ethnic diversity.

As the largest demographic group in U.S. history, baby-boomers have been a target market their whole lives; soon they will become the largest and wealthiest group of retirees ever. The American Association of Retired Persons reports that the majority of baby boomers would like to "age in place."⁶ Yet, the auto-dependent nature of

A Retrofit Gallery

suburbia hardly makes this an ideal alternative. Already, more than half of nondrivers aged 65 and older stay home because their transportation choices are limited. Not surprisingly, 71 percent of older households would prefer to live within walking distance of transit.⁷

With the departure of their grown children, many baby-boomers are leaving the suburbs and moving to more urban areas. But such active, elderly people, in their prime spending years, might also be housed in mixed-use transit-served communities in existing suburbs. Already, projects such as Mizner Park, Downtown Kendall, and Upper Rock are playing to this “empty-nester” market by providing condominiums and rentals that enable downsizing seniors to remain in areas otherwise dominated by single-family houses.

The aging of Americans is also contributing to the second significant demographic trend, the rise in single and nonfamily households. Suburbs originally targeted a market composed of married couples where one parent stayed at home with the children. But such nuclear families now account for only 7 percent of U.S. households.⁸ Indeed, in 2000, married couples with children accounted for only 23.5 percent of the total (down from 40.3 percent in 1970); and even in the suburbs, 65 percent of households did not have children.⁹

As the number of households without children continues to grow, will this fuel demand for new multiunit projects? Real estate trends would seem to indicate so. In 2003 the National Association of Realtors reported that not only were condominium sales booming, but they were becoming a more lucrative market segment than single-family homes.¹⁰

And aging baby-boomers are not

Many factors drive suburban retrofits including age, demographics, land costs, and economics, but one of the most significant is the proliferation of dead or dying malls. Of all suburban buildings, retail stores have the shortest life span. The strip malls and shopping centers of the fifties and sixties, the regional malls of the seventies and eighties, and the power centers, outlet malls, and big boxes of the nineties are all aging. None were built to endure, and most have seen their obsolescence accelerated by a system that cannibalizes itself in search of market share.

In its February 2001 “Greyfield Regional Mall Study,” PricewaterhouseCoopers reported that nearly 20 percent of America’s regional malls were dead or dying.¹ This is in addition to the thousand or more “ghost-boxes” (former big-box stores) now present in the U.S. While these empty or declining structures may once have been the pride of the municipalities in which they were built—providing significant tax revenue, jobs, and consumer choice—today they lower property values, spread blight, and diminish opportunities. It is not a coincidence that the majority of suburban retrofits to date have been on dead-mall sites.

Three of the earliest and best-known suburban retrofits took place on dead mall sites: Mashpee Commons on Cape Cod, Mizner Park in Boca Raton, and The Crossings in Silicon Valley. Collectively, they illustrate the opportunities of retrofitting, especially when public/private tools such as tax-increment financing are used. Such sites generally also offer an abundance of parking. They can be developed to the new higher densities justified by transit service, higher land costs, and new markets for apartments and condominiums (especially for the elderly). And synergies can be gained through mixed-use, mixed-income, urban building types oriented around new public spaces and streets.

More recent suburban retrofits, also illustrated in these pages, apply similar strategies to urbanize office parks, edge cities, commercial corridors, residential subdivisions, and park-n-rides. Each case responds to unique local conditions. Sometimes a dying mall or office park may trigger redevelopment; other times it may be the arrival of transit. However, all share a robust optimism that urban uses can find a place in the suburbs.

Note

1. Of the approximately 2000 regional centers with more than 350,000 sq.ft., 140 were already greyfields (defined in the study as malls where average sales/sq.ft. had dropped to less than \$150, or one-third the rate of a successful mall). An additional 200–250 were approaching greyfield status. The fate of many of these places is being tracked at www.deadmalls.com.

From shopping center to mixed-use village: Mashpee Commons, Duany, Plater-Zyberk & Company



There are now many examples of adaptive reuse of older supermarkets and shopping centers: K-Marts have been turned into classroom buildings; an abandoned mini-mall in Los Angeles was transformed into a private elementary school; and a supermarket in Savannah, Georgia, has now become a Women's Health Clinic, reusing the heavy voltage wiring of the frozen foods section for the MRI machines. However, the first shopping center retrofit to mix uses and alter street patterns is also the oldest, Mashpee Commons in Massachusetts.

This project replaced a 140-acre 1960s-era family-owned shopping center, surrounded by parking, with several blocks of one- and two-story buildings on tree-lined streets. Modeled after a traditional New England village, with wide sidewalks and on-street parking, it was a deliberate reaction to the malling of Cape Cod and to regulations that no longer permitted mixed-use neighborhoods or the zero setbacks of traditional urban streets.

The design for the initial village center and the zoning variances to build it emerged from a 1988 charrette. The retail area was occupied by both chain stores and local retail. A library, post office, boys & girls club, theater, senior center, elderly housing, and thirteen apartments were also included. In subsequent years, many of the chain stores reported their highest sales/sq.ft., proving that decades of shopping in air-conditioned malls had not inured Americans to the pleasures of streets and sidewalks. The even bigger surprise was that all of the apartments rented in one month.

Despite this success, it took the owners sixteen years and a second charrette in 2002 to get permission to build Phase 2. This now includes adjacent, walkable, live-work neighborhoods.

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the only demographic group contributing to this trend. Born between 1979 and 1994, 60 million children of baby-boomers are also beginning to shape real estate demand.¹¹ These young people may have very different expectations than their parents: one in three is not Caucasian; one in four grew up in a single-parent household; and three in four had working mothers. "America might be on the cusp of a new period of civic renewal," Harvard sociologist Robert Putnam has suggested, "especially if [their] youthful volunteerism persists into adulthood and begins to expand beyond individual care giving to broader engagement with social and political issues."¹²

The first wave of this "echo boom" has already contributed to urban revitalization by moving into higher risk, lower-rent areas.¹³ Raised with the Internet, many are digitally savvy knowledge workers of interest to high-tech employers. As Richard Florida has reported, areas wanting to attract such employers will need to develop the mixed-use, 24-hour, culturally diverse environments attractive to this new creative generation.¹⁴

Ethnic diversity is the third demographic trend that may be expected to expand markets for walkable, transit-served areas in the suburbs. Immigrants and racial and ethnic minorities now make up more than a quarter of the suburban population, up from 19 percent in 1990.¹⁵

One study in particular has supported the view that such groups are influenced by a different set of environmental values than that of the mostly white populations suburbs have traditionally been built to serve. Conducted for the American Association of Realtors and Smart Growth America, The 2004 American Community Survey found that

From dead mall to new downtown: Mizner Park, Cooper Carry Architects

African Americans were more than three times as likely to pick a “smart-growth” community over one with larger lots (78 percent to 22 percent). Hispanics made the same choice 57 percent of the time, while Caucasians were split 50/50.¹⁶ These choices were reinforced by the priority each group gave to a home close to transit: 77 percent, 67 percent, and 38 percent.

The survey also yielded information about trade-offs Americans are willing to make. Men (55 percent) and Caucasians (54 percent) were more likely to select a bigger lot. Women (51 percent), African Americans (59 percent), and people who may buy a house in the near future (52 percent) were more likely to opt for a community with a shorter commute.¹⁷ In all, the survey found that 48 percent of the housing market is looking for shorter commutes than existing suburban locations offer. Furthermore, the dominant demographic groups seeking this alternative are those expected to grow most in coming decades.

Improving Sustainability

The notion of sustainability is notoriously difficult to quantify. But there is general recognition that redirecting growth toward underperforming suburban locations may help conserve open space, reuse existing infrastructure, and strengthen existing communities.

Evidence of the economic sustainability of suburban retrofits is no longer difficult to find. Retail sales per square foot at Mashpee Commons, Mizner Park, and Reston Town Center have been well above national averages, and the market for residential units has been much stronger than many expected.¹⁸ Retail REIT analysts view mall-redevel-



Faced with a failed regional mall on 29 acres in the middle of town, the City of Boca Raton, Florida, invested \$50 million in infrastructure improvements and created a community redevelopment agency which eventually used a \$68 million revenue and tax-increment bond, to acquire the site, keep two-thirds as public space, and lease one-third for redevelopment as a mixed-use art and cultural center.

After demolition of the windowless, stand-alone mall, the new design followed city guidelines calling for use of Addison Mizner’s original 1920s tropical colors and style. Mizner Park’s arcades, balconies, terraced setbacks, and palm-lined sidewalks now center on the Plaza Real, a lushly planted boulevard that also functions as a public park. Three- and five-story buildings with office space and apartments over ground-floor retail flank the plaza. Later phases added a nine-story of luxury apartment tower and a seven-story class-A office building. The Boca Raton Museum, an International Museum of Cartoon Art, an 1,800-seat concert hall, and an amphitheater serve as cultural anchors. However

The project has been criticized for its lack of integration with its surroundings. The plaza runs parallel to a highway, and is largely screened from view. Nonetheless, the project has spurred redevelopment of adjacent blocks and proven the marketability of attractive urban public space conducive to communal events and socializing. The edges of the site’s former parking lot are now also lined with townhouses that mask parking garages and make a graceful transition to the adjacent residential neighborhoods. But even more significantly, residents routinely refer to Mizner Park as the city’s “downtown.”

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From mall to transit-served university and office tower: Surrey Central City, British Columbia, Bing Thom Architects



Forty minutes drive outside Vancouver, Surrey Central City has involved the retrofit of a dated-but-not-dead mall into a new high-tech university. At a new stop on regional light-rail “Skytrain” system, the public-private development also includes a new 25-story office tower.

Construction involved some creative sequencing. While the mall remained open, a five-story “galleria” was built over it, while the office building was constructed next door. When the galleria was complete, the roof of the old enclosed mall was torn away, creating a five-story atrium, flooded with natural light and linked to the office tower by bridges. The lower floor of the mall retains commercial uses, but a former department store and all the upper floors of the galleria now house a new campus of Simon Fraser University campuses, whose focus on emerging technologies is intended to spin off incubator business opportunities that could be supported in the office tower.

The tight grouping of the new buildings and the visibility of the high-rise celebrate urban density and synergy between integrated uses. In contrast to the old, windowless mall, the new components make extensive use of glass, intensifying the sense of urban interaction. And in keeping with the recycling of the mall itself, fir peeler cores, a local waste product, were used to construct the dramatic wood space-frame over the atrium and provide a connection to the materials and building traditions of western Canada.

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opment projects favorably, as do investment advisor services such as PricewaterhouseCoopers.¹⁹ Municipalities are also beginning to recognize the savings of compact versus low-density development.²⁰

Less recognized are the tradeoffs individuals make between housing and transportation costs. On average, American households spent one third of their income on housing in 2001 (double what they spent thirty years ago), and 19 percent for transportation (more than food and clothing combined—up from 14 percent in 1960.)²¹ However, transportation costs vary significantly with density, and the savings gained from purchasing a more distant house may be eaten up in travel expenses.²² Conversely, the higher rents or ownership expenses of in-town neighborhoods may mask relatively lower transportation costs. Living in a transit-served location also allows a household to concentrate its wealth in real estate, which is likely to appreciate, rather than in automobiles, which depreciate.

Suburban retrofits further contribute to economic sustainability by reversing the blight associated with vacant properties, especially dead malls. This prospect has often led local governments to play an active role in their redevelopment. Among other things, municipalities have established community redevelopment agencies, supported business improvement districts, used tax-increment financing (TIF), sought out “patient capital” for landbanking, created new or overlay zoning districts, invoked eminent domain, and fought for transit systems. Most existing suburban retrofits could not have succeeded without some such level of public-private partnership. But the rewards in terms of increased tax revenues may be great.

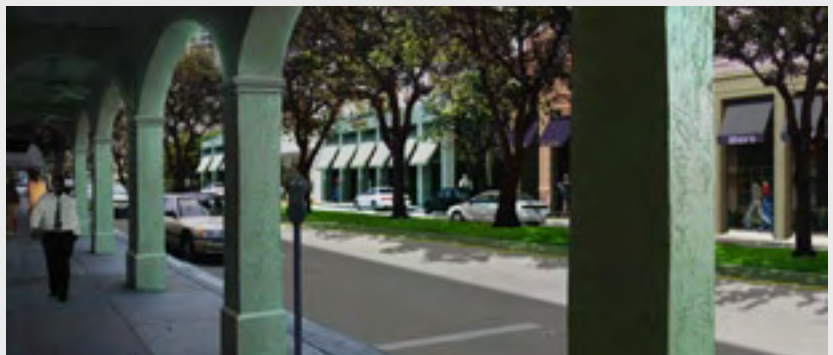
From edge city to suburban downtown: Downtown Kendall, Dover, Kohl & Partners Town Planning and Duany, Plater-Zyberk & Company

While such economic benefits may be quantified, there is less consensus about what constitutes cultural or social sustainability. Nonetheless, it is widely accepted that the inclusion of a broader range of housing options (including rental units) can make an area more accessible to a wider range of groups and help address regional jobs/housing imbalances.

The inclusion of public space is also an important means of promoting community-building. Suburban retrofits routinely emphasize the design of public space to improve pedestrian connections and encourage higher-density living. Networks of streets and squares typically replace superblocks; parks replace parking lots; and city halls, libraries, schools, and performing arts venues provide spaces for civic interaction (an aspect of life that may be increasingly important in diverse communities with large numbers of single households). Such spaces may also give a positive identity to previously amorphous suburban municipalities.

Interest in the development of suburban “town centers” has been particularly strong recently—both as the latest retail format and as a way to respond to the creation of new public spaces in existing urban areas and in New Urbanist projects. This kind of placemaking provides important opportunities for promoting social equity and cultural sustainability. Unfortunately, the overuse of default designs for “village greens” and Bradford Pear-lined sidewalks threatens to replace one set of generic standards with another. Designers would benefit more from respect for local culture and attention to emerging social patterns.

Even if the vast majority of suburban buildings do not merit preservation, more effort could also be



When the Dadeland Mall was built in 1962, Kendall was the rural edge of metropolitan Miami. Today it is closer to downtown than to the western or southern edges of the metro area. Meanwhile the 324-acre area around the mall with an adjacent mid-rise office park constitutes an emerging edge city. A mid-1990s regional plan and the construction of commuter-rail stops at either end of the site made it a prime target for retrofitting. Today, the goal is to transform the entire area into a mixed-use, transit-oriented downtown for suburban Kendall’s 400,000 residents.

A charrette in 1999 resulted in replacement of the old zoning for the site and codified many of the desired characteristics that would allow creation of an attractive public realm over time. As with many retrofits, the plan also breaks up the superblock with tree-lined streets, enhance walkability, and provide infill building sites. In addition, liner buildings were proposed around the mall’s blank exteriors, and a new street grid was aligned to its food court and interior corridor system to encourage pedestrian connectivity and open the possibility of a future open-air conversion. Meanwhile, new buildings were proposed to face an existing, neglected canal, and transform it into a public park that celebrates the local landscape.

The plan allows for the patchwork development of parcels, and build-out is expected to take two to three decades. Construction has begun on seven mid-rise projects in the “downtown” and on a 25-story building with condominiums and offices.

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From office park to mixed-use neighborhood: Upper Rock, Duany, Plater-Zyberk & Company, 2004



Much like their retail counterparts, suburban office parks from the seventies and eighties are losing value. But so are even newer office parks in places like Silicon Valley since the bust of the tech boom. Not only do the buildings need new wiring, but a new digitally savvy generation does not find them attractive, creative places to work. As a result employers seeking a recruiting edge are looking for mixed-use business districts with more amenities and a higher quality of life. At the same time many employees seeking to reduce their commute are looking for near-by housing. And many cities would like to upgrade aging facilities located prominently along major highways and arterials.

This project in Rockville, Maryland, began with a public charrette for the site, which resulted in a number of requests. Among these were that developers incorporate public space, follow the principles of green architecture, and build an environmentally friendly and artistic sound wall along the Interstate. They were also asked to convert the remaining office building to lofts, add senior housing, build a telework center, and supply incubator-market space, retail stores, and structured parking.

Two of the original office buildings on this site have already been torn down, while a new LEED silver-rated office building is nearing completion in the center of the site. The conversion of the remaining office building to residential lofts will add a “hip” urban housing option to the larger area, and facilitate development of a better mix of uses.

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made to adaptively reuse the better-designed and better-built examples. Joel Garreau speculated in 1995 that dead K-Marts might one day be appropriated by artists. Then, as suburban loft-living became chic, a new generation of lawyers would displace the artists and rename them “The Estates at Place K.”²³ Today, the more futuristic aspects of this vision may not have been realized, but department stores at Eastgate Mall, Winter Park, and Surrey Center have been converted to offices, residential lofts, and classrooms.

In other cases, a local community may be better served by simply maintaining an older facility and retrofitting the areas around it. As Jane Jacobs pointed out long ago, older buildings are far more likely to allow the low rents needed by immigrant businesses, nonprofit cultural groups, and health clinics. Although large suburban retrofits rarely displace such tenants, many older strip malls do provide space for such community-oriented tenants. Moreover, not all retrofits are oriented to upscale markets. In Atlanta, The Windjammer, one of many 1970s suburban apartment complexes for “swinging singles,” is today consolidating many of its one-bedroom units into larger apartments for immigrant households.

Retrofitting may also be used to improve the environmental performance of an area. When a shopping center failed in Phalen, outside Minneapolis, a creek paved over for a parking lot was restored, and the rest of the site was rebuilt as a lake and wetlands area. And in Houston, when severe flooding resulted from poor enforcement of rainwater-retention standards, legal action by homeowners in a downstream subdivision forced the city to buy and demolish their homes, even when no plans for

From uniform residential subdivision to traditional neighborhood district: Laurel Bay, Duany, Plater-Zyberk & Company, 2004

the future use of the area were clear.²⁴

Such wholesale regreenings are rare, but most suburban retrofits improve environmental quality through a reduction of impervious surfaces and the inclusion of trees, parks and greens. A mix of uses within a walkable distance of one another can also improve environmental sustainability by reducing automobile use.²⁵ Where transit has prompted retrofitting, as in Arlington County and Twinbrook Commons, higher-density developments have usually resulting in even greater land conservation.

The Opportunities

Can suburban retrofits actually make a difference? Or, in the words of Michael Sorkin, is fiddling with the same limited set of suburban typologies tantamount to rearranging the deck chairs on the Titanic?²⁶

The answer may have to do with the number of deck chairs. Chris Nelson, Senior Fellow with Virginia Tech's Metropolitan Institute, has argued that by 2030, half of all buildings in existence in the U.S. will have been built since 2000.²⁷ All this new construction provides an opportunity to rebuild America; an opportunity to make up the 20-30 percent tax base gap that exists between older and newer suburbs; an opportunity to help existing suburbs better meet the needs and interests of the aging boomers and diversity-inclined echo-boomers.

Most significantly, if agglomerated in dense nodes at reasonable distances on appropriate corridors, new building might provide an opportunity to introduce mass transit into sprawl—with all its economic, environmental, and social benefits. As Surrey Center, Downtown Kendall, and Twinbrook Commons demonstrate, construc-



The least prevalent retrofits are those of residential subdivisions. There have been a few hypothetical connect-the-cul-de-sacs projects, but the great number of owners involved in residential retrofitting normally makes either approval or parcel-acquisition difficult. Nevertheless, older residential subdivisions are just as much in need of updating as other development types. Despite smaller households, increasing demands for privacy and additional square footage mean that most postwar suburban houses are considered too small by today's standards. In addition, older ranch houses are out of style in a market where 90 percent of new homes are two-story buildings. Older subdivisions are also less likely to have the kind of communal recreation facilities that their newer competitors offer.

DPZ have addressed these problems in several different, as yet unbuilt, retrofits in Florida. In Northern Hillsborough County, they proposed connecting the cul-de-sacs to improve walkability and accommodate affordable housing; they also proposed replacing landscaped subdivision entry gates with small public greens lined with retail. At Apollo Beach they developed several prototypes for front-yard additions to ranch houses which would expand living space, mask garages, and urbanize the street.

Their plan for Laurel Bay on Parris Island in South Carolina attempts to convert a monocultural subdivision to support the more mixed-incomes, mixed-building types, and public spaces (if not mix of uses) of a traditional neighborhood development.

In addition to adding a new neighborhood, they propose buying and demolishing 300 homes to allow construction of a new cross street from the entry of the subdivision down to a new communal park at the water's edge. By improving access to the site's most defining feature, the new street would improve walkability, communal interaction, and the sense of place. It would be lined with 1200 new townhouse and apartment units, many of them facing onto new common greens.

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From park-n-ride to transit-oriented destination: Twinbrook Commons, Torti-Gallas CHK



In a 2002 report for the Brookings Institute, Dena Belzer and Gerald Autler of Strategic Economics argued that most so-called transit-oriented-development projects (TODs) are really only transit-related. A true TOD must balance its role as a node in a regional network (with plenty of structured parking and significant amounts of office space) with its role as a local place, designed for residents. This proposal for a dramatic retrofit of a suburban park-n-ride station in Rockville, Maryland, on the Washington Metro attempts to accomplish these goals and assist efforts to promote TODs as a standard real estate product.

The 26-acre project aims to build mid-rise, mixed-use office and residential buildings around a new public green and along several new “Main Streets.” Its edges are located within a five-minute walk of the Metro station and connect at multiple points with surrounding neighborhoods.

In keeping with Maryland’s smart-growth policies, it is expected such a project will transform the station area from primarily serving commuters headed to jobs elsewhere, into a destination in its own right. It would thus use transit to develop a high-density node, and use a high-density node to attract more riders to transit. It will also allow Metro commuters using the station as a park-n-ride to shop and dine before driving home, increasing social interaction and decreasing air pollution.

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tion of new transit lines can trigger individual good developments. But there is also a need to, quite literally, connect the dots to effect systemic change.

The prospects for transit in suburbia are not quite as farfetched as they may sound. One study has suggested that over the next 25 years, at least a quarter of all new households will be looking for housing in transit zones, more than doubling current numbers.²⁸

The biggest obstacle to such new forms of development may not be consumer demand so much as political and regulatory opposition based on an outdated view of suburbs as domestic retreats from Dickensian cities. As already noted, contemporary suburbs are major players in today’s polycentric regional economies. They are increasingly home to most of the office space in their regions.²⁹ At the same time, they are increasingly finding themselves faced with so-called urban problems of drug crime, gangs, and poverty. In other words, suburbs are increasingly behaving like cities.

As players within a larger system, retrofits would provide them a way to make their presence more visible. Similarly, a polycentric transit system could provide a basis for strengthening suburban alliances through regional cooperation.

The vision of a polycentric future of dense nodes in retrofitted suburbs overlaid with transit corridors is extremely alluring. But what is truly surprising is that if the bulk of new growth for the next 25 years were to be absorbed in existing places, retrofitted to accommodate higher densities and environmentally sensitive open spaces, the rest of the landscape would hardly change. This may come as a disappointment to those

From suburban codes to urban codes: Boulder's zoning for incremental urban infill development and retrofits, Boulder Planning Department and Van Meter Williams Pollak

interested in retrofitting sprawl itself. But it should also be a comfort to existing communities to realize that densifying nodes in an existing pattern doesn't change the pattern.

