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RETROFITTING SUBURBIA

URBAN DESIGN SOLUTIONS *for* REDESIGNING SUBURBS

UPDATED
EDITION

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

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CASE STUDIES IN RETROFITTING SUBURBIA

URBAN DESIGN STRATEGIES FOR URGENT CHALLENGES

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WILEY

*Suburban retrofits
enable communities
to address the 21st
Century challenges
that 20th Century
suburban
development
patterns were never
designed for*

Disrupt auto-dependence

Support an aging population

Leverage social capital for equity

Add water and energy resilience

Compete for jobs

Improve Public Health

Disrupt Auto Dependence

- Car-owners pay \$25/day on average to own, operate, insure, park, maintain a car

Walkability & Mix of Uses

Multi-Modal Systems & Trails

Transit-Oriented Development

Road Diets

Street Networks

Parking Districts

Car Sharing

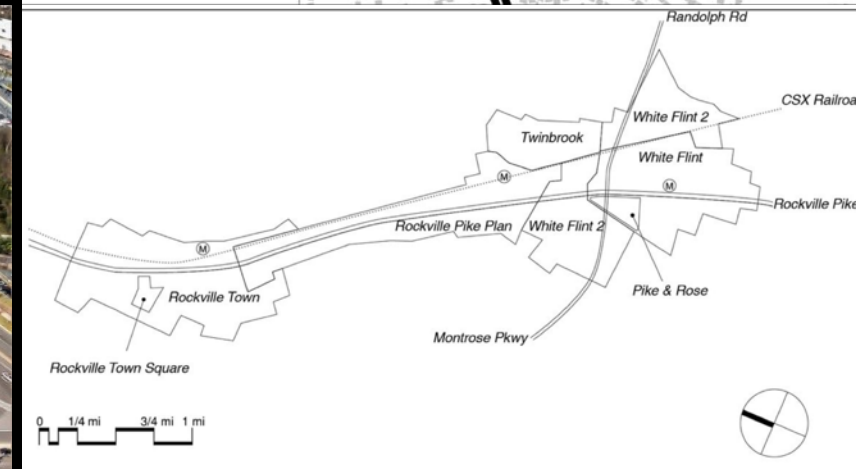
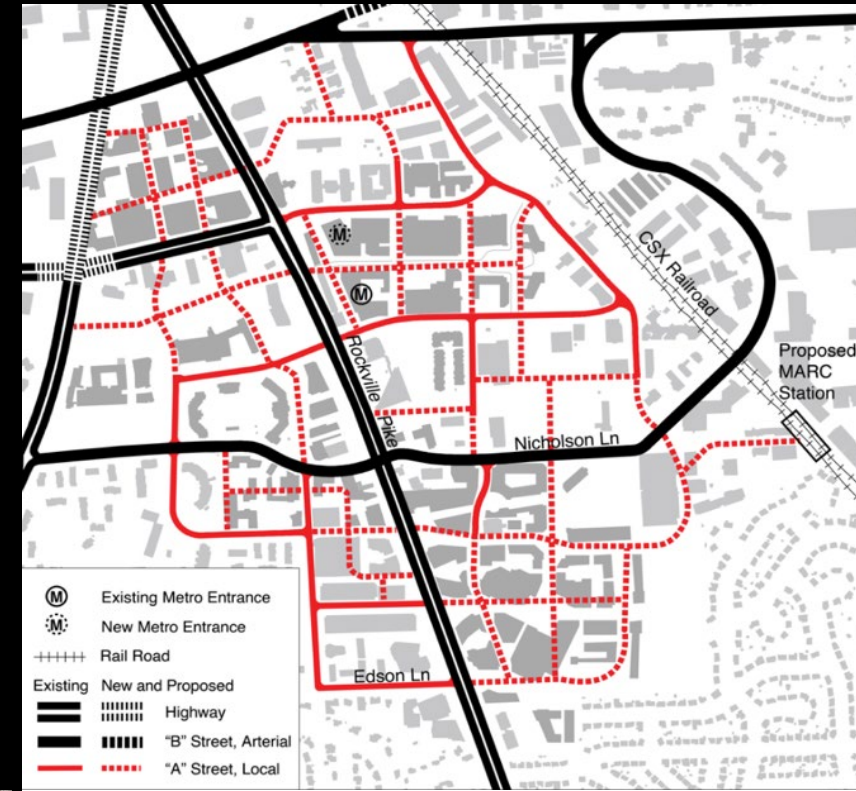
Increasing mobility with a street network, road diet, and Bus Rapid Transit

