Smart Growth 101: Making the Connections

Paul Zykofsky, AICP, Assoc. AIA Associate Director Local Government Commission

New Partners for Smart Growth Conference

Kansas City, MO February 7, 2013

Local Government Commission

- Nonprofit membership organization based in Sacramento, CA of local government officials – elected and staff
- Founded in 1979 to work on energy issues
- During 1980s expanded to work on pollution prevention, waste management, hazardous waste
- 1991: Started working on land use issues



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

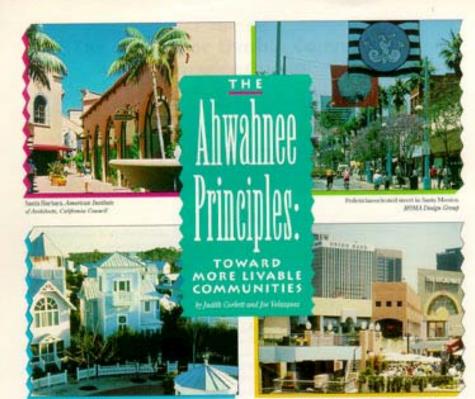




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The Ahwahnee Principles, 1991

- 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



Seader Harida SPZ architects

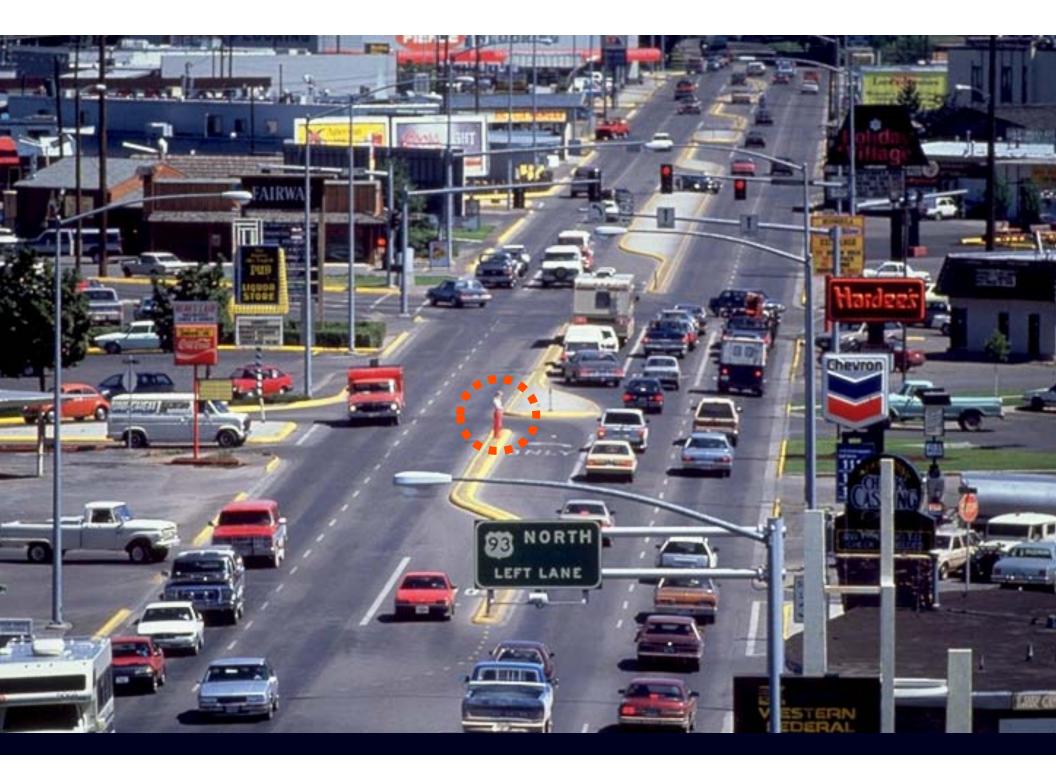
Horton Plans -- Where the shall was ideal downtown. Oty of San Disp.

Ities everywhere are facing similar problems – increasing traffic congestion and worsening air pollution, the continuing loss of open space, the need for costly improvements to road and public services, the inequitable distribution of economic resources, and the loss of a sense of community. The problems seem overwhelming and we suffer from their consequences every day. City character is blurred until every place becomes like every other place, and all adding up to No Place.

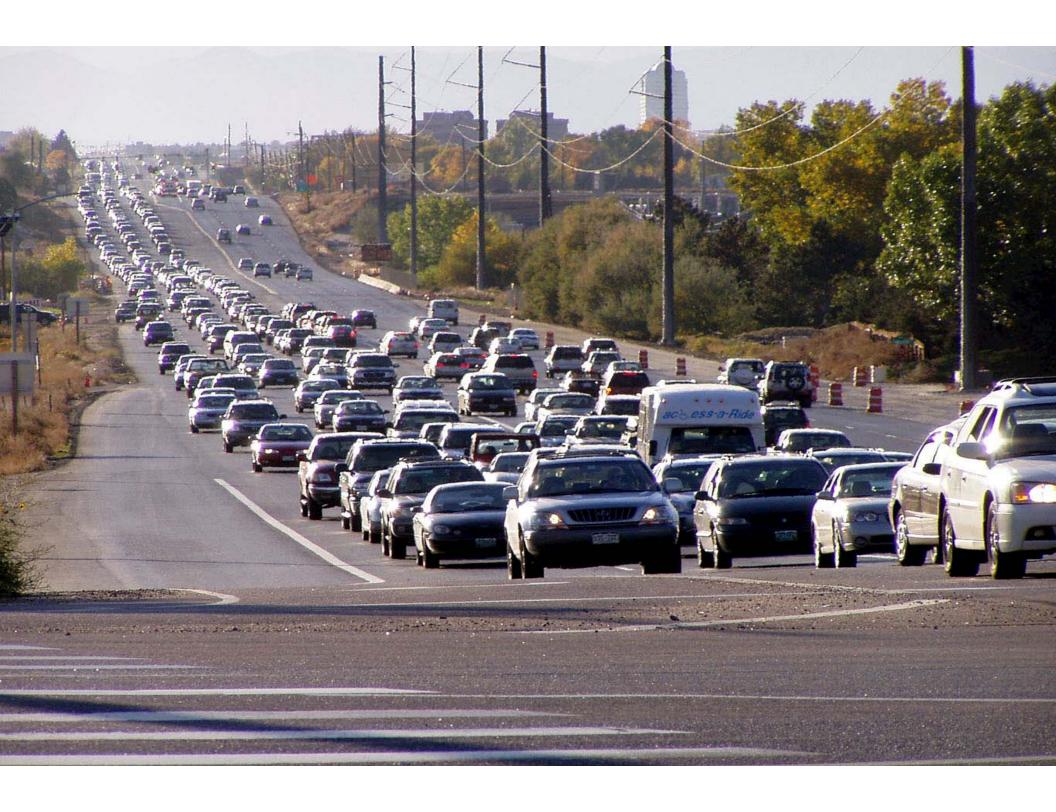
Many of our social, economic and enviroomental problems can be traced to land use practices adopted sione World War II. In the laste 1940s we began to adopt a notion that life would be better and we would all have rance freedout if we planted and built our communitien arrows (the autoevolue, Gradually, rather than increming our freedom, auto-oriented hard use planning has reduced our options. Now, it takes much reover time than it used to carry out our daily adjuice. We must go everywhere by car - there is no other option. We must take a car to the store for a pallon of milk, drive the children to Linfe League practice, even spend part of the hanch hour driving to a place to eat. And as roads becomes nervanizyly chigged and services farther from our horse, we spend our time as anonymous individuals with ing for the traffic light to change rabler than chatting with friends at the corner stars or playing hall on the bases with the neighborizoid kilo.

LEASUE OF CALIFORNIA CITED

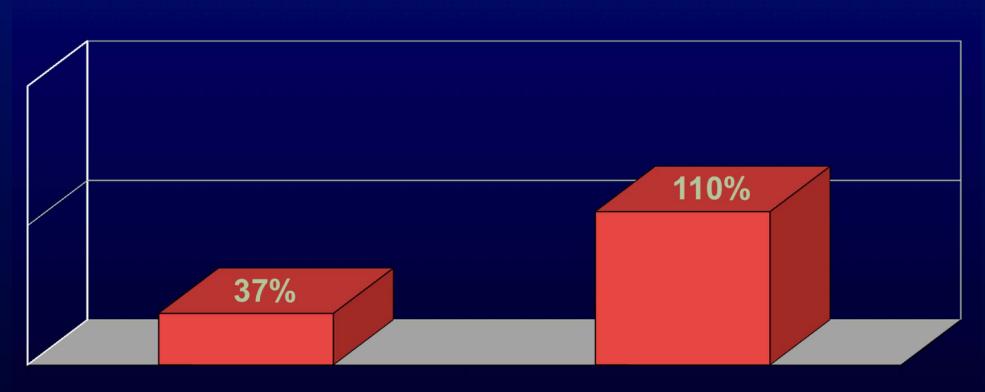








U.S. Population Growth and Transportation – 1977-2007



Population Growth

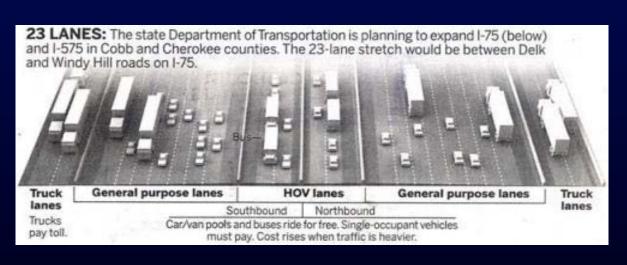
Vehicle Miles Traveled

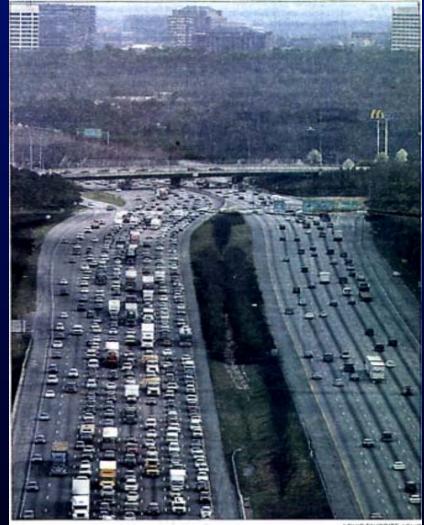
Will 23 lanes be enough?

