# Smart Growth 101: Making the Connections

Paul Zykofsky, AICP Local Government Commission

New Partners for Smart Growth Conference

Charlotte, NC February 3, 2011

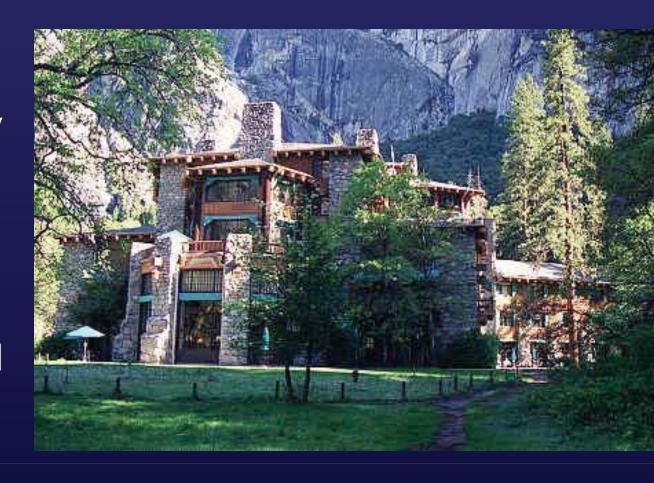
#### **Local Government Commission**

- 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

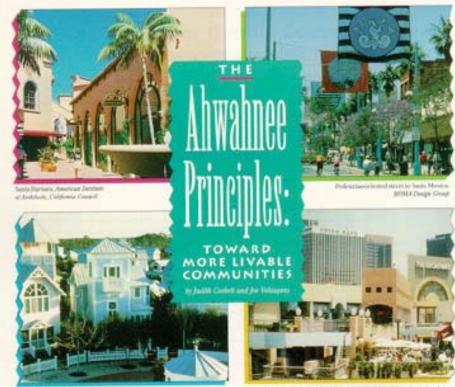
- Response to our members' concerns over sprawling, poorly planned development in their communities
- Assembled with assistance from leading architects and planners working on innovative solutions





# 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



waste Pretts 197 existent

Horten Plats -- Where the stall was shed-lowstown. City of how Deep

Itles 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 minmann-mal problems can be traced to landuse practices adopted since World War II. In the late 1540s we began to adopt a notion that life would be better and we would all have more freedom if we planned and built our communities around the assorabile. Gradually, rather than taxroning our freedom, auto-oriented land useplanning has reduced our options. Now, it takes much some time than it word to carry and our daily activities. We must go exerywhere by our - there is no other option. We must take a car to the store for a gallon of milk, drive the children in Little League practice, even seem part of the harch hour driving to a place to eat. And as roads become necroatrapy chapped and services further from our home, we spend our time as anonymous individuals waiing for the traffic light to change rather than charting with friends at the corner store or playing half on the lows with the meighborhood lidle.