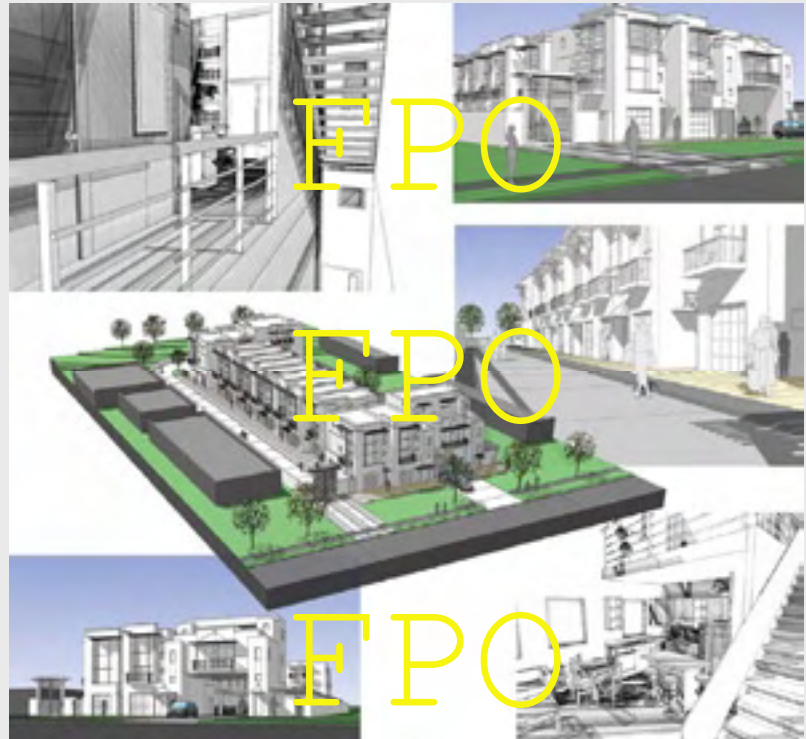
Of course, there are ways to begin thinking of changing the pattern, too. One would be to insert transit and park systems not along existing transportation corridors, but through the residual areas between subdivisions.

By making the land that current development "backs" on to a front-facing destination, new interconnections might be possible across station stops and parks. Points of disconnection would then be transformed into neighborhood-scale connections. This is essentially the strategy of Atlanta's proposed Belt Line, which would reuse abandoned rail lines between neighborhoods to create a new necklace of green space and transit-oriented development.

Next Steps

As Alex Krieger has pointed out, the benefits of suburbia have largely accrued to individuals, while the costs have been born collectively.³⁰ However, this situation no longer holds once a dead mall triggers a decline, or a new transit line triggers an increase, in property values. Suddenly, it becomes the interest of the individual property owner as well as the community to support a successful retrofit. While many existing suburbs will be able to retain value and avoid change, many others are already feeling the need to pursue the kind of projects illustrated here.

As researchers and practitioners face this future, many questions remain unanswered. How much more sustainable are polycentric systems? What are the best measures of sustainability at the scale of a metropolis, suburb or neighborhood? How



While the most visible retrofits tend to be individual, named, and easily photographed projects, the largest systemic impacts occur through changes to infrastructure and zoning.

As part of a commitment to smart-growth principles, the planning department in Boulder, Colorado, has been engaged in one of the most successful ongoing efforts to trigger suburban retrofits. A ten-year series of plans, corridor improvements, mixed-use rezonings, and diagrams of acceptable prototype developments (an early example of form-based zoning) has resulted in numerous urban infill projects by various owners. It has also allowed construction of pedestrian-oriented streetscaping along both North Broadway and 28th Street, Boulder's major auto-dominated commercial strip.

Gradually, Boulder's suburban greyfields and corridors are transforming into urban, stylistically diverse, mixed-use, pedestrian-friendly neighborhoods with a high percentage of affordable housing. As part of this effort, former City Planning Commissioner Will fleissig (now an infill and greyfield developer with Continuum Partners) developed the North Boulder Sub-Community Plan in the mid-1990s. Van Meter Williams Pollak produced the visual diagrams, as well as the prototype guides that accompanied the 1999 Boulder Valley Comprehensive Plan.

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much can existing travel behaviors be modified by connecting neighborhoods on formerly isolated super-blocks?

Answers to such questions could provide support for smart-growth policies and help in the development of tools to implement them. For example, can the transfer of development rights be used to retrofit commercial corridors, downzoning between nodes and upzoning at intersections? Can the redevelopment and densification of central locations be linked to land conservation in more outlying parts of a region?

Difficult realities also remain. How can one “design-in” opportunities for places to evolve and become more diverse while working within the constraints of existing master-plan laws? While using financing that requires “credible” (chain-store) tenants? And while involving stakeholder groups whose common-denominator preferences extend only to familiar precedents? Can small property owners be encouraged to engage in retrofitting, despite the perception that large parcels must be assembled to deal with setback and parking issues?

Finally, how can suburban retrofits be made better places? The retrofit movement has to some extent allowed architectural thinking and place-making skills to be reintroduced to the suburbs. Now, as suburbs continue to evolve into settings for the twenty-first century, what are the architectural, as opposed to urbanistic questions that such projects should address?

Notes

1. Some 75 percent of development in the last quarter of the twentieth century was suburban. See Ellen Dunham-Jones, “Seventy-five Percent,” *Harvard Design Magazine* (Fall 2000). The American Farmland Trust has estimated that 1.2 million acres of farmland were converted to developed land each year between 1992 and 1997, at a rate 51 percent higher than between 1982 and 1992 (see “Farming on the Edge,” available at www.farmland.org).
2. See Robert E. Lang, *Edgeless Cities* (Washington D.C., Brookings Institution Press, 2003). Lang describes current discourse on metropolitan form as divided between polycentrists like Chris Leinberger, and post-polycentrists like Robert Fishman and himself.
3. For a detailed discussion of problems faced by older suburbs and proposals for regional tax-base sharing, see Myron Orfield, *Metropolitics: A Regional Agenda to Community and Stability* (Washington, D.C.: Brookings Institution, 1997 revised ed.).
4. See two studies by the Institute for Metropolitan Affairs, Roosevelt University: “Exploring Edge Cities, Report of a Survey of Senior Planners,” May 2002; and Woody Carter, Robert Frolick, Tim Frye, James Lewis, and Kathleen Kane-Willis, “Edge Cities or Edge Suburbs?” November 22, 2002.
5. Examples include “The Crossings” in Mountain View, CA; Santana Row in San Jose; “Tukwila Urban Center” in Tukwila, WA; “The Commons” in Tysons Corner, VA; Reston Town Center in Virginia; “Town Center” in Sugarland in Houston; and “Perimeter Place” at Perimeter Center, and Market Village at Smyrna in Atlanta.
6. Roper Starch Worldwide Inc., prepared for AARP, “The Baby Boomers Envision Their Retirement: A Segmentation Analysis,” February 1999, available at www.aarp.org.
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Caring for Places: Caring for Thought

Suburban places have long been both beloved and maligned, no less now that more than half of Americans choose to live and work in them. The larger social and environmental consequences of those choices have prompted considerable scholarly and professional attention to the problems of sprawl and the provision of alternatives—redevelopment of the urban core or designs for new neighborhoods at the suburban periphery. However, there has been far less study of the opportunities for the existing suburbs, the middle landscape, to absorb new growth and to evolve in relation to changed demographic, technological, and economic conditions. In this issue of *Places* we hope to frame the larger arguments advocating this kind of suburban evolution—which we define as *retrofitting*. As distinct from infilling, retrofitting involves systemic changes intended to enhance the sustainable performance of places. We hope this work will encourage *Places* readers to help suburbs, both aging and booming, evolve.

The most widely recognized examples of suburban retrofits are the failed shopping centers and malls that have been converted to successful mixed-use “Main Streets” and neighborhoods. In this issue we present a new generation of projects, many of which build on this work while broadening the range of prototypical American suburban places subject to retrofitting to include edge cities, office parks, commercial corridors, residential subdivisions, suburban apartment complexes, and street infrastructure. The articles we have gathered here also seek to chronicle the range of change—historic, physical, demographic, regulatory, and financial—occurring in today’s suburbs.

As members of a generation reared in suburbia and schooled in urbanism, we are excited about the opportunities afforded by these projects’ conversion of devalued suburban formats into more urban places. Collectively, they suggest an ambitious agenda of retrofitting sprawl itself and the systems by which it is reproduced into a healthier polynucleated pattern. Without attempting to define or assess such a large-scale agenda of (sub)urban renewal, we hope this issue of *Places* will stimulate debate on both this larger project and the more immediate changes to the suburban landscape.

—Ellen Dunham-Jones and June Williamson, Guest Editors

Focusing Growth amid Sprawl: Atlanta's Livable Centers Initiative

Michael Dobbins



A turning point may finally have arrived in the Atlanta region's famous infatuation with sprawl. The opportunity stems from widespread concern that present development patterns are unsustainable, and that to do nothing is to risk the region's future desirability—and potential for continued economic prosperity. Today, a new consensus is emerging among citizens, developers, design professionals, and local officials that focuses on channeling new development into existing centers and corridors.

Atlanta's new approach recognizes the need for strategies that will create places with distinctive design quality

Chamblee, an inner suburban sprawl victim, was an early program applicant (2000), seeking to better retrofit its town center to connect to a MARTA station blocked by a large parking lot. The city staff and elected officials believed that such a move was doable and then lined up developers to try out the integrative mixed use and streetscape plan. The first phases of the ensuing midsize development are nearing completion.

and character. Prominent among these is the five-year-old Livable Centers Initiative. LCI was created by the Atlanta Regional Commission (ARC) as a way to restore the region's eligibility for federal transportation funding after it was found to be out of compliance with air-quality standards. Today it provides both planning and implementation funding for projects aimed at retrofitting declining areas into higher-density, mixed-use, livable places.

Subhead

Looking backward, Atlanta's growth and development in the last thirty years has been as phenomenal as it has been shapeless. The result is that, at 2.8 people per acre, Atlanta is the least dense of the nation's fifteen largest metro areas.¹ Looking forward, Atlanta will continue to be the hub of a southeast megalopolis that is projected to grow three times faster than the country as a whole over the next fifty years.² Even by 2030, the region expects to



add more than two million people (50 percent more than it has now), as well as a million and a half new jobs.³

Such projections bring a certain sense of urgency to the need to create a better range of living, working and travel choices. At the same time, the region must address underlying social and political issues, among which are historic racial and income inequities and the divergent purposes of at least ten counties and 64 city jurisdictions.⁴ It must also face environmental threats and their health consequences—such as conserving water supplies; improving air, water and habitat quality; and managing solid-waste disposal. In a word, Atlanta must grow smarter.

As occasionally happens in the south, the need for change has also been precipitated by a combination of federal intervention and unfavorable national attention. Most importantly, in 1998 the region was barred from spending federal dollars on new transportation projects until it adopted a transportation plan that met the provisions of

the Clean Air Act. At about the same time Atlantans awoke to an ABC News report that dubbed their region “the poster child of sprawl.”⁵ With congestion continuing to cost time and money and create “road rage” levels of frustration, the *Wall Street Journal* also reported that Atlanta had slipped from number one to number fifteen in the standings of cities desirable for real estate investment.⁶

These trends caught the attention of civic leaders. Indeed, the business community became sufficiently alarmed that its Metro Chamber, which had long vaunted the region’s lack of boundaries, began redirecting its energies toward the infilling of existing areas. The change of

Perhaps the best example of a citizen initiated LCI is the Avondale MARTA station, where local citizen and business leadership has partnered with the Decatur city government to produce a plan that integrates the superior access of MARTA with significant large scale mixed use development initiatives, among whose sponsors is the Decatur Housing Authority.

attitude was recently punctuated by the release of a “Quality Growth Atlanta” report from its Quality Growth Task Force, encouraging a more sustainable growth trajectory.⁷

Demographics have also changed in Atlanta. Seniors, empty-nesters, and young adults now provide a better balance to families with children—the population that largely drove suburbanization after World War II. These new markets are demanding more choice in how and where to live.

Clearly, the region will continue to sprawl, but indications are past leapfrog expansion will be slowed by these new markets—a trend that will work to the advantage of already-developed places. From small villages to large centers, these are typically the region’s oldest, densest, and most diverse communities. Currently plagued by aging infrastructure and disinvestment, many are looking to re-center themselves, and they hope that growth can be used to improve levels of access, service and amenity. After thirty years of declining population and private disinvestment, the City of Atlanta is today regaining population and jobs.⁸ Many smaller, older towns in the region are similarly experiencing a turnaround.

Origins of the Program

As mentioned, the LCI program ultimately owes its existence to a need to bring the region into air-quality compliance so it might regain eligibility for federal transportation dollars. After considering a range of growth-management actions, however, the ARC chose not to try to control metropolitan growth through a restrictive program of boundaries. Along with its constituent jurisdictions, it instead decided to create a system of incentives to help focus new development in existing built-up areas. Unlike programs with a top-down mandate, it was hoped such a program would allow new village-like communities to be located as part of a self-selecting process, worked out between communities, the private sector, and local, regional and state agencies. By emphasizing the carrot over the stick, it was also hoped such an approach would be a better fit with Atlanta’s freewheeling real estate development culture.⁹

The LCI program was launched in 1999 with a particularly big carrot: a five-year \$350 million commitment of federal Q23 (formerly Congestion Mitigation/Air Quality, or CMAQ) funds. The use of federal transportation dollars was justified by the smart-growth goal of creating and reinforcing walkable, live-work-shop-learn communities with densities sufficient to support alternatives to travel by private vehicle.

The idea has been to use federal funds to support both community planning and the construction of transporta-

tion projects to support it. Under the program, planning proposals are solicited annually, and then reviewed by a diverse, knowledgeable panel. Among other requirements, applicants must commit to pursuing transportation strategies that support higher-density, mixed-use development patterns; enacting land use regulations that bolster these patterns; and identifying matching funds (20 percent) for each grant. On successful completion of the planning work, applicants may also apply for implementation funds to support the transportation component of their plans. Recognizing that superior community design and development outcomes stem from an engaged citizenry, the planning and implementation phases both also require an inclusive citizen guidance process.

After four rounds of program applications, a total of 150 planning proposals have been submitted, and 51 have been funded at levels ranging from \$50,000 to \$120,000.¹⁰ Of the initial \$350 million, more than \$5 million in planning grants have been awarded, and 80 projects in 40 LCIs have been awarded \$108 million in implementation funding. Development projects enabled by the program have so far included 26,000 housing units (about 10 percent of the region’s total), 23 million sq.ft. of office space (most concentrated in existing major employment centers), 4,500 new hotel rooms, and about 5 million sq.ft. of retail space. Twenty-two jurisdictions have changed their comprehensive plans, with eleven others in the process of doing so. Some 24 communities have adopted zoning and subdivision regulations that support and facilitate new development patterns, with another nine in process.¹¹

Subhead

The above numbers, however, do not tell the whole story. What may be most significant about the LCI program is that it cuts across old boundaries. It has required governments to amend zoning and subdivision codes, reexamine public-works standards (particularly related to street-design), and create new legal frameworks for public-private cooperation. A range of innovations has also emerged from planning staffs and consultants—including mixing uses and densities, establishing conservation provisions, adapting “transect” principles to existing communities, and creating more transparent and legible (often form-based) code structures. The private sector has also found itself breaking new ground, overcoming old cultures, histories and habits in development and finance. And the various design disciplines, both in government and private consulting, are learning to work together better—although they still have a long way to go.

The community groups who have become advocates for the program have increasingly embraced the view that successful place-building requires partnerships. As parts of a single team, community leaders can provide a vision; private developers can provide money and expertise; and local government can provide a strong planning framework.

As the accompanying illustrations show, the program has targeted already-existing centers and corridors across a range of sizes—small, medium, large, and even extra large. Crossroads, town centers, strips, shopping centers, and major suburban and city centers have all adopted smart-growth plans and begun to implement their transportation components.

Infill, redevelopment and retrofit plans now support such goals as mixed-use development, connecting and conserving usable green space, providing walkable, bikeable and transit-supportive streetscapes, putting cars out of sight, and planning for increased densities. Additionally, as communities become more comfortable with the demand for alternatives to sprawl, there is increasing recognition of the need to build mixed-income housing—both to accommodate the population that works in mixed-use centers and as a strategy to shorten commutes and encourage the development of transit alternatives.

Tough Challenges Remain

As a result of its initial successes, the LCI program has been embraced across the region. In many communities, citizens groups are ahead of local governments in pressing for its application. One reason for the successes may be that the LCI program does not require localities to “think regionally.” Instead, it encourages them to pursue their own priorities, so long as they support regionally established smart-growth criteria and transportation strategies.

As the program is evolving, though, the need to adjust some of its provisions and premises has emerged. For example, many LCI communities are lagging in implementing required zoning modifications. There is also a need to dramatically beef up funding for alternative transportation strategies to meet the escalating market demand.

In addition, the ARC’s recently adopted 2030 Regional Transportation Plan indicates it may be backsliding to the roadway-dominant culture that put the region out of compliance with federal programs and necessitated development of LCI in the first place. New transportation funding should emphasize the opportunities and realities of retrofitting established areas. Instead, proportionally more money is still being spent on roadways and rubber-tired transit serving newer, less dense areas.

In the end, therefore, while the LCI program may be a creative and promising initiative, any claim that the region has turned the corner toward smarter growth is still premature. But as Atlanta looks to the future, this circumstance is comparable to the struggles of other metro areas. Across the country, supplying the market demand for new choices has been as hampered by a lack of public-sector support as it has by a lack of developer and lender support.

Today, as concerns over community health and energy conservation have joined older factors pushing for smarter growth, it is clear that more money must be spent in the older parts of regions. For years these first- and second-generation suburbs have lost out to the forces building lower-density sprawl further out. With significant concentrations of minorities and immigrants, these communities have been unable to organize the political pressure necessary to gain their fair share.

Still, all over the Atlanta region the program is generating growing enthusiasm. As the market for more livable places takes hold, many Atlantans are optimistic the LCI strategy will provide an important tool as they face the challenge of accommodating an additional two million people by 2030.

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The Need for Alternatives to the Nineteen Standard Real Estate Product Types

Christopher B. Leinberger



Retrofitting the suburbs is the challenge for the current and future generations of planners, designers and developers just as downtown revitalization was that which defined the efforts of the last. Many obstacles stand in the way of this vision. Among them are the difficulty of rewriting local zoning codes, the obstinacy of local officials, objections from neighborhood groups to change in any form, and the inexperience and sometime hostility of the development community. But the biggest challenge will be obtaining financing.

The best design ideas are worthless unless money can be raised to build them. The massive American (and, more and more) worldwide real estate finance system operates according to well-understood decision-making rules. Those rules once produced older suburbs, and they are currently producing even lower-density communities on the elusive fringe.

Learning how this system works, and how it may be influenced to accept different models, should be one of the top concerns of advocates of change. A brief history lesson is an important place to start.

Real Estate Is Dead, Long Live Real Estate

During the 1980s, the American real estate industry engaged in the largest building boom in the country's history. More office buildings went up during that decade than since the founding of the Republic¹; huge single-story industrial buildings were constructed that could contain multiple football fields; and retailing evolved to produce what we now call big boxes in power centers. The vast majority of this space was built in the suburbs at low suburban densities.²

To finance this building boom, real estate developers borrowed billions of dollars from the savings and loan industry, commercial banks, insurance companies, pension plans, individual investors, and others. Unfortunately... the developers forgot to pay much of it back.

In the most spectacular real estate failure since the Great Depression, the overbuilding of the 1980s resulted in the massive financial hangover of the early 1990s. Much of the S&L industry went bust, a significant amount of the equity base of the banking industry was lost, some of

the oldest insurance companies disappeared, and many individuals lost their life's savings. Eventually, it took \$150 billion in federal taxpayer money and the impressive work of the federally chartered Resolution Trust Corporation (RTC) to right the country's financial system.³ When the full magnitude of the disaster became clear, the Federal Reserve also decided that controls needed to be put on the real estate industry, and it turned to Wall Street investment banks, in part, to help impose them.

The controls imposed in the early 1990s focused on both components of real estate finance: debt and equity. On the debt side, the RTC created a secondary market for commercial and residential real estate borrowing.⁴ On the equity side, investment bankers and virtually bankrupt commercial, apartment and industrial real estate developers rediscovered a nearly forgotten IRS corporate category for owning real estate assets, real estate investment trusts.

In a brilliant reversal of fortunes, REITs provided liquidity for what had previously been considered one of the most illiquid of assets. Amidst the real estate investment debacle of the early 1990s nearly 100 REITs of the class of 1993 succeeded in taking nearly worthless portfolios of commercial, apartment and industrial properties to publicly traded equity markets (primarily the New York Stock Exchange NYSE), where they found institutions and individuals willing to buy them.

The success did not stop there. There are now some 180 publicly traded REITs, with a total asset value of more than \$400 billion.⁵ Not to be outdone, Wall Street in the 1990s also fell in love (as it has numerous times over the previous forty years) with publicly traded homebuilding companies a love affair that continues today, along with a boom in residential real estate values.

Most important, the changes of the early 1990s marked the end of real estate as it had been known for centuries. Like politics, real estate had always been a local business, built by local developers and owned by local investors.⁶ However, over the course of the last twenty years, the majority of real estate debt and equity has come to be traded in one form or another on Wall Street. As an asset class, real estate has joined stocks, bonds and cash as the most widely held and important forms of American investment.

[illegible]

Subhead

Why is this history so important to the revitalization of suburbia? The answer is that while good design should, and many times does, change the built environment, most times it is financial interest that dictates what will be built. With the notable exception of endowed museums, educational institutions, and federal courthouses, the bottom-line as interpreted by Wall Street now rules. Why and how has this happened?

Wall Street, and modern financial markets in general, provide an efficient means of pricing and trading assets as they have since their emergence in Holland in the sixteenth century. What undergirds this efficiency is a guarantee that trading takes place like for like. No NYSE or Chicago Commodity floor trader examines the fine print on a share of Intel class B stock, a grade A pork belly, or a Euro-denominated bond. A massive underwriting system, managed by investment bankers and credit-rating agencies, guarantees that what is traded is the same. As William Bernstein wrote in *The Birth of Plenty*, An efficient market is one where buyers and sellers freely and openly transact business in high volume at nearly identical prices.⁷

As mentioned, the main benefits of access to the new market for real estate developers has been access to financing and dispersal of investment risk. But to participate in it, they have had to commodify what they build, and this has meant ensuring that each unit of each product type was adequately similar to every other. Such a situation has very quickly led to what can be called the Nineteen Standard Real Estate Products, listed in the accompanying chart.⁸

From an investment point of view, commodification has also resulted in extreme specialization. REITs today nearly all specialize in one product type or another.⁹ A banker may spend an entire career understanding the suburban office product, and as a Wall Street investment analyst may focus 100 percent of his or her time understanding the details of entry-level, for-sale housing and the companies that produce it. An entire company may even devote its considerable energies and capital to making money in suburban rental apartments.

