Smart Growth 101: Making the Connections

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Associate Director
Local Government Commission

New Partners for Smart Growth Conference

Baltimore, MD
January 28, 2015
We are a nonprofit organization that fosters innovation in local environmental sustainability, economic prosperity and social equity.
What we do...
The **LGC** helps transform communities through *inspiration*, *practical assistance* and a *network* of visionary local elected officials and other community leaders.

How we do it...

- Workshops and Trainings
- Participatory Planning and Design Work
- Policy Development Assistance
- Tours of Model Projects
- Networking Events
- Conferences
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Local Government Commission  
www.lgc.org
The Ahwahnee Principles, 1991

- Response to our members’ concerns over sprawling, poorly planned development in their communities
- Assembled with assistance from leading architects and planners working on innovative solutions
The Ahwahnee Principles, 1991

- Revitalize existing parts of our communities through infill development
- Plan complete and integrated communities with mix of uses
  - Within walking distance of one another
  - Within walking distance of transit stops
  - With a diversity of housing types
  - With a center focus
What is the Purpose of Towns and Cities?

Cities are an invention to maximize exchange (goods, culture, friendship, knowledge) and to minimize travel.

The role of transport is to maximize exchange.
How have we built our urban roadway system?

To facilitate travel over longer distances
Proposal would put I-75 among country's biggest

By ARIEL HART
ahart@ajc.com

It's wider than an aircraft carrier. Far wider than the carving on Stone Mountain. Wider than the White House stretched end to end, twice.

It's the planned I-75, all 23 lanes, coming soon to Cobb County. As currently conceived it's 388 feet across, wider than a football field is long.

23 LANES: The state Department of Transportation is planning to expand I-75 (below) and I-575 in Cobb and Cherokee counties. The 23-lane stretch would be between Delk and Windy Hill roads on I-75.

<table>
<thead>
<tr>
<th>Truck lanes</th>
<th>General purpose lanes</th>
<th>HOV lanes</th>
<th>General purpose lanes</th>
<th>Truck lanes</th>
</tr>
</thead>
</table>

- Illinois
- U.S. as a whole
- California
- Washington
- Georgia
- North Carolina
- Idaho
- Utah
- Texas
- Florida
- Arizona
- Nevada

Source: U.S. Dept. of Commerce, Census Bureau
Will traffic volumes always increase? Maybe not

Since 2005 US Vehicle Miles Traveled (VMT) has been flat.

Since 2005 US Vehicle Miles Traveled (VMT) has been flat.
Future VMT trends are unknown

Source: Phineas Baxandall, U.S. PIRG
Smart Growth/Livable Communities

- Common Themes
  - Efficient use of land
    - Fill in older parts of communities before spreading out
    - Build new communities in more compact way
  - Mix of uses
    - Mix commercial and retail uses with residential
    - Support/create town and neighborhood centers
    - More destinations in walking/bicycling distance
  - Support walking, bicycling and transit use
  - Create strong local and regional economies
  - Involve residents in planning process
Economic Benefits of Smart Growth

“Just as companies now compete on quality, communities will too.”

— Collaborative Economics, *Linking the New Economy to the Livable Community*

“Livability isn’t some middle class luxury. It is an economic imperative.”

— Robert Solow, Nobel Prize-winning Economist
Economic Benefits: Property Values

- 78%: 30-minute commute to work
- 77%: Places to take walks (sidewalks, parks, trails)
- 66%: Easy walk to places (schools, stores, restaurants)
- 44%: Having a large house

Source: “Community Preferences Survey” by National Association of Realtors, 2011
Obesity* Trends Among U.S. Adults

* BMI ≥ 30, or ~ 30 lbs overweight for 5’4” woman

Source: Behavioral Risk Factor Surveillance System, CDC
Obesity* Trends Among U.S. Adults

Counties with obesity levels over 30% in 2008 included: Merced, San Joaquin, Stanislaus, Tulare and Yuba