LEAGUE OF CALIFORNIA CORD

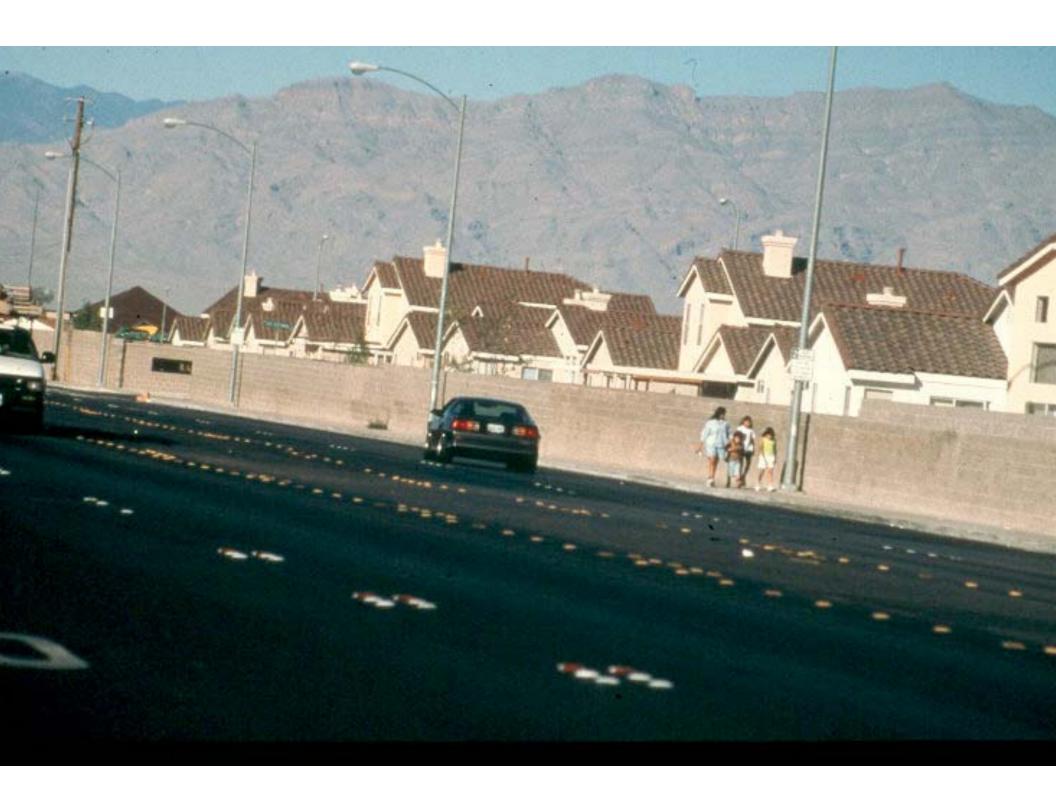


# The Ahwahnee Principles for More Livable Communities

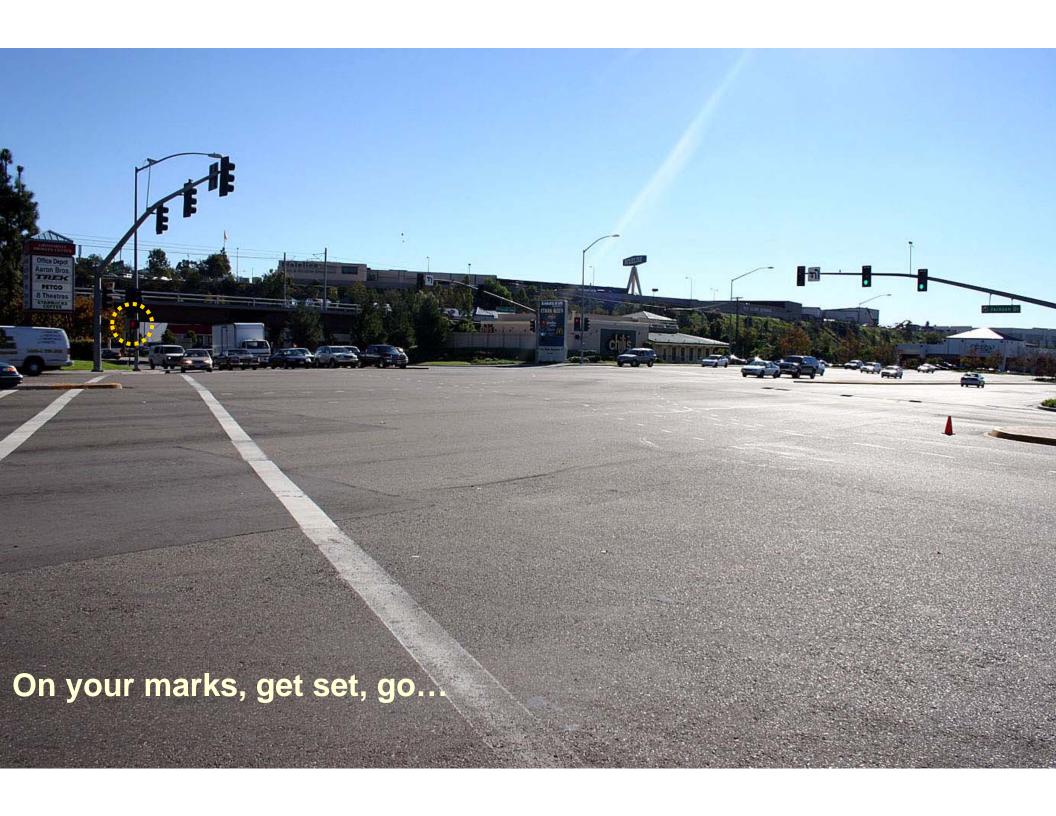
- Embraced by local government officials in California and other states
- LGC initiated programs on land use and transportation planning
- 1993 created Center for Livable Communities
- Over 200 cities and counties in California adopted all or part into their planning documents
- Since 2001 have organized National New Partners for Smart Growth Conference

