ELLEN DUNHAM-JONES AND JUNE WILLIAMSON

RETROFITTING SUBURBIA

URBAN DESIGN SOLUTIONS FOR REDESIGNING SUBURBS FOR 21ST CENTURY CHALLENGES

WITH A NEW UPDATE BY THE AUTHORS AND A FOREWORD BY RICHARD FLORIDA

Ellen Dunham-Jones, FCNU
Professor, MSUD Director, Georgia Institute of Technology

Images are for academic purposes only and may not have copyright approval
unintended consequences:

traffic and auto-dependence
suburbia overburdens arterials and underuses local streets, in a vicious spiral

public health & aging
suburban living raises risk of obesity, suicide, and death by automobile crashes

climate change & sustainability
suburbanites’ have higher carbon footprints than urbanites
living compactly reduces per capita water and energy use

affordability
low density costs municipalities more to serve with less revenue per acre
“drive ‘til you qualify” savings are wiped out by transportation costs

poverty and social capital
since 2005 more U.S. Americans in poverty live in suburbs than cities
1035 shopping malls: 1/3 are dying

50,000+ strip malls, vacancies filling

350,000+ big box stores, 300 mil vacant sf

suburban office vacancy rates 14-22%
WELCOME

The 2015 SA Tomorrow Comprehensive Plan is the first update to the plan since 1997. Use this website to stay informed and involved about the blueprint for the future of our city.
market driver headlines:

demographic shifts

suburbia simply isn’t “family-focused” anymore. 2/3 of suburban hh’s don’t have kids, 85% of new hh’s won’t through 2025. Millennials value wifi, nightlife and connectedness more than cars. 58% of 65+ want walkable urbanism (Pew, 2014)

the new centers

as metros have expanded, first ring suburbs now have central locations, often meriting densification, often as a twin boom with a revitalizing downtown that has successfully proven the market for urban living.

the old centers

The expansion of malls killed many Main Streets. Now that malls are dying, those Main Streets are coming back
“60% of demand for housing will be in the “urbanizing suburbs” for at least a generation.”

C. Leinberger, Builder, March, 2015

Washington DC – 2012:
• 43 Walk Ups, 50% in the suburbs
• 75% price premium for office rents
• 71% price premium for multi-family residential rents/sales

Atlanta, GA – 2013:
• 2008-2012: 60% of region’s development took place in Atlanta’s 27 Walk UPS.
• 112% avg rent premium

Dallas, TX – 2014:
• 9 Walk Ups. DART TODs?
• Only 7% of Walk UPs are in the suburbs. Good opportunities for urbanization

BUT – TOO OFTEN – THESE RENT PREMIUMS MAKE WALKABLE, MIXED-USE NEIGHBORHOODS UNAFFORDABLE
Raising office rents by inserting walkable, mixed-use as an amenity?

Legacy Town Center, Legacy Business Park, Plano TX: DPZ
Cassidy Turley’s Q2 2013 Report: existing rental rates in Far North Dallas have risen 22% in 5 yrs to $29.04/sf and 4th lowest vacancy rate (9.9%) of 13 Dallas submarkets.

“Just up the North Dallas Tollway, the success of Legacy has sparked the construction of Granite Park Four, Hall Office Park, Legacy Tower, Dominion at Parkwood, and Lincoln Legacy Two, all of which are underway, in hopes of mirroring what Legacy did so well: creating a premier mixed-use environment.”  
Ward Eastman, “The Legacy Effect,”  
Can San Antonio’s regional centers (and the corridors between them) introduce new housing types and retrofit their streets and underperforming properties to better leverage URBANISM AS THE NEW AMENITY?
To stay downtown, AT&T demands more pedestrian-oriented streets
AT&T campus, Dallas, TX

Dallas to close, shrink and make streets two-way to keep AT&T downtown
From grocery anchored strip mall to live-work extension of neighborhood Main St
The A&P Lofts, Old Cloverdale, Montgomery AL
City Loft Corporation, McAlpine Tankersley Architecture, The Colonial Company
Urbanism is the new amenity EVEN in highway-oriented employment centers