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.

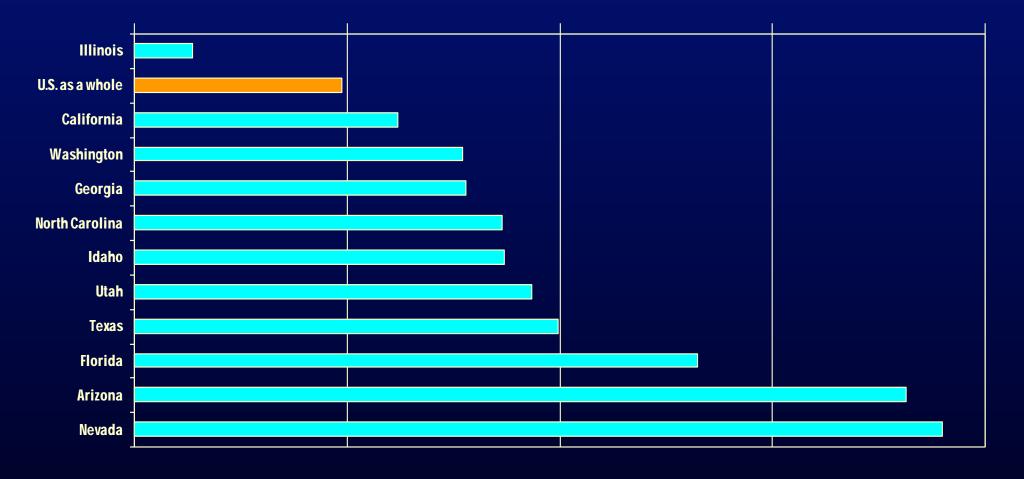
It's the planned 1-75, all 23 lanes, coming soon to Cobb County. As currently conceived it's 388 feet across, wider than a football field is long.





Traffic heads north on I-75, just north of I-285, on Thursday. A proposal for the interstate is enough to make a road builder werp with joy, and make others wonder whether it's overkill.

Projected Population Growth Rates in the U.S. (2000-2030)



60%



0%

Local Government Commission

30%

Source: U.S. Dept. of Commerce, Census Bureau

120%

90%

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

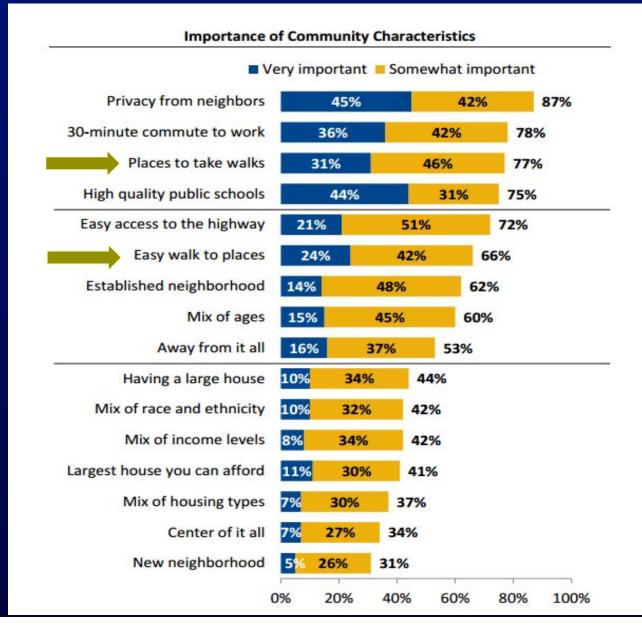


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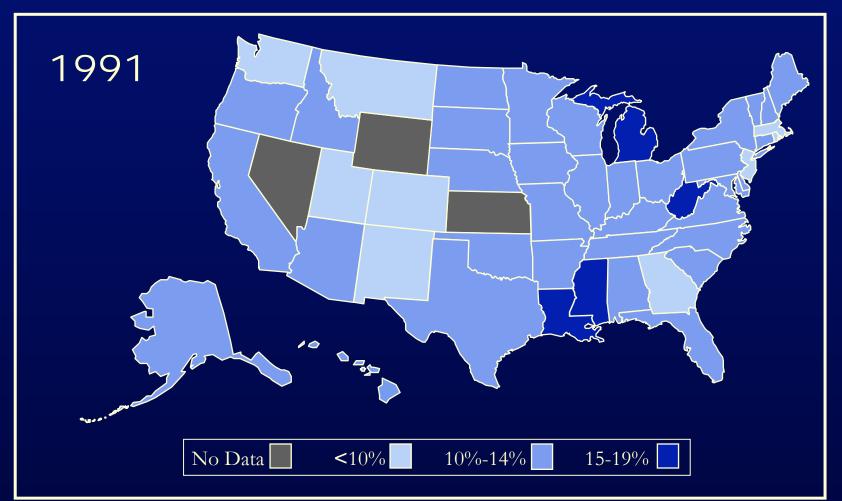
Economic Benefits: Property Values

- 77%: having sidewalks and places to walk important
- 66%: important to easily walk to places in their community

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

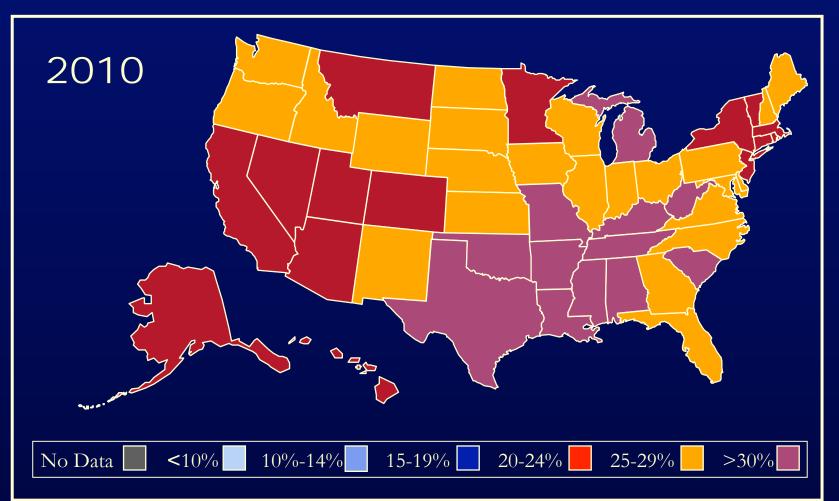


Source: Behavioral Risk Factor Surveillance System, CDC Source: Mokdad A H, et al. JAMA 2003;289:1

Obesity* Trends Among U.S. Adults

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

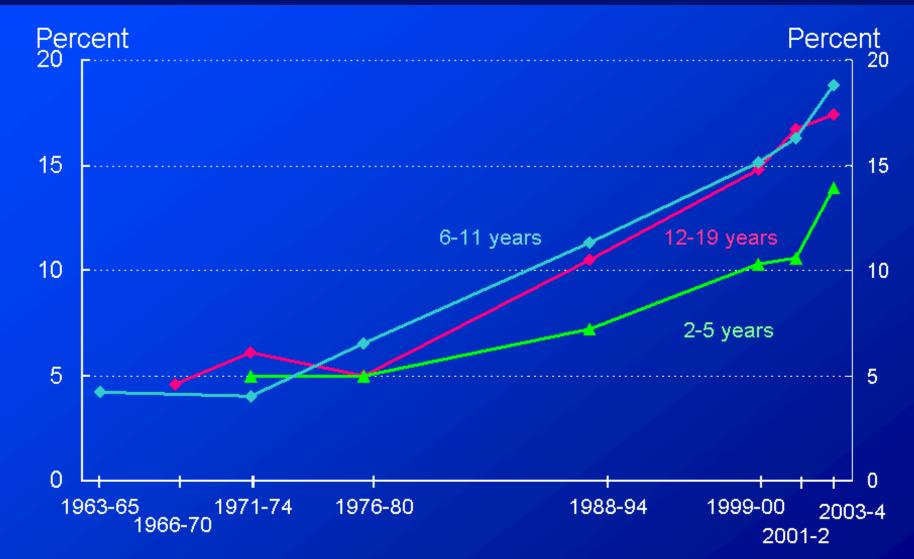
* BMI ≥ 30, or ~ 30 lbs overweight for 5' 4" woman





Source: Behavioral Risk Factor Surveillance System, CDC Source: Mokdad A H, et al. JAMA 2003;289:1

Trends in Child and Adolescent Overweight



Note: Overweight is defined as BMI >= gender- and weight-specific 95th 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.

It Strikes 16 Million Americans Are You at Risk?

ETVS VES

nputer drawing of a human insulin molecule 🔛

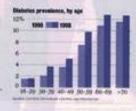
An American Epidemic

The silent killer: Scientific research shows a 'persistent explosion' of cases especially among those in their prime BY JERRY ADLER AND CLAUDIA KALB

OMETHING TERRIBLE WAS HAPPENING TO YOLANDA BENTTEZ'S eyes. They were being poisoned; the fingile 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 base that shot out light entirely. "Her blood vessels inside her eye were popping," says her daughter, Jamette Roman, a Chicago college student. Benitez, who was in her late 40s when the

problem hegan fair years ago, was a cleaning woonan, but she's had to stop working. After five surgeries, she has ergained vision in one eye, but the other is completely uselem. A few weeks ago, awakening one night in a hotel bedroom, she walked into a door, setting off a paeroxym of pain and ransea that hum't let up yet. And what caused this cutastrophe was nothing as enotic as pesticides or emerging viruses. What was poison ing Benitz was soger.