Perhaps more to the point in a discussion of placemaking, commodification has also required the elimination of external influences. Thus, each of the nineteen product types is modular and stand-alone, a condition which almost guarantees low-density sprawl. In fact, suburban sprawl, which has a floor area ratio (FAR) of 0.2 to 0.4, is now evolving into semi-rural sprawl, which has an FAR of less than 0.1.¹⁰

Take the neighborhood retail center product type. It is today built on a 12-to-15-acre site located on the going-home side of a four-to-eight-lane highway that carries a minimum of 25,000 cars per day. It is shaped in an L, with about 20 percent of its site covered by 100,000-150,000 sq.ft. of one-story stores. The stores will be placed away from the highway, though there may be a couple of out-parcels for fast-food, chain restaurants, or banks. At its ends, it will be anchored by a 45,000-55,000-sq.ft. chain grocery store and a 15,000-25,000-sq.ft. chain drug store. In between will be the outlets of smaller national and regional chains. Furthermore, the drug store, bank, and fast-food restaurants will all have drive-up windows; the bulk of the site will be covered by asphalt; and behind the stores will be a driveway for trucks to deliver goods and haul away trash. In terms of market, such a neighborhood center will serve at least 20,000 households in a two-to-three mile radius, whose incomes will be at or above the national median income level. Virtually everyone will get there by car.

This form of center will be the same, whether located in Southern California, New Mexico, or Virginia. However, at the last moment, the center in Southern California may have Mediterranean tiles added to its roof, the New Mexico center may have fake vigas applied to give it an adobe pueblo look, and the Virginia center will receive a brick Williamsburg facade.

Such a design may seem excessively crude to most architects. But from a finance and marketing standpoint, there is good reason why the neighborhood retail center is less architecture than billboard: it needs to catch the eye of the motorist passing by at 35-65 miles an hour. In the nanosecond the driver can devote to it, it must yell back grocery store!

Predictability, Not Innovation

Resistance to such restrictive formulas has already been tried. When REITS came on the scene in the 1990s, two initially attempted to develop and own mixed-use, walkable places that did not conform to the standard product types. One, Federal Realty, built the notable Bethesda Row outside Washington, D.C., which combined ground-floor retail with housing and office above. With structured parking hidden behind, this was one of the first Main Street projects in the country.

The other was Post Properties. Working closely with Andres Duany and his architecture and planning firm DPZ, it aspired to becoming the first New Urbanist developer. Today its best-known projects include Riverside in Atlanta and Addison Circle in Dallas, both mixed-use

housing projects with some ground-floor retail wrapped around structured parking.

Unfortunately, in the late 1990s both Federal Realty and Post Properties fired their visionary CEOs and reverted to conventional, single-product development. The message was clear: Wall Street did not like experiments.

Today, building a nonconforming real estate development makes financing significantly more expensive and difficult to obtain. Most equity investors and bankers, who may have spent much of the past twenty years specializing in a single product type, will not know how to evaluate the financial projections, and will simply refuse to underwrite the risk. Those willing to invest in something different will insist on a higher level of compensation.¹¹

With financial power vested in Wall Street (not to mention that most zoning codes essentially mandate the nineteen product types) how can anyone even think about building anything else? Do those who want to retrofit the suburbs to more dense, walkable patterns have a prayer of success? If smart growth is needed to contain sprawl, reverse the obesity epidemic, and begin to curb greenhouse emissions, is there any hope?

There may be. Although it may not be possible to change the multi-trillion-dollar real estate market, it may be possible to manipulate it through a strategy of co-optation.

Alternative Types

If the suburbs are to be retrofitted, alternative standard product types need to be invented that are mixed-use, integrated into a complex urban framework, and allow access by multiple transportation modes especially walking. Below are some such possible new standard real estate products, along with built examples from the city of Albuquerque.

For-Sale Housing/Office over Retail. Built up to the sidewalk of a walkable street, its ground floor will have rental retail space, while it will have for-sale housing or office space above. Parking can be located in an adjacent or immediately accessible structure, either above ground, underground, or between the retail and for-sale housing or office. Lower-density projects might use surface or tuck-under parking.

One example is the Gold Avenue Lofts, which fits 32 for-sale housing units, nine for-sale offices, and 11,000 sq.ft. of rental retail on an 11,000-sq.ft. parcel in downtown Albuquerque. Cars park in an immediately adjacent garage with direct access to the units by a dedicated elevator. While the density is 160 units to the acre, four times higher than anything ever built in the market, much lower densities could also be encompassed in this product type.

The Nineteen Standard Real Estate Product Types 1st Quarter, 2005

These real estate products are the easiest and most acceptable to the conventional investment community. They are generally single product type, stand-alone developments with self-contained parking, though some mixed-use developments are now possible.

Income Products		
Office	Industrial	Retail
Build to Suit Office Mixed Use Urban Office/Retail/Restaurant Medical Office Multi-Tenant Office	Multi-Tenant Bulk Warehouse Build-to-Suit Industrial	Grocery Anchored Neighborhood Center Big Box Anchored Power Center Lifestyle Center
Rental Apartments	Miscellaneous	Hotel
Garden Apartments Urban Apartments	Self-storage Mobile Home Park	Budget Motel
For-Sale Products		
Entry Level	Move-Up Housing	Luxury Housing
Retirement	Resort/Second Home	Hotel
Includes a variety of segments, e.g., assisted living, independent, etc.)		

Burying the Big Box behind Retail and Office/Housing. This type locates a big-box retailer in the middle of a block and surrounds it with individually designed buildings with retail on the ground floor and either office or housing above. Parking for the big box, retail and office users can take place off site, while parking for those who live there can be located immediately adjacent or underground.

An example of this type is the Century Theater Block in downtown Albuquerque. It includes a 50,000-sq.ft., four-teen-screen movie theater surrounded by seven buildings, totaling 60,000 sq.ft., with rental retail on the ground floor and rental office space above.

High-Density Rental Housing surrounding a Parking Structure with Retail at Grade. Pioneered by Robert Shaw, formerly of Post Properties, this is a four-story stick-built apartment building that buries an immediately adjacent parking deck. The first floor can have rental retail to serve

the built-in market above as well as a local or regional market.

An example is West Village in Uptown Dallas. This project includes 176 rental units and 130,000 sq.ft. of specialty retail.

Retail with Office or Artists Lofts above. This product pairs rental retail on the ground floor with rental office or live-work space above. Developers have long struggled with what to do with the floor or floors above Main Street retail space. Artist loft space is inexpensive to build, provides activity 24 hours a day, may spin off a retail gallery, and can result in rents that make it feasible.

An example of this type is the historic San Ysidro Block in downtown Albuquerque. This has five rental retail spaces on the ground floor and 22 artists work lofts on the second floor.



Subhead

There are undoubtedly many other types that might help establish alternatives to the sprawl-producing nineteen standard products. But all will need to be documented from the perspective of market acceptance, design and most importantly, financial performance. To be considered conforming, the real estate and finance industries will also need to be educated about how these products work.

The most hopeful indicator that such a strategy may bear fruit is that a significant number of consumers who want such alternatives. Market research by firms such as Robert Charles Lesser & Co. and Zimmerman-Volk has shown that between 30 and 50 percent of target populations want to live in mixed-use, walkable places.¹²

Even more powerful is research involving visual preference surveys that has been conducted by Tony Nelessen. This involves showing people multiple images of walkable

places and conventional sprawl and then asking them to rank the desirability of each. Without exception, during hundreds of surveys across the country, Nelessen has found that people selected the walkable places.¹³

Despite such findings, the sprawl-producing nineteen standard types continue to maintain an iron grip on the development process. Worse, while born in America, they are now being exported to the far corners of the world. The second beltway around Paris looks like a slightly smaller version of the third beltway around Houston, complete with big-box retailers and office campuses. Glorious Prague, closeted from Western real estate practices until the fall of the Iron Curtain, now has a freeway from Germany that is flanked by a super-regional mall, a power center, car dealerships, and fast-food restaurants. Of course, the greatest need for alternatives may come from China, home to a current building boom that makes the

1980s American boom look miniscule.

There is much romance to being a revolutionary outsider. But those of us who wish to bring real change to suburbia by retrofitting have a choice to make. We can stay outside the world of Wall Street-dominated real estate finance, discuss, and (occasionally) design and build precious, expensive alternatives. Or we can work hard to develop new product types that the mainstream can understand, accept, and prosper by developing and owning.¹⁴

Notes

1. 1.2 billion sq.ft. in the thirteen largest metropolitan areas vs. 910 million sq.ft. in the same thirteen areas since the eighteenth century. See Robert E. Lang, *Edgeless Cities: Exploring the Elusive Metropolis* (Washington, D.C.: Brookings Institution Press, 2003), p. 54.
2. Robert Lang estimated that 69 percent of new office space was built in the suburbs during the decade of the 1980s (see Lang, *Edgeless Cities*, p. 54). But his statistics are conservative since they only include speculative, multitenant office space. They do not count owner-user office space, which in the experience of this author, has and continues to be built in the suburbs, though there is no data available to confirm this.
3. Importantly, the Japanese economy had an even worst financial hangover from the 1980s economic and real estate boom. Unfortunately, the Japanese government did not take the same drastic measures the RTC did in the United States. These included taking over bankrupt financial institutions, writing down their real estate assets, and aggressively putting them back into circulation. Many economists think this failure to act, particularly with regard to the real estate bust of the late 1980s and early 1990s, was a major contributor to the stagnation of the Japanese economy through 1990s and into the early part of this decade.
4. This has now increased to where it is larger than the market for corporate debt. In 2004 U.S. corporations issued \$1.2 trillion in new debt, compared to \$1.4 trillion of new commercial and residential real estate debt. The real estate figure is rather impressive considering there was no secondary market for real estate debt twenty years earlier. See Gretchen Morgenson, "Wanted: Credit Ratings. Objective Ones, Please," *New York Times*, Feb. 6, 2005.
5. Cohen and Steers is the largest family of REIT mutual funds. See FAQs about REITs at www.cohenandsteers.com
6. Christopher B. Leinberger, *The End of Real Estate, Urban Land*, 1996. Available at www.cleinberger.com.
7. William J. Bernstein, *The Birth of Plenty: How the Prosperity of the Modern World was Created* (New York: McGraw-Hill, 2004). See chapter four, *Capital*, p. 133.
8. This list was developed by the author using various real estate industry financing sources, such as NetFunding.com. The list changes over time as products become overbuilt, thus failing off the list; the market becomes undersupplied, thus coming back on the list; or new products are created, such as lifestyle retail in recent years.
9. In a discussion with the president of a regional-mall REIT in 1999, the author asked why his company would not even consider building a mixed-use (housing over specialty retail), walkable Main Street component in the parking lot of a flagship mall. The president pulled out a recent front-page story from the *Wall Street Journal* that took his company to task for having a construction company that built and remodeled the company's properties. The story reported that investors thought the firm was not sticking to its knitting, which ought to consist only of developing, owning and managing malls. Getting into the separate business of constructing them was considered a diversion. According to the president: If Wall Street will not let me construct my own malls, they would flay me for building mixed-use developments.
10. There is no commonly accepted terminology that precisely defines the character of different parts of U.S. metropolitan areas. In 1995 the author defined these as urban, suburban, and semi-rural, using floor-area ratios as a guide. This definition was first used in an article in *Urban Land* entitled "The Changing Location of Development and Investment Opportunities". The article is available at www.cleinberger.com. Also see Lang, *Edgeless Cities*.
11. This is done by increasing the rate of return for the equity invested, or by increasing the interest rate of the construction or other loan.
12. Most of this research is proprietary for individual clients of investment firms. In the case of Robert Charles Lesser & Co., which the author has been Managing Director of for 25 years, consumer research in Atlanta, Detroit, Albuquerque, El Paso, and other cities, using the same survey instrument, showed that between 31 and 37 percent of a scientific sample from throughout the metropolitan area wanted to live in walkable communities. The availability of such communities in those metropolitan areas is probably under 5 percent of the housing stock.
13. Anton Clarence Nelesen, *Visions for a New American Dream: Process, Principles, and an Ordinances to Plan and Design Small Communities* (Chicago: American Planning Association, 1994).
14. Christopher B. Leinberger, *Building for the Long-Term, Urban Land*, 2003. Available at www.cleinberger.com.

Rediscovering the Logic of Garden Apartments

Paul Mitchell Hess

Cul-de-sacs, subdivisions, strip malls, office parks, industrial parks, edge cities—these are all familiar terms that evoke strong images of suburban development. The garden apartment is less familiar. Because the single-family house in its yard is so central to American notions of the suburb, apartments are rarely seen as important to this landscape.¹ Nevertheless, understanding the environments created by apartments and the cultural and institutional logic behind them is critical to developing new, more sustainable practices of suburban design, planning and development.

Several features of existing apartment complexes make them particularly germane to discussions of suburban retrofitting. For one, apartments already make up a large percentage of suburban housing stock, particularly in older, middle-ring areas. Using U.S. Census definitions, “attached” units comprise more than a third of all housing outside the cores of large urbanized areas. Some of these units are single-family “townhouses”; many more are stacked flats in garden-oriented complexes.²

Second, suburban apartments are generally constructed at several times the density of single-family subdivisions. Further, large concentrations of them are often located adjacent to retail centers. Both attributes provide solid building blocks for any future effort to make suburbs more walkable and transit supportive.

Third, most suburban apartment zones are currently extremely hostile to pedestrian use. Bisected by traffic arterials, dominated by parking lots, and lacking such basic public infrastructure as sidewalks and local streets, they could benefit immediately, and substantially, from the attention of planners, designers and local officials.

Finally, these areas are already home to all kinds of people—including many families.³

Seattle-Area Complexes

Several dozen large concentrations of apartments in the Seattle suburbs provided the basis for this study. These clusters originated as part of a suburbanization of multi-family housing that began in the early 1960s, and continues today.⁴ The prevalence of such housing and the logic of zoning practice suggest that similar concentrations should be present in other American metro areas. Indeed, the study confirmed the presence of similar clusters around such cities as Chicago, Los Angeles, and Atlanta.

In general, the Seattle apartment clusters were defined by large zones of garden-apartment and townhouse development (of which the largest concentrations contain several thousand units), wedged between single-family subdivisions and local retail areas. The research examined

these areas using a variety of sources and approaches, including historic census data, original zoning maps, early municipal plans, and changing lot patterns. In addition, sequences of development were examined in detail with regard to three areas—Juanita, Crossroads, and East Hill.⁵

Such zones are neither suburban downtowns nor edge cities, but smaller, mostly residential nodes scattered across the suburban realm. Average net densities were found to be about 25 units per acre, several times that of nearby single-family neighborhoods. Gross population densities—derived by including all land within a half-mile radius of a local retail center—were found to be similar to Seattle’s older, more walkable neighborhoods—about twelve people per acre.⁶ Like these older, desirable neighborhoods, retail centers adjoining apartment clusters usually also contained a range of convenience services including supermarkets, dry cleaners, hair salons, video stores, and restaurants.

Medium housing densities and nearby retail stores—two necessary conditions for pedestrian activity and street life—proved to be the extent of similarity between these apartment clusters and older, more established urban neighborhoods, however. Indeed, despite their relatively compact and regular pattern of land use, there is little historical evidence to suggest these apartment concentrations were ever conceived as neighborhoods to begin with. Instead, the sequencing of development and parcelization of places like Juanita and Crossroads emphasizes a different set of values.

In the first wave of post-World War II suburbanization, developers of single-family subdivisions gravitated toward land that was slightly removed from established roadways, places they could achieve economies of scale and create large, protected “communities” of detached houses.⁷ Soon after, new retail zones were built along nearby main roads, where they were exposed to mounting flows of traffic.

Apartment complexes only began to emerge in this landscape starting around 1960. Prototypically, they were developed one by one on leftover parcels, too small to be optimal for subdivision, yet too removed from large roadways to be useful for commercial purposes. With no public streets, few connections to arterial roadways, no public improvements such as sidewalks, and landscaping and fencing that prohibited movement between properties, these environments evolved in ways that in many respects were the opposite of older, well-designed neighborhoods.

Opposite: Informal infrastructure creating missing connections in apartment clusters.



A History of Separation

Pod-like development and the clustering of land uses in large single-use areas is a well-known part of the suburban story. Less well understood is the way different uses have historically been located with respect to each other—more specifically the way apartments have long been used to buffer single-family subdivisions from retail uses and large roadways.

The earliest zoning codes in the U.S. did not separate single-family and multifamily housing into separate areas. However, the cult of the detached “home” runs deep in American culture, and it became particularly virulent in the early twentieth century.⁸ According to then-prevail-

ing views, the single-family home was the only appropriate environment to nurture morality and family life. Its corollary was that apartments were inappropriate for families and fostered immoral behavior. Following this logic, early proponents of zoning forcefully argued that apartments were an “invading” land use in “residential areas.” By 1916, Berkeley, California, had established what is generally recognized as the first exclusive single-family zone in the U.S.⁹

When it issued its landmark Euclid, Ohio, decision in 1926 establishing the constitutionality of zoning, the U.S. Supreme Court merely recognized patterns of separation between housing types that had already become widespread. In its ruling, the court even used language



familiar to planning reformers, referring to an apartment in a district for “private house purposes” as a “parasite” that could lead to the destruction of the “residential character of the neighborhood.”¹⁰ In the years that followed, as legal doctrine continued to be developed, courts in many states further established a “zoning hierarchy,” with single-family housing at the top. In such a scheme, apartments not only could be, but *should* be, used to buffer such priority areas from other uses.¹¹

The seminal concept of the “neighborhood unit” also spoke to the spatial relationship between single-family housing and apartments. The idea that cities should be made up of small, distinct neighborhoods containing local institutions to support family and social life was broadly discussed in the first decades of the twentieth century. In terms of planning practice, Clarence Perry’s 1929 monograph *The Neighborhood Unit* was the most fully articulated and influential statement of these principles.¹² Perry argued that distinct neighborhoods should be bounded by arterial roadways; that they should have schools, parks and playgrounds on interior local streets; and that they should provide a high-quality residential environment. Local shops were also included in Perry’s vision; but they were placed around the periphery, along the arterial streets

where they would not “blight” residential areas, and where they could gain the “trade of through traffic.”

Perry’s attitude toward apartments was somewhat ambiguous. He did not disparage apartment life, especially for “bachelors and childless couples.” And, writing from New York, he recognized the realities of large cities—even proposing that some neighborhood units might be composed entirely of apartments. But at the beginning of his monograph he also made it clear that neighborhood units were primarily conceived as places “for child rearing,” where “each dwelling devotes an equal amount of space to yard, shrubbery, and outdoor amenity,” and where children could “associate with homes which hold similar standards to their own.”

Perry’s most widely disseminated diagram of neighborhood-unit principles was also strongly oriented toward single-family housing. Apartments were found in this classic diagram, but only outside the residential interior, and undifferentiated from stores that faced onto arterial roadways.

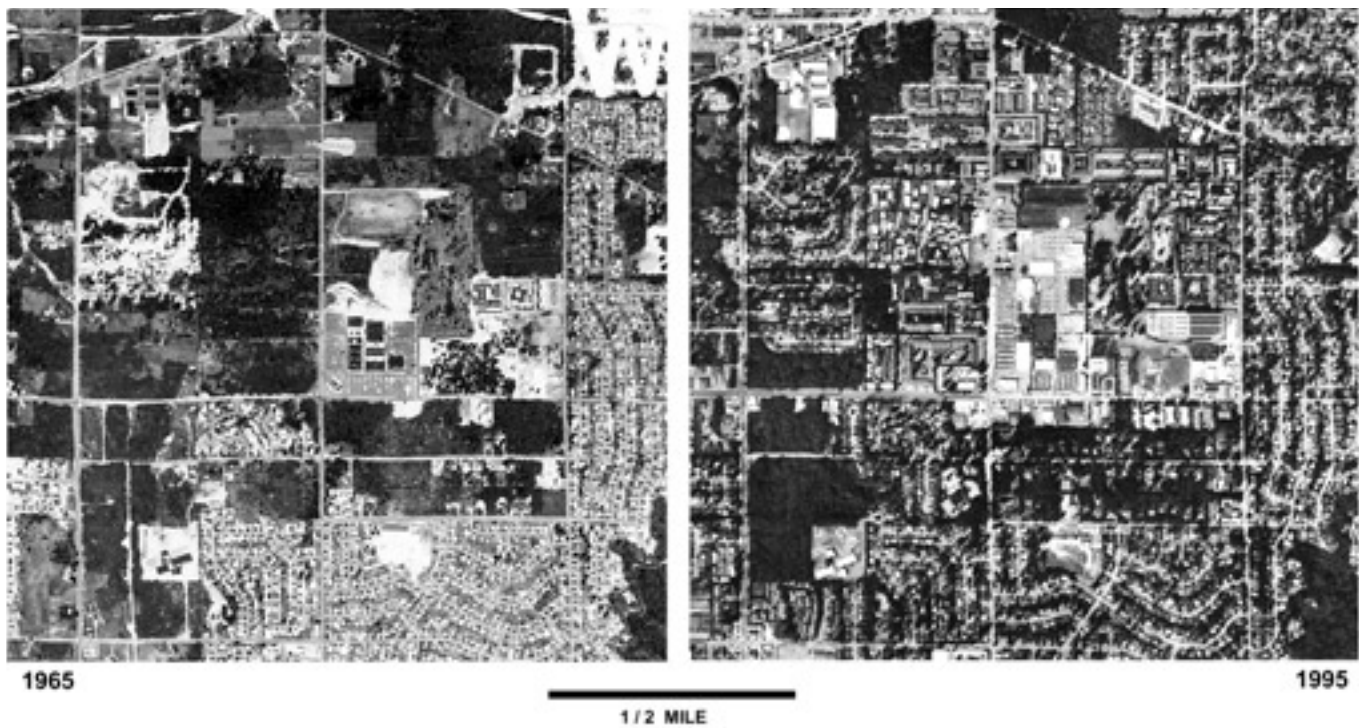
Protecting new suburban residential areas from the negative impacts of increasing amounts of traffic was also becoming a major concern in the 1920s. In this regard, Perry’s placement of apartments, not on local streets, but on what he at one point referred to as “traffic-ridden highways” was telling. Other contemporary writers, such as Nelson P. Lewis, more fully defined this hierarchy of environmental values based on street types. At one end, arterials were conceived as highways for moving traffic between neighborhoods and across the metropolis. At the other, quiet, almost-private local streets were seen as providing access to “residences.”¹³

Such a hierarchy was a defining feature of Clarence Stein’s famous plan for Radburn, NJ. There, single-family houses were placed on quiet cul-de-sacs accessed by collector streets, while retail and apartment areas were located along

Left: Juanita land use diagram showing typical suburban arrangement of apartments located between retail area and single family subdivisions.

Right: Clarence Perry’s single family Neighborhood Unit diagram, 1929.