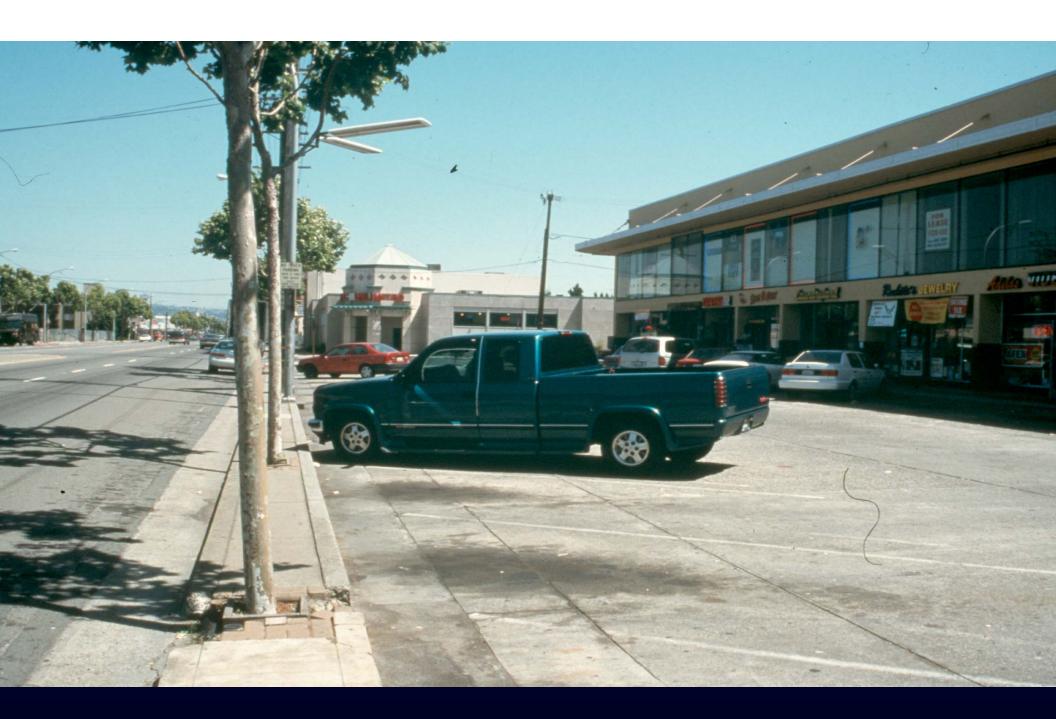






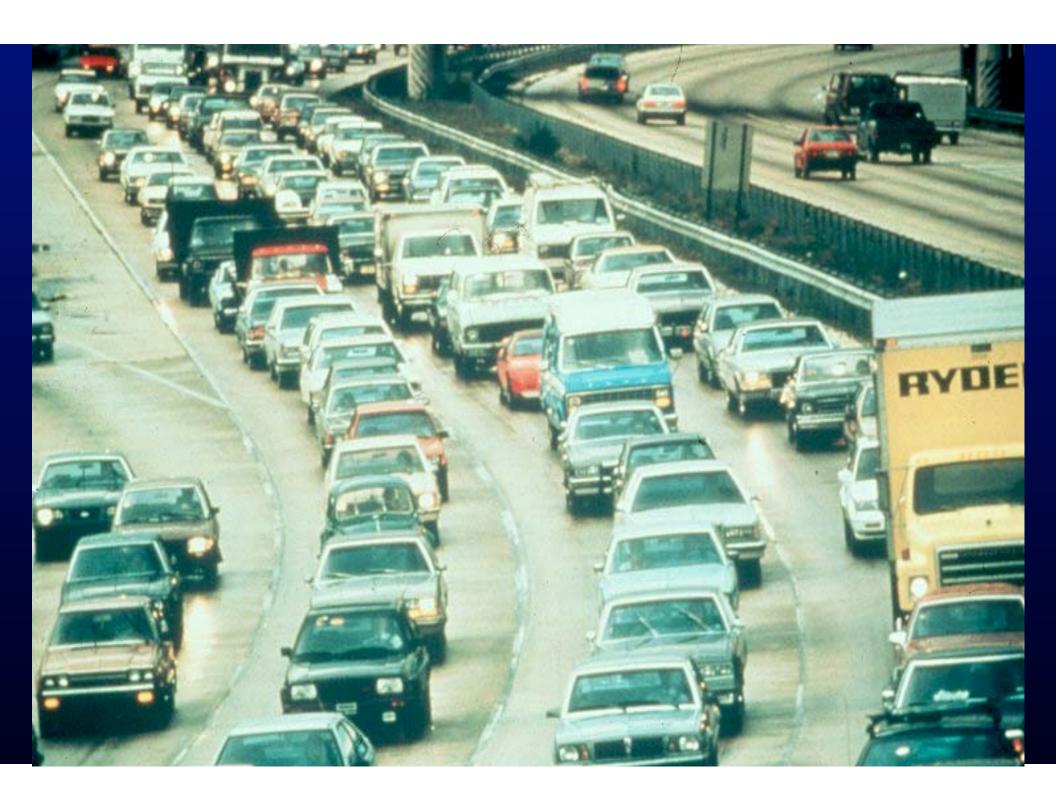


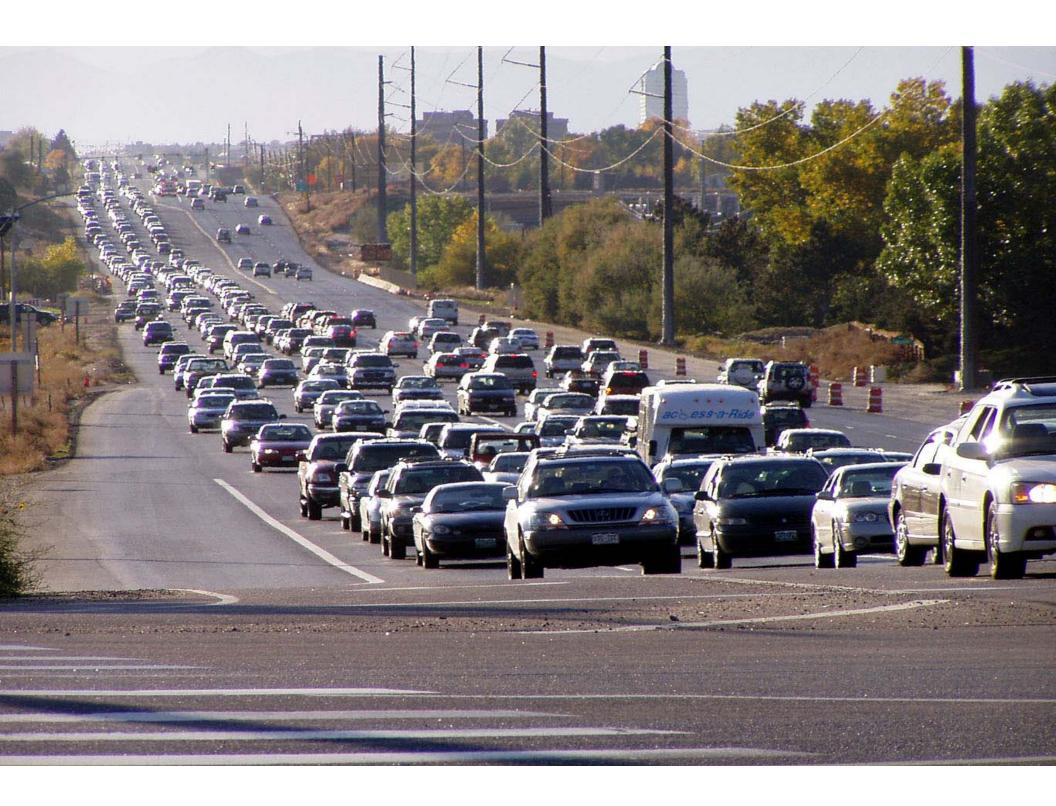




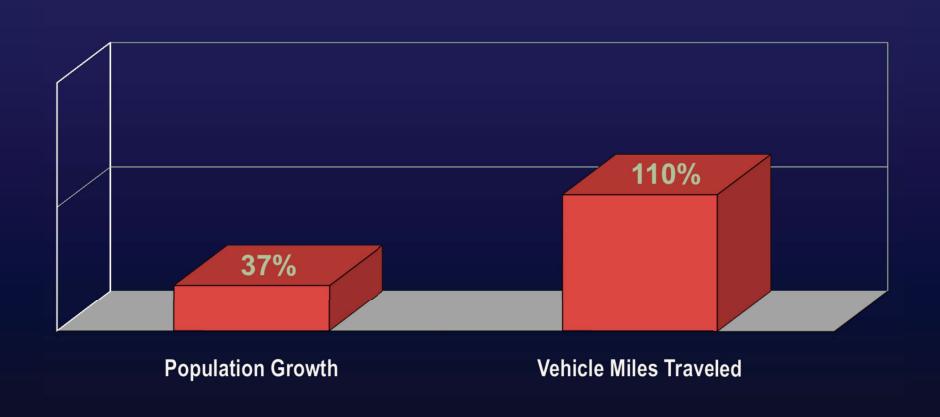






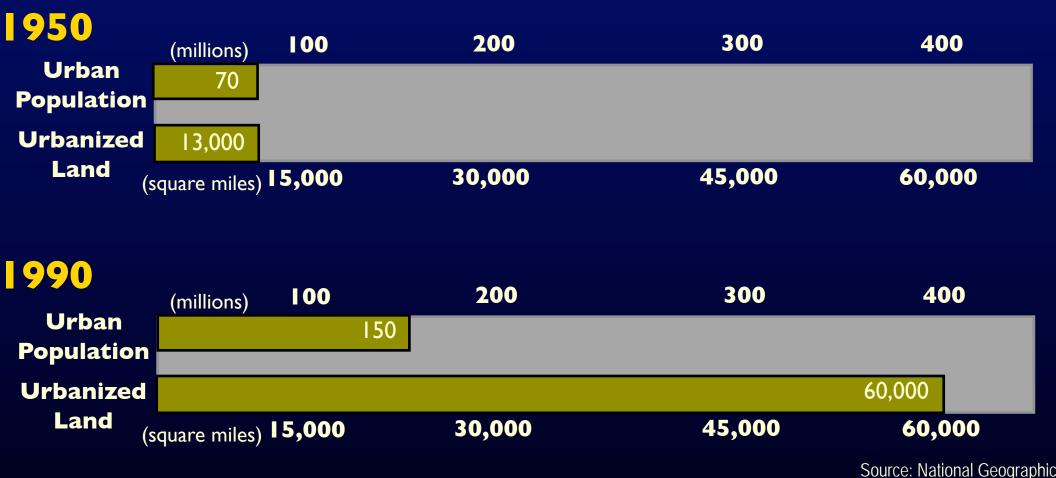


# U.S. Population Growth and Transportation – 1977-2007



### U.S. Population Growth, 1950-1990

 Land has been urbanized 2½ times faster than the increase in urban population



Graphic courtesy Design Community & Environment

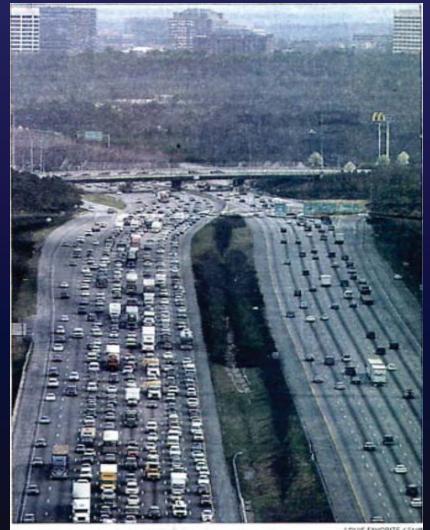
# Will 23 lanes be enough?

