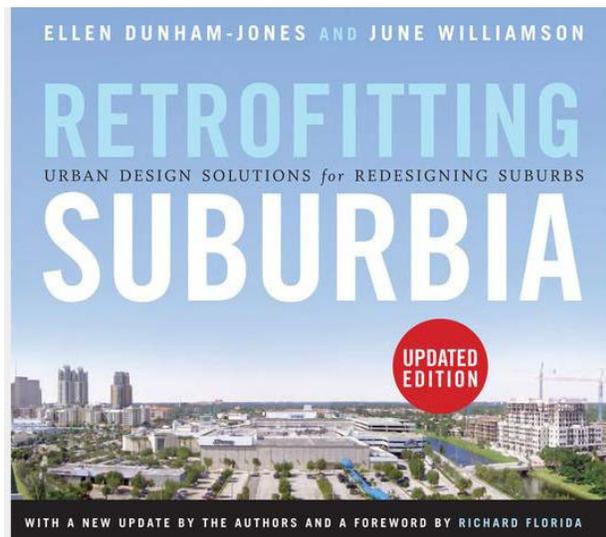


# Build a Better Burb: The Online Journal of Suburban Design

## 11 Urban Design Tactics for Suburban Retrofitting

By June Williamson

*“Historically, America’s economic growth has hinged on its ability to create new development patterns, new economic landscapes that simultaneously expand space and intensify our use of it.” —Richard Florida, from the foreword to *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs**



In the competition brief for Build a Better Burb, we asked designers to consider this question: “How might Long Island’s existing downtowns be creatively retrofitted – reinhabited, redeveloped and/or regreened – in ways that are economically productive, environmentally sensitive, socially sustainable, and aesthetically appealing?”

The formation of this central question stemmed from the findings of a decade of urban design research I conducted in collaboration with Georgia Tech professor Ellen Dunham-Jones. We wondered what was being done across North America with vacant big box stores, dead malls, dying commercial strips, traffic choked edge cities, outdated office parks and aging garden apartment complexes. For our book [Retrofitting Suburbia](#), we traveled around the country to find out, and what we found was eye

opening. In the book, we document and analyze over eighty fascinating examples of suburban retrofitting that, taken together, demonstrate the significant potential for profound transformation, over time, of the unsustainable sprawling patterns of late twentieth century suburbanization. We spent fifty years building and living in these suburban landscapes, and we must spend the next fifty retrofitting them for the new needs of this century, to help build a resilient future suburbia that is climate-sensitive, compact, pedestrian- and bike-friendly, and responsive to changing demographics and contemporary lifestyles.

Some might say that the answers to resiliency must be sought primarily in building up center cities, ignoring that fact that suburbs now comprise the majority – in land area, population and economic activity – of our urbanized areas. This line of thinking overlooks the reality that more potential gain could be achieved by focusing on adapting our *least* sustainable landscapes, in suburbia, to transform them into more resilient, equitable, adaptable, walkable, transit-oriented, and more public-oriented places. In a stagnant economy it is imperative that the built landscape be as self-sustainable and energy efficient as possible. Retrofitting and planning for retrofitting are more important than ever.

The three main strategies for retrofitting are:

- **Re-inhabitation**, or various forms of adaptive reuse,
- **Re-development**, or urbanization by increasing density, walkability, use mix, and
- **Re-greening**, from small parks and plazas, to restoring wetlands ecologies.

These strategies support our ideal of “incremental metropolitanism,” that is, the gradual emergence of a robust and efficient multi-centered network of infilled centers and corridors within existing North American metropolitan regions, replacing the pattern of ever-outward sprawl. Often, these approaches are used in combination, with re-inhabitation and re-greening the most popular due to their lower cost in the face of difficult-to-finance re-development strategies. However, changing the urban structure rather than the current building uses and densities – which are more easily changed – constitutes the primary task of suburban retrofitting.

How are these strategies implemented? Following are several tactics, illustrated with projects from our book that demonstrate a range of opportunities for retrofitting suburbia to sustainable urbanism. These tactics are drawn from lessons learned from our research, lessons that might guide the next generation of suburban retrofits.