Opposite: Crossroads in 1965 (left) and 1995 (right). In 1965 the retail area is starting along main roads nearby new single-family subdivisions. By 1995 the retail area was expanded and several thousand apartments were developed, but no new public through-streets or blocks were created in the process.



the main road to New York.¹⁴ For Perry, Lewis and Stein, apartments were clearly more related to the realm of commerce and traffic than to the protected world of the family.

Unequal Development

Such early-twentieth-century notions of street hierarchy were eventually institutionalized in almost every municipal transportation department across the U.S. through a standard street classification system.¹⁵ The neighborhood-unit concept, too, became extraordinarily influential. Indeed, it was used by a majority of planning departments in the U.S. into at least the late 1960s.¹⁶

King County, in which Seattle is situated, was no exception. The county's first plan in 1958 used language almost directly pulled from Perry, stating that the "ideal neighborhood" is made up of "a rather solid pattern of homes, linked by quiet streets and centered on an elementary school.... [A] small neighborhood shopping location may be spotted near the edge of the neighborhood." A more ambitious 1964 plan similarly stated that "stable residential areas should contain pleasant homes," and that "residential areas are best formed in elementary school neighborhood units." As in Perry's conception, and consistent with zoning and street hierarchies, apartments were to be "logically developed adjacent" to shopping areas, and "functionally convenient to a major or secondary arterial highway."¹⁷

By shaping zoning and exerting control over road widening and street construction, planners could implement the neighborhood-unit concept only imperfectly. Nevertheless, its philosophy came to imbue most U.S. suburban development in the second half of the twentieth century. Thus, in the Seattle region (as in most other parts of the country), preexisting rural roads along the section and quarter-section lines of the Land Ordinance Survey were expanded

in the years after World War II to serve as large, suburban arterials.¹⁸ Single-family zones and elementary-school sites were then developed within this arterial framework.

In these single-family areas, planners found they were able to use subdivision regulations to require developers to build local streets, sidewalks, and other public infrastructure according to strict standards.¹⁹ But suburban apartment developers (who built on larger, often preexisting parcels that did not require subdivision) were not required to install such public amenities, even where projects contained hundreds of units. Access to these projects came directly from arterial roads along relatively low-quality driveways; and where interior walkways existed, they typically connected apartment buildings to parking lots, not to public streets on the exterior of the project.

The results of these practices may be seen today in clusters such as East Hill, which began to develop in 1965 at the intersection of two rural roadways. Forty years later, the area contains more than 3,400 apartments and a million sq.ft. of commercial space. Yet the public road network is virtually unchanged. Likewise, the block in Crossroads with the greatest concentration of apartments and retail use is more than 200 acres in size, but has no interior public streets. Indeed, one of the easiest ways to identify suburban apartment concentrations is to look on maps for arterial intersections surrounded by large areas without streets.

Important Lessons

One of the great tragedies of this history is that it has created an unpleasant and potentially dangerous pedestrian environment. Such parcelization patterns normally mean that, if they choose to walk, people living in these places face long, indirect routes to retail centers located just "next door."²⁰ And with legal, protected pedestrian crosswalks

located only at traffic signals (sometimes a half-mile or more apart), the arterial roadways apartments face onto create substantial barriers to movement and communication.

Furthermore, unless a local government has specifically provided them, such arterial streets often lack complete sidewalk systems. Since sidewalks are primarily provided by private developers as part of the subdivision process, nearby single-family zones may be well provisioned with them. But many arterials were once rural roads which have simply been expanded several times to handle ever-greater traffic flows, without any agency considering the needs of pedestrians.

As already mentioned, apartment concentrations have two conditions necessary, although not sufficient, for creating walkable suburban neighborhoods: medium densities, and housing and convenience services in close proximity. Such conditions do not tell us *how* to retrofit. But they do suggest that the expenditure of scarce resources for basic pedestrian infrastructure would have a powerful transformative effect.

In a few cases, local governments and developers have made a good start. In Crossroads, the City of Bellevue has made substantial upgrades to sidewalks and streets. The local mall, too, has built pedestrian walkways connecting building entrances, through parking lots, to surrounding streets.

Residents are clearly desirous of such improvements. For example, one previous study of pedestrian activity in Crossroads showed that more than 100 people per hour walk to the retail center.²¹ The creation of provisional pedestrian infrastructure in places like Crossroads is a further indicator that more of the real thing is needed.

However, the dilemma of how to retrofit such apartment clusters also provides lessons that go beyond building a few sidewalks. One is that basic planning tools such as zoning, subdivision, and road classification will be insufficient to create connected, walkable street systems in such non-single-family areas. One such tool developed recently in a number of U.S. cities to promote smaller, more walkable blocks has been “connectivity standards.” Unfortunately, almost all such regulations are irrelevant to existing multifamily areas because they can only be put into play as part of the subdivision process.²²

Several cities have tried other strategies. For example, Bellevue recently tried to break up the huge blocks in Crossroads by requiring easements along the edges of redeveloped parcels. Ultimately, however, this strategy only created isolated pathways that middle- and high-school students were the only ones daring enough to use.

Redeveloping tired retail areas as mixed-use, street-oriented places has been another important redevelopment

strategy. In Juanita, for example, a small conventional shopping center has been replaced by more than 450 apartments and 60,000 sq.ft. of retail space.

Creating incentives for this type of redevelopment is a largely untapped resource, but it cannot transform the larger disconnected fabric of the clusters. To really retrofit these places, fences will have to be pulled down, and new, truly public streets will have to be pushed through apartment and retail developments—even into single-family zones.

This, indeed, will be hard work. It will require challenging entrenched property rights and fears of “transient” apartment dwellers. And it will only happen piece by piece, over a long time.

A New Progressive Vision

I have argued here that many of the planning tools developed in the first part of the twentieth century privileged single-family areas at the expense of apartments. These practices are still largely in place, and need to be challenged.

But there may be a larger, more positive lesson to be learned from the period when these planning tools were first developed. Early-twentieth-century reformers used strong arguments concerning the public good to establish new, often-controversial planning powers. In the early part of our own century, this legacy should be expanded, not discarded.

New strong arguments are now needed to define suburban apartment areas as more than the necessary, but undesirable periphery of residential areas. Detached single-family housing may be the preference of most suburban apartment dwellers, but the reality is that more suburban apartments are being built than ever.

It is time to start recognizing that the people living in these places, too, must be considered when we define how built environments should be shaped by public concerns. Only then can we confront deep cultural attitudes about appropriate and inappropriate housing types and start transforming suburban apartment clusters into suburban neighborhoods.

Notes

1. There is a well developed literature on the pre-World War II apartment. See E.C. Cromley, *Alone Together: A History of New York's Early Apartments* (Cornell University Press, 1990); R. Plunz, *A History of Housing in New York City* (New York: Columbia University Press, 1990); R. Dennis, “Interpreting the Apartment House: Modernity and Metropolitanism in Toronto, 1900-1930,” *Journal of Historical Geography* Vol. 20, No. 3 (1994), pp. 305-22; and J. Hancock, “The Apartment House in Urban America,” in A.D. King, ed., *Buildings and Society: Essays on the Social Development of the Built Environment* (London: Routledge & Kegan Paul, 1980), pp. 151-87. For

exceptions on the suburban apartment, see R. Schafer, *The Suburbanization of Multifamily Housing* (Lexington, MA: Lexington Books, 1974); and C.F. Horowitz, *The New Garden Apartment: Current Market Realities of an American Housing Form* (New Brunswick, NJ: Center for Urban Policy Research, 1983).

2. U.S. Census of Population and Housing, 2000, for urbanized areas of over 1,000,000, STF3, table H30, subtracting out housing by type in the core central places as defined by the name of the area. On average, 35 percent of the remaining housing is some kind of attached unit, with 7 percent in single-family attached units, and more than 14 percent buildings with more than ten units. Because of smaller average household sizes, about one-quarter of the suburban population lives in attached housing. Suburban garden apartments are typically three-story, walk-up buildings with through-building apartment units.
3. It is difficult to study the socio-demographic characteristics of apartment areas because they do not correspond to census boundaries. Generally, apartment clusters tend to be slightly poorer and more socially mixed than the larger areas around them. The presence of children is clearly evident in many of them.
4. See A.V. Moudon and P. Hess, "Suburban Clusters: The Nucleation of Multifamily Housing in the Suburban Areas of the Central Puget Sound," *Journal of the American Planning Association*, Vol. 66, No. 3 (2000), pp. 243–64.
5. Development histories are primarily based on visual records. There is remarkably little archival evidence of planning and development decisions in this era. Some arguments in this article are more fully elaborated in P.M. Hess, "Apartments Apart: Site/Non-Sight and Suburban Apartments," in C.J. Burns and A. Kahn, eds., *Site Matters* (New York: Routledge, 2005).
6. See P.M. Hess, A.V. Moudon, et al., "Neighborhood Site Design and Pedestrian Travel," *Transportation Research Record* 1674 (1999), pp. 9–19. Gross development densities were based on a conventional half-mile walking shed from the retail zones, and usually extend well beyond apartment areas and into much lower density zones. Including only the apartments and retail lands raises densities much higher.
7. For the Seattle area, see M.R. Wolfe, "Locational Factors Involved in Suburban Land Development," Department of Urban Planning, University of Washington, Seattle, 1961?. For the role of large subdividers more generally, see M. Weiss, *The Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning* (New York: Columbia University Press, 1987).
8. On the cult of the single-family house, see, especially, R. Fishman, *Bourgeois Utopias: The Rise and Fall of Suburbia* (New York: Basic Books, 1987); K.T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York: Oxford University Press, 1985); and D. Hayden, *Building Suburbia: Green Fields and Urban Growth, 1820–2000* (New York: Pantheon Books, 2003). Specifically on views toward apartments, see K. Baar, "The Movement to Halt the Spread of Multifamily Housing, 1890–1926," *Journal of the American Planning Association*, Vol. 58, No. 1, (1992).
9. See a good comparison of Berkeley and New York in R. Fischler, "The Metropolitan Dimension of Early Zoning—Revisiting the 1916 New York City Ordinance," *Journal of the American Planning Association*, Vol. 64, No. 2 (1998), pp. 170–88. Fischler argues that, while ineffective, the New York ordinance too was very concerned with protecting areas of houses. Building codes and other laws were also used to exclude apartments before the development of zoning. See, for example, R. Dennis, "Zoning before Zoning: The Regulation of Apartment Housing in Early Twentieth Century Winnipeg and Toronto," *Planning Perspectives* Vol. 15, No. 3 (2000), pp. 267–99.

10. *VILLAGE OF EUCLID, OHIO v. AMBLER REALTY CO.*, 272 U.S. at 394. The court is quoting the Supreme Court of Louisiana here, but this language was common with nearly identical language used.
11. D.R. Mandelker, *The Zoning Dilemma: A Legal Strategy for Urban Change* (Indianapolis: Bobbs-Merrill, 1971).
12. C.A. Perry, "The Neighborhood Unit," in *Neighborhood and Community Planning* (New York: Regional Plan of New York and Its Environs, VII, (1929). Johnson has argued that Perry "appropriated" the concept from William Drummond. See D.L. Johnson, "Origin of the Neighborhood Unit," *Planning Perspectives* 17 (2002), pp. 227–45.
13. N.P. Lewis, *The Planning of the Modern City: A Review of the Principles Governing City Planning* (New York: Wiley, 1923).
14. Like Perry, Stein was a member of the Regional Plan Association of New York. Radburn, stripped of its community facilities and orientation, has been seen as an important prototype for the postwar, subdivision. Interestingly, Stein was also closely involved in the design of Baldwin Hills Village in Los Angeles, the prototype for the suburban garden-apartment complex. See C.S. Stein, *Toward New Towns for America* (Cambridge, MA: MIT Press, 1966).
15. The system is conventionally defined as limited-access highways, major arterials, minor arterials, collectors, and local streets.
16. T. Banerjee and W.C. Baer, *Beyond the Neighborhood Unit: Residential Environments and Public Policy* (New York and London: Plenum Press, 1984).
17. King County Planning Commission, Comprehensive Plan for King County, Washington (Seattle: King County Planning Commission, 1958); and King County Planning Department, The Comprehensive Plan for King County, Washington (Seattle: King County Planning Department, 1964).
18. Although Perry's model was most concerned with the area around New York City, where the ordinance survey grid does not exist, it does not seem coincidental that he proposed 160 acres—the exact area of that most ubiquitous unit of land development, the quarter-section—as the ideal size.
19. See M. Southworth and E. Ben-Joseph, "Street Standards and the Shaping of Suburbia," *Journal of the American Planning Association*, Vol. 61, No. 1 (Winter 1995), pp. 65–68. Not all jurisdictions required sidewalks.
20. Straight-line distances between housing and the center of retail districts are often equivalent to those in older, gridded neighborhoods, but indirect walking routes make actual travel distances farther. See P.M. Hess, A.V. Moudon, et al., "Neighborhood Site Design and Pedestrian Travel," *Transportation Research Record* 1674 (1999), pp. 9–19.
21. *Ibid.*
22. See K. Bulter, S.L. Handy, et al., *Planning for Street Connectivity: Getting From Here to There* (Chicago: APA Planning Advisory Service, 1999). Portland is an exception, and has also looked at "campus-like" development. New Urbanist development has also created small blocks, but only as a part of large, master-planned communities designed as a piece on greenfield sites, not in the more incremental, less coordinated development typical of suburban apartment clusters.

Superneighborhood 27: A Brief History of Change

Susan Rogers



In cities across the United States, sandwiched quietly between the newly coveted urban space of the central city and the suburban sprawl of the periphery, are outwardly conventional landscapes experiencing profound transformation. Neither urban nor suburban, they represent a hybrid condition—part global city, part garden suburb, part swinging singles complex, part disinvestment.

In Houston, the Gulfton community, “Superneighborhood 27,” is one of these landscapes. The name derives from an effort in 1999 to divide the city’s vast expanse into 88 districts to encourage neighborhood-oriented government and enhance community participation. More pertinently, however, Gulfton is an American “gateway,” similar to those in other cities like Atlanta, Charlotte, and Washington, D.C. As immigrants increasingly bypass the abandoned or gentrified cores of U.S. cities, they have come to settle in low-rent suburban environments like Gulfton.

One resident recently described this new geography succinctly: “In parts of Central America, people don’t say they are coming to Texas or Houston. They say they are coming to Gulfton.”¹

Gulfton’s history tells a story of fluid populations that offers insight into the social construction and use of space in overlooked areas of American cities.

Boom and Bust

Prior to the 1950s Gulfton was a greenfield, entirely undeveloped, seemingly peripheral to nearby Houston. The first isolated subdivision did not spring up there until the mid-1950s. Named Shenandoah, its small ranch-style homes occupied sixteen well-manicured blocks. Then, all

Gulfton is simultaneously globally linked, locally severed, socially connected and physically divided.

of a sudden, Houston's population exploded. In Gulfton, that meant construction of thousands of apartment units in the next two decades, completely surrounding the small subdivision.

The apartments were initially built for a young, predominantly white population. Their desire for a singles lifestyle was clearly evident in advertisements of the time. One complex boasted seventeen swimming pools, seventeen laundry rooms, seventeen hot tubs, and two clubhouses.

Many of these young people came to Houston from the declining manufacturing cities of the Midwest and Northeast, part of a great migration that was reshaping the country and giving rise to a powerful new sunbelt economy. Up north, bumper stickers read "Last one out turn out the lights." But in oil- and job-rich Houston, they were met by a welcome only Texans could provide: "Yankee, go home."

Of course, as Texans now know, such booms do not last. By the 1980s, the local economy, following the price of oil, went into a tailspin. Gulfton, along with many other areas, was hit hard. Thousands left, rents fell, and vacancies rose.

At about the same time, new waves of foreign immigration were beginning to bring a new group of residents to Houston. Seeking expanded opportunity or fleeing war and poverty, they came from such countries as Vietnam, El Salvador, and Mexico. The borders these new residents crossed were often distant, difficult and dangerous, but their goal was the same as that of the previous migrants—to find a better life on the flat plains of the steamy sunbelt. Apartment owners, in an attempt to remain solvent, began targeting their advertising to these new immigrants, listing vacancies *en español*, offering move-in specials, ignoring their previous "adults only" policies, and drastically reducing rents.²

These new residents would profoundly transform Gulfton. Between 1980 and 2000, and without the construction of one additional apartment complex, its population nearly doubled.³ The transition from a predominantly white singles community to a dense ethnic enclave was far from smooth, however. Shenandoah barricaded its streets to separate itself from the greater community; the area was renamed "Gulfton Ghetto"; and for a short time it was one of the ten most crime-ridden communities in Texas.⁴

As a result of demographic change, Gulfton today is simultaneously globally linked, locally severed, socially connected, and physically divided. Not unlike the dense ethnic enclaves of America's past, more than 60 percent of its residents are foreign born. They hold citizenships from 42 different countries, and speak as many languages.

A global infrastructure keeps such people connected to countries of origin, native cultures, languages, families and friends. Telephones, cable television, the press, and wire transfers all help to keep the conversations, politics, and money flowing.⁵

Gulfton's multilateral globalization (versus unilateral Americanization) also offers a glimpse of an alternative future. ADOC footwear, with shops in Guatemala, El Salvador, Nicaragua, and Costa Rica, has only one store in the U.S., and it is located in Gulfton. Pollo Campero, a Guatemalan chicken franchise recently opened its second store in the U.S.—in Gulfton. Gulfton also has three branches of Salvadoran banks and countless importers who stock local shelves with global products.

Such conditions, however, mean that many residents have few local ties. Undocumented status also keeps many residents from fully participating in local economies and politics. Meanwhile, language barriers make Gulfton easy for the powerful to ignore.

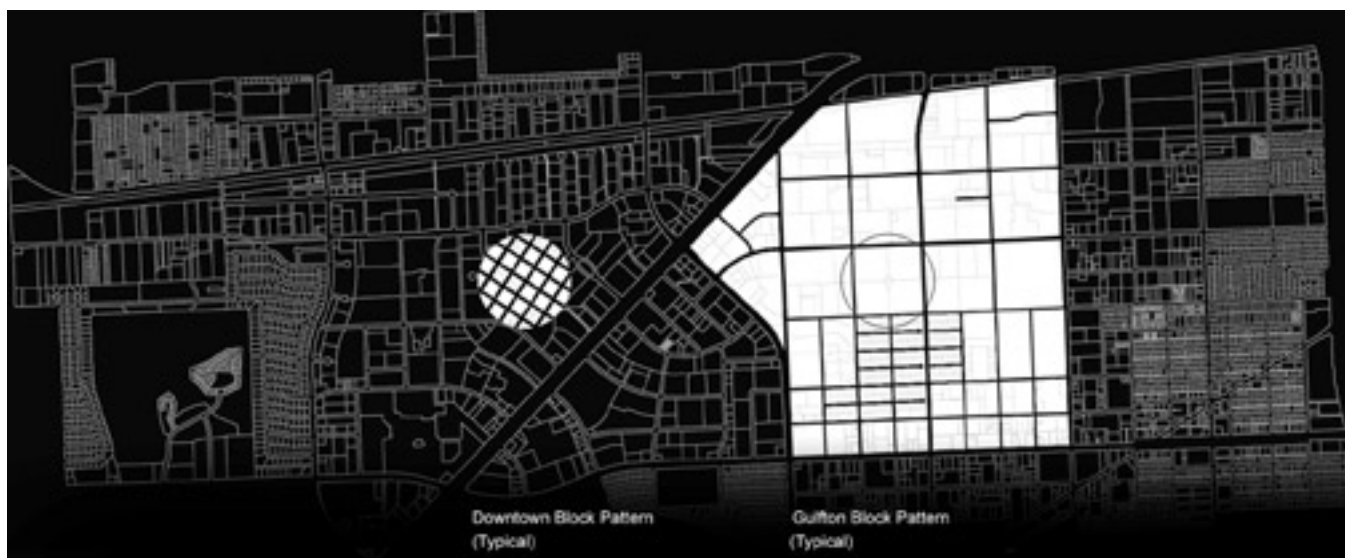
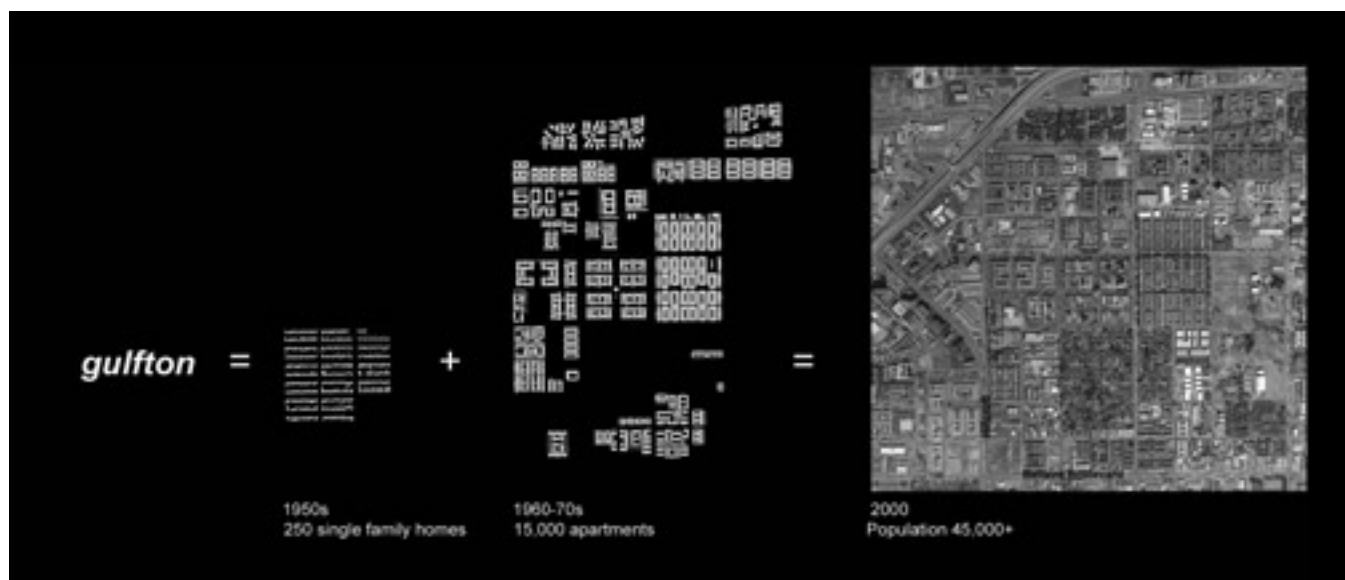
Nevertheless, the same characteristics that separate Gulfton from its surroundings create strong internal bonds. Informal social networks assist new residents in adapting to life in the United States—securing housing, education and employment, and teaching more mundane skills such as how to use modern appliances and ride the bus. And these networks extend back to residents' countries of origin, reproducing Gulfton's status as "gateway," and encouraging new waves of family and friends to join current residents.

Community networks also serve as conduits of information. Word that an employer has cheated his workers spreads quickly, and may force him to look elsewhere for laborers. And news that *La Migra* is raiding construction sites looking for undocumented workers, whether true or false, may shut the sites down.

