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

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traffic and auto-dependence
suburbia overburdens arterials and under-uses local streets, in a vicious spiral
• 2016 INRIX: avg ATL driver spends 70.8 hours in traffic/year (8\textsuperscript{th} worst in world)

climate change & sustainability
suburbanites’ have higher carbon footprints than urbanites
living compactly reduces per capita water and energy use
• In 2011 ATL had highest water bill rates in US
• GA: transportation uses more energy than industry. Avg ATL motorist’s cost = $11,578/yr

public health & aging
suburban living raises risk of obesity, suicide, and death by automobile crashes
• 2016: GA ranks 18\textsuperscript{th} in obesity. Clayton county has highest rate: 38%

affordability
“drive ‘til you qualify” savings are wiped out by transportation costs
low density costs municipalities more to serve with less revenue per acre
• “moderate” hh’s in metro Atlanta: 36\% of income on housing and 26\% on transportation

poverty and social capital
since 2005 more Americans in poverty live in suburbs than cities
• 2016: 83\% of Metro Atlanta’s food stamp recipients are in the suburban counties
• ATL neighborhoods of concentrated poverty: 67 in 2000, 233 in 2015. #1 increase in US
1/3 of 1500 shopping malls have died

50,000+ strip malls, 10% vacancy rate

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

suburban office vacancy rates 14-22%
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 and commercial corridors now have central locations, often meriting densification and urbanization of their “underperforming asphalt”.

flipped model
Suburbs are now emulating in-town development patterns, not vice versa
Perimeter Center: Over 7 million square feet of new, walkable mixed-use development as of 2016
“60% of demand for housing will be in the “urbanizing suburbs” for at least a generation.”

**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

**Boston, MA - 2015:**
- 57 Walk Ups:
  - 12X the tax revenue of Edge Cities
  - 6X the tax revenue of drivable suburbs

“In the top 30 U.S. Metros, walkable urban office, retail and rental multi-family product types have a 74% rental premium over drivable suburban.” *Foot Traffic Ahead, 2016*
strategy:

Redevelopment

densify

urbanize

Diversify

But won’t work where the market is weak or where the market for urban living has not already been proven in the downtown
• Generally require custom PPPs and some kind of subsidy
• CID/BIDs have been effective champions

Mizner Park, Boca Raton, FL
Re-inhabitation

space for community-serving uses & entrepreneurs that cannot afford new construction

RELOCALIZATION

Former retail spaces lend themselves to:
• Small, local service businesses
• “Eds & Meds”
• Non-profit service providers
They do not tend to work well for housing.
strategy:
Re-greening
reconstruct local ecology

Well-designed parks increase adjacent property values (and enable density)

food production and flood protection

Funding sources include: habitat grants, flood protection/resilience, watershed improvements, and CSO mitigation

Phalen Village, Phalen, MN
retrofitting *challenge*:

Auto Dependence

Walkability + Multi-Modal Systems
Transit-Oriented Development
Road diets
Street Networks
Parking Districts
Car Sharing
Canadian Crater Traffic Calming Devices
Liner building to screen parking lot

402 Melbourne Ave, Winter Park FL: WPRA LTD, Duany Plater-Zyberk & Co
from strip center to New England village by building on the parking lots
Mashpee Commons, Cape Cod, MA, 1988-present
Cornish Assoc. Ltd / Duany Plater-Zyberk & Co / Imai, Keller Moore

Source: Dunham-Jones, Williamson 2009
**Liner Buildings:** shallow, local retail/apt buildings that screen parking lots

**Mashpee Commons,** Mashpee, MA: Cornish Assoc. LTD, Duany Plater-Zyberk & Co

**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
From edge city sprawl to developer-led walkable urbanism

White Flint, N Bethesda MD: W.F. Ptrship, Montgomery Cty, Glatting Jackson, var designers - new high-rise downtown over 20 years, $6-7 bil tax revenue, 10k residents – 25% affordable
From edge city sprawl to 430-acre developer-led walkable urbanism

White Flint, N Bethesda MD: W.F. Ptrship, Montgomery Cty, Glatting Jackson, var designers
-new high-rise downtown over 20 years, $6-7 bil tax revenue, 10k residents – 12.5% affordable
From incremental to regional retrofitting shifting from highway to rail
Rockville Pike and the Red Line, Montgomery County, MD

Rockville Town Center
Construction started 2004

Rockville Pike Plan
Adopted 2016

Twinbrook Station
Construction started 2008

White Flint
Sector 1 Construction started 2010
Sector 2 plan adopted 2016
Rewarding the pedestrian eye

Pike & Rose, ”White Flint,” N. Bethesda, MD: Federal Realty, Design Collective, WDG, ForeSeer

Rockville Town Square, Rockville, MD: Federal Realty, WDG
From dead mall to walkable green downtown
Belmar, Lakewood, CO: Continuum Partners; Elkus Manfredi Architects, Civitas Inc., VMWP