### **Tactic #1: Reuse The Box**

**Adaptive reuse of vacant commercial buildings for new, often community-serving uses, such as libraries or medical clinics, is both socially desirable and reduces waste.**

In the Denver area, two anchor department stores were retained at shopping malls that were otherwise demolished. Both stores were built in the 1980s to the same prototype design. One, at [Belmar in Lakewood](#), was re-inhabited as an office building, with retail on the ground floor. The other, at [CityCenter Englewood](#), is now City Hall. Light filters in from a new central atrium cut through the building’s floor slabs.

Other examples of reusing the box include the award-winning [Camino Nuevo Charter Academy elementary school](#) in Los Angeles, in a former mini-mall complex, as well as numerous churches, clinics, public libraries and other non-retail, community-serving uses that have emerged in empty big box stores and strip centers.

### **Tactic #2: Provide Environmental Repair: Restore Wetlands and Creeks**

**Retrofits sometimes provide the opportunity to reconstruct wetlands and creeks, components in the metropolitan watershed that were erased or diminished by suburban development patterns.**

Many malls and strip centers that pre-date wetlands protection legislation were built on wetlands, because these were the areas where large parcels could more readily be assembled. Some of the properties have continuously suffered from poor drainage and occasional flooding.

In the Northgate neighborhood in northern Seattle, a little-used overflow parking lot for a busy regional shopping mall was prone to flooding. The headwaters of Thornton Creek were buried in a large culvert beneath the asphalt and local environmentalists lobbied hard for “day lighting.” Developers were also interested in the property while planners also hoped to see more density, since the terminus of a light rail line was planned for the adjacent quadrant of overflow mall parking. The win-win solution? A combination of new “soft” storm water infrastructure in the form of a very sophisticated vegetative bioswale – [the Thornton Creek Water Quality Channel](#) – plus mixed-use development with hundred of attractive new housing units in Thornton Place.

### **Tactic #3: Revise Zoning Codes and Public Works Standards (Re-development)**

**Make it easier to build compact, mixed-use developments with complete streets, and make it harder to build single-use, auto-dependent places.**

This tactic primarily operates at the level of local government where land use and decisions are made. A promising trend is the reexamination of dated zoning codes that require separated uses, deep setbacks and wide streets that practically guarantee automobile dependency. Instead, form-based codes and new infrastructure standards may be adopted.

Citizen-activists can also apply this tactic with temporary events, for example by participating in [PARK\(ing\) Day](#), held worldwide every September. Begun as a small ad-hoc urbanism project by [REBAR](#), a San Francisco design collaborative, it has grown significantly, to 140 cities in 21 countries. The simple concept: on-street parking spaces are reclaimed for non-auto use by feeding the meter and occupying the space with a temporary public park—perhaps 150 square feet of sod and a few folding chairs. A similar program is [Build a Better Block](#), a planning initiative based in Dallas that works with communities to temporarily transform streetscapes as a way to permit a community to engage in a visioning process—albeit temporarily—at full scale. These projects help lead the way to more permanent retrofits.

#### **Tactic #4: Keep Block Size Walkable**

**Without careful modulation, the hybridization of suburban building types and parking into urban blocks and streets can lead to oversized blocks and monotonous building fronts. The rule of thumb for a walkable block is a perimeter dimension of less than 1700 linear feet.**

The successful building prototype known as a “Texas Donut,” shown here at Legacy Town Center in the large Dallas suburb of Plano, Texas, consists of embedding unadorned parking decks in the center of a four-story residential apartment block, resulting in an inviting streetscape. However, the resultant blocks are somewhat large, just barely walkable in dimension. Reductions in parking requirements and remotely locating residential parking could yield improvements in walkability. There is much room for architectural innovation in devising new housing and block types.

#### **Tactic #5: Establish a More Continuous Streetscape with Shallow Liner Buildings**

**Wrappers can be employed around reused box buildings and liners can screen surface parking lots to provide a more continuous streetscape.**

[Mashpee Commons](#), a retrofit of a strip center on Cape Cod in Massachusetts begun in the mid 1980s, deserves credit for pioneering many of the challenges to conventional suburban development and zoning that are increasingly becoming routine in new retrofitting projects. It utilizes twenty-foot deep liners, leased to local “mom and pop” retailers, around the parking lots to give a two-sided street presence to the Commons.

Liners can also be incorporated into buildings. For example, a structured parking deck might have a ground floor liner of small retail shops or artists’ studios, as shallow as twenty-foot deep (the depth of one row of parking spaces).