The *Houston Chronicle* recently confirmed the power of such a grapevine. After residents of the Willow Creek Apartments hastily packed their things in response to rumors of a raid, "one resident who said she was living here illegally said she heard it from a neighbor. The neighbor, she said, simply heard it from 'la gente'—the people."⁶

New Populations, Same Needs

The more than 15,000 apartment units in Gulfton were never constructed with the lofty goal of "building community." According to Robert Fisher and Lisa Taaffe, "Gulfton developed in the 1970s and declined in the 1980s as a purely short-term, relatively spontaneous speculative process which focused on producing apartment complexes, night-



clubs and warehouses.”⁷⁷ In other words, the area was built rapidly for short-term profit without concern for any supporting infrastructure of parks, recreation centers, libraries, sidewalks, public spaces, small blocks, or other amenities.

One indicator of this lack of public infrastructure today

is that Gulfton contains more than one hundred semi-private swimming pools, many now filled in, but only one public park. Each apartment complex where these pools are located is an enclave unto itself—gated and guarded as a result of violence a decade ago. Furthermore, you could comfortably fit sixteen standard downtown blocks in one superblock of Gulfton, but sidewalks are infrequent. And with the exception of the park, the main public space is the street, meaning that children have few safe places to play, teenagers lack proper space to hang out, and mothers struggle just getting around.

Top: Gulfton images, from left to right across spread: pedestrian; apartment complex; Metro riders; bicycle vendor; Jane Long (Gulfton area) Middle School; residents; re-use of abandoned auto dealer; Church Market. Photos by Belinda Kan-petch and Levi McKee.



Irrefutably, the physical landscape of Gulfton speaks of division and neglect. Yet, ironically, it also exhibits key characteristics that have recently been endorsed as indicative of a smart, sustainable neighborhood—relatively high density, a mix of uses, and access to transit. Most of these characteristics were never built into the neighborhood, however. Rather, they emerged as its demographics changed, illustrating the power of social transformation to shape space.

The densest neighborhood in Houston, Gulfton today is more than five times as dense as the city's average. The 2000 U.S. Census counted more than 45,000 people living in its approximately three square miles—although community leaders suggest the real number may be closer to 70,000.⁸ Many of these residents are members of families. Some 14 percent ride public transit to work; another 32 percent walk, bike or carpool.

In many ways, Gulfton also defines the image of a self-sufficient, mixed-use community. Residents can find most anything they need within walking distance: furniture, automobile repair, groceries, bank services, laundry, books, medicinal herbs, a Saturday night out, or a Sunday morning service.

It could be suggested such an environment is both a product of necessity (more than 20 percent of Gulfton households do not have vehicles) and a result of Houston's lack of zoning laws. Regardless, small commercial and employment centers are thriving; along the main thoroughfares the storefronts are all occupied (with additional

commercial space under construction). Several blocks of homes in the Shenandoah subdivision have even been adapted to house small *tiendas*, auto repair, hub-cap stores, and beauty shops.

On the whole, then, Gulfton has a distinct identity, created not through architecture or planning, but through the choices its residents make in their daily use and activation of space. New forms of commerce activate under-utilized parking lots. Enterprising shop-keepers reclaim the premises of abandoned car dealerships. Day laborers occupy median strips, vying for opportunity, while community organizations work to ensure them dignity.

As new cultures occupy its formerly homogenous, branded spaces, Gulfton has become animated by the sounds, smells and activities of a dense, diverse, culturally rich community.

New Suburban Realities

In the last two decades, more than \$1.5 billion have been expended in the center of Houston to increase density in the urban core, link it with transit, and provide amenities for middle-class families and tourists. Meanwhile, Gulfton and similar communities have been largely ignored.⁹

Perhaps Gulfton's nondescript character—its 1970s garden apartments, strip malls, and small office blocks—offer few enduring qualities of interest to architects or

Gulfton Land Use Diagram, Commercial (Black) and Industrial (Grey).



planners. But the study of Gulfton could inform future building practices and suggest innovative means for intervening in existing landscapes. We could begin by advocating enhanced public transit where people already ride it. And we could work toward assuring that all new communities have adequate open space, libraries and schools, and that a standard infrastructure of sidewalks and lighting exist in all communities.

The study of Gulfton also suggests that new means and processes of intervention should be developed that reflect

an understanding of conditions as they really are, and that respond to these conditions creatively.

For example, we could work to turn utility right-of-ways into linear parks or alternative types of street. We could work with the day laborers to construct new employment centers. We could design pocket parks and plazas to replace empty parking lots and barren medians. We could re-image the edges of apartment blocks and better weave them into the community. And we could reclaim vacant sites for new community amenities—a library, a play park, a basketball court. Such a program of interventions could identify underutilized space, learn from how it is being used, and seek ways to make it public.

Kenneth Frampton recently pointed out that a “report by the British government states that ninety percent of what will exist twenty years from now has already been

Top: Gulfton Land Use Diagram, Commercial (Black) and Industrial (Grey).

Opposite: Gulfton images: parking lot cactus; and women walking with stroller.
Photos by Belinda Kanpetch, Levi McKee, and Charlene Hickl



built.” This is informative for Gulfton and the other older suburbs that are emerging as gateway communities across the U.S. While we can learn from our mistakes as we build in the future, we must also seek to adapt these places to support the people who currently call them home—and their American dreams.

The story of Gulfton is one of both fluidity and stasis. It tells how social and cultural bonds can breathe life into dead spaces regardless of how mean or inhospitable they are. But it also tells how physical form endures, and is hard to retrofit once constructed. Innovative means of transforming the physical fabric of these fragmented landscapes must be invented, and we must learn from those who resist and push against division and isolation—both as designers and as human beings.

To travel to Gulfton today is to travel the world without leaving Houston. In what could normally be defined as suburbia, one encounters great diversity, unforeseen density, and unanticipated cultural and social networks. Gulfton is not representative of a perfect union between town and country. But it is an emergent social landscape that defines a range of new possibilities.

Notes and Acknowledgement

The author wishes to thank the students enrolled in her fourth-year design studio at the University of Houston's Gerald D. Hines College of Architecture in the fall of 2004 for their interest and engagement with the Gulfton community.

1. Beatrice Marquez, as quoted in Debra Viadero, “Personal Touches,” *Education Week*, date, number and volume, page number, etc. needed.

2. See Nestor P. Rodriguez and Jacqueline Maria Hagan, “Apartment Restructuring and Latino Immigrant Tenant Struggles: A Case Study of Human Agency,” in *After Modernism: Global Restructuring and the Changing Boundaries of City Life—Comparative Urban and Community Research* (City: Publisher, 1992), pp. 164–81.

3. According to the U.S. Census, for the tracts that make up the Gulfton community, the population was 26,855 in 1980; 31,898 in 1990; and 45,106 in 2000. The Census listed 444 fewer housing units in Gulfton in 2000 than in 1980 and 2000, mostly due to abandonment.

4. See Robert Stanton, “Residents Rise up in Southwest Houston,” *Houston Chronicle*, July 19, 2001, p. 1.

5. One good example is the popular television program “Salvadorenös de Corazon,” broadcast by the Houston affiliate of Azteca TV. The show provides Central American residents with a weekly slice of home, and is produced by David Batres, who lives in an apartment in Gulfton.

6. *Houston Chronicle*, need author, title, date, and page number.

7. See Robert Fisher and Lisa Taffe, “Public Life in Gulfton: Multiple Publics and Models of Community Organization,” in *Community Practice: Models in Action* (City: The Haworth Press, 1997), pp. 31–56.

8. Gulfton has been defined by the U.S. Census Bureau as a “hard to enumerate” tract. It is therefore likely that it has been undercounted. See Jo Ann Zuniga, “Afraid to be Counted: New Immigrants Often Bring Fears from Homelands,” *Houston Chronicle*, February 20, 2000, p. A.1.

9. See Joel Warren Barna, “Big-Ticket Urbanism,” in *Cite: The Architecture and Design Review of Houston*, Vol. 60 (Spring 2004).

When Suburbia Awakens

Lars Lerup

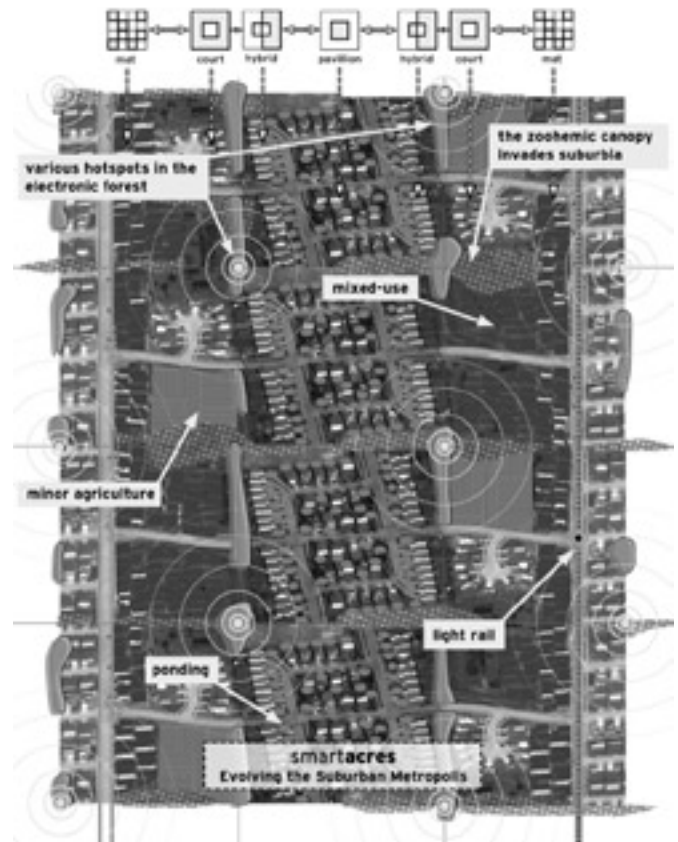
The ancient urbanism best portrayed by etched maps is passé. The new metropolitan urbanism has been liberated from those petrified inscriptions. But we have also left cinematic urbanism behind, where trains once left crowded platforms in billowing smoke. The new metropolitan mode is handheld video urbanism, where a clip can stop, turn left, fade, begin again, grow dim, and be erased.

But all three are inadequate for the future: the first is too static, the second is too predictable—too noir; and the third is too erratic and self-indulgent. The peculiar suburban potential amalgamation of Nature and culture—of lawn and house—with renewed environmental insistence holds the secret to a new metropolitan urbanism. Rolled out, its horizontal coherence is weak but persistent, gentle and laconic; it is, when it can be, just there. Never fully complete, undramatic, always struggling against more powerful forces, it still holds its promise. It is this metabolic intelligence that points the way.

The new metropolitan urbanism is the fuzzy union of the built, the planted, and the natural (in the case of Houston the ancient moist prairie). It is an architecture both visible and invisible. Here Jeffersonian husbandry, now frozen in suburban landscaping replete with leaf-blowers and pesticides, can find new life by seeing the natural as the motor of a new urbanism.

In this return to the natural lies embedded the rejection of our total dependency on fossil fuels and the utopian dream that we will one day grow our houses. Solar air-conditioning! Twin-fuel cars! The image of the new metropolis that emerges from this new field-room is a lateral domain with a quiet but scintillating intelligence—the electronic forest. Here metropolitans will swarm, or swim, in a new liquidity, suspended between the invisible and physical reminders of the public dimension of the metropolis. In Houston these perma-stims will bustle with new communication software, wireless hotspots, environmental controls for monitoring and guiding both public and private traffic—invisible forces that will join an uncanny hardware struggling to break out of its static confines to merge with the endless trunks of the Zohemic Canopy.

Welcome to Smartacres.



Caption: Caption caption caption, caption caption caption caption. Caption caption caption, caption caption caption caption.

Retrofitting “Levittown”

June Williamson



In 1947 Abraham Levitt, with sons Alfred and William, set out to build a planned new community on 4,000 acres in the town of Island Trees, New York. By refining a highly efficient, vertically integrated construction process developed before the war, Levitt and Sons rapidly constructed 17,500 houses of 750 sq.ft. each on one-eighth-acre lots. By 1951, the financial success of their original Levittown was so clear that this new model for family living was being widely copied by a new class of merchant-builders. And for the last half century, the principles of mass-production and standardization introduced by the Levitts—backed by government support for homeownership as a core political value—have remained a driving force behind the growth of the American suburbs.¹

Barber shop in DownTown Park Forest.

Despite its spectacular commercial success, in academic circles “Levittown” soon became a trope for all that was wrong with government-subsidized suburbanization. In physical terms, it evoked bulldozed farms and forests replaced by curving streets and small, repetitive houses on “cookie-cutter” lots.² Critics used the trope as shorthand for a culture of automobile dependency and wasteful sprawl. And politically, it stood for “white flight,” real estate redlining, and racially restrictive covenants.

Some also argued that the mass development of suburban housing after World War II involved tacit cooperation between government and private interests to entice mass migration from cities (seen as hotbeds of ethnicity, non-conformance, and radical politics) into more politically and economically stabilizing settings.³ As William Levitt himself famously declared, “No man who has a house and lot



can be a Communist. He has too much to do.”⁴

In sociology and popular culture, then, the trope came to refer to demographic homogeneity and social conformance—as well as stultifying boredom, especially for women.⁵ It hardly mattered that Herbert Gans observed in his 1967 book *The Levittowners* that the sociological profile of suburbanites differed little from that of middle-class urban dwellers.⁶

In hindsight, one can now see all these characterizations had some validity. But it may be more important today to

recognize that suburban developments of the immediate postwar era are now half a century old, and much change has taken place in and around them.⁷ Indeed, there is much to indicate that “Levittown” has been undergoing a continuous process of evolution, and that significant opportunities may exist to redirect this process toward a new set of goals—one based on greater diversity, more variable density, a finer grain of uses, and improved mass transit. In the process, it may also be possible to forecast a range of issues that will soon confront newer suburbs.

It is time for another look at “Levittown.”

Three Prototypical Communities

All three “Levittowns” examined here have been the subject of intense media and academic scrutiny. One is the original Levittown on Long Island. A second is a later Levitt development in Willingboro, New Jersey—the primary subject of Gans’s book. The third is Park Forest, Illinois, whose residents provided a source for many of the observations in William Whyte’s influential 1956 book *The Organization Man*.⁸

From the outset, these places shared certain important characteristics. In contrast to typical prewar middle-class and lower-middle-class neighborhoods, all were constructed extremely rapidly. In the first Levittown, the peak rate of construction was an astonishing thirty houses per day—a fact which added to its allure. As planned communities, each also came with schools, pools and parks, shopping centers, and other amenities.⁹

The demographic profiles of their original residents were also largely similar. These were young, white families with one primary wage earner, often a returning GI, who commuted to a nearby city to work. Previously, many such families had lived in apartments in urban ethnic neighborhoods, often doubling up with relatives.¹⁰ But postwar FHA and VA mortgage programs made suburban living feasible, allowing them to purchase inexpensive houses with little money down.

What both critics and proponents agree on is that the Levitts and other merchant-builders were selling a promise of upward mobility. What has become of these places today?

The original Levittown consisted of a series of residential subdivisions clustered north and south of Hempstead Turnpike. It was served by small haphazardly developed shopping centers, and sites for schools were donated as new lands were acquired.

Today the principal trends in Levittown include rising house prices and low turnover. Two-bedroom houses, once priced at around \$7,000, now have a median assessed

Top: Tri-County Flea Market, formerly the Mays department store, on Hempstead Turnpike in Levittown.

Bottom: Winter view of central green and former Sears building at Willingboro Town Center.

value of \$190,000. Low turnover is indicated by the fact that 26 percent of the current population (53,000) moved there prior to 1969. When first sold, Levittown houses carried odious whites-only restrictive covenants. U.S. Census data from 2000 indicates that Levittown also remains overwhelmingly (94 percent) white.

Like Levittown, construction of Park Forest began in 1947. The developer, American Community Builders (ACB), had purchased 2,400 acres some 30 miles south of Chicago. The master plan was the work of Elbert Peets, coauthor of *The American Vitruvius* and a designer in the federal government's 1930s greenbelt-town program. The president of ACB, Philip M. Klutznick, also had a long government resume, including a stint as head of the Federal Public Housing Authority.

Unlike Levittown, at least a quarter of the housing units in Park Forest were rental apartments. These were organized in lowrise garden courts, grouped around an open-air shopping center. Possibly the first suburban pedestrian mall, the shopping area included a Piazza San Marco-style clock tower that became a primary meeting point.¹¹ Park Forest also included a forest preserve and a large park, ideas drawn from the idealistic greenbelt program.

Today Park Forest's population has dwindled to 23,500 from a high of 33,000 in the 1960s. According to the 2000 Census, 55 percent of residents are white and 39 percent are African American. The average value of owner-occupied houses is \$85,400—relatively low in regional terms.¹² Likewise, although levels of educational attainment are identical, the median household income is 30 percent lower than in Levittown, with almost double the number of female-headed and nonfamily households. The presence of a large number of affordable rental units may account for this difference.

Willingboro was built by the Levitt Company a decade later, between Camden and Trenton—with the first families, including that of Herbert Gans, moving in in 1958. It, too, was originally named Levittown; but to distinguish it from another nearby Levittown in Pennsylvania, residents voted in 1963 to revert to the original town name.

The company had made several important changes in its planning approach since its earlier projects. One was to redraw local political boundaries so that the entire community would fit within a single township. Another was to concentrate shopping in a single 600,000-sq.-ft. outdoor pedestrian mall. To accommodate growing families without the need for remodeling, Willingboro houses were also designed with three or four bedrooms, and ranged in price from \$11,500 to \$14,500. finally, the site was more sensi-



tively and professionally planned with respect to issues such as drainage and wayfinding.¹³

The most significant evolutionary change in Willingboro today may be its racial composition. Some 67 percent of its 33,000 residents are African American, 6 percent are Hispanic, and only 23 percent are white. Levitt had originally intended to exclude minority residents, a practice the company defended on economic grounds. But legal pressure forced it to integrate Willingboro. A consultant was even hired to prevent the clustering of minority buyers.¹⁴

Top: Aerial view of Park Forest Plaza, 1950s. Photograph courtesy of the Park Forest Public Library.

Bottom: Recent aerial view of DownTown Park Forest, with new drugstore and senior housing in foreground. Photograph courtesy of Warren Skalski, Village of Park Forest.

Today, town and county officials attribute Willingboro's relatively low median house value—\$96,700—to its reputation as a “black” suburb. Even though educational levels and median household income are similar, and its houses are generally bigger and sited on larger lots, this figure is half the value of houses in Levittown.

The above review indicates how the character of original “Levittowns” may have diverged significantly over the years. But in one important respect—aging—they have remained remarkably similar.

Typical of postwar conditions, the median age of Park Forest's first residents was 28, and two-thirds of its household heads were veterans. Today, the median age in all three communities has risen to 35–38, and one quarter of households include at least one senior.

Resistance to Change in Residential Patterns

In physical terms, perhaps the most remarkable similarity between the three “Levittowns” today is the extent to which their original residential patterns have resisted change. Neighborhood streets are unaltered; lots have not been combined or further subdivided; single-family houses have not been replaced with multifamily dwellings; and individual dwellings have not been demolished or changed to other uses.

Clearly, the high rate of owner occupancy is an important factor contributing to the lack of change. Since the 1950s, homeownership has been supported by government mortgage guarantees and tax policy as a means of building personal wealth. As Barbara Kelly has noted, most Levittown homeowners have also used sweat equity to increase the value and utility of their houses through remodeling.¹⁵

As Renee Chow recounts in her article in this issue (and elsewhere¹⁶) regulations on such variables as setbacks and the number of units on a lot have also worked against change. But even if original codes had allowed more variety, it would have been nearly impossible politically for developers to purchase and assemble small, contiguous lots from owner-occupants and convert them to other uses—or even other forms of housing.

On account of this inflexibility, however, the lack of housing options has now become a concern in all three communities. This is especially true for single people and among seniors who wish to downsize without leaving the area. Almost fully “built out,” there seem to be no other way to address this concern than by retrofitting formerly nonresidential sites.

In Willingboro, such efforts have included construction of three-story townhouses on reclaimed portions of the

mall parking lot. Assisted-living apartments—the town's first midrise dwellings—were also recently built on another commercial parcel along Route 130; and the township is trying to encourage the mixed-use redevelopment of another site—a closed marina.¹⁷

In Levittown, townhouses for seniors were recently constructed on formerly commercial land, and much of the commercial “strip” along Hempstead Turnpike may be ripe for similar retrofitting.

Park Forest, as previously noted, included many garden apartments when first constructed. Nevertheless, dedicated senior housing is a pressing need, and an assisted-living facility was recently constructed on the site of the old Sears store.

Failure and Redevelopment of Retail Properties

While residential neighborhoods in postwar “Levittowns” have resisted physical transformation, their retail areas have not. As the articles by Ellen Dunham-Jones and Michael Freedman in this issue make clear, retail competition is relentless, and the cycle of renewal or demise is short.

Retail activity in Levittown was originally confined to Hempstead Turnpike, which both bifurcated the community and connected it to neighboring towns. Commercial outlets there included small malls, restaurants, and eventually a Mays department store. Today, while house values remain strong, the rents on this strip are low, and the Mays building is used primarily for a flea market. Many of these sites are ripe for retrofitting, perhaps into residential or other nonretail uses.

Unlike Levittown's ad-hoc commercial areas, Park Forest's innovative 48-acre outdoor mall was designed by the prominent architecture firm of Loeb, Schlossman, and Bennett. The centralized complex of shops, recreational activities and offices, ringed with free parking, was anchored by Marshall Field, Goldblatt's, and Sears. It quickly became the social heart of the town, the setting for parades, political rallies, and other community events.

Yet despite a mid-1980s overhaul, by 1995 the Park Forest Plaza was effectively dead. The real estate diagnosis was poor location: since it was built in the center of the community, far from any arterial boulevard, it did not benefit from a larger catchment of shoppers. Eventually, many residents also chose to shop at newer, copycat malls, some developed by Klutznick himself.¹⁸

Much effort has gone into considering how Park Forest Plaza might be retrofitted. With no outside developer interested, the Village of Park Forest eventually purchased the site for a meager \$100,000. Its redevelopment has since involved demolition of some buildings and construction of

new streets through its pedestrian areas. Nevertheless, the award-winning “Down Town Park Forest” is today spottily tenanted and somewhat forlorn, and development of its planned residential pieces is progressing slowly. With time, this place may regain vitality, but only because the Village of Park Forest is operating under a different financing model and with different goals than a commercial developer.¹⁹

The township of Willingboro has similarly committed significant public resources to redeveloping its original mall. When Interstate 295 was built in the 1970s displacing Route 130 in regional importance, Willingboro Plaza suffered a similar fate as Park Forest Plaza (which it was, in part, modeled on).

However, with \$14 million in financing from the township, a progressive developer, Renewal Realty, is now transforming the 56-acre site into a mixed-use “town center.” So far this boasts a new public library, classrooms for a local community college, and a mail-order center for a pharmaceutical company.