- 60% of public improvements paid through TIF and PIF bonds, 40% by developer.
- 2002-8 fiscal and economic impact on Lakewood of $207.2 million ($49.5 million in 2008 alone)
- 9 acres of public space and parks including a 2.1 acre park, 1.1 acre plaza, 8 bus lines
- ‘14: Generates approx $5M sales tax and $12M in property tax revenue, 4X the mall at its peak
- 1.1 mil sf retail, .9mil sf office, 2000 residential units. 3000 jobs
- 700% increase in on-site prop values ‘04-’12, and 36% on the Alameda corridor ‘01-’13
8 of 13 regional malls in the Denver Metro area have been retrofitted. Retrofitting does NOT imply the wholesale redevelopment of existing neighborhoods. Rather it provides existing neighborhoods with urban nodes on targeted underperforming sites—raising the question, how to connect the dots?

Source: Dunham-Jones, Williamson, 2009
Recapturing traffic islands for walkable, affordable redevelopment

Fort Totten, Washington DC Planning Department

Source: Washington DC Planning Dept website

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

Walmart-anchored residential
From 5-lane arterial to 2-lane Main Street with multi-use parking Ramblas & solar

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
From “stroad” to multi-way boulevard and new downtown
Palm Canyon Drive, Cathedral City, CA; Freedman, Tung & Bottomley  
source: Dunham-Jones, Williamson, 2009
Retrofitting the strip corridor with transit-served nodes and a form-based code

Columbia Pike, Arlington County, VA, Ferrell Madden Associates, Dover Kohl & Partners
Expanded suburban trails and greenways increase walk-bike options
Metro Atlanta 2016-18 new masterplans

Cobb County

Henry County

Fulton, Douglas, Carroll & Coweta

Gwinnett County

City of Newnan, Coweta County
Not everyone can be an entrepreneur/maker – but everyone wants to be creative

Attract and retain 25-34 yr olds

Urbanism is the new amenity for office

Update outtdate office parks and sleepy suburbs with mixed uses and housing
Office park’s trails expanded city-wide to link jobs, residents, and new downtown Peachtree Corners, GA: City of Peachtree Corners, Lord Aeck Sargent, Pond & Co.

- 2015: LCI grant to study connectivity & livability in 1450-acre Technology Park
- 2015: Trails and Open Space ordinance establishes T-O zone providing housing credits for every acre of land donated to the planned 11-mile multi-use trail system.
- 2016: first infill “millennial apartment” complex approved inside Technology Park. The developer is donating 13-acres and $42.5K to the city to develop the first segment of the public trail system and a boat dock for public access to the 15-acre lake.
- 2016: Peachtree Gateway Partnership formed to network several Dekalb County cities’ trails
- 2017: 4 miles of sidewalks, 2 crosswalks, new streetlights, and work on the trails
- 2018: Autonomous Vehicle test track planned
From strip mall to urbanism: the new amenity for office

Santana Row, San Jose, CA: Federal Realty Trust, Street Works, SB Archts, BAR Archts

In 10 years its grown from 35 to 100 merchants, 622 res'l units (w/ 20% premium) and has contributed more than $40 mil in property tax and $24mil in sales tax in 2011.
transit triggers infill of an office park
University Town Center, Hyattsville, MD
Prince George’s Metro Center, Inc.; Parker Rodriguez, RTKL Associates, WDG Architecture
from taxi distributor to anti-corporate mixed-use, innovation district

**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
First steps in retrofitting a 1970’s edge city: liner retail and streetscaping

Crystal City, Arlington County, VA: Torti-Gallas, Vornado Development, WDG Architects
Building community in the office park with parking garage bike races
Crystal City, Arlington, VA; Crystal City Business Improvement Association

The 'Fight Club of Cycling' Makes Parking Garages Cool Again
Civic engagement in activating under-used spaces

Capture the social capital of dying malls and return it to Main Streets with small, incremental redevelopment

Replacement of chain retail with more community-serving uses

Programmed activities and public gathering spaces

Treat streets as the public spaces they are

retrofitting *challenge*:

Social Capital

Walkability is key to building social capital and improving public health
Revived/New Suburban Downtowns

All of these towns’ Main Streets took a hit when the malls opened in the ‘70s and ‘80s. Now that many of the malls are struggling – and new city status-many Main Streets are coming back and ONCE THE MARKET FOR URBAN LIVING IS PROVEN new suburban town centers are being created.
Gwinnett cities aim to create destinations

By Curt Yeomans - curt.yeomans@gwinnettdailypost.com

Gwinnett County’s cities — and even the county government itself — are in the midst of a building boom focused on a common goal: giving residents livable centers of activity in their own backyards.

For the cities, this has meant major investment in the redevelopment of their downtown areas — or in Sugar Hill’s case, creating a downtown area. Meanwhile, the county has tried to create its own downtown-like centers in unincorporated areas, such as the planned public-private partnership to create an entertainment district at the Infinite Energy Forum.