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.

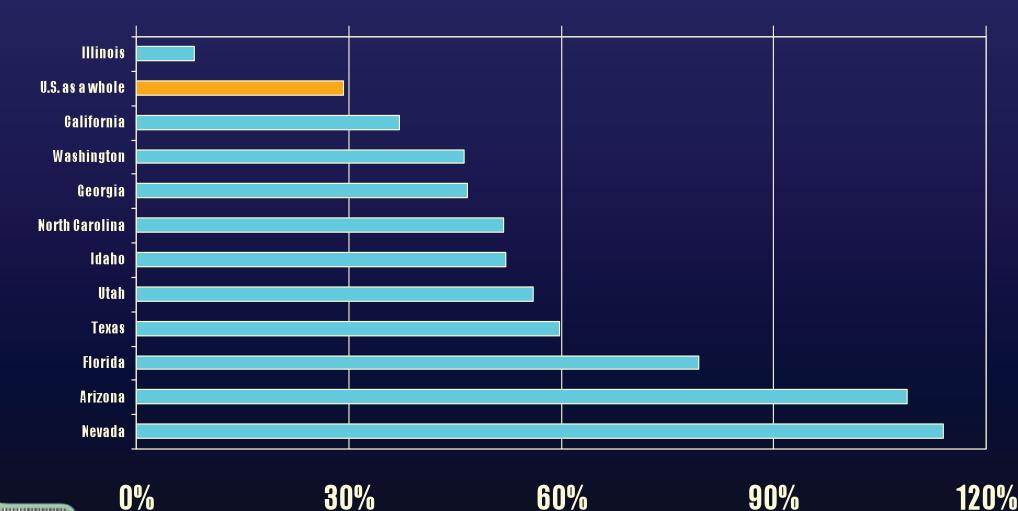
It's the planned I-75, all 23 lanes, coming soon to Cobb County. As currently conceived it's 388 feet across, wider than a football field is long.

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. General purpose lanes Truck **HOV lanes** General purpose lanes Truck lanes lanes Southbound Northbound Trucks Car/van pools and buses ride for free. Single-occupant vehicles pay toll. must pay. Cost rises when traffic is heavier.



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 weep with joy, and make others wonder whether it's overkill.

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





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

#### 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."

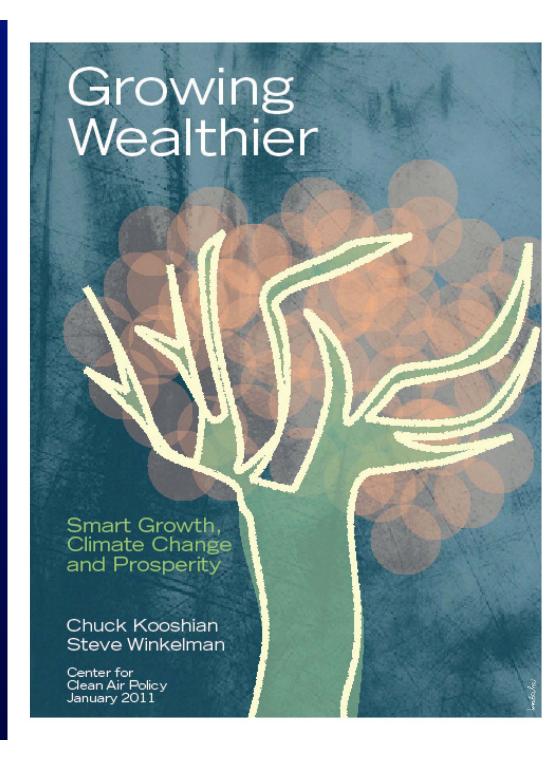
— Collaborative Economics, Linking the New Economy to the Livable Community

"Livability isn't some middle class luxury. It is an economic imperative."

— Robert Solow, Nobel Prize-winning Economist



"We find that an inclusive planning process following smart growth principles that yields more walkable neighborhoods with broader options for housing and transportation can help communities, businesses and individuals make money, save money and improve quality of life."



#### What Smart Growth "Is" And "Is Not"

**More transportation choices** Not against cars and and less traffic roads Not anti-suburban Vibrant cities, suburbs and towns Wider variety of housing Not about telling people where or how to live choices Not against growth Well-planned growth that improves quality of life

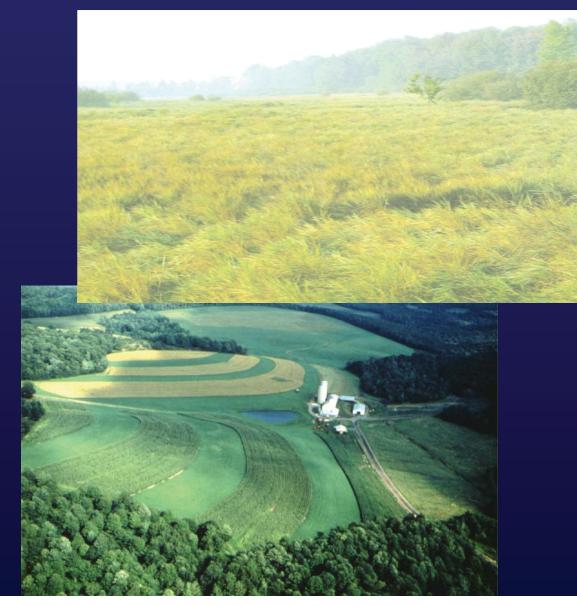
### Principles of Smart Growth/ Livable Communities

### Ten Principles of Smart Growth

- 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
- 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



### Charlantingham: Welcome to the big city

By Maurice Tamman mtamman@ajc.com

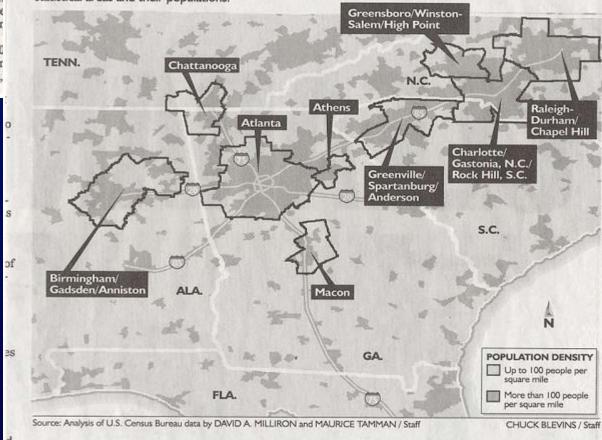
Charlotte — Over the past 40 years, satellite lenses have clicked away, 450 miles high, capturing the nation's night lights.