* BMI ≥ 30, or ~30 lbs overweight for 5’4” woman

Source: Behavioral Risk Factor Surveillance System, CDC
Trends in Child and Adolescent Overweight

Note: Overweight is defined as BMI >= gender- and weight-specific 85th percentile from the 2000 CDC Growth Charts.
Source: National Health Examination Surveys II (ages 6-11) and III (ages 12-17), National Health and Nutrition Examination Surveys I, II, III and 1999-2004, NCHS, CDC.
Society

An American Epidemic

Diabetes

The silent killer: Scientific research shows a ‘persistent explosion’ of cases—especially among those in their prime

By Jerry Adler and Claudia Kalb

Something terrible was happening to Yolanda Benitez’s eyes. They were being poisoned; the fragile capillaries of the retina attacked from within and were leaking blood. The first symptoms were red lines, appearing vertically across her field of vision; the lines multiplied and merged into a haze that shut out light entirely. “Her blood vessels inside her eye were popping,” says her daughter, Janette Roman, a Chicago college student. Benitez, who was in her late 40s when the problem began four years ago, was a cleaning woman, but she had to stop working. After five surgeries, she has regained vision in one eye, but the other is completely useless. A few weeks ago, awakening one night in a hotel bedroom, she walked into a dust, setting off a paroxysm of pain and nausea that hasn’t let up yet. And what caused this catastrophe was nothing as exotic as pesticides or emerging viruses. What was poisoning Benitez was sugar.

Diabetes prevalence, by age

[Graph showing diabetes prevalence by age]
Diabetes Projected Risks: For Babies Born in 2000

Girls: 38% lifetime risk
- Latino girls: 53%
- African-American girls: 49%
- If diabetic before age 40, Lifespan shortened by 14 years (Quality of life by 19 years)

Boys: 33% lifetime risk
- Latino boys: 45%
- African-American boys: 40%
- If diabetic before age 40, Lifespan shortened by 12 years. (Quality of life by 22 years)
### What Smart Growth “Is” And “Is Not”

<table>
<thead>
<tr>
<th></th>
<th>Not against cars and roads</th>
<th>Not anti-suburban</th>
<th>Not about telling people where or how to live</th>
<th>Not against growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>More transportation choices and less traffic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibrant cities, suburbs and towns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wider variety of housing choices</td>
<td></td>
<td></td>
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<tr>
<td>Well-planned growth that improves quality of life</td>
<td></td>
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</tbody>
</table>

Courtesy: Smart Growth America
Principles of Smart Growth/
Livable Communities
Ten Principles of Smart Growth

1. Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas
2. Strengthen and Direct Development Towards Existing Communities
3. Take Advantage of Compact Building Design
4. Mix Land Uses
5. Create Range of Housing Opportunities and Choices
6. Provide a Variety of Transportation Choices
7. Create Walkable Neighborhoods
8. Foster Distinctive, Attractive Communities with a Strong Sense of Place
9. Encourage Community and Stakeholder Collaboration
10. Make Development Decisions Predictable, Fair and Cost Effective
1. Preserve open space, farmland, and critical environmental areas

- Identify areas with highest priority for preservation
- Use a variety of preservation tools, including purchase, regulatory, and incentive programs
Sprawl in the Atlanta Region

- 1973-1992 forest land was reduced by 15 percent and grassland and cropland by about 6 percent

- The Georgia Conservancy estimates that 27 acres of tree cover are lost in the region every day

- Without transit-supportive and higher-density land use patterns, the Conservancy estimates that 200,000 acres of tree cover will be lost by 2020
By Maurice Tamman
mtamman@ajc.com

Charlotte — Over the past 40 years, satellite lenses have clicked away, 450 miles high, capturing the nation's night lights.
In the 1970s, those lenses detected only a few blips from Georgia, Alabama, Tennessee, and the Carolinas. Today, the region glows like a wheel-shaped constellation, with Atlanta as its hub.