The Pike District, Montgomery County, MD: White Flint Partnership, Montgomery County, Glatting Jackson

- high-rise “Corridor City” over 20 years, \$6-7 bil tax revenue, 10k residents, 25% affordable

Pike & Rose, North Bethesda, MD: Federal Realty Investment Trust

- 30-acre strip mall redeveloped into dense, walkable mix of uses w public streets

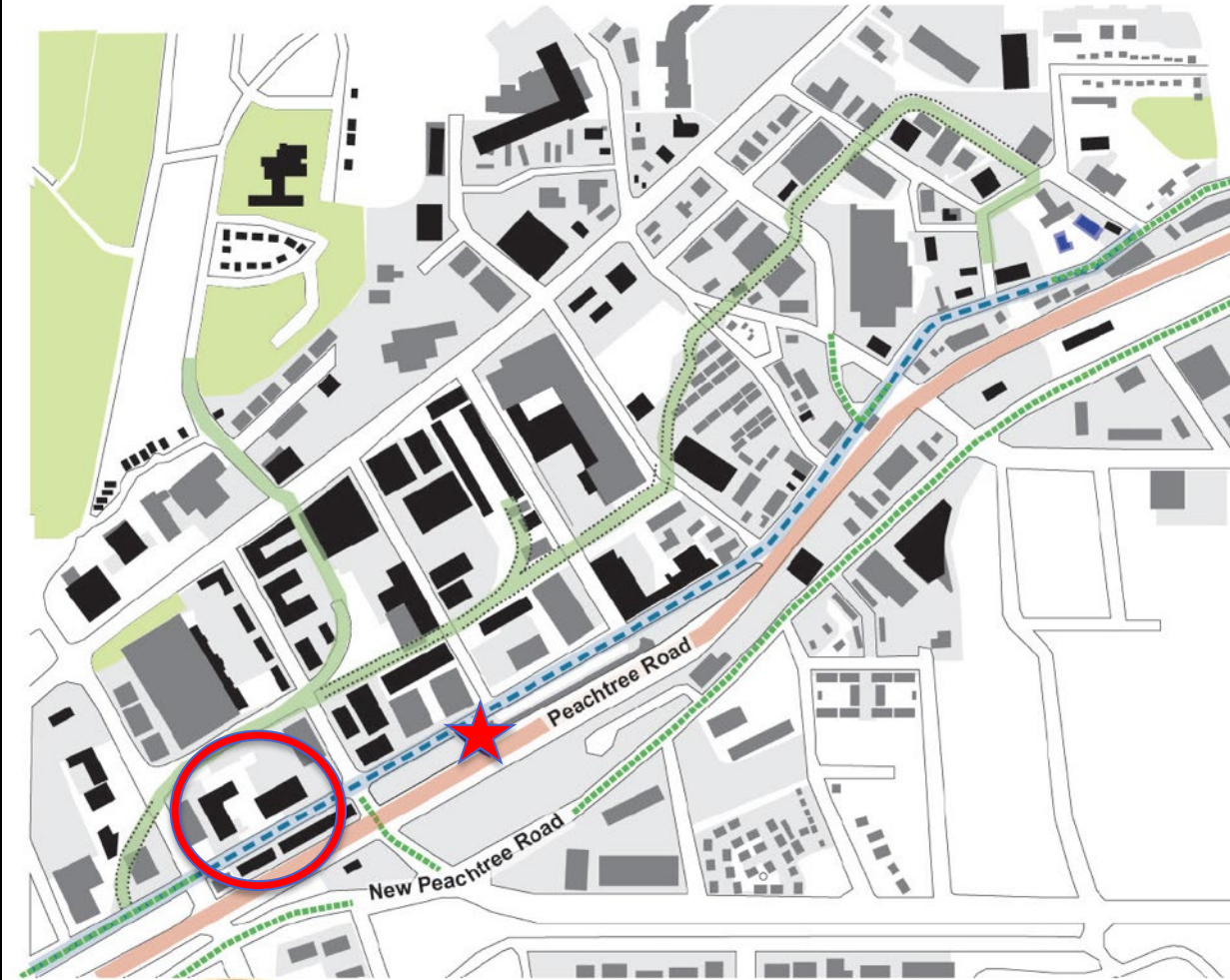


Attracting young adults w transit, apts on former parking lots, increased walkability– and adaptive re-use
Downtown Chamblee, Chamblee, GA