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. During that time, me 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 lion people live in the r Piedmont megalopolis,

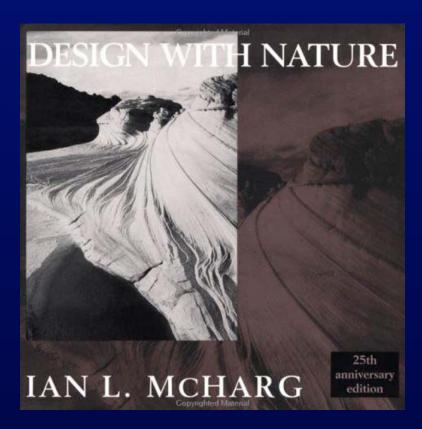
#### PIEDMONT MEGALOPOLIS

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



Mapping Method
Developed by Ian McHarg



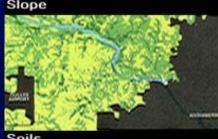
Geology



Hydrology



Slope



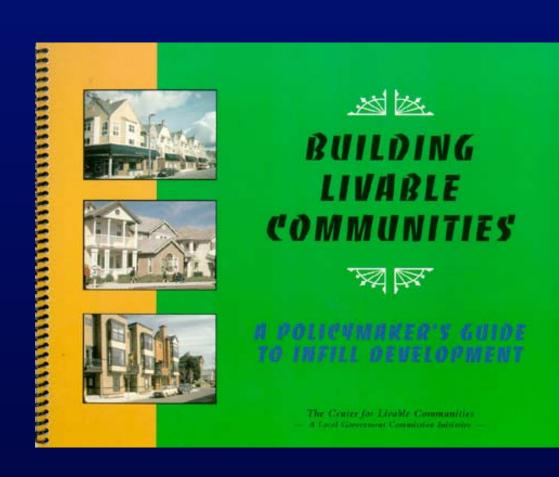
Soils



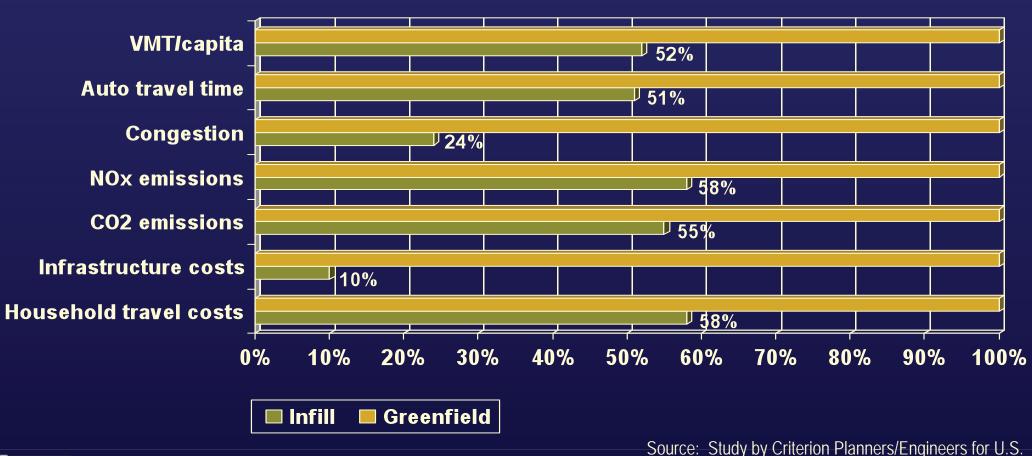
Woodland

# 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

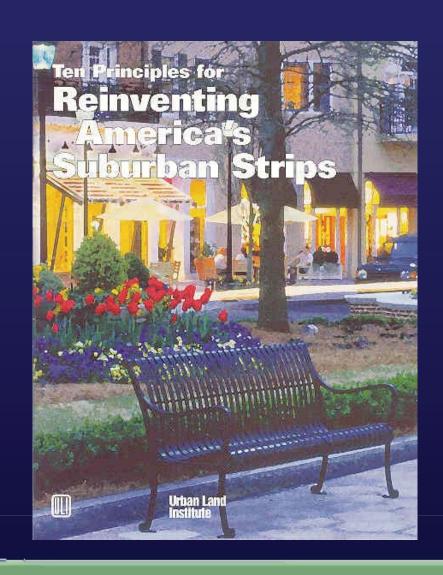
#### Potential benefits of infill

- 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





#### Regional traffic arterial



#### Regional traffic arterial



#### Regional traffic arterial



Photo Simulation by Steve Price, Urban Advantage (www.urban-advantage.com)