S NEWSWEEK SUPPENDER 4, 2000



Heredity

Genes help determine whether you get diabetes. In ma Tamiliea, multiple generations are struck. But heredit is not destiny especially if you to well and exercise

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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)

The Atlanta Journal-Constitution / Sunday, June 15, 2003

CDC: Diabetes to afflict 1 in 3 born in 2000

Scientist says kids must eat healthier, exercise more

By JANET McCONNAUGHEY

New Orleans - One in

three U.S. children born in 2000

will become diabetic unless

many more people start eating

less and exercising more, a sci-

entist with the Centers for Dis-

ease Control and Prevention

African-American and Latino

children: Nearly half of them

are likely to develop the disease,

said Dr. K.M. Venkat Narayan,

a diabetes epidemiologist at the

betes epidemic has been raging

has been well-known to us for

several years. But looking at the

risk in these terms was very

about triple the American Dia-

betes Association's current

The 33 percent lifetime risk is

shocking to us," Narayan said.

"I think the fact that the dia-

The odds are worse for

Associated Press

warned Saturday.

CDC.

estimate.

by 2050, to 29 million, an earlier CDC study by Narayan and others found.

"These estimates I am giving you now are probably quite conservative," Narayan said in an interview before the diabetes association's annual scientific meeting here.

Narayan said it would be difficult to say whether undiagnosed cases would rise at the same rate.

If they did, that could push the 2050 figure to 40 million or more.

Doctors had known for some time that Type 2 diabetes what used to be called adultonset diabetes because it typically showed up in middle-aged people — is on the rise, and that patients are getting younger.

Nobody else had crunched the numbers to look at current odds of getting the disease, Narayan said.

Overall, he said, 39 percent of the girls who now are healthy 2¹/₂- to 3-year-olds and 33 percent of the boys are likely to develop diabetes, he said.

For Latino children, the odds are closer to one in two: 53 percent of the girls and 45 percent of the boys. The numbers are about 49 percent and 40 percent for African-American girls

What Smart Growth "Is" And "Is Not"

More transportation choices and less traffic	Not against cars and roads
Vibrant cities, suburbs and towns	<u>Not</u> anti-suburban
Wider variety of housing choices	<u>Not</u> about telling people where or how to live

Courtesy: Smart Growth America

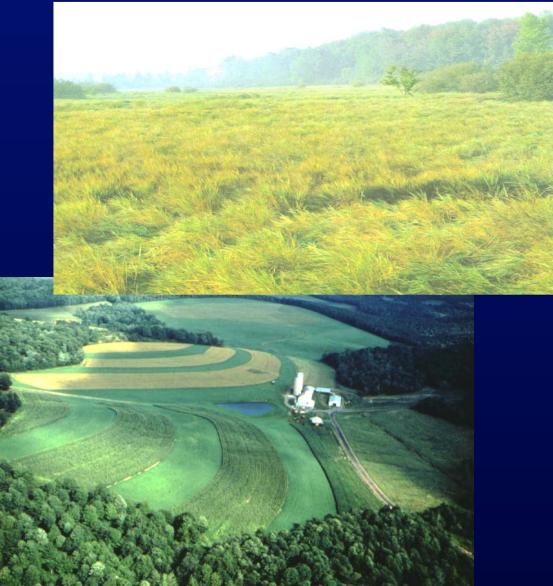
Principles of Smart Growth/ Livable Communities

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
- 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 <u>every day</u>
- Without transit-supportive and higher-density land use patterns, the Conservancy estimates that 200,000 acres of tree cover will be lost by 2020



Charlantingham: Welcome to the big city

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 at its hub.

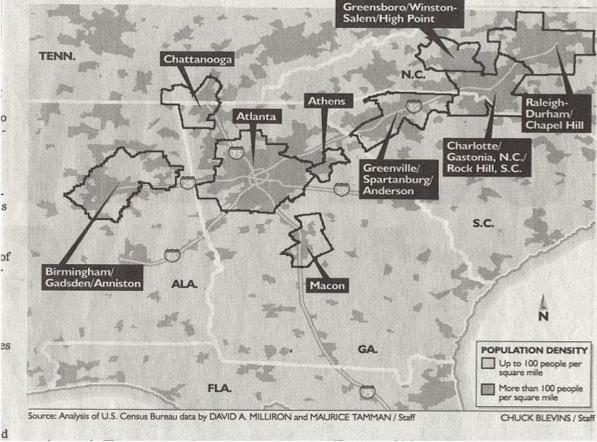
grown from 1.39 millio five counties to 4.11 mi counties; it pushes out 20, 75 and 85 toward B tanooga, Macon, Green Charlotte. All the while markets boomed, exter aries toward Atlanta. According to the 200

During that time, me

lion people live in the r Piedmont megalopolis,

PIEDMONT MEGALOPOLIS

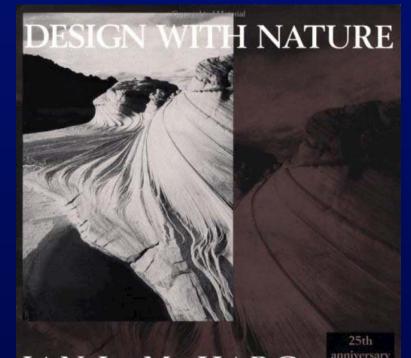
Atlanta is the hub of what has been called the Piedmont megalopolis, stretching along I-20, I-75 and I-85 from Birmingham to Greenville, S.C., Charlotte and even Raleigh and from Chattanooga to Macon. This shows how the areas are growing together as people move to areas along the interstates. A look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



Atlanta Journal-Constitution, April 15, 2001

Analyze where you can accommodate future growth

edition



IAN L. MCHARG

Mapping Method Developed by Ian McHarg Geology

Geology



Hydrology

Slope

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

<image><image>

Impacts of Infill vs. Greenfield Development in the San Diego Region

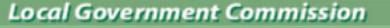


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Potential benefits of infill

- 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



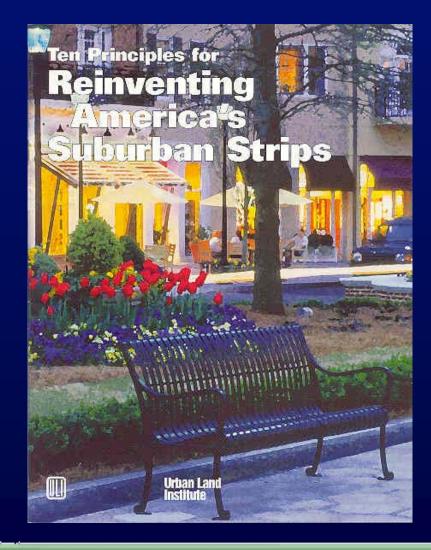




Commercial Strips — The Next Frontier

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



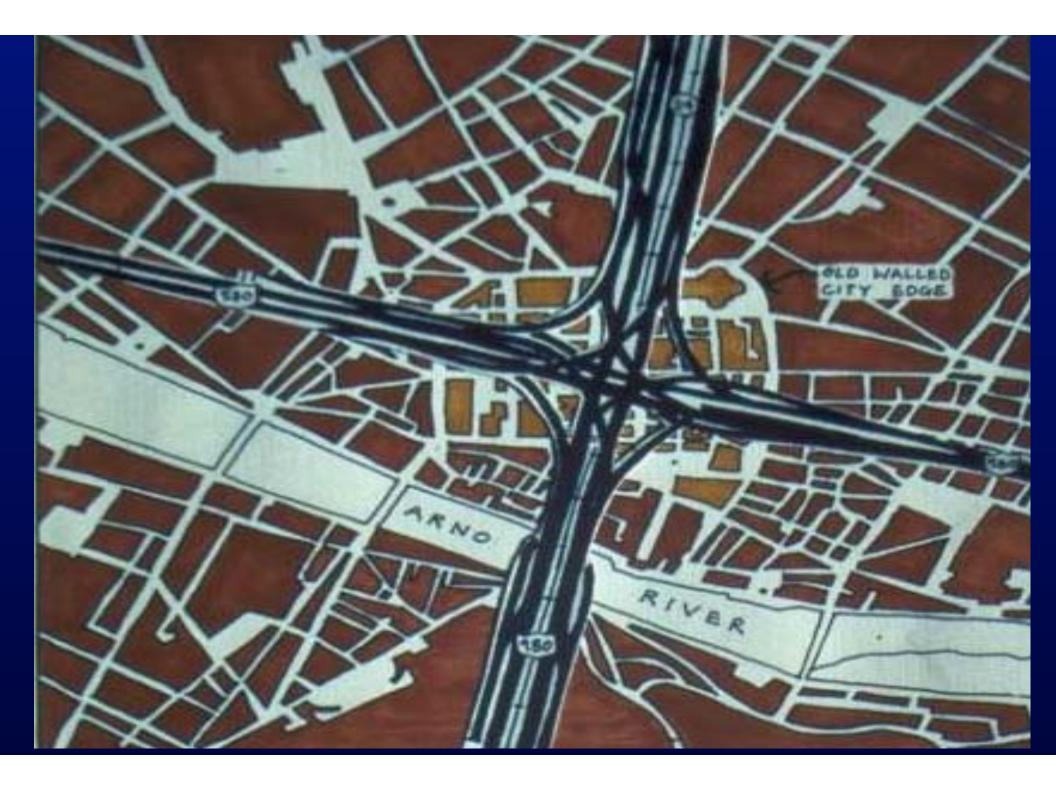


3. Take advantage of compact building design

 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

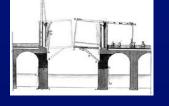
Low Density vs. Compact Development

Land Consumption	45% more*
Cost for Roads	25% more**
Cost for Utilities	15% more**
Cost for Schools	5% more**
Other Costs	2% more**

*Duncan, James et al, *The Search for Efficient Urban Growth Patterns.* Florida Department of Community Affairs, 1989. **Burchell, Robert, *Economic and Fiscal Impacts of Alternative Land Use Patterns*, Rutgers University, 1996.