Although this last building is decidedly unfriendly to pedestrians, it has brought 850 jobs, and townhouses are being added along the rear of the site.²⁰ Overall, the project presents an innovative mix of conventional stand-alone suburban types—office park, fast-food outlets, community college, and multifamily housing. Local officials, though, continue to believe their efforts to attract national retailers are being stymied by aversion to the township’s racial profile.²¹

No doubt, the involvement of town governments and the introduction of mixed uses does represent an important new model for transforming such bypassed suburban retail properties. But these projects face an uphill battle. Builders once provided such shopping areas to boost the attractiveness of their residential developments. Today the obsolescence of these commercial areas is also detracting from the value of residences in all three communities

Paths toward Change

What is the future of these original “Levittowns”? Should they still be regarded simply as bedroom communities? Are their schools and retail areas still viable? Can they be retrofitted to broaden the qualities of life they afford?

Such questions are particularly pertinent on Long Island, where the diversification of housing types will be critical in coming years. A recent survey showed a 20 percent decrease in the number of 18-to-34-year-olds in Nassau and Suffolk Counties from 1990 to 2000. Some of the main reasons given were scarce and overpriced housing and the cost of owning and fueling a vehicle.²²

Such studies indicate that one of the greatest hindrances

to redefining the place of “Levittown” today is the limited range of uses for which it was originally built. Nevertheless, significant opportunities do exist. It will be possible to better integrate workplaces into these settings, including support for working at home. The development of better transit options will also be important, particularly if town-center initiatives such as those of Willingboro and Forest Park are to succeed.

The viability of schools and other community facilities is another important consideration. In 1983 Levittown Memorial High School closed due to declining enrollment, and was converted into an adult- and special-education headquarters.²³ One of two high schools in Willingboro was also closed around the same time, but it may now be transformed into a performing-arts center. Schools were once central to the social life of every “Levittown,” and their closure has left a hole at the heart of each community that clearly needs to be filled.

A third significant concern is a lack of space for civic life such as that which Park Forest Plaza once allowed. Fortunately, suburban governments today seem to understand that retrofitting “Levittowns” should involve bolstering public spaces and institutions. However, to ensure the viability of such new centers, regional associations may need to be invented to improve their functioning and accessibility.²⁴

Finally, it is important that planners address the continuing environmental impact of suburban development. Many of “Levittown’s” now-ailing shopping areas were built on wetland sites. Where these are unsuitable for conversion to housing, the opportunity may exist to reclaim them for bioremediation, wildlife habitat, or parkland.

Where is “Levittown” today? These snapshots have revealed that even in such mythologically “frozen-in-time” places, evolution does occur. The changes are diverse and uneven, but several general conclusions may be drawn:

- These communities are almost completely built out. Any new development, especially for multifamily housing, must come from redevelopment, especially of underutilized school and commercial parcels.
- The aggregation of single-family house sites is not likely to happen—and may not even be desirable. The legalization and encouragement of accessory units may, however, allow greater housing choice.
- Median age has risen significantly, and a greater range of housing options is needed. This must include senior apartments and assisted-living facilities with convenient access to transit, social opportunities, and recreational space.
- Retail parcels are failing, creating blight and a significant loss of tax revenue. With private developers unwilling or

unable to address the problem, local governments may need to step in and pursue innovative strategies for retrofitting.

- Bias is still attached to demographic diversity. Where minority residents, especially African Americans, represent a significant percentage of the population, property values are lower than places with comparable household income, education level, and housing stock.

- Regional alliances may need to be formed to address issues of shared concern like strip retrofitting and mass transit. Expanded transit options could help revive mixed-use centers by improving accessibility.

In many ways the original “Levittowns” served as a template for the last half century of suburban development. Today, in addition to solving local problems, a campaign of intelligent retrofits in these places may also provide useful models for retrofitting the thousands of similar developments that rolled off the assembly lines after them.

Notes

1. See Barry Checkoway, “Large Builders, Federal Housing Programmes, and Post-war Suburbanization,” *International Journal of Urban and Regional Research*, Vol. 4, No. 1 (March 1980), pp. 21–44.
2. For a full account, see Adam Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (New York: Cambridge University Press, 2001).
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8. William H. Whyte, *The Organization Man* (New York: Simon and Schuster, 1956).
9. Marc Weiss, *The Rise of the Community Builders* (New York: Columbia University Press, 1987), p. 2.
10. Richard Sherman, “Park Forest: A Model for U.S. Planned Towns,” *Star Newspapers*, Sept. 11, 1988.
11. A commuter-rail station was planned at the mall, but the Chicago commuter-rail authority never built it. See Gregory Randall, *America’s Original G.I. Town: Park Forest, Illinois* (Baltimore: Johns Hopkins University Press, 2000), p. 73.
12. For comparative statistics on Park Forest and other suburbs, see William H. Hudnut III, *Halfway to Everywhere: A Portrait of America’s first-Tier Suburbs* (Washington, D.C.: Urban Land Institute, 2003).
13. Gans, *The Levittowners*, pp. 5–12.
14. This was eventually accomplished by offering African-American families the choicest lots at the edges of the neighborhood, and then allowing white buyers to move in next door or in a less desirable central location. See “Living Together: How One Suburb Acted to Integrate Smoothly, Avoid Major Incidents,” *Wall Street Journal*, December 28, 1970; and Gans, *The Levittowners*, pp. 375–80.
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16. Renee Chow, *Suburban Space: The Fabric of Dwelling* (Berkeley and Los Angeles: University of California Press, 2002).
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Restructing the Strip

Michael Freedman



Suburban America's commercial strips have become the latest victims of the same dynamic of creative moving from downtowns to suburban highways to serve a population increasingly enchanted with the automobile. And for the rest of the century, retail activity continued to flow to pole-sign-studded lots along arterial highways and a growing number of regional malls, making shopping on foot in central city commercial districts ever more of an anachronism.

In recent decades, however, new trends have undermined the viability of the strip as the auto-age shopping destination of choice. The build-out of Interstate and other grade-separated highways has created more accessible sites at highly visible interchange locations. Intense competition has led to enlarged formats which exploit economies of scale but require enormous sites. And new formats such as open-air "lifestyle centers" have now combined shopping with entertainment and other uses to create comprehensive themed environments.¹

Meanwhile, the strip has also been failing as an arterial thoroughfare. For years, transportation officials have emphasized the importance of arterials to long-distance mobility. But miles of individual strip businesses require frequent curb cuts, and left turns across traffic further decrease overall speeds and increase accident rates. Sacrificing the efficiency of vehicle movement to the success of local businesses might represent a rational choice; so might devoting the strip to smooth traffic flow. But by trying to do both, the strip has failed to do either well, and the outcome have been cries familiar coast to coast: fix the traffic congestion! Give our city an entry and an identity! Replace obsolescence! Get rid of the ugliness!

Unfortunately, the weaknesses of the strip are structural, and there is little that individual property owners can do by themselves. To reverse disinvestment, stabilize property values, and restore vitality along once-important suburban corridors municipalities must join with regional

agencies to formulate strip restructuring plans. In this challenge, however, is also an opportunity to build on the present forces of change and articulate credible new visions of supportable retail-driven centers, healthy neighborhood structures, and a workable hierarchy of transportation corridors.²

Reestablishing a Pattern of Centers

Centers are the parts of cities and towns where people congregate.³ Active, concentrated and connected public places, they typically contain tight clusters of retail, restaurant, entertainment and civic venues that draw people out of their private worlds to participate in public life.

The suburban strip is in many ways the anti-center: it scatters all the activity-generating shops and services a community can support along miles of arterial roadway. The present trend of disinvestment thus provides an important opportunity to heal a major cause of social dysfunction in the suburbs and establish new regional, town and neighborhood centers where they have been missing.

Regional Centers. Large new investments in retail today are being drawn to the most accessible locations in suburban regions—typically primary freeway interchanges. Such massive shopping agglomerations generally include multiple department stores, superstores, and big boxes. But most of them are not yet city centers because they lack employment, housing, and compact structure.

Identifying the location of such region-serving destinations and their effect on existing commercial corridors is the first step in a restructuring plan. As a nexus for the centripetal forces draining vitality from older areas, they will be highly resistant to change in the short term. However, when available land around such places begins to disappear, property values will escalate, putting pressure on developers to build structured parking and use land more efficiently. Communities may use this opportunity to establish policy frameworks and enhance transit infrastructure in ways that attract the dense employment and housing needed to transform these retail hubs into true urban centers.

Town Centers. Along an existing strip, the building blocks of town centers will generally be found at the next most visible and accessible locations—either adjacent to secondary freeway interchanges or at intersections with other primary at-grade arterials.

In contrast to a regional center, which may serve several suburban cities, a town center's shops will generally serve the population of several neighborhoods, or even a single small municipality. Town centers will likely be anchored by supermarkets, pharmacies, movie theaters—or, increas-

ingly, a junior department store or big-box general merchandiser.

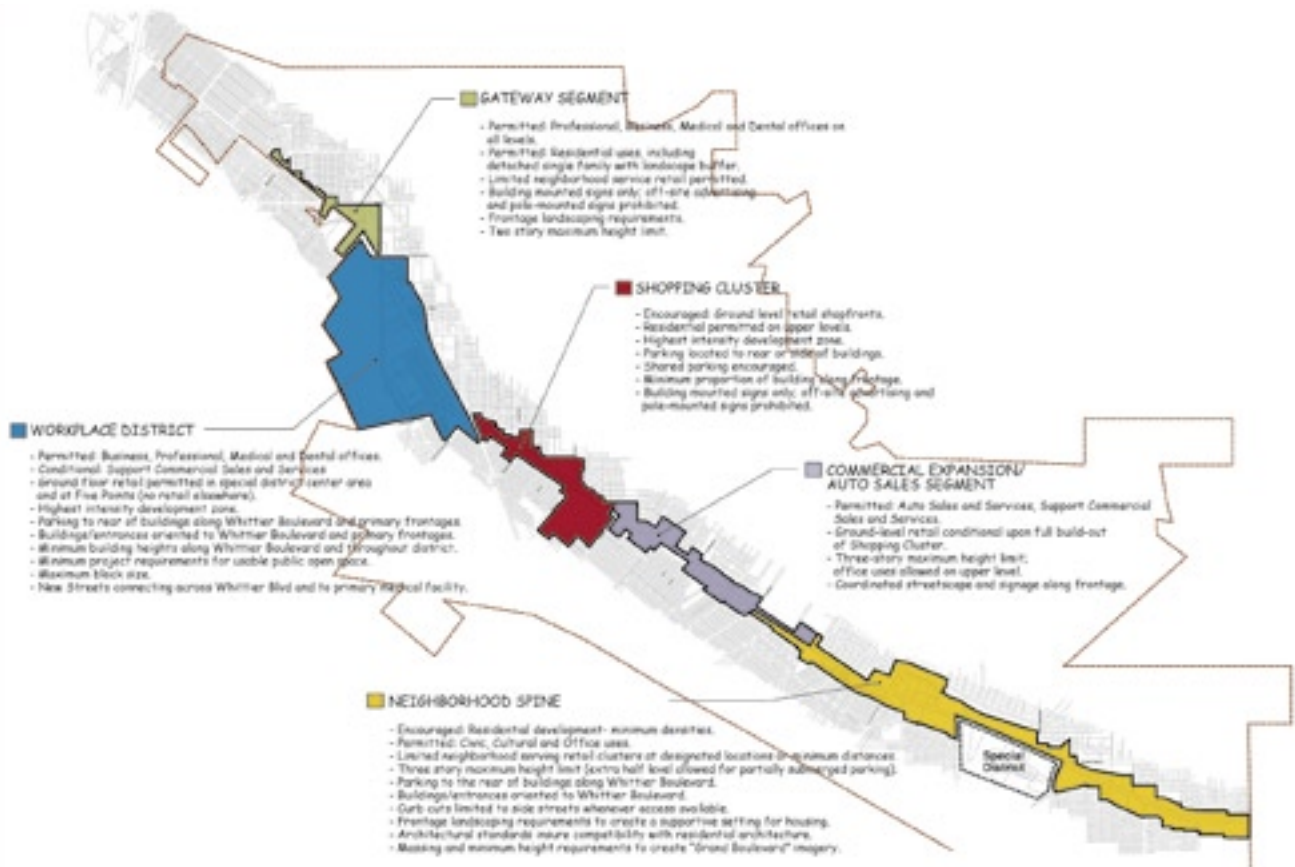
Initial investigations into the restructuring of a strip corridor must determine whether the localities it traverses can support a town center. Care should then be taken to ensure that new town centers are located sufficiently far from historic downtowns to avoid further disinvestment in these important places. At locations five to seven miles from older town centers, or in newer suburbs without downtown cores, major corridor crossroads provide ideal locations for town centers.

Neighborhood Centers. Whether or not a regional and/or town center is (or can be) located along an existing strip, most of properties along it will fall outside these areas. Along such segments, remaining supportable retail will increasingly be limited to businesses serving adjacent residential areas. The low density of these neighborhoods can typically support only one convenience center for every two or three miles (drawing on around 5,000 households). Such neighborhood centers will usually be anchored by a supermarket or grocery store, typically in combination with a pharmacy and a branch bank.

Neighborhood centers positioned along a corridor may augment their local customer base by attracting drive-by traffic. The shops in such centers will have even greater chance for survival if they are located at a secondary intersection. However, if there are already supermarket-anchored centers doing well along a corridor, a restructuring plan should not attempt to create new neighborhood centers at theoretically more desirable locations.

Common to All Centers. Urban designers, public officials, and property owners tend to envision successful cafes and street life at the base of every new commercial building. In truth, a given community can support only a limited amount of retail activity. It is important, then, that an independent market study be one of the first steps taken to support a strip restructuring plan. Such a study should consider not only existing supply and demand, but also projected demand based on plausible population-growth scenarios.

The successful restructuring of a strip environment will also be easier if it is carried out within a defined regional plan. One of the best of these was recently adopted for Portland, Oregon, by its elected regional government, the Metro Council.⁴ The plan's "2040 Growth Concept" establishes specific locations for regional centers, town centers, and corridors, and the agency is currently developing an implementation program in coordination with local jurisdictions.



Building New Neighborhoods

The second task of a restructuring plan is to propose new uses for properties lining the long stretches between centers. Although some of these segments may feature stable concentrations of noncompeting commercial uses such as auto sales and service, long stretches will likely already be characterized by declining retail assets.

Two factors can be leveraged to capture value on these properties. First, strip corridors typically form the awkward edges of stable residential neighborhoods whose quality and value exceed that of the strip corridor. Second, in many metropolitan areas, a shortage of sites for dense, more affordable housing means residential development either is (or soon will be) able to outperform retail on miles of corridor-fronting properties.

There was a time when America's most prominent homes self-consciously preened along some of its widest and most public thoroughfares. Such homes, which often maintained their value even as traffic speeds increased, can provide important lessons for designing new forms of housing.

Typically, the large size of such homes was only one of the qualities that allowed them to stand up to the scale of the wide thoroughfare; they also fronted it with grand design elements of deliberately civic expression. Such homes may also have been buffered through such simple landscape treatments as wider setbacks, decorative fences and hedges, or slightly raised locations. And outboard of the sidewalk, planting strips may also have been wider, shade trees taller, and decorative streetlights a bit grander

than elsewhere in town. Today, duplex, triplex, quadplex, townhouse clusters, courtyard housing, "faux-mansion," and stacked flats can all be designed in ways that reinterpret such urbanistic success.

Detached single-family homes can also work along wide roads, but their siting needs special consideration. One solution is to orient the houses to narrower, perpendicular streets, and to establish a wide, planted buffer at the ends along the wide street. But while this arrangement solves privacy problems, it makes no provision for resident monitoring of sidewalks and bikeways along the wide street, and as a result, the public space may be less safe. A better arrangement may be to separate the single-family area from the primary roadway with a tree-lined median island, a service lane with curbside parking, and an additional back-of-curb planter strip with trees, streetlights and ground cover. Such an arrangement is exemplified by The Esplanade in Chico, California.⁵

Because developers have little familiarity with the special requirements of residential development along wide roads, communities must begin to educate them. Restructuring plans should specify the building types they want and the frontage treatments that go with them. Maximum block sizes should also be established as a way to control the number of properties needing access from the main corridor and as a guarantee of adequate access to adjacent

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neighborhoods. Setting maximum setbacks and minimum building heights will also be important to create a sense of spatial definition.

Where single-family homes abut properties along the corridor, community codes may also specify height limits and respectful rear-yard treatments. The exact dimensions for height, setback, and building and landscape character, however, should be calibrated to the location of the restructured strip within the “transect,” or continuum, of urban to rural fabric in the region.⁶

Throughout a strip restructuring process it is important for planners to insist that properly arranged, well-designed multifamily housing can provide a better arterial edge for a residential area than the service and parking lots of typical strip commercial properties. However, to widen the spectrum of investment opportunity, other uses, such as workplaces, live-work, and lodging, should be considered as well. As with multifamily housing, communities can control the effect of these uses by specifying desired transitions, massing, articulation, orientation, and other design features.

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Restructuring the Thoroughfare

Even with sufficient market demand and proper location, the success of any development remains contingent on its pairing with a matching thoroughfare type.⁷ For example, downtown commercial areas often rely on a Main Street typology in which ground-level shopfronts open directly to public sidewalks, pedestrians are buffered from traffic by convenient curbside parking, sidewalks include benches and other decorative furnishings, and parking lots are located behind the buildings.

On the strip, auto-dependent development has long been paired with a conventional arterial typology. Strip frontages are lined with eye-catching signage readable from a moving car, and wide curb cuts ensure convenient access to properties by motorists and supply trucks. Meanwhile, strip buildings are set back behind expansive parking lots, with only a minimal need for architectural quality. In such environments, pedestrian movement is normally only poorly accommodated: crosswalk distances are long and without refuge; tree canopies are sparse or nonexistent; sidewalks are narrow (where they exist at all); and intermittent, bare-bones street furnishings convey the impression that no one would walk, bicycle, or sit at a transit stop there unless they had no other choice. A successful restructuring plan must therefore also include the reconfiguration of the public way.

At the centers, the primary challenge will be to create a more pedestrian-friendly environment without sacrificing high-volume vehicle capacity.⁸ Since ground-floor shop-



fronts require curbside parking, but such parking requires separation from rapidly moving traffic, the best solution may be a multiway boulevard that features slow-moving service lanes separated from through-lanes by a raised median. The success of this corridor type in many of the world's most admired cities has been beautifully documented by Allan Jacobs, Elizabeth Macdonald, and Yodan Rofe.⁹

Peter Calthorpe has offered an alternative that splits the arterial thoroughfare around the retail center using a one-way couplet.¹⁰ This strategy, which allows convenient left-turn access from both directions, can be particularly effective when planning new corridors, but it is difficult to carry off when retrofitting an existing corridor.

Along the new segments between centers there will be a different set of problems. Most residential development types cannot thrive on today's typical strip thoroughfare. Its bleak highway-like environment then must be transformed with tree-lined edges that screen views and new street furnishings and lighting that provide real amenity to pedestrians. For the widest corridors, a central median planted with broad-canopy trees may also be necessary to provide pedestrian refuge and a sense of human scale. One simple solution to all these concerns is to continue the basic arrangement of the multiway boulevard from the commercial centers into the neighborhood segments, modifying its more urban qualities and expanding planting strips and sidewalks.

Whatever design changes are contemplated to the thoroughfare, it is important that they be done before or simultaneously with the redevelopment of adjacent properties. This can be accomplished by requiring private developers to make improvements all the way out to the curb (with possibly gradual results). Alternatively, public financing

(e.g., the city in partnership with state transportation agencies) may be obtained to install and maintain the capital improvements.

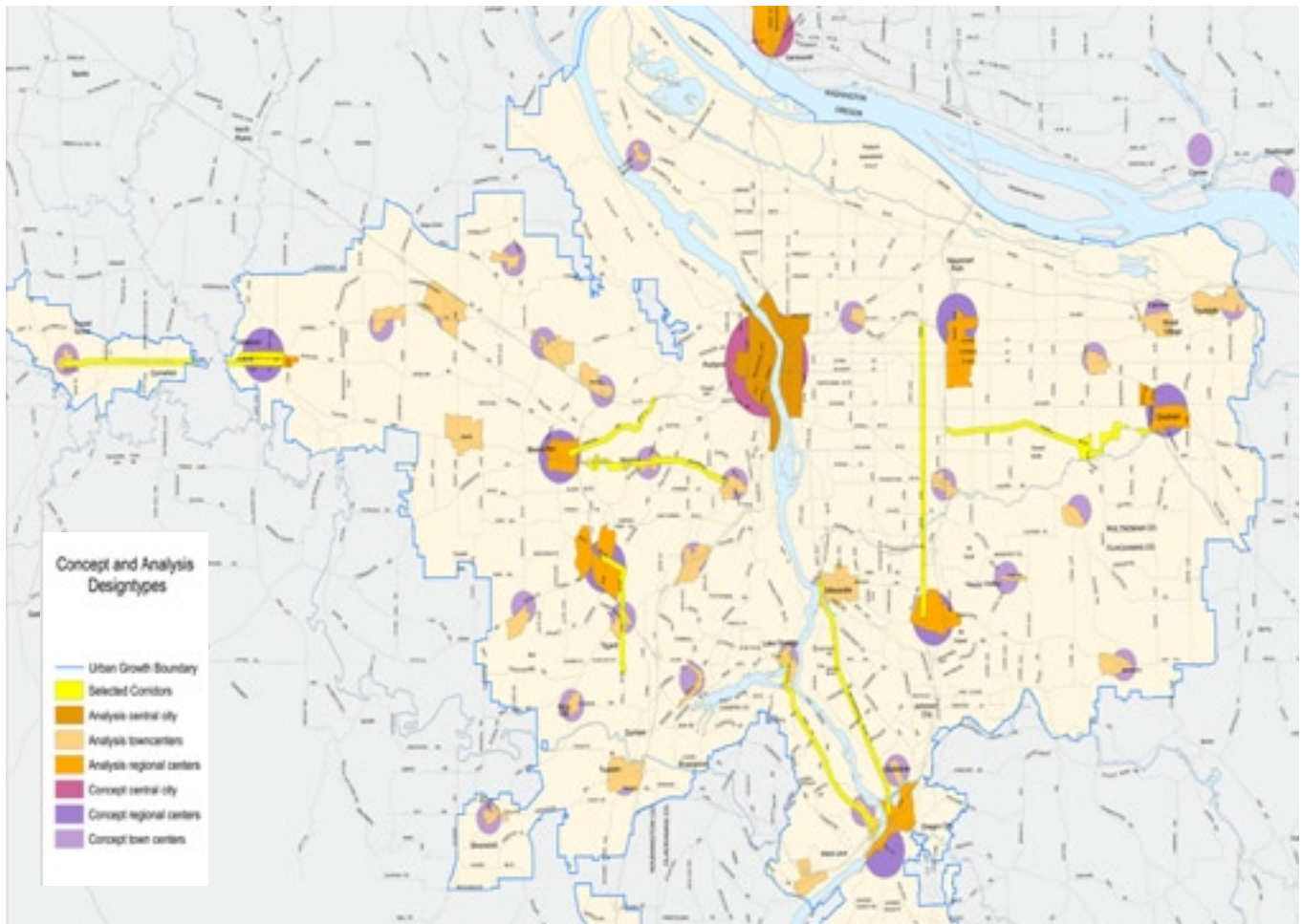
Additionally, any thoroughfare redesign must consider ways to accommodate transit service. Transit is increasingly viewed as a desirable amenity in residential neighborhoods and workplace settings. And even if transit plans are far in the future, providing for them now sends an important message, especially in coordination with a regional plan.