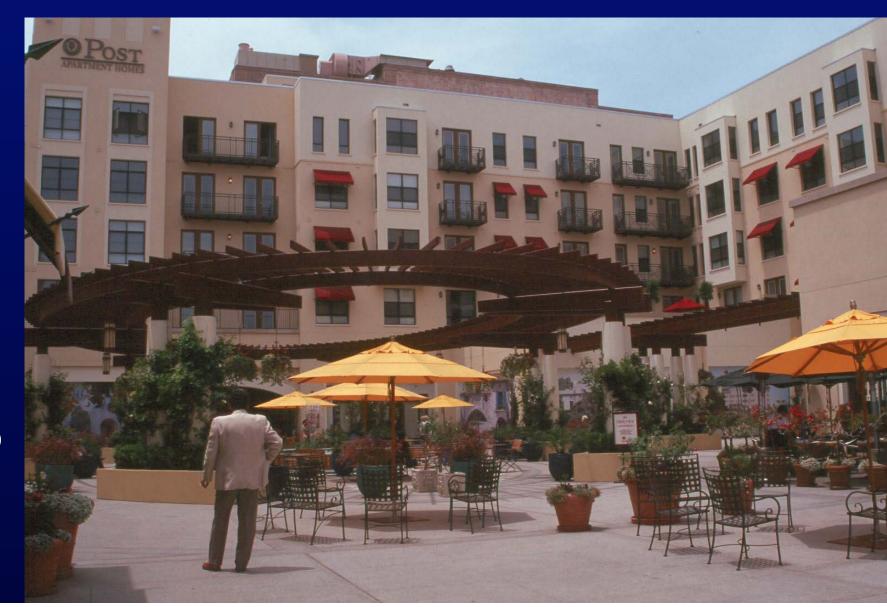
### Case Study: Pasadena



Paseo Colorado

After

# Case Study: Pasadena



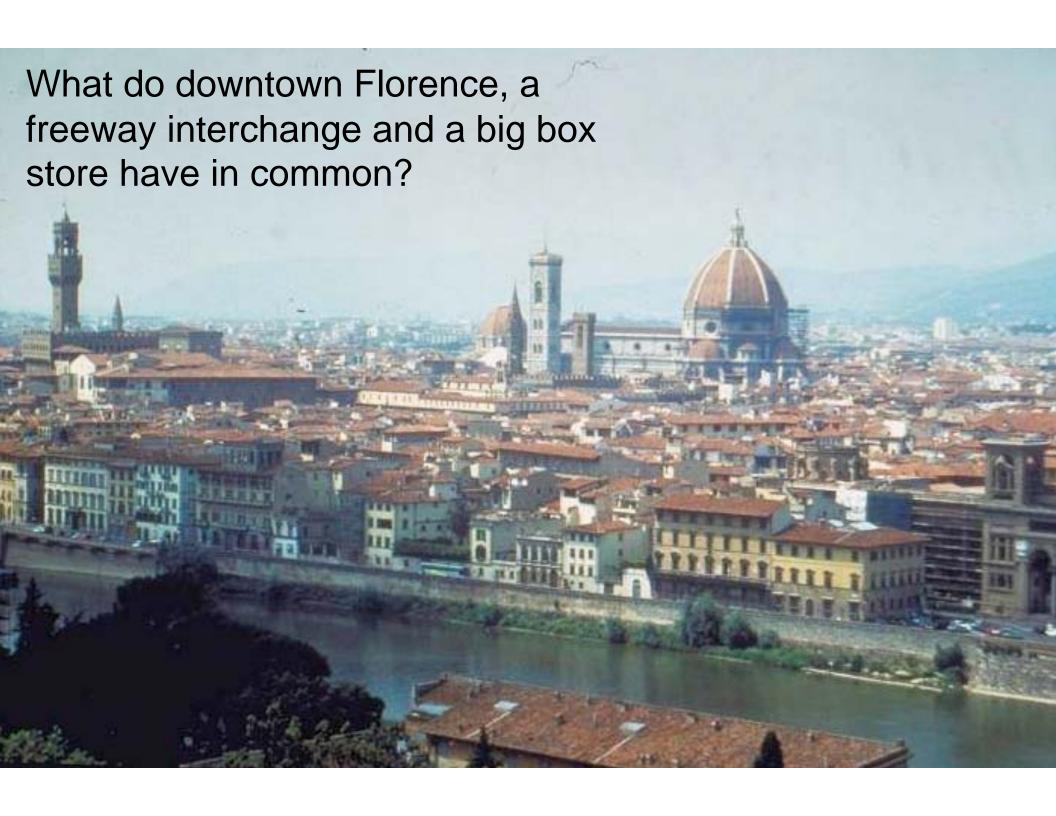
Paseo Colorado

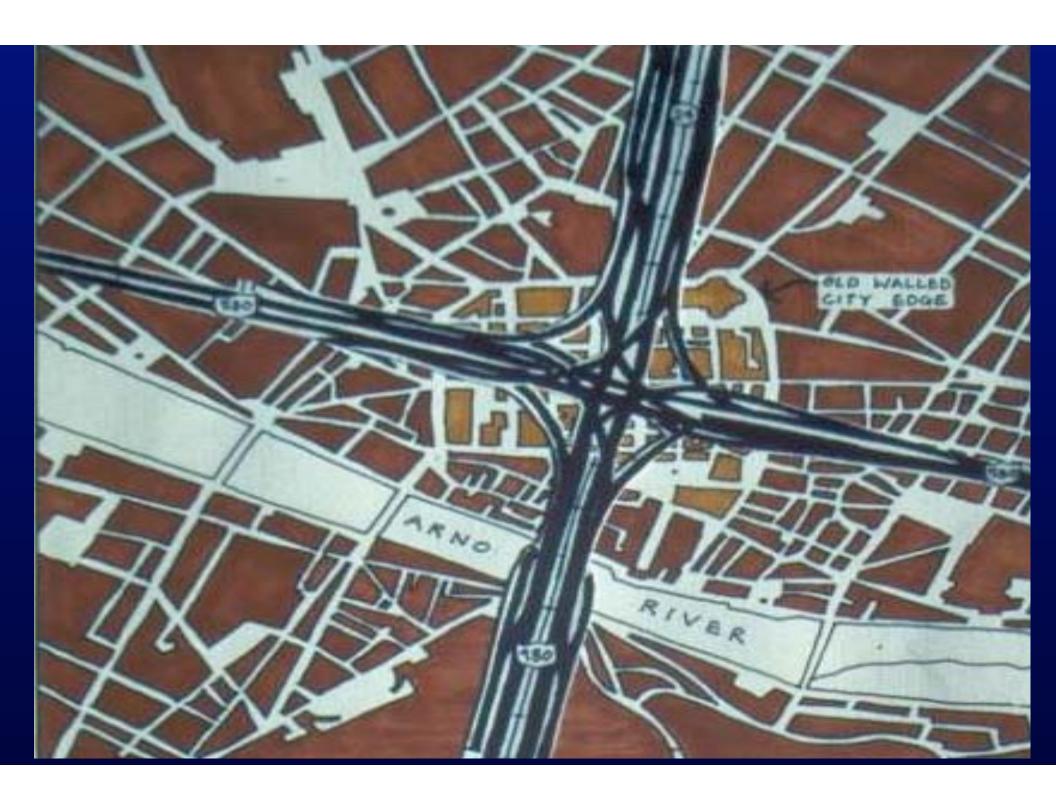
After

# 3. Take advantage of compact building design

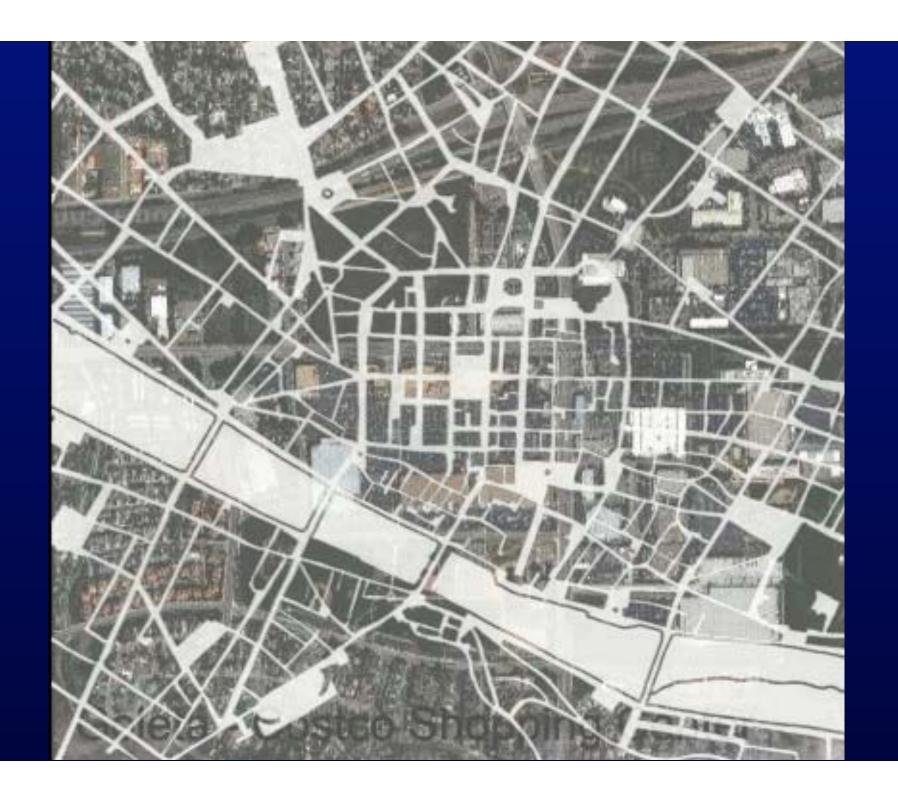
 Grow vertically rather than horizontally to preserve green spaces and reduce cost of providing public facilities and services











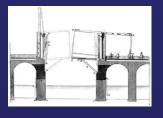
### Lower Cost of Infrastructure

#### 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.



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

# Compact vs. Low Density Development

American Farmland Trust
Study of Growth in
California's Central Valley
— 1995-2040



Low Density
Development
Scenario
(3 units/acre)



Compact vs. Low Density Development

...vs. More