Generation Park, Houston, TX: McCord Development, Gensler

- 4,000-acre mixed-use business park
- Anchored by 173-acre TechnipFMC campus adjacent to mixed-use Redemption Square
- 900-acre Foreign Trade Zone, 2 new college campuses
Connectivity
• Transit
• Fine-grained street/sidewalk network
• trails

Convenient destinations
• Mix of uses
• Walk Score

Pedestrian-Friendly experience
• Active facades
• Streetscaping
• The street as “outdoor room”
• Slow car speeds: “20 is Plenty”

retrofitting challenge: Walkability
Anticipatory Retrofits: parking lots as future building sites w “streets” & utilities

Englewood CityCenter, City of Englewood, Miller Weingarten Realty, Trammell Crow Residential, David Owen Tryba Architects, Calthorpe Associates

Sources unverified
Liner building to screen parking lot
402 Melbourne Ave, Winter Park FL: WPRA LTD, Duany Plater-Zyberk & Co
First steps in retrofitting a 1970’s edge city: liner retail and streetscaping

Crystal City, Arlington County, VA: Torti-Gallas, Vornado Development, WDG Architects
from taxi distributor to anti-corporate bike-oriented mixed-use, creative office

TAXI, Riverfront North, Denver, CO: Zeppelin Development

- Mix of reinhabitation, redevelopment & regreening provides compelling connections to past, future & nature while inviting innovation
- Stimulated rebranding of industrial area, over 27 redevelopments, corridor improvements & transit coming
Streetscaping connects education-anchored uses on former commercial strip
Fiesta District, Mesa, AZ
Road Diet: from 5-lane arterial to 2-lane Main Street with parking “ramblas”

Lancaster, CA (pop 157k): CT/KDF Comm’y Devel. Partners, Moule & Polyzoides, Peter Swift

Since revitalization started in 2009: $106mil in New Markets Tax Credits for redevelopment for local entrepreneurs; 50 new businesses; 10% increase in downtown property values; 50% cut in traffic collisions
Accelerating reinhabitation, redevelopment and regreening through light rail

ReInventPHX, Phoenix, AZ:

- Reversing Phoenix’s development pattern through light rail, TOD, and form-based codes that increase walkability and choices
- Downtown is proving the market for urban living & working, the other areas are following

Reinhabitation of car dealership

Redevelopment in TOD

Regreening of canal for TOD access
Preserve existing affordable housing

Equitable access: to transit, jobs, parks, schools, and housing
• Connections of affordable housing to affordable transportation
• Extension of social services and job opportunities
• eTOD via TOD Aff Hsg Funds

“Missing Middle” housing types

Inclusionary zoning

100% replacement units

The city as master developer
TOD fund enables acquisition of land near future transit for affordability

Avondale Apartments, Denver, CO: Urban Land Conservancy, Del Norte Nhd Devel Corp, studio completiva

Rodolfo “Corky” Gonzales Branch Library: City and County of Denver, Studiotrope
Expanding affordability for renters and owners with accessory dwelling units
Licton Springs DADU, Seattle, WA: Chad Rollins

Courtesy of Chad Rollins and Jonathan Reich, from Retrofitting Suburbia (Wiley, 2009)
Affordable, dense infill gracefully transitions the commercial-residential seam

Cottages on Greene Street, East Greenwich, RI: 620 Main St Associates, Union Architects

Former auto-repair lot

First proposal for affordable housing

Inward views to stormwater-catching court

15-units/acre maintains local scale at street
From gas station to “missing middle” affordable housing on the arterial
2802 Pico Boulevard, Santa Monica: Moore Ruble Yudell Architects
Recapturing traffic islands for walkable, affordable redevelopment
Fort Totten MetroRail stop, Washington DC Planning Department

Source: Washington DC Planning Dept website

Art Place: Mkt-rate hsg, sr hsg, and museum

Walmart-anchored residential
From the Ho Hum Motel to apartments and health services for the homeless

Beacon Apts, South Burlington, VT: Champlain Hsg Trust, Burlington Hsg Auth., Safe Harbor Health Ctr

-mostly used by the homeless on state vouchers, the motel now provides permanent housing

The Beacon Apartments in South Burlington are newly renovated permanent housing for the region’s homeless. Photo by Chris Donnelly for VTDigger.