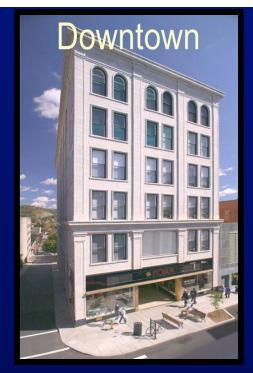


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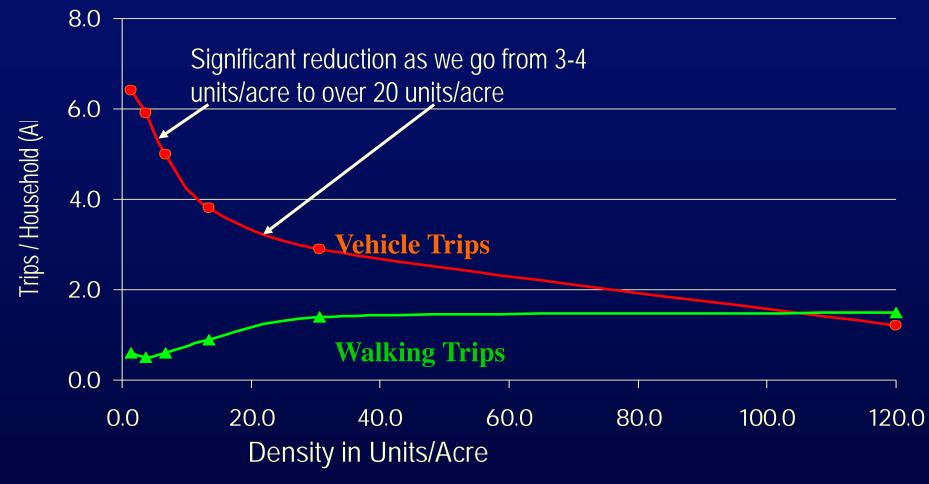
Public Interest Projects, Inc. Joseph Minicozzi, AICP Joem@pubintproj.com





Land Consumed (Acres):	34.0	00.2
Total Property Taxes/Acre:	\$ 6,500	\$634,000
City Retail Taxes/Acre:	\$ 47,500	\$83,600
Residents per Acre:	0.0	90.0
Jobs per Acre:	5.9	73.7

Land Use Pattern Affects Travel — Higher Density can reduce Vehicle Trips



Source: John Holtzclaw, PhD, Sierra Club

Land Use Pattern Affects Travel — Density to Support Transit

For Light Rail Service 18-25 units/ acre in urban area

For Bus Service

> 7 units/ acre (every 30 minutes)



Land Use Pattern Affects Travel — Density to Support Retail

For a 10,000 sq.ft. Convenience Store 9 units/acre

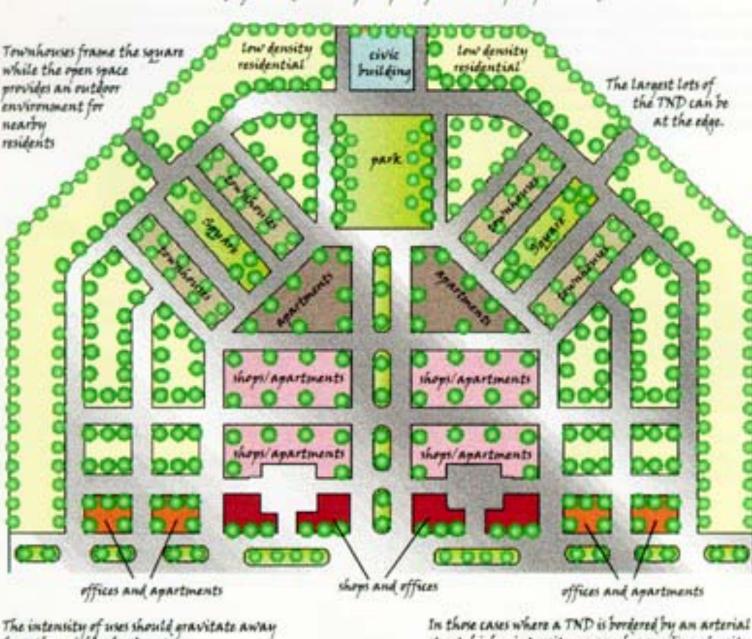
For a 25,000 sq.ft. Small Supermarket 18 units/acre



Compact **Development in** Appropriate Locations

Traditional Neighborhood Code

Knoxville, TN



Civic buildings should be at the focal pint of a street or open space corridor.

from the neighborhood center.

streat, higher intensity uses such as medium density housing can be used in creating the edge

In 1991 there were <u>31.8</u> <u>million</u> people over the age of 65 in the U.S.

By 2030 that number will increase to <u>66 million</u>.

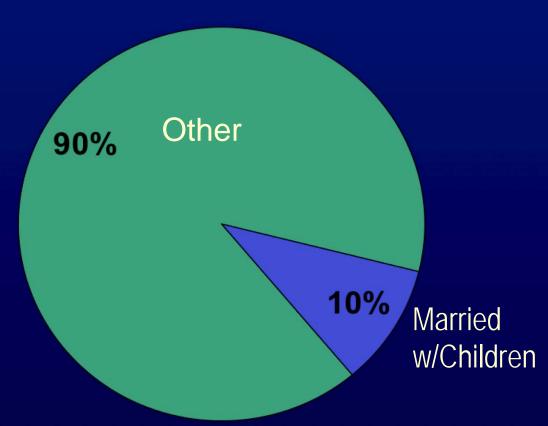


Increase in Elderly Population

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New U.S. Households Formed: 2005-2015

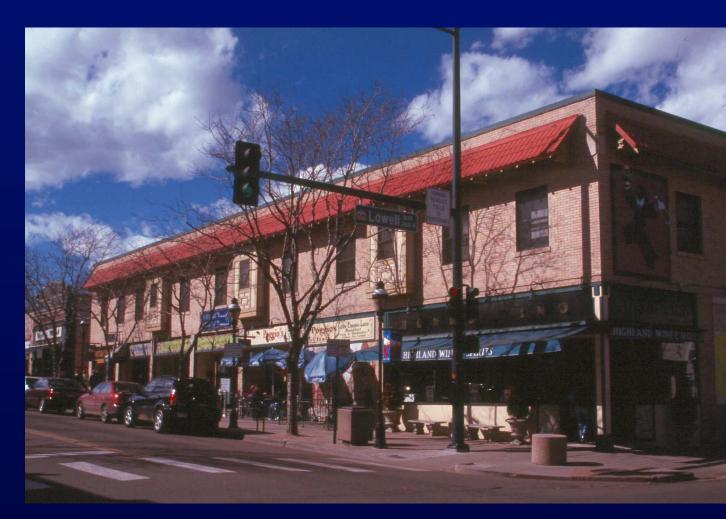
"The traditional family — married couples with children — is slowly declining in number, while households made up of single persons living alone, singles living together, and married couples without children are growing rapidly. These three groups will account for <u>90 percent</u> of the net new household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



Peter Slavin, "The Rise of the Nontraditional Household," Multifamily Trends, Urban Land Institute, Summer 2005.

4. Mix land uses

Provide retail or personal services near housing Incorporate parks, schools, and other public facilities

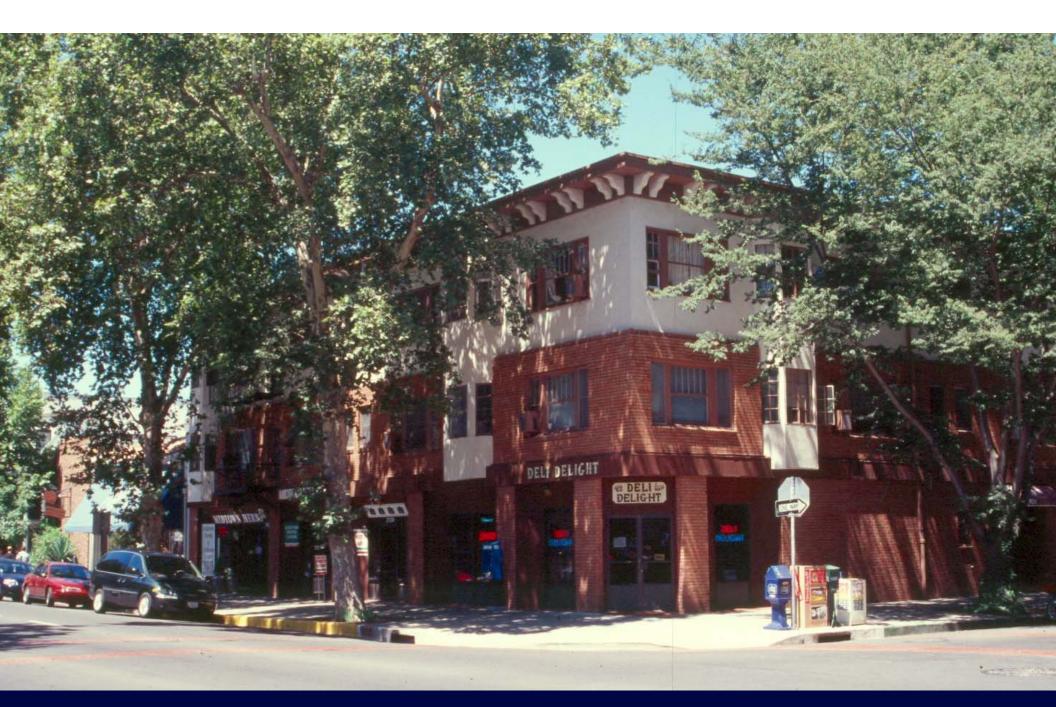


Alternative Patterns of Development



Traditional

Conventional



Housing over retail shops







Housing next to retail



5. Provide housing opportunities and choices

 Provide quality housing for people of all income levels, household sizes, and stages in the life cycle.