Compact
Development
Scenario (6
units/acre)

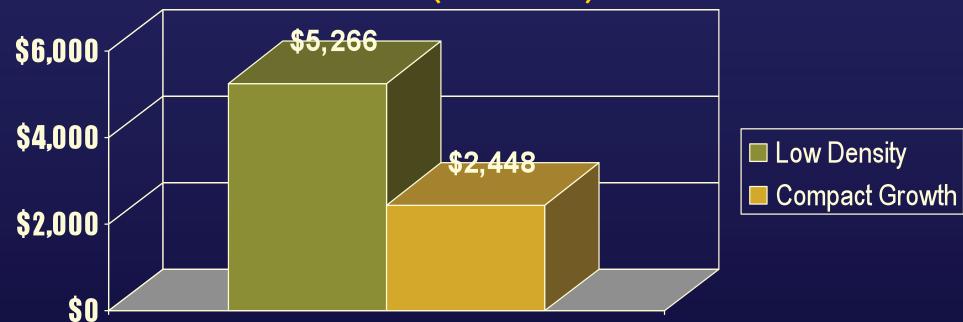


Compact vs. Low Density Development

## Compact vs. Low Density Development

Projected Loss of Agricultural Sales in 2040 (Millions of 1993 dollars)

Cumulative loss (1995-2040): \$72 billion



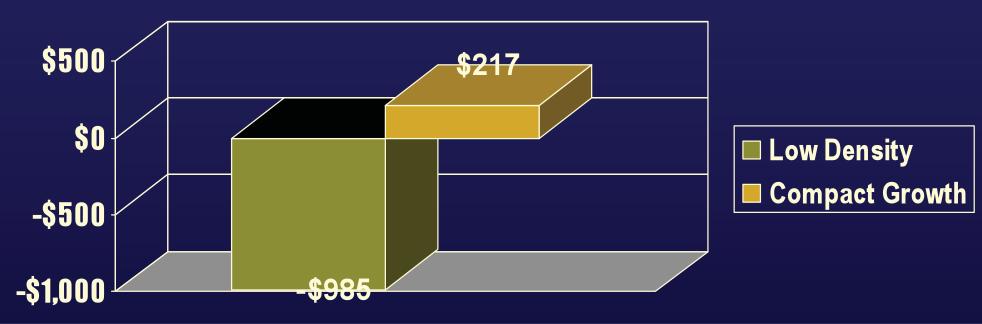


Source: American Farmland Trust, "Alternatives for Future Urban Growth in California's Central Valley: The Bottom Line for Agriculture and Taxpayers." October 1995.

## Compact vs. Low Density Development

City Revenues/Public Service Costs in 2040 (Millions of 1993 dollars)

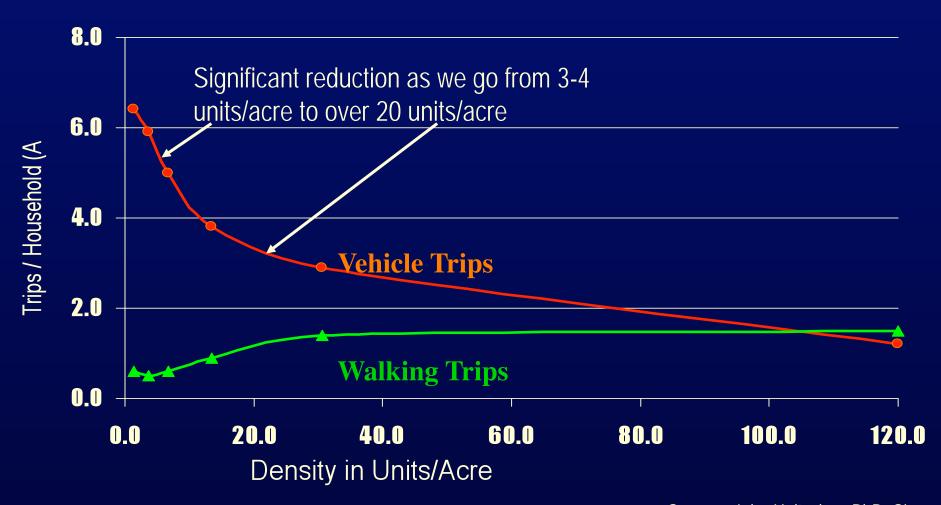
Cumulative loss (1995-2040): \$29 billion





Source: American Farmland Trust, "Alternatives for Future Urban Growth in California's Central Valley: The Bottom Line for Agriculture and Taxpayers." October 1995.