2002



2018



Support an Aging Population

Percent of the US population over age 65:
2010: 13%
2050: 20%

Plan for “Lifelong Communities”

- Allow “missing middle” dwelling types that allow seniors to downsize without leaving their neighborhood.
- Allow Accessory Dwelling Units (ADUs) to enable seniors to better afford to age-in-place or with family
- Facilitate social engagement by encouraging front porches, stoops, and front gardens.
- Adopt Complete Street standards and mixed-use zoning to allow for safe access to everyday needs

Plan senior care as essential community infrastructure

Integrate senior housing into walkable neighborhoods

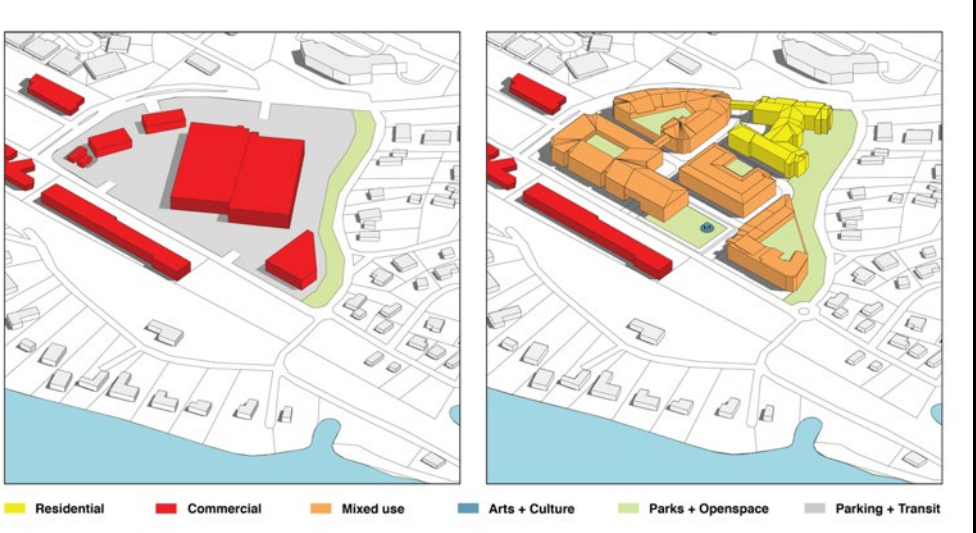
Vacant warehouse replaced with senior housing and medical care in a walkable TOD

Mercy Park, Chamblee, GA: Mercy Care, Mercy Housing SE, Parkside Partners, Smith Dalia Architects, Sylvatica Studio

- Affordable housing and affordable healthcare designed and financed together w public funds and donations
- meeting LEED Gold and Silver certification



from dead mall to senior housing town center on Main St w/ geothermal energy and zero stormwater runoff
Promenade at Wayzata, Wayzata, MN: City of Wayzata, Presbyterian Homes, LHB, DIIAP, InSite



Build Equity with Social Infrastructure

- “Suburbs aren’t getting poorer just because poor people are moving in. **They’re often structurally less resilient than cities** in adapting to economic recession, deindustrialization, and unsustainable development and maintenance costs.”