During that time, metropolitan Atlanta grew from 1.39 million five counties to 4.11 million counties; it pushes out 20, 75 and 85 toward Blount, Macon, Green, and Charlotte. All the while, markets boomed, extending toward Atlanta.
According to the 2000 census, 4.1 million people live in the Piedmont megalopolis. 

Atlanta is the hub of what has been called the Piedmont megalopolis, stretching along I-20, I-75 and I-85 from Birmingham to Greenville, S.C., Charlotte and even Raleigh and from Chattanooga to Macon. This shows how the areas are growing together as people move to areas along the interstates. A look at those metropolitan statistical areas and their populations:

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Atlanta Journal-Constitution, April 15, 2001
Analyze where you can accommodate future growth

Mapping Method
Developed by Ian McHarg

Geology
Hydrology
Slope
Soils
Woodland
2. **Strengthen, and direct development towards, existing communities**

- Use incentives to achieve clean-up and re-use of “brownfield” and “grayfield” sites
- Preserve and repair historic buildings as part of redevelopment plans
- Build on the resources and amenities of existing communities
Impacts of Infill vs. Greenfield Development in the San Diego Region

Source: Study by Criterion Planners/Engineers for U.S. Environmental Protection Agency, 1998
Potential benefits of infill

- Revitalize town centers, neighborhoods
- Provide more housing options
- Support transit service
- More efficient use of land
- Reduced costs for infrastructure/services
- Preserve agriculture
- Conserve open space
Commercial Strips — The Next Frontier

ULI’s Principles to Reinvent Suburban Strips

- Ignite Leadership/Nurture Partnership
- Anticipate Evolution
- Know The Market
- Prune Back Retail-Zoned Land
- Establish Pulse Nodes of Development
- Tame the Traffic
- Create the Place
- Diversify the Character
- Eradicate the Ugliness
- Put Your Money (and Regulations) Where Your Policy Is
3. Take advantage of compact building design

- Grow vertically rather than horizontally to preserve green spaces and reduce cost of providing public facilities and services
What do downtown Florence, a freeway interchange and a big box store have in common?
## Lower Cost of Infrastructure

### Low Density vs. Compact Development

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage Increase</th>
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<tbody>
<tr>
<td>Land Consumption</td>
<td>45% more*</td>
</tr>
<tr>
<td>Cost for Roads</td>
<td>25% more**</td>
</tr>
<tr>
<td>Cost for Utilities</td>
<td>15% more**</td>
</tr>
<tr>
<td>Cost for Schools</td>
<td>5% more**</td>
</tr>
<tr>
<td>Other Costs</td>
<td>2% more**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land Consumed (Acres):</th>
<th>34.0</th>
<th>00.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Property Taxes/Acre:</td>
<td>$6,500</td>
<td>$634,000</td>
</tr>
<tr>
<td>City Retail Taxes/Acre:</td>
<td>$47,500</td>
<td>$83,600</td>
</tr>
<tr>
<td>Residents per Acre:</td>
<td>0.0</td>
<td>90.0</td>
</tr>
<tr>
<td>Jobs per Acre:</td>
<td>5.9</td>
<td>73.7</td>
</tr>
</tbody>
</table>
Land Use Pattern Affects Travel — Higher Density can reduce Vehicle Trips

Significant reduction as we go from 3-4 units/acre to over 20 units/acre

Source: John Holtzclaw, PhD, Sierra Club
Land Use Pattern Affects Travel — Density to Support Transit

Source: Tumlin, Jeffery, Sustainable Transportation Planning, 2012
Land Use Pattern Affects Travel — Density to Support Retail

For a 10,000 sq.ft. Convenience Store
- 7 units/acre

For a 25,000 sq.ft. Small Supermarket
- 18 units/acre
Compact Development in Appropriate Locations

Traditional Neighborhood Code

Knoxville, TN
In 1991 there were 31.8 million people over the age of 65 in the U.S. By 2030 that number will increase to 66 million.
Moving to downtowns and older neighborhoods
Driving less and looking for other transportation options.