Mixed Income Housing

Redwood City, CA



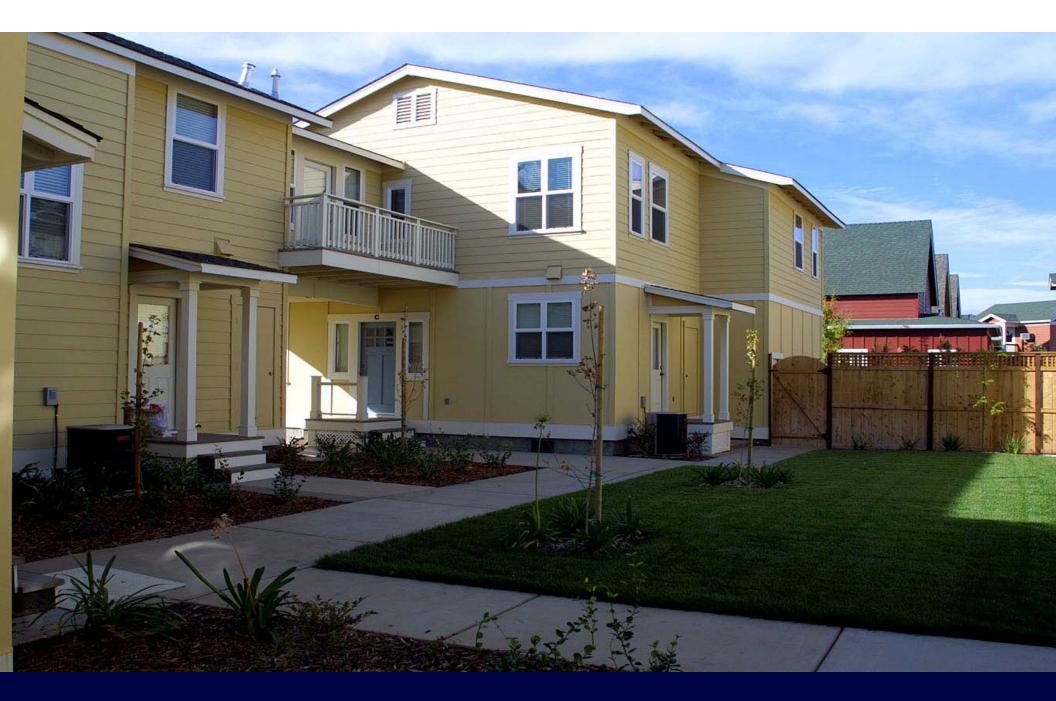
Live-Work Units

Little Italy, San Diego, CA



Mixed housing types

Doe Mill, Chico, CA



Doe Mill







Bungalow Court



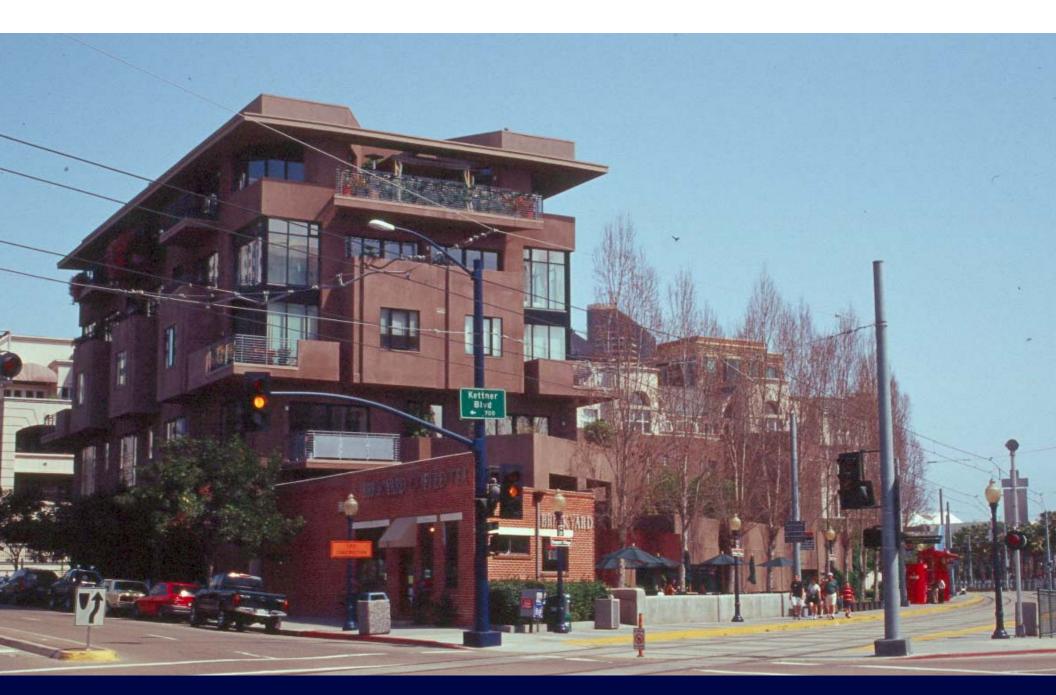
Townhomes



6. Provide a variety of transportation choices

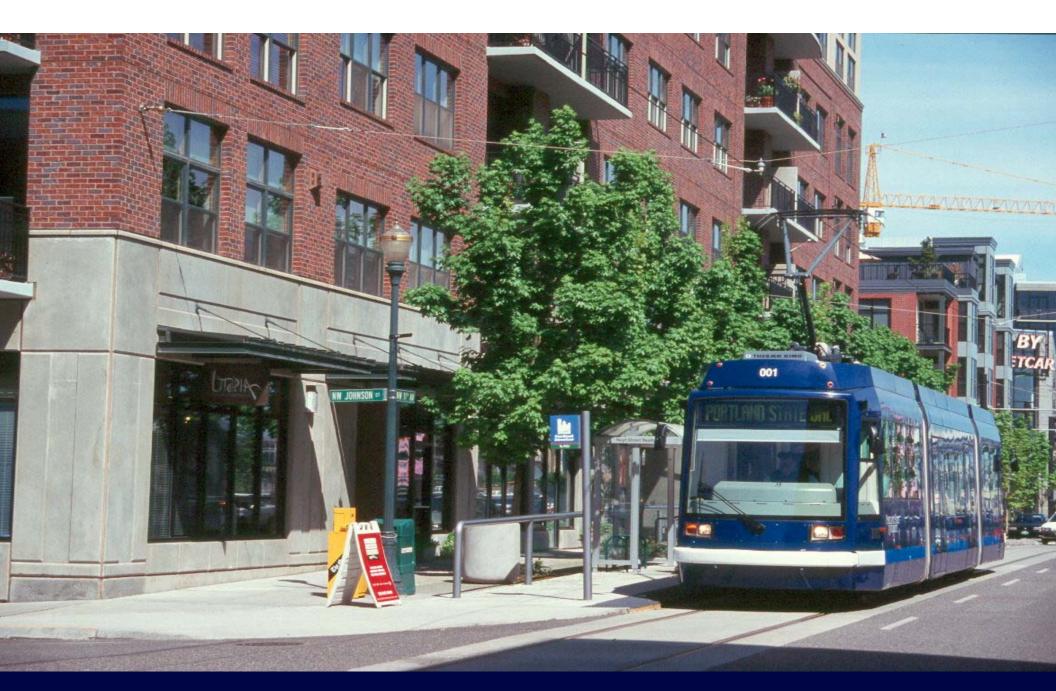
- Coordinate land use and transportation investment
- Increase high-quality transit service
- Connect pedestrian,
 bike, transit, and
 road facilities





Transit-Oriented Development

San Diego, CA



Portland, Oregon Streetcar



Portland Bus Mall



Los Angeles Metro Rapid Bus

7. Create walkable communities

- Mix land uses, build compactly, and provide safe and inviting pedestrian corridors
- Create "complete streets"
 - Accommodate pedestrians, bicyclists, transit users