See Scott Allard, Places in Need, 2017

Build economic resilience, often through **reinhabitation**:

- Education & Job Training
- Child care & family planning
- Local jobs
- Healthy food and health care
- Affordable transportation

Add public spaces to build social capital to serve today’s demographics (esp. 1-2 person households)

- **regreened** actively programmed small parks
- Local activation of underused spaces
- Diverse activities and uses

Expand affordability for all to stay or move into **redeveloped** areas:

- Inclusionary zoning
- Zoning to allow missing middle and multi-family
- Replacement units
- Real estate transaction fees
- Land Trusts
- Preservation of affordable housing policies

Building social infrastructure with after-school programs in apartment complexes

Willow Branch Apartments, Clarkston, GA: Marjorie Stagmeier, Tri-Star, 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
- Targeting similar garden apts in the worst-performing elementary school districts



Fulton County lost approx. 9,000 garden apartment units from 2008-2016, average year of construction 1959.

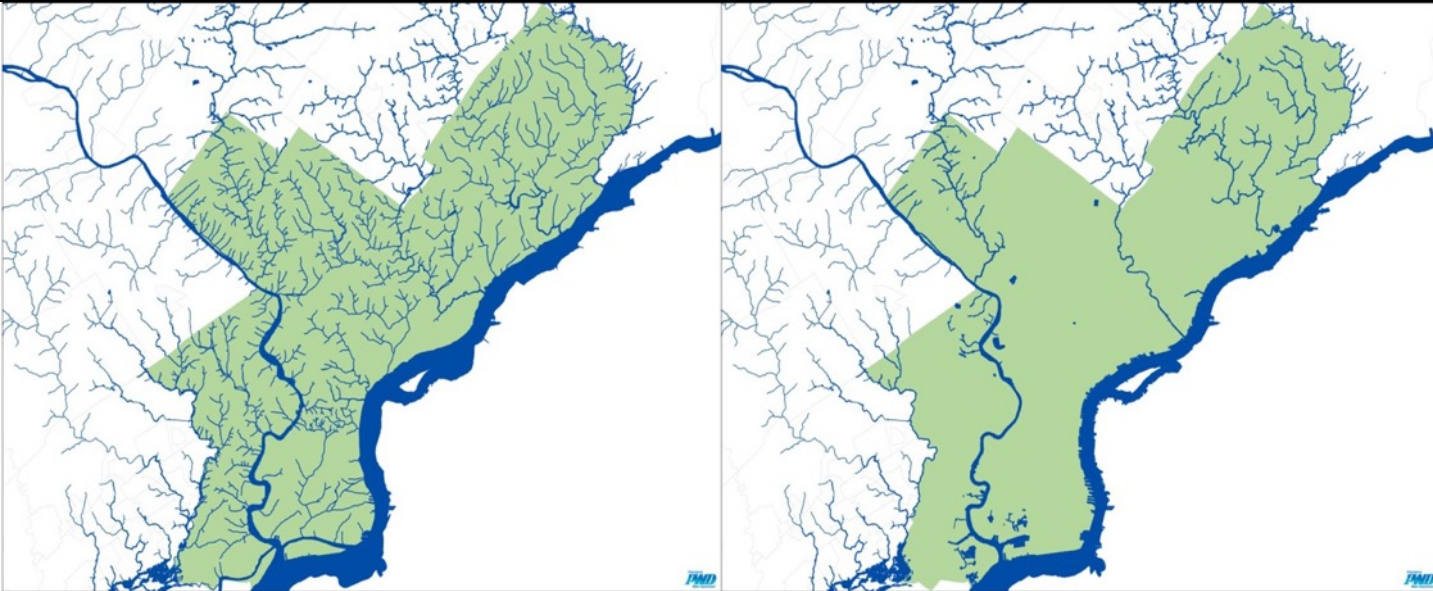
Cityhood triggers redevelopment: Target store to mixed-use civic center and gathering space

City Springs, Sandy Springs, GA: City of Sandy Springs, Goody Clancy, Carter & Selig, Rosser Int'l, RJTR

- \$229M Public Private Partnership: City Hall, City Green Park, Performing Arts Center, 20k sf retail and restaurants
- 275 apartments, 19 townhomes with rents from \$1,385 to \$3,910



Add Water Resilience



Philadelphia's historic streams before and after suburbanization

Water Quality:

- Daylight culverted creeks
- Reconstruct wetlands
- Cleanse, infiltrate & slow runoff

Too little water:

- Capture for reuse
- Conserve
- Replenish groundwater

Too much water:

- Green roofs, cisterns, water recycling and increased infiltration
- Shift from gray to blue/green infrastructure
- Treat water as a resource
 - Demolish buildings in flood plains, build stormwater parks
- *Buildings and infrastructure that can take a bath*
- *Planned retreat*

17-acres of parking lots regreened into a stormwater park, triggering adjacent redevelopment

Historic 4th Ward Park, Atlanta, GA: City of Atlanta, HDR, Trust for Public Land, Markham Smith, Bill Eisenhauer



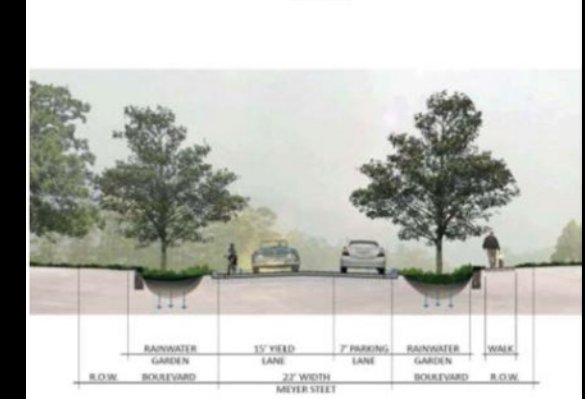
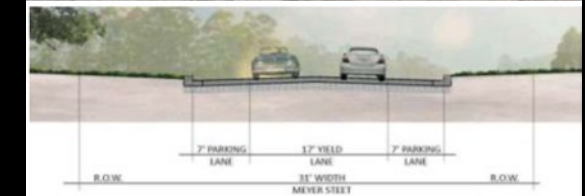
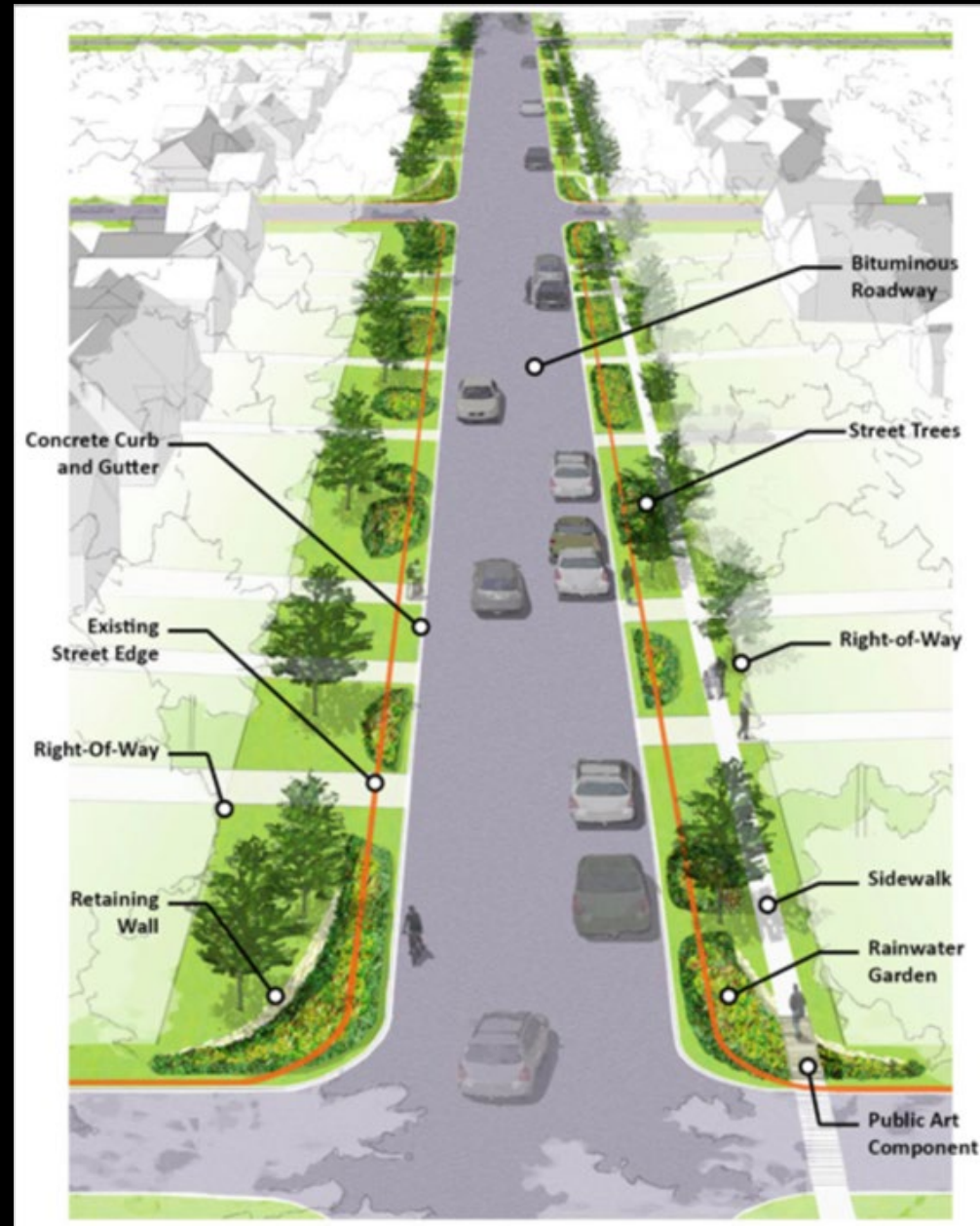
- Retains stormwater for a 300-acre drainage basin, enabling new development to avoid on-site detention.
- Cost \$24 million instead of the \$40 million originally proposed for an underground tank while providing a neighborhood amenity that has triggered so much redevelopment that gentrification has replaced flooding and sewer overflows as the main concern.