Mark Yoros, managing partner at North American Properties, which is working with the county on the Infinite Energy Center entertainment district, said this is part of a trend going on not just in Gwinnett but in communities around metro Atlanta and elsewhere in the country.

North American Properties has also worked on projects such as the Avalon development in Alpharetta and a project at Atlantic Station. It is also working on the Colony Square redevelopment project in midtown Atlanta.

“What we’ve learned with the recent repositioning of Atlantic Station, the development of Avalon and the reimagining of Colony Square is that whether we are a resident, hotel guest, an office worker or a visitor to shop and dine, we are seeking experiences that can best
Cityhood triggers redevelopment: Target store to mixed-use civic center

City Springs, Sandy Springs, GA: City of Sandy Springs, LCI - 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
Revitalization of suburban Main Street with local food, beverage & entertainment

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
Community college rehabs the mall with student housing built on the parking

Austin Community College, Highland Campus, Austin, TX: BGK Arch't’s, McCann Adams

- ACCelerator Math Lab has cut attrition 50%, attracting digital employers
From dead cinemaplex to walkable “screens & greens” urbanism off the Beltway

The Mosaic District, Merrifield, VA: Edens, Clark Rlty, 5 arch firms inc. Nelsen, MGv2, RTKL LEED-ND Silver; 1M from Metro & Beltway: Hyatt, 73k sf office; 500k sf retail; 1000 residential units

• Great activation of public space by buildings that put big uses (Target, parking, office, theaters) over fine-grained shops & restaurants – and use of LED screen to program park activities
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

- 325 sr hsg units
- 85 conv’l hsg

City bought the mall, approved rezoning, and subsidized the infrastructure

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.
Connect affordable housing to affordable transportation

Preserve/Replace existing affordable housing

Inclusionary zoning

"missing middle" & accessory dwelling unit infill housing

Reinhabitutions that increase opportunities for small businesses; permanent housing for the homeless; access to day care, senior care and after-school programs

Love and social capital

retrofitting challenge:

Equity and Affordability

- Walkability contributes significantly to equity and affordability
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 zombie subdivision to mixed-income TND: City as Master Developer

Walkers Bend, Covington, GA: Covington Redevelopment Authority

New Leaf Center
Social services, incubator kitchen, restaurant, classrooms, mtg space, with aps abv.
3 funding sources: NPS3, SPLOST, CHA loan.

Affordable Equity Partners
Lease to Purchase
Low-income tax credits

Habitat for Humanity townhomes
NSP- funded
Crime prevention leads to regreening of 1,334 1970’s apartments for sports, etc.

Franklin Gateway, Marietta, GA: City of Marietta

- 2013 bond referendum approved to purchase, demolish and sell property along Franklin Road
- Instead of the promised Green Tech Corridor and mixed-use, the properties have become a pro soccer team facility, public sports complex, and a future driving range and future Ikea.
- Where did the residents, including 250 mostly minority school children go?
Water

Water Quality:
• Daylight culverted creeks
• Reconstruct wetlands
• 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

Retrofitting challenge:

Green infrastructure solutions go hand and hand with walkable development – and may be the most fruitful way of adding walkability.
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 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, etc.
from parking lot to mixed-use TOD with condos, senior housing, daylit creek and wetlands

**Thornton Place**, Northgate Mall, North Seattle, WA: LEED-ND pilot program

Mithun Architects for Stellar Holdings & Lorig Associates

source: Dunham-Jones, Williamson, 2011
From office superblock to LEED Platinum complex in new eco-district

Hassalo on 8th, Lloyd District, Portland, OR: American Assets Trust, GBD Architects

- NORM, Natural Organic Recycling Machine/Green Roof treat 100% gray/blackwater treatment to flush toilets and irrigate the public plaza and green street. Diverts 45k gallons/day from the CSO-strained sewer system earning a $1.48M, approx 50% refund, on city’s Systems Development Charges.
- 100% solar hot water; rainwater storage and reservoir; street level stormwater networks
- 657 apts, parking for 1,000 bikes and 1200 underground cars
Upgrading 1940-s-50’s environmental, social, and transportation systems

Parkmerced, a 3,221-unit rental apt community, San Francisco, CA: SOM

Almost tripling new residences with net zero increase in greenhouse gases, street or sewer capacity, while recharging the lake and aquifer.
Stormwater park catalyzes BeltLine, Ponce City Market, and new development

Historic 4th Ward Park, Atlanta, GA: TPL, Smith Dalia Arch’ts, HDR, WPi, Jacobs Eng’g

1907
1960
2016
Future
Atlanta suburbs are increasingly emulating the newer development patterns of the City of Atlanta – instead of the other way around.

• Trails like the Beltline
• Innovation Districts like Tech Square
• Food Halls like Ponce City Market
• Revived downtowns
• More transit?

As more of our suburban communities struggle with 21st Century challenges, we need more layered solutions that integrate walkability as we address climate change, social inequity, jobs and public health.
Retrofitting

REDESIGNING CITIES

March 27 & April 24, 6pm
Academy of Medicine
875 W. Peachtree St, Atlanta