Chris Donnelly, with the Champlain Housing Trust, stands inside one of the newly renovated Beacon Apartments in South Burlington. Photo by Morgan True / VTDigger
After-School Program in aging apartment complex transforms opportunities
Willow Branch Apartments, Clarkston, GA: Marjorie Stagmeier, Star-C
• Provides summer school, after-school programs, health care, meals for children, community gardens and security guards to the 700 residents who pay less than $575/month rent
Water Quality:
• Daylight culverted creeks
• Reconstruct wetlands
• Slow, clean and control runoff

Too little water:
• Capture for reuse
• Conserve and recycle
• Replenish groundwater

Too much water:
• Regreen flood plains
• Stormwater parks
• Blue/Green infrastructure/LID
• Pervious surface
• Hard and soft barriers
• Buildings and infrastructure that can take a bath
• Planned retreat
From downtown mall to flood control park for the entire downtown
Meriden Green, Meriden, CT: Parsons Brinckerhoff, Milone & MacBroom
Upgrading suburban streets to “Living Streets”
Maplewood Living Street Demonstration Project, Maplewood, MN: Ramsey-Washington Metro Watershed District, City of Maplewood, Barr Eng’g, Kimley-Horn & Assoc.

- Street replacement project enabled reconstruction of 2 miles of residential streets, narrowing the pavement from 31’ to 24’, adding 32 rain gardens and one larger basin, 200 trees and 1.5 miles of sidewalk. Led to adoption of Living Streets Policy for all new street projects
- Resulted in 50% of rainwater runoff is filtered or infiltrated, 40% evaporates and only 10% of the water runs directly into storm sewers. 95% of homeowners maintain their gardens.
- Cost: $4.3 million in 2012. In 2016, city of 30k pop. has 700 rain gardens, national recognition and has inspired rain garden movements in Kansas City, Lexington KY, Toledo OH.
Upgrading 1940-s-50’s environmental, social, and transportation systems
Parkmerced, a 3,221-unit rental apt community, San Francisco, CA: SOM
5,665 net new residences with net zero increase in greenhouse gases, zero landfill waste, 100% aquifer recharge, 68-acres open space including an organic farm, 56% reduction in reliance on “the grid,” 100% replacement of 1,538 rent-controlled apts, 15% below market units in each construction phase, and re-routing of Muni streetcar through the site.
retrofitting challenge:
Social Capital

Gathering Spaces
Civic Engagement
Welcome diversity
Tactical urbanism
Play
Share: Uber, Lyft, Airbnb

Figure 16: Urban Heat Island Effect for the City of San Antonio.
from dead mall to mixed-use NORC with sr housing, grocery, hotel: zero stormwater runoff and geothermal heating and cooling

Promenade of Wayzata, Wayzata, MN: Wayzata City, Presbyterian Homes, LHB, DIIAP, InSite

The wetland site was drained for construction of the Bay Center mall in the sixties. In addition to capturing all stormwater on site under pile-supported streets, the project paid $129k for wetland credits to the Wayzata Wetland Bank to further protect the lake.

- 325 sr hsg units
- 85 conv’l hsg

City bought the mall, approved rezoning, and subsidized the infrastructure
Revitalization of suburban Main Street with local food and beverage

Pleasant Ridge, OH: Pleasant Ridge Development Corporation, Cincinnati Premier Realty, etc

- All-volunteer PRDC got Community Entertainment District designation, easing liquor licenses
- Grants and long-term loans for restoration brought back movie theater and 19th C hotel/shops
- Providing landing for food truck and pop-ups: Gorilla Cinema, Café Urbano, Cheesebar
From 3-acre truck loading facility to urban park w/ 600 ton BTU geothermal source

Guthrie Green Urban Park, Tulsa, OK: OSU, SWA, Kinslow, Keith & Todd Architects

The $8M conversion of the 3-acre site in an emerging arts district received a $2.5M ARRA grant to provide gardens, stage, pavilion and 120 wells to serve 120k of nearby non-profit users.
Eco-Suburban sprawl via drones and autonomous vehicles?

Future of Suburbia: MIT Center for Advanced Urbanism
retrofitting challenge:

Layered Solutions, PPPs, Departmental and Regional Cooperation, New Metrics of Success

Walkability
Auto-dependence
Public Health
Affordability & Equity
Social Capital
Jobs
Water
Energy
Waste