Improving water quality, walkability, and pollinator habitat with “Living Streets”

Maplewood Living Streets, Maplewood, MN: Ramsey-Washington Metro Watershed District, City of Maplewood, Barr Eng’g, Kimley-Horn & Assoc.

- As streets come up for repaving, the city narrows the pavement from 31’ to 24’, invites homeowners to adopt rain gardens, plants trees and builds sidewalks.
- 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.



Compete for Jobs

Density correlates with patents/capita.

Urbanism is the new amenity for office

Infill office parks with housing and more diverse uses

Creative office, Maker Space & innovation districts

Light industrial, automated, mixed-use manufacturing

Reinhabitation incubators for small entrepreneurs

Education for middle-skill, middle wage labor shortage

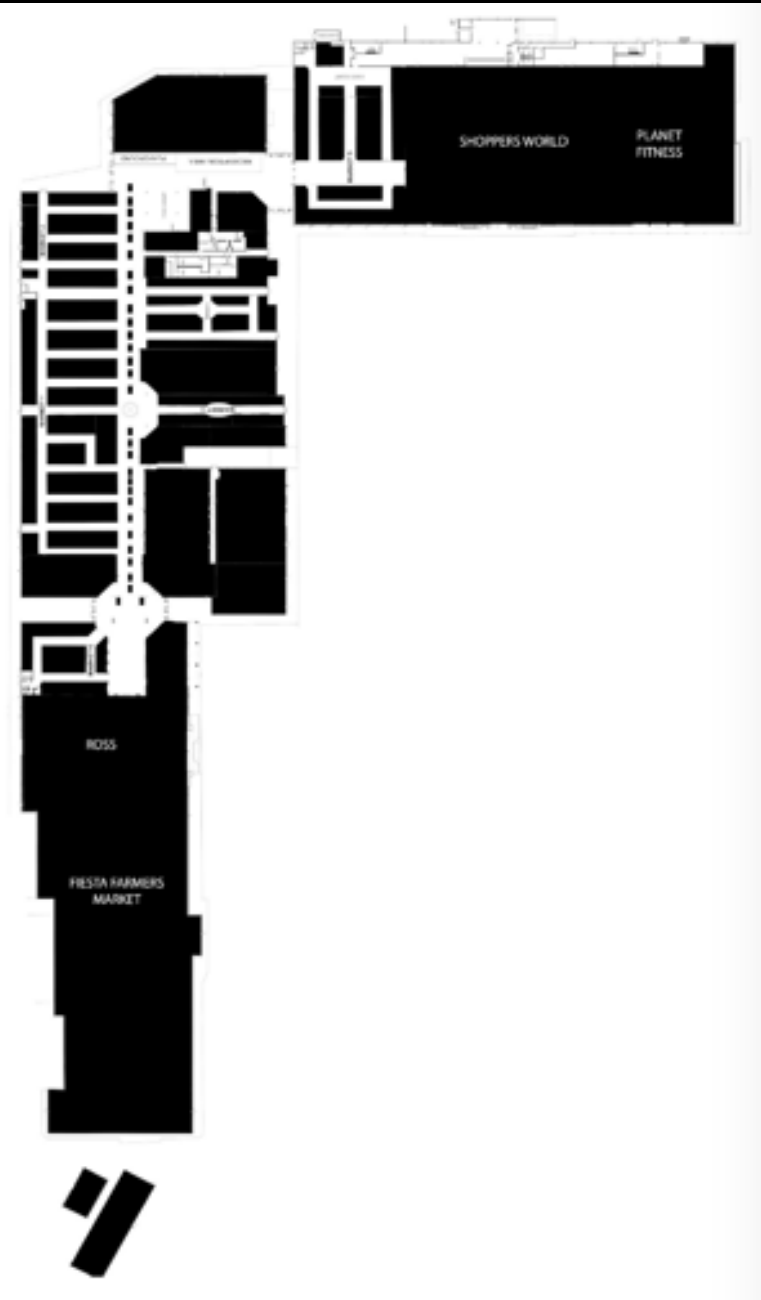
“Millennial Housing” and bike-to-work trails help attract employees to aging office park