Most corridors will never reach densities high enough to warrant light rail. However, streets should be designed to accommodate existing local and regional bus service, and express buses or bus rapid transit (BRT) as corridor-use intensifies. A multiway boulevard can accomplish this adroitly, with local buses using the service lanes and express buses using a through-lane on the other side of the separator.

Implementation Strategies

Even the most market-driven efforts to restructure commercial strips will have to engage the political, legal and administrative environments that condition their form. To be effective in these contexts, the planning process must generate substantial support from affected parties, and it must propose realistic implementation mechanisms. A convincing spectrum of mechanisms already exists, but they will need refinement with experience and practice.

Reorganize entitlements. The anything-goes commercial zoning along typical strips today allows virtually any form of retail development, but it prohibits residential use. This makes current zoning practice the primary obstacle to the evolution of a new pattern of vital centers and neighborhood segments.



The most direct and effective way to implement the restructuring plan is to modify development policies to specify the proper location and distribution of regional-, town-, and neighborhood-center retail, and to similarly modify codes to focus the greatest intensities and most urban standards in these centers. Similarly, codes must be modified not only to permit residential use in the neighborhood segments, but to prohibit the location of retail there.

This first step may be politically daunting, but it can be done. Whittier, California, recently adopted a corridor restructuring plan that reorganizes entitlements along seven miles of Whittier Boulevard. Likewise, Redwood City, California, officials are considering an aggressive strategy to limit the type and amount of retail permitted on El Camino Real, the main commercial strip adjacent to their downtown.

Specify the physical character of development. A fundamental role of the community in the development process has always been to establish mutually beneficial relationships between separate private developments. Now more than

ever, community planners must recognize this obligation. They must also ground their interventions in an understanding of healthy city structure.¹¹

For areas designated as residential segments, corridor restructuring must specify design standards for appropriate development types, and for the thoroughfare designs that will allow adequate separation between public and private space. Such standards should also identify building types that can accommodate other uses and specify the treatments that will make them good neighbors to the residential types.

Policies must also be established to allow the maturation of retail centers into true urban places—for example, requiring multiple-story commercial blocks with ground-level shopfronts for net-new development. Standards in centers must also include maximum block sizes to ensure proper connectivity and pedestrian scale, and these smaller blocks must be paired with dimensioned standards for streets.

Adopt a “parallel-track” development policy. In some instances, a broad reorganization of entitlements will not be feasible in the near term. For example, since it requires the public sector to compensate property owners for any loss of value resulting from changes in zoning, Oregon’s recent Measure 37 will make it hard to radically modify development policies there. Until it can be readily proved that residential entitlements are worth more than retail

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ones on arterial segments between centers, the costs of pursuing such a strategy through the courts will prove prohibitive. In these instances a more practical strategy may be to keep the present system and adopt the restructuring plan as a “parallel track.” To further entice developers, this option can be sweetened with incentives such as a streamlining of the approval-process and/or a waiver of certain development fees.

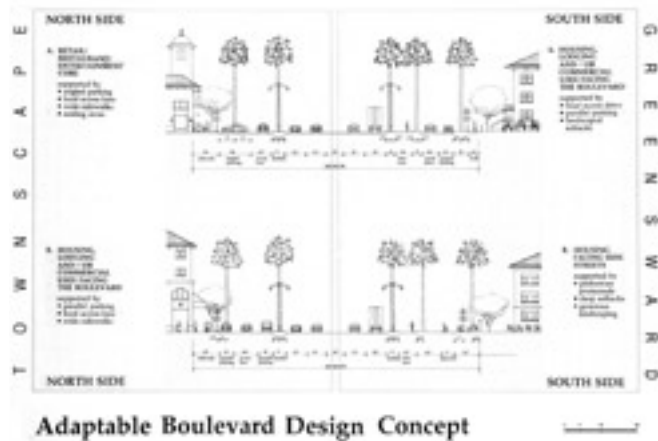
Use streetscape improvements as a catalyst for change. One of the most powerful tools a community can deploy to stimulate restructuring is to finance the first steps itself. In combination with a reorganization of entitlements or the enactment of a parallel-track code, a community can install segment-based streetscape improvements to enhance credibility and make it easier for investors to picture desired new patterns. Real estate professionals are very good at configuring sites in response to thoroughfares they face. An effective new thoroughfare design will likely also decrease the functionality of outmoded retail.

Cathedral City, California, recently implemented this approach very successfully. By contributing additional funds to the widening of its local highway, Palm Canyon Drive, it wanted to instigate development of a new town center. The city’s goal was to concentrate vehicular capacity at two primary intersections rather than allow a comprehensive widening of this highway to seven lanes. Eventually, the public street improvements attracted a developer to construct the downtown node. Other anchor uses, including a cinema, have now arrived as well.

Montebello, California, is another example. That city proceeded with streetscape improvements along the downtown portion of Whittier Boulevard prior to endorsement and implementation of its entire corridor-restructuring plan. San Fernando, California, likewise is proceeding with streetscape improvements along one of its three aging commercial corridors after the adoption of a restructuring plan.

Involve stakeholders in informative public workshops. Restructuring may initially be opposed by strip property owners whose expectations for commercial development have become largely unsupportable. Educating them to new development realities requires a patient workshop process that provides objective information and case studies. This must include a clear presentation of the changing dynamics of the retail industry, the forces leading to the decline of strips nationally, and evidence that these larger trends will affect their properties.

Presenting the findings of an independent economic study can be crucial to this effort. Such a study should demonstrate how market demand for retail can no longer



provide expected profits, and how “trading in” retail entitlements for residential ones will be more lucrative in the long term. In Charlottesville, Virginia, such a market analysis took into account current conditions, employment projections, and demographics. It also surveyed relevant projects, included interviews with local experts, and proposed viable new uses for each corridor segment based on local market demand.

Illustrate future conditions. Restructuring and revitalizing commercial corridors is a relatively recent endeavor, and most people have trouble envisioning what success looks like. Photographs of housing on boulevards and of thriving regional and town centers, combined with clear and appealing renderings and simulations, can help make up for the lack of built precedents.

Involve planning and public works departments. Municipal planning and engineering departments are used to operating with relative autonomy, and overcoming ingrained rivalries will require major cultural change within many city governments. Nevertheless, design and capacity improvements to the roadway need to be coordinated with land use and development planning so the design of the public right-of-way is not at loggerheads with a new pattern of uses along fronting properties.

To assist such efforts, the Congress for the New Urbanism and the Institute of Transportation Engineers is developing a set of criteria for major thoroughfares that better coordinates road engineering with urban form.¹² The framework uses standard terminology so that street types can be easily adopted within the industry. Another example of a new typology of thoroughfares has been prepared by the Ottawa-Carleton region in Canada. It includes six road types that respond to the urban context along each segment.¹³



A Larger Vision

Restructuring aging commercial strips is a crucial part of the larger project of retrofitting placeless sprawl into a more coherent, multinucleated pattern that enhances livability, mobility, and reinvestment opportunity. However, since most suburban retail was once located along such corridors, there is no doubt this effort will have to involve a fundamental realignment of the commercial framework of many suburban regions.

Fortunately, such restructuring can build on the accelerating preference of the shopping industry to concentrate at major crossroads. But it must also recognize the need to reevaluate the role of the arterial corridor according to a new pattern of city centers and neighborhoods. This will require that while the mobility function of the corridor remains linear, its form must transition by segment in response to the character of the development through which it passes.

The existing commercial strip is a creature of zoning. It was created according to certain policy tools, and its restructuring will require development of new tools. Nevertheless, there is good reason to hope such places can express a new planning paradigm, one in which building types, frontage treatments, and thoroughfare design are all integrated into a healthy new urban structure.

Notes

1. Examples of such "lifestyle centers" are Santana Row in San Jose, Zona Rosa in Kansas City, and CityPlace in West Palm Beach. Also see Jake Batsell, "Big malls get bigger, smaller centers spruce up, slow-footed get left behind," *The Seattle Times*, October 12, 2003; and Julie Tamaki, "More Shopping Malls Going Alfresco," *The Los Angeles Times*, June 3, 2004.
2. For a discussion of the district, neighborhood and corridor as the basic element

of healthy city structure, see Michael Leccese and Kathleen McCormick, eds., *The Charter of the New Urbanism* (New York: McGraw-Hill, 2000).

3. Duany Plater-Zyberk & Company, *The Lexicon of the New Urbanism*, Version 3.2 (drafts available from www.dpz.com), p. L-1.1, L-1.2. Also see Peter Calthorpe, "Centers, the Missing Element of New Urbanism," in Council Report VI: On Retail, *The Town Paper*, February 2004, pp. 6-7.
4. "Regional Framework Plan," December 11, 1997. *Metro: City of Portland, Oregon*.
5. Allan B. Jacobs, Elizabeth Macdonald and Yodan Rofo, *The Boulevard Book* (Cambridge, MA: MIT Press, 2002), pp. 62-71.
6. Andres Duany and Emily Talen, "Transsect Planning," *Journal of the American Planning Association*, Summer, year, pp. 245-66.
7. A thoroughfare is that portion of a corridor that contains vehicular lanes, parking lanes, planting strips, and sidewalks.
8. A bypass will not work because retail will relocate over time to the more visible/accessible sites along it.
9. See Jacobs, Macdonald and Rofo, *The Boulevard Book*. Also see Allan B. Jacobs, *Great Streets* (Cambridge, MA: MIT Press, 1995).
10. See Peter Calthorpe, "The Urban Network: A Radical Proposal," *Planning*, June 2002.
11. The best current reference is "Codifying New Urbanism: How to Reform Municipal Land Development Regulations," *American Planning Association, Planning Advisory Service, Report Number 526* (May 2004). Also, training in the preparation of form-based codes can be obtained by contacting The Congress for the New Urbanism at www.cnu.org.
12. Known as "Context Sensitive Design for Major Urban Thoroughfares," this is a joint effort of the Congress for the New Urbanism and the Institute of Transportation Engineers, funded by the Federal Highway Administration and the U.S. Environmental Protection Agency. Initial publication by the Institute of Transportation Engineers is targeted for late 2005.
13. See Ottawa-Carleton's "Regional Road Corridor Design Guidelines" (July, 2000) for a complete list of road corridor types and their corresponding street designs.

A State of the Union

Cervin Robinson

How in ten photographs do you describe a state, Maine in this instance? Describing cities may be easier because they often have their Big Bens and Eiffel Towers, and part of a description could indeed be giving viewers what they expect, unless the whole point of your description is denying them that. In the case of Maine, they might expect pine trees (Maine is the pine-tree state), a rocky coastline, a white wooden church, and a moose.

In this instance I give you (a) the wooded rocky coastline and (b) a wooden church (though in coffee, chocolate, lemon and lime, “based,” I have it on the good authority of Earle Shettleworth, “upon paint analysis conducted by Historic New England [SPNEA],” not in the white you could expect); but I deny you the moose. For the rest I have chosen subjects, not because they seemed characteristic (though they may well be that) but because they showed conviction, contradiction, pride, or anguish. I thereby avoid, I hope, both self-conscious eccentricity and predictable advertising.

- 1. Hockomock Channel
- 2. Church (1832-33), Dresden Mills
- 3. Child’s grave, Round Pond
- 4. Sales offering, Edgecomb
- 5. Front door, Round Pond (with flag)
- 6. front door, Medomak (with arch)
- 7. Fragments from the Battleship Maine, Bangor
- 8. Trailer and fence, Richmond
- 9. Car, chair, doors and toilet, Round Pond
- 10. New boat shed, Medomak









Veiled Sustainability: The Screen in the Work of Fumihiko Maki

Brendon Levitt



Top: View to the Gender Equality Center (GEC) from Nihonmatsu Castle.

Bottom: Ukiyoe print of a village at the base of a mountain with a Shinto Shrine in the distance.

Opposite Left: Entrance into the brick base with the screen above.

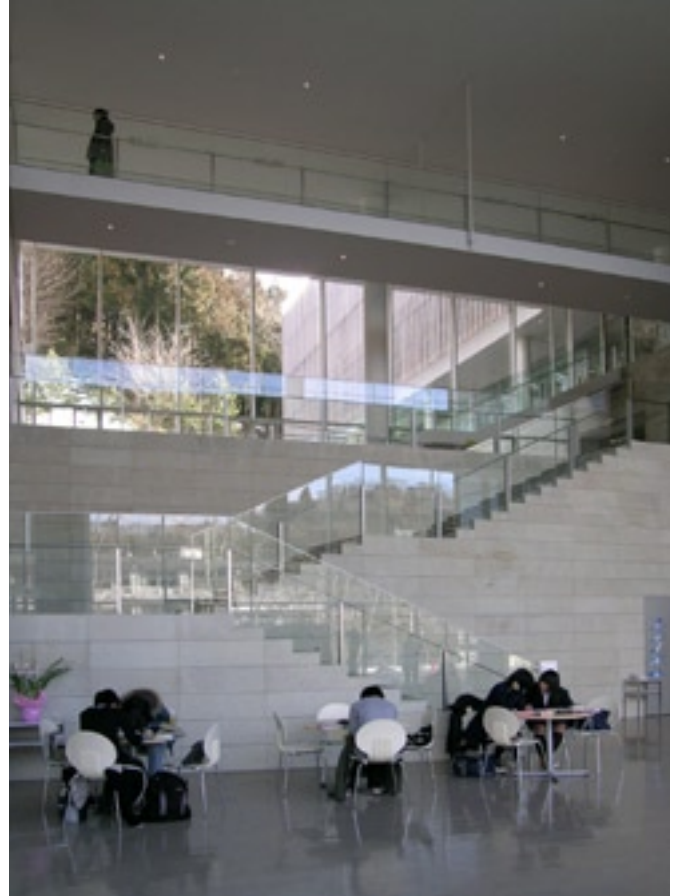
Opposite Right: The GEC cascades up the hill, beckoning the visitor ever deeper into the building.

Recent articles have applauded the sustainability of Fumihiko Maki's architecture due primarily to his use of screens.¹ Ultimately, however, such arguments represent a misreading of intent. In this age of "green-washing," architects often rationalize screens or sunshades as evidence of their buildings' sustainability. But Maki's buildings could rarely be considered sustainable by such measures as energy consumption, carbon emissions, or waste reduction.

Instead, Maki's buildings embody a different kind of sustainability—one that lies not in their technical performance, but in the conceptual overlays that imbue them with meaning. While Maki's screens do block the sun, and

consequently reduce the need for air conditioning, he does not conceive them as purely energy-saving devices. Rather, they derive from concepts that embody cultural, religious, social, spatial, material, artistic, technological, economic and humanistic ideas.

To illustrate the complexity of Maki's thinking, this article refers to a number of his designs. His use of screens on the exterior of the Gender Equality Center (GEC) in Nihonmatsu will serve as a particularly important touchstone, however. The GEC is a multiuse community center in a small town 250 km. north of Tokyo. Set on the northern slope of a forested hill, it faces the distant ruins of a fifteenth-century castle across a



populated valley. The two pieces of monumental architecture form a poignant dichotomy between the old and the new.

The GEC rests on a heavy, brick base, up which a series of public spaces step steeply and extend out to a courtyard. But seeming to float above, its fourth and fifth floors are enclosed by a delicate screen of aluminum and wood louvers. The vertical louvers cloak a variety of functions, from seminar rooms and research labs to guest rooms. Apart from their material presence and technical performance, the louvers reflect deeper meanings rooted in traditional Japanese conceptions of space. They show how “sustainable” elements can be integrated

into an architecture that is also culturally resonant and aesthetically refined.

Traditional Sources

Maki’s intellectual flexibility allows him to reference various sources during his process of design. Some concepts such as inner space, veiled space, and relational space are uniquely Japanese, and were the conceptual starting point for Maki’s explorations with screens dating back to the 1970s. Others, such as atmosphere, symbolism and composition derive from Maki’s Modernist training. For the sake of clarity—and at the risk of oversimplification—I will try to separate these strands. In reality, while he is designing, Maki superimposes,

adds and subtracts such sources in an expedient fashion until he is satisfied. It is only when the work is done that one can rationalize this inherently irrational process.

Fundamental to Maki’s notion of space is the Japanese concept *oku*. There is no completely analogous word term in English. *Oku* connotes a mysterious depth or symbolic, unattainable center; it refers less to a measurable distance than to a metaphysical dimension, and can apply on many scales, from city to shrine. To describe the concept, Maki’s 1979 book *Miegakure Suru Toshi* referred to the paradigmatic Japanese village located along a river valley at the base of a forested mountain.² For the vil-



lagers, the mountain is imbued with a spiritual life, but it is not a place or a spirit that can be known. The mountain is a mysterious part of the collective unconscious, evoking a mystery that is neither sinister nor benign. It only lurks, and its presence constantly reminds the villagers that something unknowable lies beyond.

Many of Maki's designs incorporate the idea of *oku*, and screens are often used to choreograph the experience. For example, unlike typical architectural promenades that end in a climactic space, Maki's promenades often hint at something beyond without allowing the visitor direct contact. Thus, Maki's design for the Kaze-

no-Oka Crematorium guides visitors along a prescribed route where screens deny direct access and view but provide hints of an inner sanctum.

At the GEC, light emanating from behind the louvers hints at something within, but the screen does not allow direct visual access. Thus, as he or she mounts a series of ramps and stairs, a visitor catches glimpses of the spaces; but it is only after ascending all four stories that it is possible to occupy these mysterious spaces. By then, the inner experience has shifted, however, and it is the city (to the north) and the mountain (to the south) that lurk behind the louvers.

Closely related to *oku* is another

Japanese expression, *miegakure*. Literally "to glimpse something that is hidden," such as the moon passing behind clouds, it is a concept that embodies both the ephemeral and ambiguous. Maki explains it as the abstraction of an experience completed only in our minds. For instance, it is the white undergarment beneath the collar of a kimono that seduces the viewer into imagining what lies beneath—or, as Maki frames it for a Western audience, the lace negligee that hints at the shape of a naked body, without revealing it.

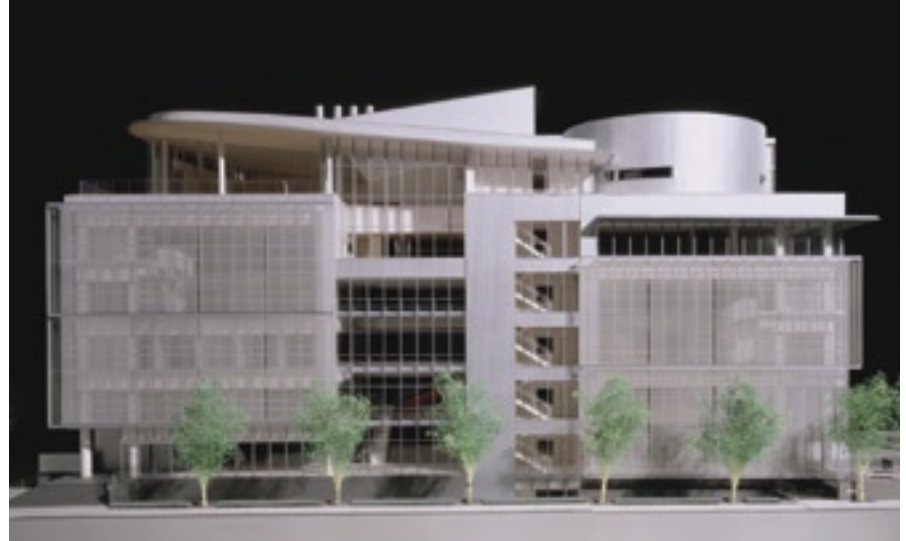
Maki also describes the elements of Japanese cities as veiled. Thus, screens may allow cursory glances to

the interior of a store while preserving the privacy of the patrons therein. Meanwhile, inside, the visitor finds refuge from the chaotic city while still being connected to it through the slits in the louvers. The GEC is designed to produce a similar effect. Especially as one walks parallel to the facade, the 24-cm. openings between louvers veil the private, interior realm.

Maki's design for the foyer of TEPIA, an exhibition pavilion for new technology, also explores this traditional Japanese notion of veiled space. Here, finely perforated metal panels are suspended from stainless steel cables to form an updated kind of *shoji* screen that filters views to the city from the interior, and views to the foyer from the exterior.

A third Japanese concept that has influenced Maki's architecture is *ma*. This is best understood as relational space, or the space between things. A *The New York Times* article once reported that when researchers asked schoolchildren from America and Japan to describe the contents of a fish tank, the American children described the individual fish, whereas the Japanese children described the relationships between them.³ This propensity is the basis of *ma*.

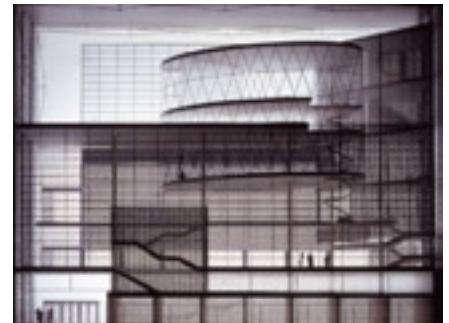
In a 1964 pamphlet, *Investigations in Collective Form*, Maki offered a version of this concept for modern times. In particular, he proposed a humanistic urbanism that advocated incremental, informal, open-ended urban growth as opposed to the megastructures that dominated architectural discourse at the time. The key, he wrote, was to emphasize transport nodes and public corridors. "Urban design is ever concerned with the question of making comprehensible links between discrete things. As a corollary, it is concerned with making an extremely large entity comprehensible by articu-



lating its parts."⁴ For Maki, the key to a humane urban environment is not just the quality of the individual buildings, but the quality of the spaces between.

Such concern permeates Maki's architecture at all scales. For example, in his competition entry for the Salzburg Congress Hall, he used mesh screens to enclose discrete elements, but the elements were amalgamated to produce coherently figural interstitial spaces. These transitional spaces extended the public network of streets into the building both visually and physically. The differing degrees of public exposure could also be "read" from the exterior, as successive layers of screens overlap to produce increasingly veiled space. And at the core of the building, this opacity was consolidated figurally as the building's *raison d'être*: the Congress Hall.

The GEC accomplishes similar goals through subtler means at a variety of scales. At a macro scale, the screens articulate a thickened threshold between city and nature. At the building scale, the louvers define two primary program areas within its



overall L-shaped design—its administrative and residential wings—while relating them through a common design. And at the scale of the individual rooms, the louvers negotiate the transition between primary space and the outdoors in diverse ways depending on scale and the desired level of

Opposite: A perforated metal screen filters views in and out of Tepia.