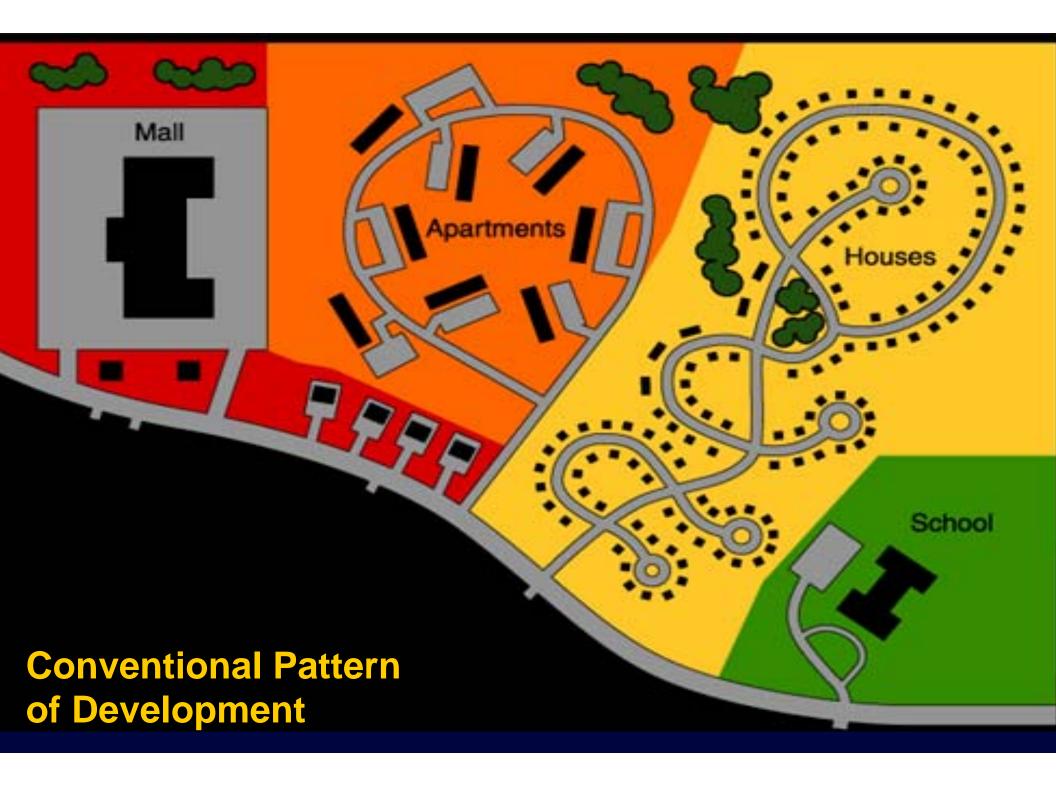


Street Design

Influences trip choices

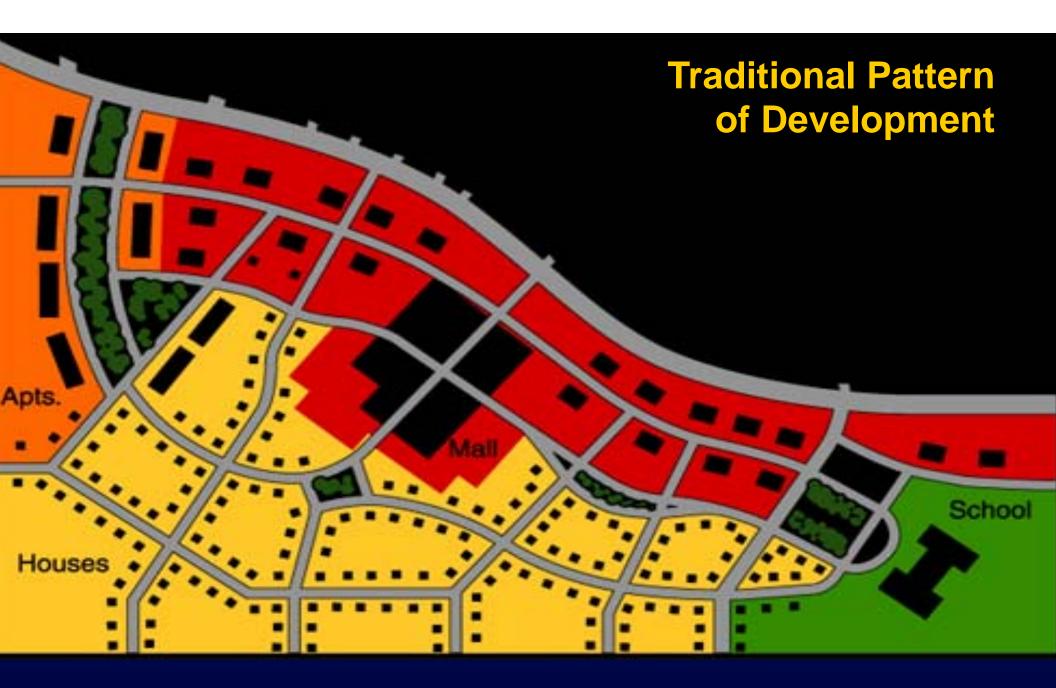
 Safe, quiet, slow, shaded streets encourage people to walk, ride bicycle or take transit instead of driving a car

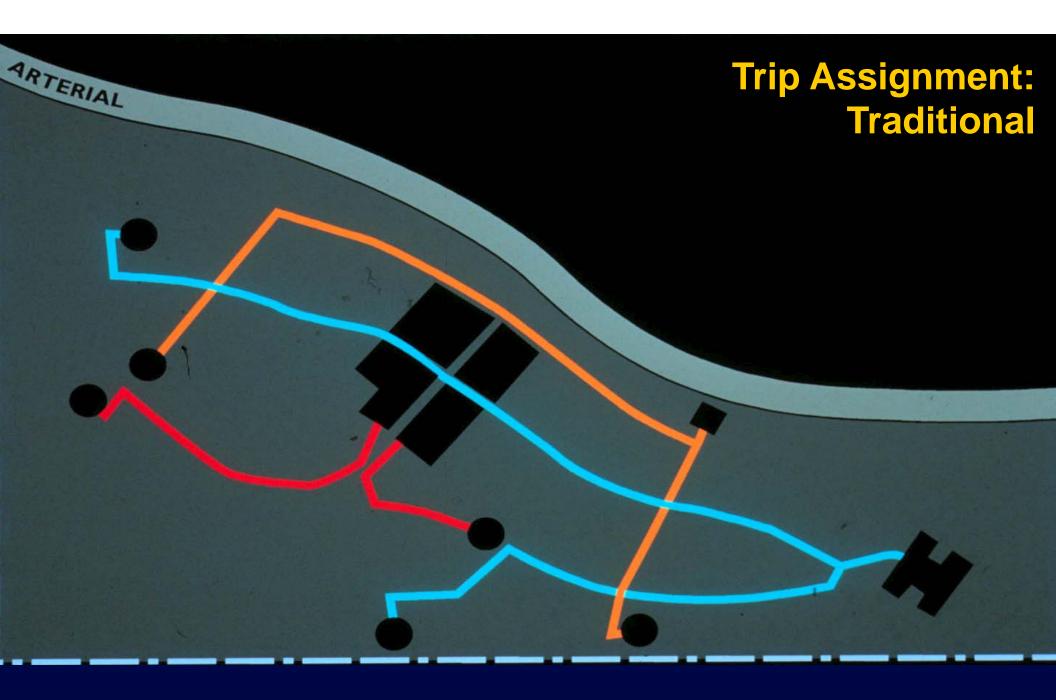




Trip Assignment: Conventional

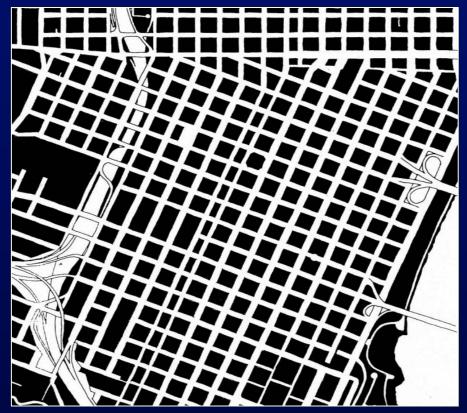
ARTERIAL





Traditional vs. Conventional

Central Business Districts at the same scale





Great Streets, Allen Jacobs

Portland, Oregon

Great Streets, Allen Jacobs

Walnut Creek, California

Principles of Safe, Walkable Streets

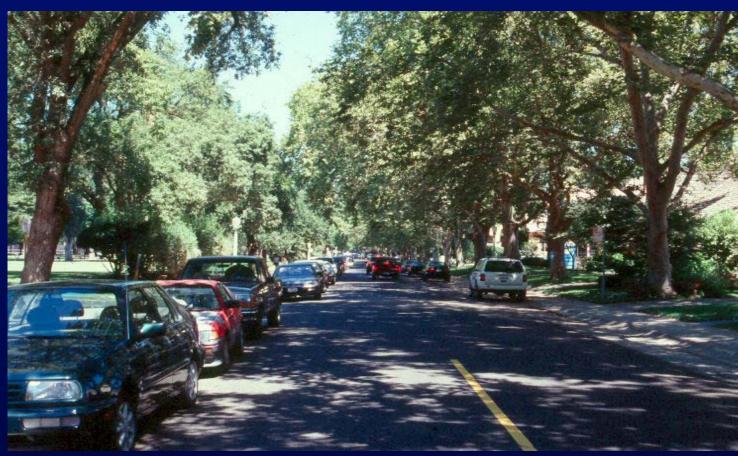
- Complete Streets
 designed for people, not just cars
- Friendly to cars, pedestrians and cyclists



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

Source: "Residential Street Typology and Injury Accident Frequency," Swif and Associates, Longmont, CO, 1997

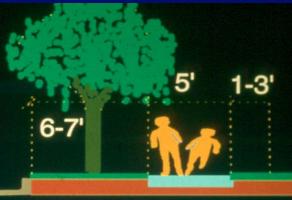
Safe Streets Need Good Sidewalks

- Detached from curb
- At least 5 feet wide

 Planting strip helps shade street and sidewalk

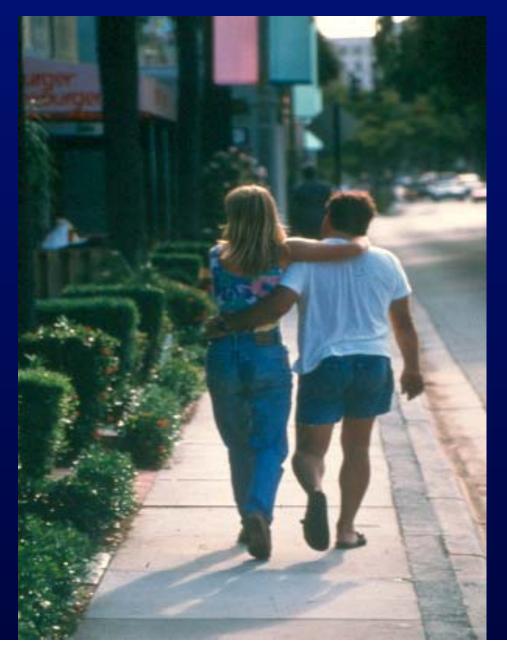
SIDEWALK FEATURES

- Width (minimum 5')
- 6 feet if at back-of-curb (AASHTO)
- Crossfall 1:50
- Pedestrians need a 2 foot 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