Demographic Trends: Millennials

“The traditional family — married couples with children — is slowly declining in number, while households made up of single persons living alone, singles living together, and married couples without children are growing rapidly. These three groups will account for 90 percent of the net new household growth projected in this decade, according to U.S. Census Bureau figures.”

Tremendous Opportunity?

- By 2025 demand for attached and small-lot housing will exceed current supply by 35 million units (71%)
- Demand for compact housing will fall short of current supply

4. Mix land uses

- Provide retail or personal services near housing
- Incorporate parks, schools, and other public facilities
Alternative Patterns of Development

Traditional

Conventional
Housing over retail shops

Sacramento, CA
Housing over restaurant, shops

Sacramento, CA
Housing next to retail

Salinas, CA
5. **Provide housing opportunities and choices**

- Provide quality housing for people of all income levels, household sizes, and stages in the life cycle.
Live-Work Units
Little Italy, San Diego, CA
Mixed housing types

Fourplex, Doe Mill, Chico, CA
Mixed housing types

Fourplex, Doe Mill, Chico, CA
Mixed housing types

Bungalow Court, Doe Mill, Chico, CA
Mixed housing types

Townhouses, Doe Mill, Chico, CA
6. Provide a variety of transportation choices

- Coordinate land use and transportation investment
- Increase high-quality transit service
- Connect pedestrian, bike, transit, and road facilities
Portland, Oregon Streetcar
Los Angeles Metro Rapid Bus
Bicycle Share Programs

Lyon, France

Paris, France

Mexico City, Mexico

Omaha, NE
Cycletracks — New York City
7. Create walkable communities

- Mix land uses, build compactly, and provide safe and inviting pedestrian corridors
- Create “complete streets”
  - Accommodate pedestrians, bicyclists, transit users
Courtesy of traffic engineer Ian Lockwood
Courtesy of traffic engineer Ian Lockwood
What’s the first thing a child wants to do and the last thing an older person wants to give up?
“Cars are happiest when there are no other cars around…”
— Dan Burden, Blue Zones
“People are happiest when there are a lot of other people around…”
— Dan Burden, Blue Zones

Victoria, British Columbia
The tremendous potential

Of all trips:

50% are less than 3 miles

28% are less than 1 mile

60% are driven of these trips…

National Household Travel Survey (2009)
Street Design

- Influences trip choices
  - Safe, quiet, slow, shaded streets encourage people to walk, ride bicycle or take transit instead of driving a car
Conventional Pattern of Development
Trip Assignment: Conventional
Trip Assignment: Traditional
Traditional vs. Conventional

Central Business Districts at the same scale

Portland, Oregon

Walnut Creek, California

Great Streets, Allen Jacobs

Great Streets, Allen Jacobs
## CALIFORNIA CITY COMPARISON

<table>
<thead>
<tr>
<th></th>
<th>Safer Cities</th>
<th>Less Safe Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>65,719</td>
<td>59,845</td>
</tr>
<tr>
<td>Population Density</td>
<td>5,736 per sq. mi.</td>
<td>2,673 per sq. mi.</td>
</tr>
<tr>
<td>Intersection Density</td>
<td>106 per sq. mi.</td>
<td>63 per sq. mi.</td>
</tr>
<tr>
<td>Mode Share</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driving</td>
<td>84.1%</td>
<td>95.8%</td>
</tr>
<tr>
<td>Walking</td>
<td>5.4%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Biking</td>
<td>4.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Transit</td>
<td>6.6%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Road Fatalities per 100,000 population</td>
<td>3.2 per year</td>
<td>10.5 per year</td>
</tr>
</tbody>
</table>