Peachtree Corners, GA: City of Peachtree Corners, Lord Aeck Sargent, Pond & Co., Alta

- Trail hubs target properties city wants redeveloped. Trail ordinance encourages land donation along creeks in exchange for 3X density credit to be used or sold within the 1,450-acre “central business district”
Successfully attracted first new residential development in the 500-acre office park.



From Buford Clairmont Mall to Oriental Garden to Plaza Fiesta w mercado of 140 small vendors
Plaza Fiesta, Atlanta, GA: RAM Devel, Vincent Riggio, Arturo Adonay, Jose Legaspi



Improve Public Health

Chronic diseases kill 3X more people than infectious diseases. There is no vaccine for sprawl.

Planners can do more to keep people healthy than doctors can.

Dr. Richard Jackson, former Director at the Centers for Disease Control

Reduce the stresses of income inequality

Reduce social isolation

Improve access to healthcare

Improve safety from crime, fire, flood, vehicle accidents, and toxic exposures

Encourage physical activity (walking, biking, exercising)

Improve access to healthy food

Increase access to parks, trees, “nature”

Improve air, water, and soil quality

Reduced UHI and car crashes w road diet while revitalizing Main St, adding aff hsg, arts, and solar

The BLVD, Lancaster, CA :City of Lancaster, CT/KDF Community Dev. Partners, RBF, FHS, Moule & Polyzoides, Peter Swift
2009-2012: \$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, significant cooling from shade and light permeable paving, immeasurable mental health from community building



75%

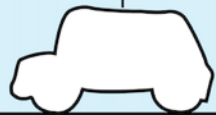
of residential land in American cities is zoned exclusively for single-family detached dwellings. Yet, if retrofitted with sidewalks and bike lanes nearly half of the trips they generate would not need to be made by car.

39 average person miles/day

19,642 annual VMT/household
(up from 12,000 in the 1970s)

28 minute average commute

80% increase in
deliveries since 2009



Typical
suburban house
generates
trips/day **9.4**

46% of trips ≤ 3 miles \approx 18-minute bike ride

35% of trips ≤ 2 miles \approx 8-minute e-scooter ride

21% of trips ≤ 1 miles \approx 20-minute walk

69% are non-work trips



1

2

3 miles

Data Sources :

Institute of Traffic Engineers Trip Generation Manual (10th Edition, 2017)

US 2017 National Household Travel Survey & Travel Day data

Badger, E., Bui, Q., "Cities Start to Question an American Ideal: A House with a Yard on Every Lot," *New York Times*, 18 June 2019