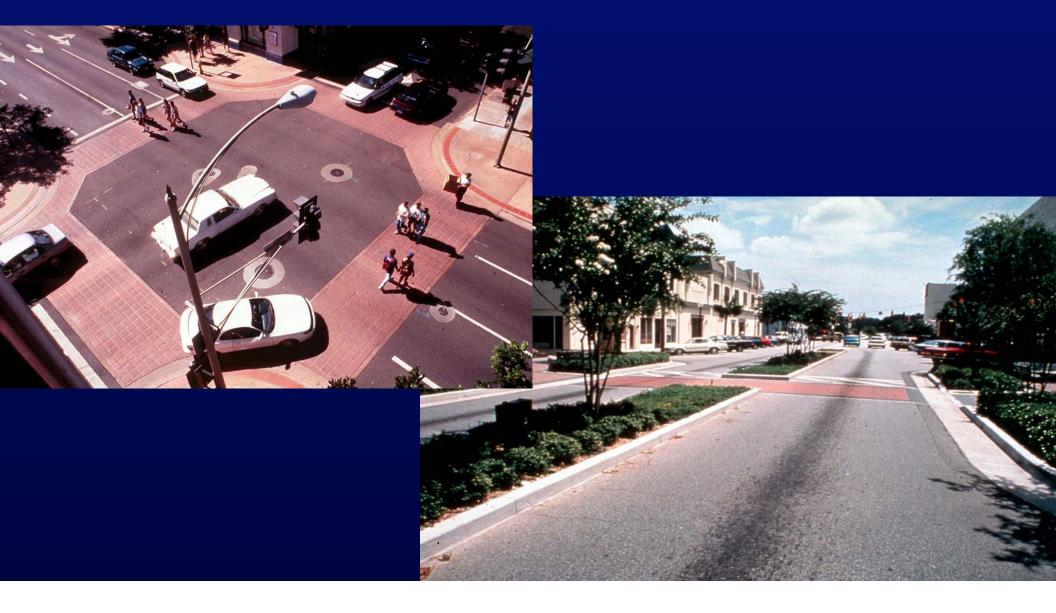


Safe Streets Need Good Sidewalks





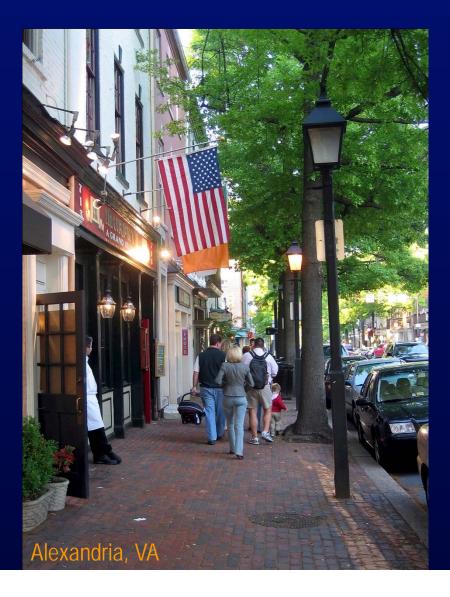
Healthy Neighborhoods Need Good Street Crossings

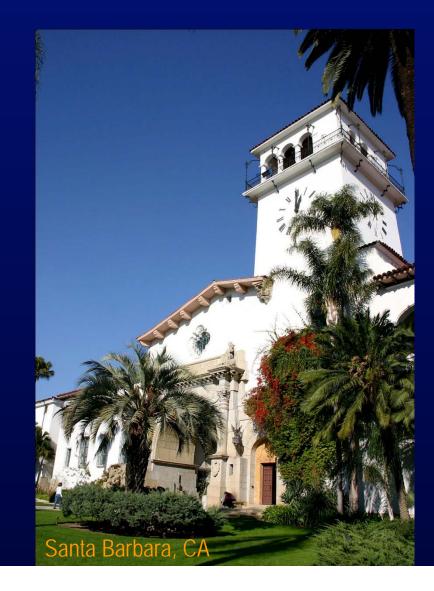


Parklets or plazas take underused street space to create people places, support local businesses



8. Foster Distinctive, Attractive Communities with a Strong Sense of Place

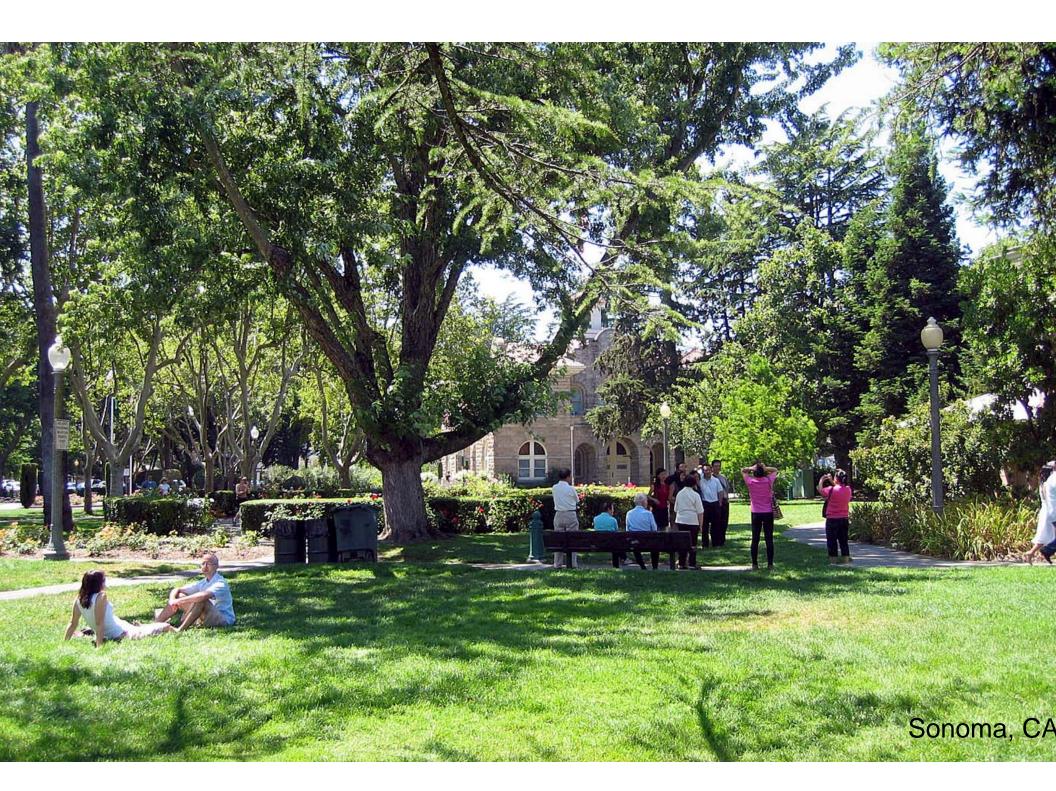


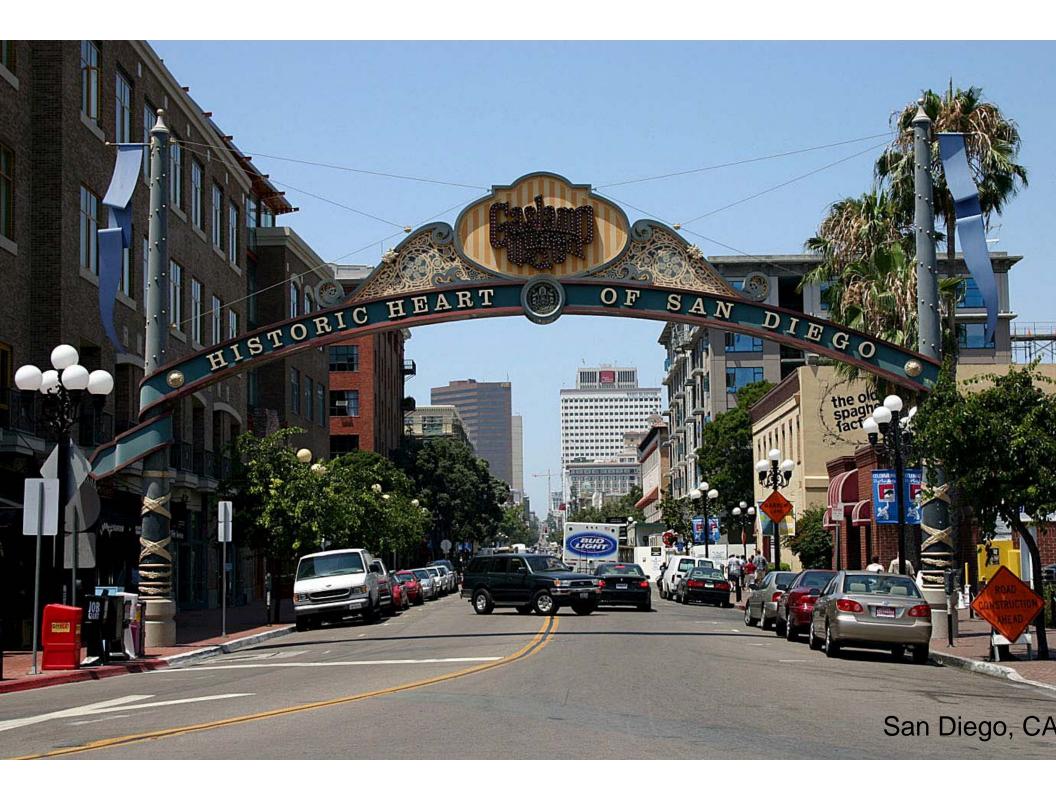




"There is little sense of having arrived anywhere, because everyplace looks like no place in particular."