Top: The MIT Media Lab's facade is composed of a transparent glass atrium flanked by the private, screened space of the laboratories.

Bottom: Screens in the Salzburg Congress Hall Project were planned to define discrete forms as well as the spaces between.



privacy. Thus, the vertical louvers accentuate the grand, double-height volume of the guest room foyer, but they also relate more intimately to the smaller scale of the guest rooms by enclosing a narrow, outdoor terrace.

Other Sources

Maki's insatiable curiosity, coupled with his prestigious and international background, has led him down various avenues of thought. In addition to Japanese influences, Maki has always been a participant in contemporary

architectural discourse. When examining his design approach, it is not easy to isolate the various sources; references to Bachelard are as likely as those to Basho.⁵ Maki's treatment of screens is likewise subject to influences beyond the uniquely Japanese.

One of the primary determinants of Maki's design decisions is the kind of architectural quality or atmosphere he is trying to produce. He describes this in terms of a palette of options: cool/warm, high-tech/homey, slick/earthy, abstract/articulated, light/massive, shiny/textured, etc. Maki is not dogmatic about these choices: "Which option to choose for a given project depends on the client, the site, the budget.... In the end, it is the enrich-

ment of space that is more important than selling an image."⁶ He candidly admits that many of these decisions are based merely on the client's, or his own, personal preferences.

In this sense, the exterior screen on the GEC has various spatial functions, but it also plays an important atmospheric role. The louvers are designed as pinwheels of aluminum and wood so that the feel of the building changes as it is experienced from different places. Maki felt that an all-metal screen would have created too imposing an edifice, while an all-wood screen would have been a fire hazard. Therefore, he developed a hybrid solution that combined the strength of metal with the warmth of wood. The use of wood also echoes the forest backdrop, so that the screen conceptually bridges between the urban and the natural.

The wood lattice in the Toyama International Conference Center accomplishes similar objectives. Here, the wood glows as it modulates the sunlight entering the foyer. As seen from the outside, however, the lattice also mediates the high-tech appearance of the metal-and-glass building, by producing a secondary reading of the facade, and providing human scale for a monumental edifice.

Maki sometimes refers to his screens as "signs"—billboard-like elements. Most contemporary modernists would downplay the influence of 1980s postmodern theory; however, Maki readily acknowledges the symbolic function of architecture. For example, the GEC's unique hybrid louvers are an easily recognizable feature of this important public building. At night, in particular, they allow it to glow at the base of the dark, wooded hill—and provide symbolic reference of the institution's modernity.

The Graduate Research Center

"In architecture you can start with anything; in the end, it must be a piece of architecture as you'd like to see it." - F. Maki

at Keio University uses a perforated metal screen to similar effect. During the day, the stainless steel glitters in the sun and stands in stark contrast to the surrounding concrete campus. At night, Maki intended the building to glow with a cool, green light that would symbolize the 24-hour occupancy engendered by its international research agenda.

Contemporary architects also tend to scoff at the role that traditional aesthetics play in their design processes. Maki, however, will readily rationalize formal decisions based on “composition.” The design of screens is no exception.

With the GEC, Maki strove to construct a base that was “of the earth,” and a top that was “of the sky.” The bottom two stories are clad in brick, the third story is recessed, and the screen facilitates the apparent dissolution of the fourth and fifth levels into the air. Meanwhile, a vertical void cuts through the middle of the building, signaling the public space that climbs up through it. This design approach of a fully-glazed, central atrium flanked by screened “programmed” areas is a common strategy for Maki. One can also see it in his design for the as-yet unbuilt Media Lab at MIT.

Maki’s approach to screen design, like the overall design of his buildings, places emphasis on technical performance. The GEC’s louvers were necessary, for instance, to shield the glazed facades from excessive solar heat gain. The louvers are especially effective in conserving energy in the southwest-facing research laboratories. However, the heat gains and losses allowed by the expanses of glass would seem as much a concern as the solar radiation shielded by the louvers.

This is a common theme in Maki’s use of screens. Because many of his buildings have glass facades, they

would be uninhabitable if left unprotected from the sun. The screens, therefore, are less a gesture toward energy conservation than a response to the pleas of mechanical engineers for help.

The Tokyo Church of Christ is a case in point. Here Maki designed a light-filled sanctuary that faced west onto a noisy boulevard. This created difficult problems of heat gain and sound insulation that needed to be addressed head-on. Maki’s solution was an innovative trombe wall using fiberglass mesh and fritted glass to filter excessive sound, heat and light. The resulting composition glows at twilight, giving life to the setting sun instead of spurning it.

Subhead

Maki recognizes that sustainability is one of the major issues in contemporary design. But, he adds, “while some people say it is the most important thing, I think it is just as important as other issues.”⁷⁷ In fact, Maki tends to consider sustainable design a technical issue requested by enlightened clients; absent such a requirement his buildings rarely achieve significant reductions in energy use, waste production, or carbon dioxide emissions. Furthermore, the mostly glass facades typically lead to high energy use, and his favored materials such as stainless steel and anodized aluminum are environmental liabilities.

While Maki’s architecture might not conform to the standard conventions of sustainable design, however, there may be more important considerations. Given the resources that go into constructing, demolishing and replacing a building, its longevity is a key element of its sustainability. One may even argue that sustainable architecture is that which endures because it is valued. And in this regard, the

rich overlays of meanings in Maki’s designs are key to his buildings’ long-term appeal.

Maki sees the complex technical challenges faced on most projects as opportunities for his architecture to reflect society. The GEC’s louvers embody the Japanese cultural constructs of inner space, veiled space, and relational space. They are comments on the natural and artificial, the forest and the city. They produce an atmosphere of welcoming warmth, and high-tech, cool precision. They are a symbol for a modern, public institution. They compose the building’s facades from without, and frame views from within. They also protect the building from the sun.

To say that these louvers are merely sunshades is to misunderstand the architecture. Maki is a world-class designer, not an environmentalist, and his conceptual approach opposes the tendency to design architectural elements as single-functioning accessories. His screens are part of an integrated architecture that embraces the complexities, ambiguities and multiplicities of modern life in order to generate unique and enriching places.

Notes

1. For example, “Control of Vision and the Environment,” *Techne* 1 (February 2004), pp. 11–17.
2. Fumihiko Maki, *Miegakure Suru Tosbi* [in Japanese] (Tokyo: Kajima Publishing Co., 1986).
3. Erica Goode, “How Culture Molds Habits of Thought,” *The New York Times*, August 8, 2000.
4. Fumihiko Maki, “Investigations in Collective Form,” *The Japan Architect* 16 (Winter, 1994), pp. 265–67.
5. Gaston Bachelard was a twentieth-century French poet, philosopher and scientist. Matsuo Basho was a seventeenth-century Japanese poet.
6. Fumihiko Maki, interview with author, October 23, 2004.
7. Ibid.

The Polycentric City

Greg Tung with Ellen Greenberg

The thirteenth Congress for the New Urbanism was convened June 9–12 in Pasadena's 1931 Beaux-Arts jewel of a Civic Auditorium and within a flanking pair of bunker-like 1970s-era Conference Center annex buildings. With the latter's windowless concrete facades raked sharply away from adjacent streets and plazas, as if to divert the force of a truck-bomb, the complex offered a strikingly grim, if unintended, metaphor for urbanism in an age of terrorism. But nearby, downtown Pasadena offered much positive evidence of a resurgence of urban culture.

Across the street, the once-enclosed Plaza Pasadena Mall has been transformed into the mixed-use, open-air Paseo Colorado (2001). Nearby Oldtown has been successfully revitalized, and its impact is spreading beyond its Colorado Boulevard spine. LA County's Metro Rail Gold Line (2003) now courses through and underneath the city. And a decade's assemblage of downtown and transit-oriented housing has now added resident vitality.

Pasadena and its setting within the Los Angeles region also served to illustrate this year's overall theme of "The Polycentric City." It also illustrated a larger point and contention of the CNU: that populous urban regions are dynamic urban laboratories for shaping the "block, the street, the building; the neighborhood, the district, the corridor; and the metropolis, city and town."

Major Issues

The 2004 Congress extended and updated major areas of focus from the two preceding Congresses—in Chicago (2004) and Washington, D.C. (2003). It also showed that New Urbanist principles and obsessions are engaging (or at least attempting to

engage) a range of important issues at scales from regional growth patterns to mini-malls. All in all, however, the theme of polycentrism was perhaps as much about the CNU itself as it was about its urban object of invention and inspiration.

Form-based coding. New Urbanism's early form-based code efforts won attention, but their derivation from controlled platting of greenfield projects led to skepticism over their applicability to the irregular and dynamic lot patterns of existing cities. Municipalities that opted instead to graft elements of form-based coding onto conventional density and land use controls found that long, unwieldy documents and a more complicated permitting process would often result.

The latest form-based coding projects (Columbia Pike in Arlington, Virginia, and Downtown Ventura, California, for example) have specifically engaged the complexities of existing city fabric with an emphasis on compact and usable regulatory tools. The most ambitious of these have focused the organizational basis for the code on building types rather than land uses; several sessions addressed recent case studies and methods.

Green Urbanism. In previous years, most "green" discussions at CNU could only address buildings—and to a limited extent, landscape and site development. This year, a number of sessions took on the potentials of green urbanism and the refinement of what might constitute a LEED-neighborhood standard. This work still appears to be in the early stages, but it still drove detailed seminars and discussions.

Transportation and Transit-Oriented Development (TOD). Transit sessions focused on the potentials of street-cars and bus rapid transit, while what

might be called "automobile-management" sessions looked at the false economies of free parking, the potentials of car-sharing, and the challenges and positive results of urban freeway removal. Overall, however, transit-oriented development was more of a thread woven through other urbanistic concerns than a freestanding "how-to" topic. Culturally, TOD also provided a kind of meeting ground for East and West Coast urbanists—as well as becoming an area of overlap for design-focused and region-focused urbanists to engage both the local and regional scale of places.

Public Space. Fascinating presentations were made on developments in shared public space from Europe—particularly the work of traffic engineer Hans Monderman in the Netherlands. His work has gotten rid of traffic-control signs, lane striping, and curbs on downtown streets to promote ambiguity, and force drivers to pay attention to their driving—in other words, this is not your mother's *woonerf*.

In terms of street design, an update was presented on CNU's collaboration with the ITE (Institute of Transportation Engineers) toward revision of national and local standards for the design of streets and roads. A lively and sometimes contentious discussion of allowable street widths, fire truck sizes, and turn radii also took place between fire marshals (bigger is better) and street designers (small is beautiful).

Domestic diplomacy. "Conservatives and Urbanism," "Religion and Civic Art," "Slow Food and the Fast Life," and "Ethnicity, Economy and Urban Form" were all sessions this year that involved social initiatives (some of which were deliberated and proposed at previous Congresses). In general, they attempted to broaden dialogues

with groups or movements not previously engaged with New Urbanism, and in some cases openly opposed to it.

What might be termed “other urbanisms”—the everyday urbanism of mini-malls, billboards, and parking lots; and Latino New Urbanism as a synthesis and adaptation between the old culture and the new accommodated settlement pattern, for example—were also given forums to question and critique New Urbanism, and vice versa.

International relations. This year’s Congress sessions, awards and exhibitions signaled the growth of connections with the CEU (Council for European Urbanism), and nascent Australian and Israeli Urbanist movements. The work of Australian and Swedish urbanists made a strong showing in the Charter Awards.

Perhaps because the CNU is essentially an Anglophone organization (so far) and was formed historically in opposition to conventional American suburban development, there has been little formal presence of practicing urbanists from Asia, South America, and Africa. Nevertheless, these continents are home to the world’s greatest megacities, and on the outskirts of these megacities one can find rapidly growing and sought-after subdivisions patterned after American suburbs.

Home-court advantage. The Congress shone a spotlight on the work of Pasadena-based Moule & Polyzoides Architects and Urbanists. MPA was one of the major host firms and a founding member of CNU. Particular emphasis was given to their courtyard housing projects, which derive from a specific Los Angeles history and sensibility.

At several of its sessions, MPA and others also presented a theoretical repudiation of the Reyner Banham’s

Los Angeles: The Architecture of the Four Ecologies. As an alternative, they proposed a morphogenic structure of five Los Angeles(es) through history—Pueblo, Town, City, Metropolis, and Polycentric Region. They and others also assembled an excellent and comprehensive survey of Southern California Urbanism for the Congress, entitled *Los Angeles: Building the Polycentric Region* (Alan Loomis and Gloria Ohland, editors), which was provided to all attendees.

Other Conference Proceedings

As in its previous meetings, the CNU’s political engagement was much in evidence in 2005. Los Angeles Mayor-elect Antonio Villaraigosa delivered a keynote address, raising Los Angeles-themed issues of urban mobility and livability, and political and cultural inclusiveness. The UK’s Prince Charles also made a videotaped appeal to cement common cause between the Prince’s Trust and the CNU.

In a change from the pattern of recent years, the annual Charter Awards saw an increase in the number of awards presented to projects at the regional scale, and in those given to the work of large firms. Was this evolution in the practice of designing these projects, a change in the jury attitude, or a change of interest in the program by large firms? It’s an interesting evolution, in any case.

For the first time, “Civic Art” awards were also given out by the local host committee. A lifetime achievement award went to Phil Angelides (developer of Laguna West, former California Democratic Party chair, currently State Treasurer, and declared California gubernatorial candidate). A policy and implementation award went to Rick Cole (former Pasadena Mayor and Councilmember,

former City Manager of Azusa, and presently City Manager of Ventura). An environmental award went to the NRDC. But perhaps most controversially, a physical design award went to Gehry Partners for their Disney Concert Hall, a choice that was hotly contested in on-line forums immediately following the Congress.

In addition, regional chapters of the CNU, first chartered in the 2004 Congress, made their first organized appearance—signaling a new phase of decentralization and local focus.

The Congress concluded with Janus-faced presentations by Jan Gehl and James Howard Kunstler. first, Gehl puckishly described how shared street and public spaces have succeeded in revitalizing city life in parts of Europe. But this was followed by Kunstler’s dark predictions of “The Long Emergency,” his dystopian vision of the coming failure of the American suburban economy and lifestyle.

During the traditional ensuing “open mike” session, attendees’ comments included protests against the lack of democratic discourse within the organization and the high cost of dues and conference fees for students and nonprofessionals. Attendees expressed frustrations that New Urbanism has not being able to climb out from under its stereotypes (“the porch people”), and that its public image is defined by critics.

Finally, there were musings over the CNU’s future. While CNU founders are still very much in leadership roles, the rise of regional chapters, the increased activities of the “next generation” group, and other trends may be pointing toward transition and further evolution of the organization.

New Visions of Suburban Life

June Williamson

When did suburbia begin? It's a deceptively simple question. Is Levittown really a "first suburb"? What about Llewellyn Park and Riverside? Brooklyn and Brookline? The answer, it seems, depends on who is asking, and which paradigm they employ.

Such complexity hints at the need for policy-makers and academics to take suburban environments more seriously. Indeed, according to Richard Guardino and Daniel Rubey, organizers of the "New Visions of Suburban Life" conference, it is time to move suburbia to the forefront, "rather than treating it as merely an 'other' for the city."

The interdisciplinary conference, held March 18 and 19, was the inaugural effort of the Center of Suburban Studies, a think-tank founded in 2003 at Long Island's Hofstra University to study suburbia's problems and potentials. As if to accentuate the nature of this shift from more city-centric visions, several commentators noted how panelists at the conference were as likely to come from suburban community colleges as from "brand-name universities."¹

Subhead

In keynote addresses, Robert Puentes, a fellow at the Brookings Institute, proclaimed a "policy blind spot" toward those municipalities he termed America's "first suburbs." Although diverse, these aging postwar developments, predominantly in the Midwest and Northeast share many characteristics: slow growth, aging populations, and ethnic diversity (the latest census indicated that one third of their residents are minorities—many foreign-born). The most troubling finding, however, is that they now increasingly include pockets of concentrated poverty.

Noted historian Robert Fishman (University of Michigan) then cast



this picture in more optimistic terms, proclaiming the coming of "The Fifth Migration." In homage to Lewis Mumford's prescient 1925 article "The Fourth Migration," Fishman, author of *Bourgeois Utopias*, suggested that the trend of people moving back to the city or staying there to raise families would soon extend to these aging first-ring suburbs.² This constitutes a tremendous opportunity to reverse the dominant twentieth-century trend toward decentralization, he said.

Among other highlights of the conference was a paper by Becky Nicolaides (UC San Diego), entitled "Beyond White flight." In defiance of stereotypical views, it offered preliminary research into the history of stable, ethnically diverse suburbs of Los Angeles.³ In paired papers, Leslie Wilson and Joel Schwartz (Montclair State University) also focused on suburbs with a long history of ethnic and racial diversity, this time in New Jersey. But they described how even these model communities enacted

de facto segregation, particularly in schools through the use of IQ tests and districting.

Also of interest was an exploration by Robert Beuka (Bronx Community College) of the changing face of suburban fiction, as it moves from "Cheever Country" to the recent work of novelist Chang-Rae Lee.⁴ And in a panel on transportation, Claude Willey (Cal State University, Northridge) recounted the sights and sensations of his unusual bicycle commute from Pasadena to Northridge, about 30 miles, in language reminiscent of magical realism.

On a more serious note, the conference included a special screening of the 2004 documentary *Farmingville*, by Carlos Sandoval and Catherine Tambini. The film depicts the local effects of economic globalization as played out in a small Long Island town. Here, bitter, sometimes violent, conflict has broken out between blue-collar homeowners and Mexican day laborers living in overcrowded rooming houses. However, both sides

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Greg Tung and Ellen Greenberg are Principals at the San Francisco-based urban design firm of Freedman, Tung & Bottomley. In addition to his design work for the firm, Tung has taught urban design at U.C. Berkeley and has participated as a resource person for the Mayor's Institute for City Design and the GSA and NEA awards programs. Greenberg is an authority on emerging practice areas, including zoning reform, street and circulation-network design, and transit-oriented development.

June Williamson is a practicing architect and urban designer in New York City and a recent graduate of the Urban Design Program at the City College of New York. She and Ellen Dunham-Jones are working on a case-study book about retrofitting suburbs.

UC Merced: Time Will Tell

Christopher Adams and John L. Kriken



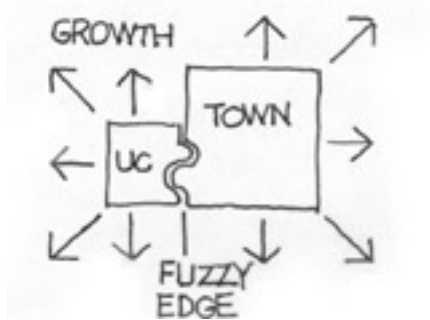
As the campus planner and lead campus design consultant for the new University of California, Merced, we wish to comment on the Spring 2005 article “New Campuses for New Communities: The University and Exurbia,” by Richard Bender and John Parman, which dismisses the idea of a campus as “more and more of a distraction to what real investment in higher education is coming to mean.” Such provocative questioning is an important aspect of our profession, and contrary to some of their asser-

tions, the new UC Merced campus reflects this kind of investigation.

Bender and Parman argue that “the idea of building a traditional campus may be more and more of a distraction to what real investment in higher education is coming to mean.” We would respond that a UC campus remains a distinct and single *place*, in the sense described by Frances Halsband in the same issue. The University of California has a basic mission in the state for research and historically has served as the primary public institution for

residentially focused undergraduate education. A UC campus is more than individual buildings to be inserted into the fabric of a town; it requires quasi-industrial districts for research, large playing fields, and significant land reserves for the housing of students and faculty.

The program for UC Merced was based on a study of the space requirements of public and private research universities throughout the United States. At such institutions, academic space needs are a function of number



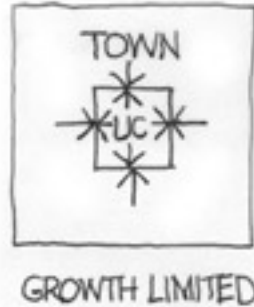
of faculty, not students. In converting space needs into land coverage, we considered elevator demand at class changes; building and safety codes, particularly for laboratories; and the surcharge for remodeling highrise spaces, all of which led us to midrise coverage. Because a university is always changing, we provided land for construction staging at all levels of growth. Our observation of UC campuses over the last half-century led us to provide generous reserves for faculty housing to allow Merced to remain competitive in recruiting faculty, regardless of the cost of housing in the adjacent community. Finally, parking demand, even at campuses with good public transportation, led us to provide realistic amounts of space for surface parking and eventually for parking structures.¹ The resulting total land area requirements were beyond what any city in California's San Joaquin Valley could accommodate.

In proposing the integration of the new campus into the core of Merced, Bender and Parman make significant assumptions about the city's eagerness to welcome the University with its power to reshape the community in pursuit of its academic mission. This proposal also assumes that the University has the administrative and financial resources to acquire the hundreds of separately owned parcels

that the new campus would ultimately require. As Halsband noted, when faced with a campus pushing outward, "neighborhoods are likely to push back—and often with good reason since these neighborhoods themselves have evolved into historic districts, with their own memorable and distinctive qualities of space and architecture." Merced's older neighborhoods—with their tree-shaded street grid, provided us with a model to emulate, not to destroy.

Bender and Parman cite the examples of UC campuses built in the 1960s at Santa Cruz and San Diego, which we agree suffer from their degree of separation from their host communities. Instead we studied UC Davis, Chico State University, and the Claremont Colleges, as well as older East Coast institutions in small cities, to see what worked and what didn't. From these examples, we learned that a successful town/gown interface requires close and continuous proximity on at least one edge of both the campus and the town and that car and truck traffic should go around, not through, this interface.

Our solution, which was developed in concert with Merced County planners, places the campus at the border of a new community at the edge of the existing city, within a grid of streets—which would organize development of both. A town center, within the



County's plan and also shown in the campus master plan, forms the heart of the interface. Museums, performing arts facilities, and sports venues will be built at this interface, while other university operations, such as the storage of hazardous materials and certain kinds of research, will be located away from the town. Even further away, a reserve for future research facilities—perhaps for something that cannot even be imagined now—is provided. (Who would have imagined a cyclotron when Berkeley was established in 1878?) We planned that traffic would not separate the campus from the adjacent community and instead, would connect to a new loop road around Merced, which had been initiated prior to the decision on campus location.

In the *long* run (which is the only way to consider a university master plan) we believe that Merced, the campus, and Merced, the town, will develop jointly as a thriving and exciting community. It will take a while (see photo of UCLA in 1930), but we urge Bender and Parman to come back and take a look.

Notes

1. UC Berkeley is considering increasing its parking from approximately 7,700 spaces to 9,000 despite its location on a BART line and at the confluence of a number of bus lines.

Opposite: Aerial view of Royce Hall and Powell Library from Goodyear Blimp, 1930. Photographer: Thelner Hoover (UCLA Class of 1930). From the Hoover (Thelner and Louise) Collection; originals located in the UCLA University Archives.