Principles of Safe, Walkable Streets

- Complete Streets designed for people, not just cars
- Friendly to cars, pedestrians and cyclists
Principles of Safe, Walkable Streets

- Streets designed so drivers feel comfortable at slow speeds
  - 15-25 mph on neighborhood streets
  - 25-35 mph on avenues and boulevards
Principles of Safe, Walkable Streets

- Narrower streets are slower and safer
  - Longmont, CO study of 20,000 accidents
    - Found street width had the greatest relationship to injury accidents
  - Accidents/mile/year were higher on wider streets
    - 40-foot wide street: 2.23 a/m/y
    - 36-foot wide street: 1.21 a/m/y
    - 24-foot wide street: 0.32 a/m/y

Safe Streets Need Good Sidewalks

- Detached from curb
- At least 5 feet wide
- Planting strip helps shade street and sidewalk

**SIDEWALK FEATURES**

- Width (minimum 5'), ADA
- 6 feet if at back-of-curb (AASHTO)
- Crossfall 1:50
- Pedestrians need a 2 feet wide buffer to all edges, curb, buildings, bridge railings etc.
- Buffer to motor vehicles (4-10'), nature-strip 7 feet wide to plant trees
- Street lighting, shade
- Pavers can be used for enhancement
Safe Streets Need Good Sidewalks
Healthy Neighborhoods Need Good Street Crossings
Parklets or plazas take underused street space to create people places, support local businesses.
8. Foster Distinctive, Attractive Communities with a Strong Sense of Place

Alexandria, VA
Santa Barbara, CA
“There is little sense of having arrived anywhere, because everyplace looks like no place in particular.”

— James Howard Kunstler, *The Geography of Nowhere*
9. Encourage community and stakeholder collaboration in development decisions

- The private sector does most of the development, but residents and other stakeholders collaborate in this process to ensure it is consistent with community needs and concerns.
Cutler-Orosi Design Charrette – Opening Night Workshop
1. Sidewalk Finished
2. Better Lighting
3. Stop sign on Main St
THESE MAPS MAY NOT BE ACCURATE!
The image contains two hand-drawn maps created by different individuals. The map on the left is a colorful representation of a local area, labeled with symbols such as 'High School,' 'Gym,' 'New houses,' and 'Lake Beresay.' It also includes a 'Stop' sign and a 'Street' label. The map on the right is titled 'Evelyn Zichwa age 11' and shows a winding path with various labels and symbols, including 'Grant St.' and 'Bent St.'
Implementation – Public Participation is Key

- Get Better Plans
- Engage Residents in their Community
- Good Plans Survive Political Changes
- Way to insure that residents feel not that they have access to City Hall but that they own City Hall
10. Make development decisions predictable, fair and cost-effective

- Update comprehensive plan and implementing regulations to incorporate Livable Communities, and apply regulations consistently.
Neighborhoods, Villages, Streets
Plan proactively
Develop a Vision for Community

Pasadena
General Plan

Point of Agreement: Targeted Growth

Strategy Areas
- Directed Development Areas
- Transition Areas
- Enhancement Areas
- Areas to Stabilize
- Central District (Area 19)

Light Rail
- Light Rail Route
- Light Rail Stations
Plan proactively
Develop a Vision for Community

Pasadena General Plan
Holly Street Village
Infill, mixed use rental housing

Model: Early 1990s
Implementing the Vision

- State-of-the-Art Development Codes — Form-Based Codes
  - Recognition that current zoning and land development regulations are flawed
  - New approaches to fixing them
  - New emphasis on form-based codes, SmartCode
  - Problems with conventional codes that emphasize use and intensity of development

Source: Duany Plater-Zyberk
Additional Resources

- Smart Growth Network
  - www.smartgrowth.org
- Smart Growth America
- Local Government Commission
  - www.lgc.org
- Congress for the New Urbanism
  - www.cnu.org
Thank You!

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