— James Howard Kunstler, *The Geography of Nowhere*





9. Encourage community and stakeholder collaboration in development decisions

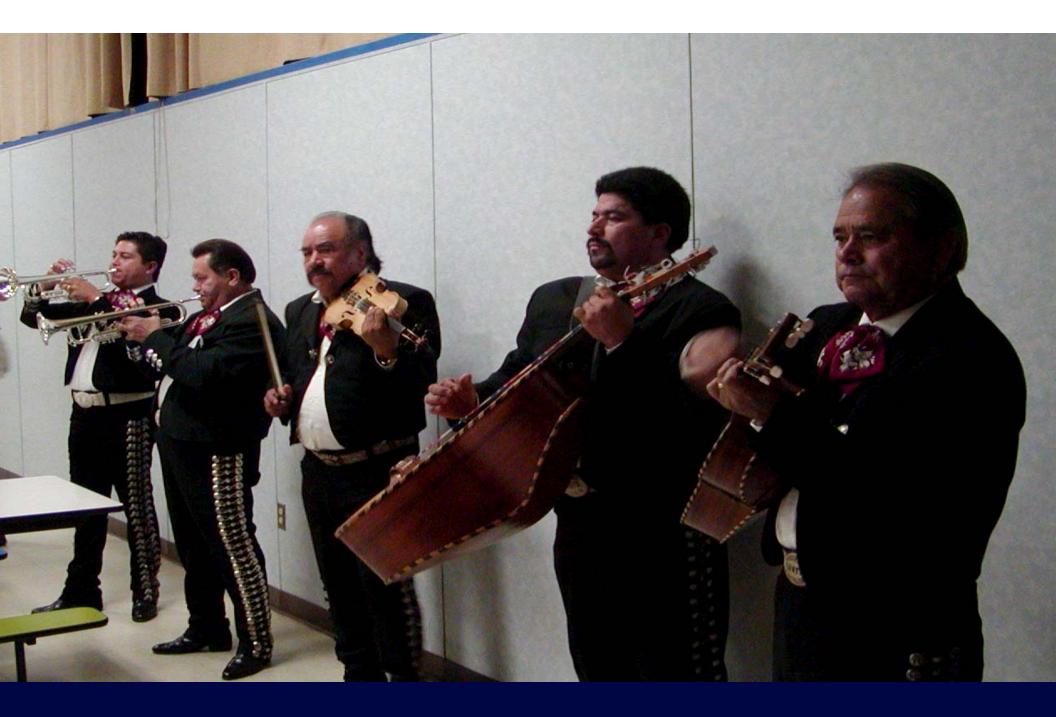
 The private sector does most of the development, but residents and other stakeholders collaborate in this process to ensure it is consistent with community needs and concerns.







Cutler-Orosi Design Charrette – Opening Night Workshop











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



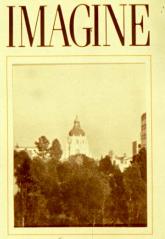




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Plan proactively Develop a Vision for Community

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

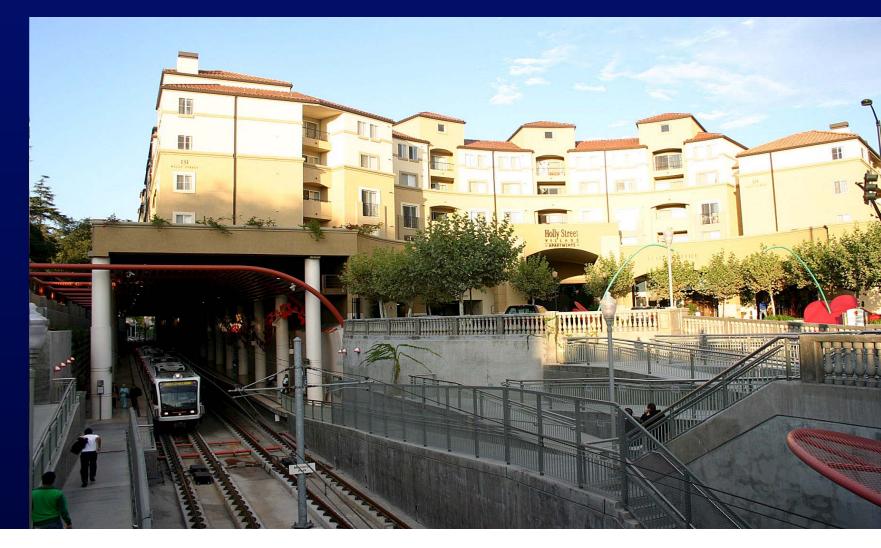
- Light Rail Route
- Light Rail Stations

Plan proactively Develop a Vision for Community

Pasadena General Plan

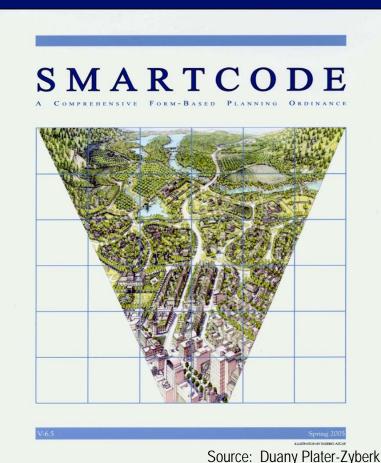
Holly Street Village Infill, mixed use rental housing

Model: Early 1990s



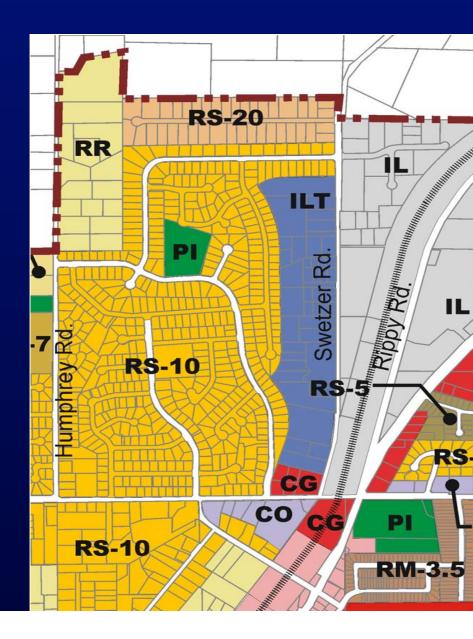
Implementing the Vision

- 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



The Problem with Conventional Zoning

From making places to making maps — Crayola Zoning

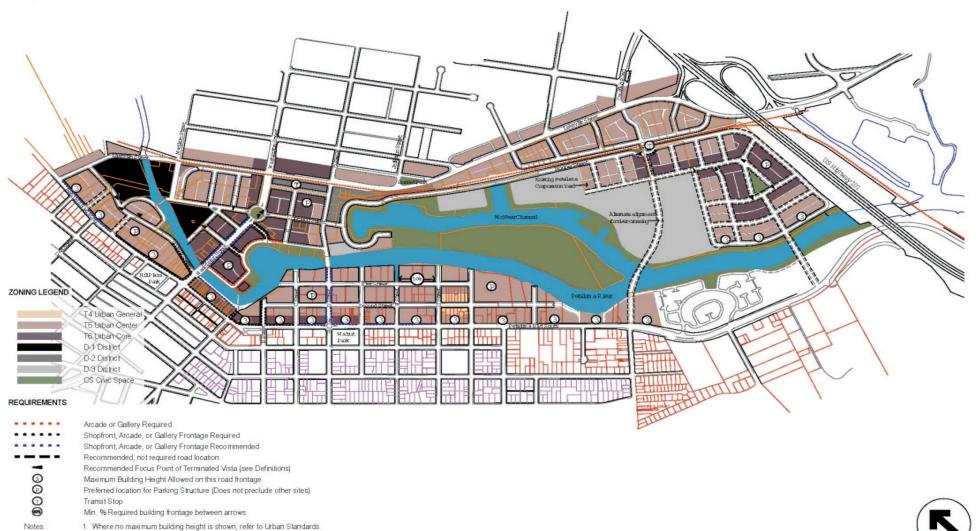


Form-based Codes: Case Study Central Petaluma





Source: Fisher & Hall Urban Design



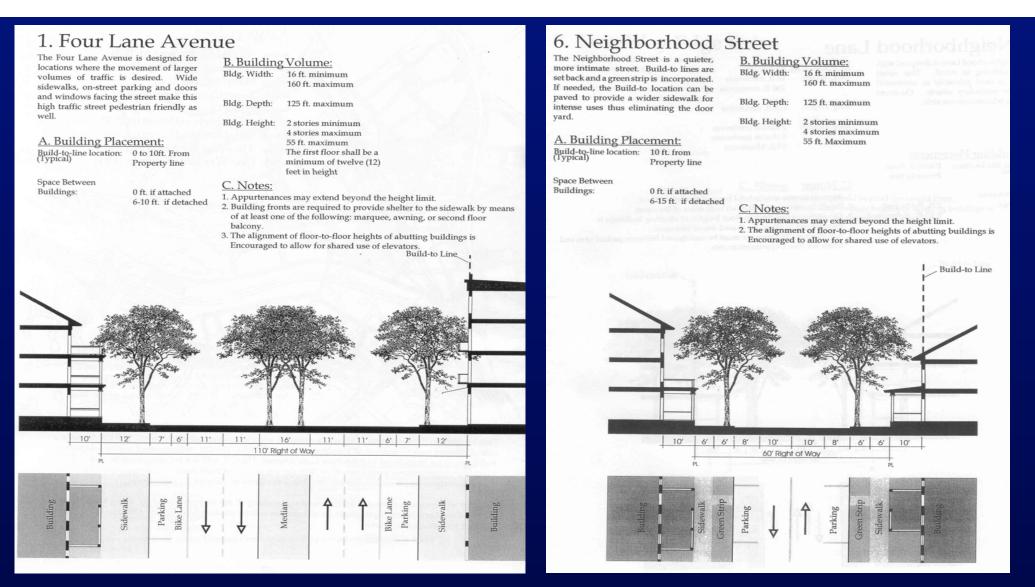
2 If Zoning Map Requirements and Urban Standards Conflict, the Zoning Map prevails

Note: Lot lines are for illustrative purposes only.



2

Central Petaluma Smart Code — Zoning Map



Hercules, CA — Form-Based Code

Street type determines location, height, features of buildings

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

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