#### **Tactic # 6: Use Appropriate Street Types and Real Sidewalks**

Many suburban streets are overly wide, and lack sufficient sidewalks and crosswalks. The Institute of Transportation Engineers (ITE) [2010 manual on designing walkable urban thoroughfares](#) provides recommended design guidelines for a broad range of context-sensitive street types.

Santana Row in San Jose, California, is the upscale mixed-use retrofit of a shopping center that boasts a very well-proportioned Main Street, with appropriately scaled on-street parking, and small, landscaped gathering areas in the median. Santana Row is not particularly well connected to adjacent areas, but its internal streetscapes are a good model.

Many states, including New York, have passed a version of “[Complete Streets](#)” legislation, requiring state and local transportation agencies to factor non-car uses of streets and sidewalks into all projects.

#### **Tactic #7: Improve Connectivity for Drivers, Bicyclists and Pedestrians**

**Build interconnected street networks to increase walkability and public safety, while distributing traffic and reducing overall [vehicle miles traveled](#) (VMT).**

For the full gains of retrofitting to be realized, any redeveloped node should make connections to the adjacent built fabric, so that people can walk, bike or drive shorter distances. The design for Gramercy in Carmel, Indiana, the redevelopment of a “pod-like” golf course community into a mixed-use, walkable neighborhood, proposes to change the points of connection from one to eleven.

#### **Tactic #8: Consider *Future* Connectivity and Adaptability**

If desired street connections cannot be achieved when the retrofit is initially designed and constructed, because of NIMBY concerns or other barriers, design in easements for future linkages. If desired densities and parking decks cannot be justified yet, design parking lots as future building sites, with utilities placed in the future streets at the outset.

The exemplar retrofits of Mashpee Commons and Belmar illustrate this tactic. At Mashpee Commons the owners of a neighboring apartment complex were wary of forming a direct street connection, so the master plan includes a stub out location. At Belmar, a strip of land to the east wasn’t part of the retrofitted property, but the new streets align with the grid of the subdivision beyond, and could be connected sometime in the future.

Parking lots in lower density commercial retrofits can be designed for “anticipatory” retrofitting. In essence, the parking lots can be laid out in a block configuration, with each parking area conceived of as a potential future building site. The collector lanes between blocks of parking, where below-grade utilities should be placed, can be planted with “street” trees to reinforce the potential.

#### **Tactic #9: Diversify Housing Choice and Price**

**The future success of suburbs will hinge on their ability to respond to changing demographics; provide more housing choices.**

One of the key characteristics of suburban housing is the preponderance of single-family homes and the attendant lack of racial, age, and income diversity. Varying degrees of housing types, affordability, accessibility and incentives can attract greater diversity in the suburbs. For example, housing for seniors and “empty nesters” forms a key part of many retrofitting plans in order to allow for people to “age in place” or to be near their families. A key aspect of this tactic is to strive to integrate housing choice into existing neighborhoods.

One example of an innovative housing type that might appeal on Long Island is The Towers at University Center, a 910-bed apartment building that caters to area college students, located close to transit (bus and Metrorail) and part-time service jobs. While not a dorm, the four-bed, four-bath units are optimally designed for sharing by unrelated adults (i.e. students and recent graduates).

#### **Tactic #10: Add New Units to Existing Subdivisions**

**Infilling residential neighborhoods with accessory dwelling units (ADUs) can provide affordable housing choices for singles and seniors, and increase residential density without dramatically altering the morphological pattern.**

A change in zoning can allow the legalization and addition of accessory dwellings, attached or detached in backyard cottages, to existing homes. The benefits, beyond affordability and density, include more housing choice, the opportunity to accommodate immediate or extended family, and increased flexibility in living arrangements.

Several municipalities in the Pacific Northwest have recently passed widespread zoning revisions permitting detached accessory units. In the early stages of the process, in order to gain public support, the City of Seattle launched a design competition and built three attractive demonstration units. More recently, Seattle's Planning Commission and Department of Planning and Development issued a comprehensive "[Guide to Building a Backyard Cottage](#)."

### **Tactic #11: Invest in Quality Architecture**

**The most successful and sustainable retrofits will be beautiful, durable, culturally significant, and built to meet high standards of environmental performance both in the public spaces and the buildings.**

Solidly built buildings in retrofits should be designed with the capacity to accommodate innovative architectural additions and infill over time, complemented with attractive, high-performance landscapes that can function as "soft" storm water infrastructure.

The time for designing a more resilient suburban future is now.