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



# 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)



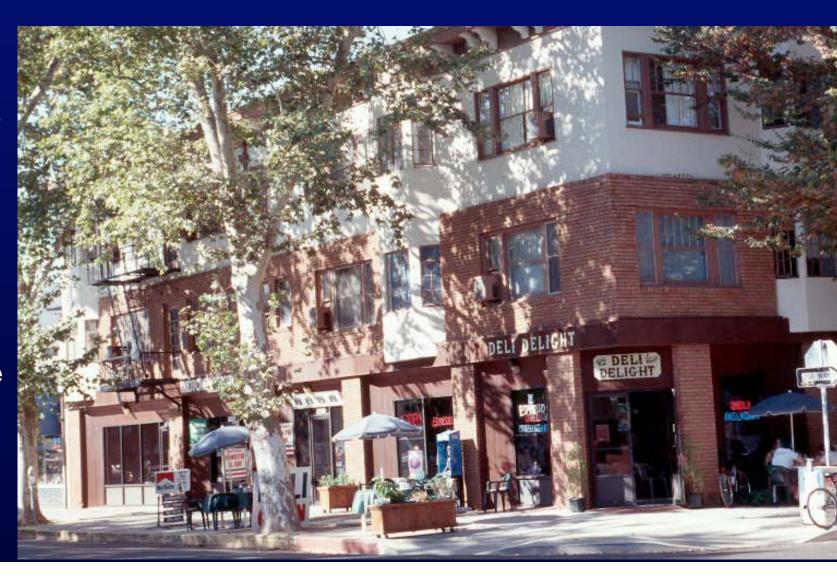
# Land Use Pattern Affects Travel — Density to Support Retail

For a 10,000 sq.ft.
Convenience
Store

7 units/acre

For a 25,000 sq.ft. Small Supermarket

■ 18 units/acre



# Compact Development in Appropriate Locations

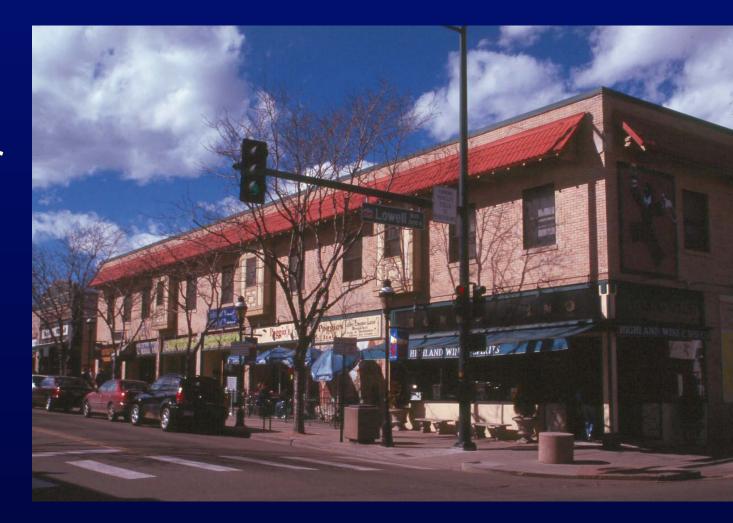
Traditional Neighborhood Code

Knoxville, TN

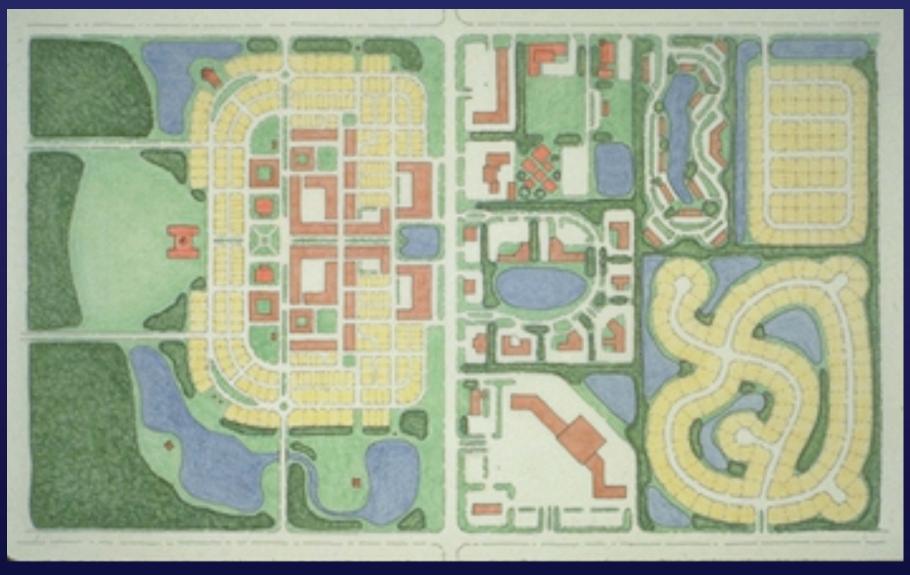


### 4. Mix land uses

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

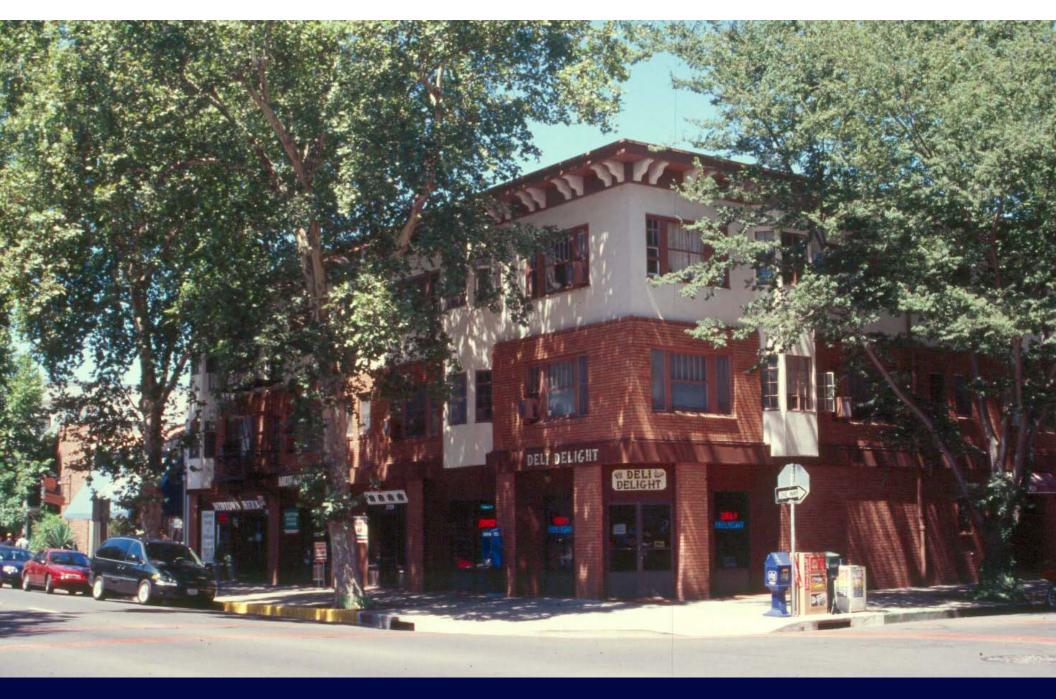


### Alternative Patterns of Development



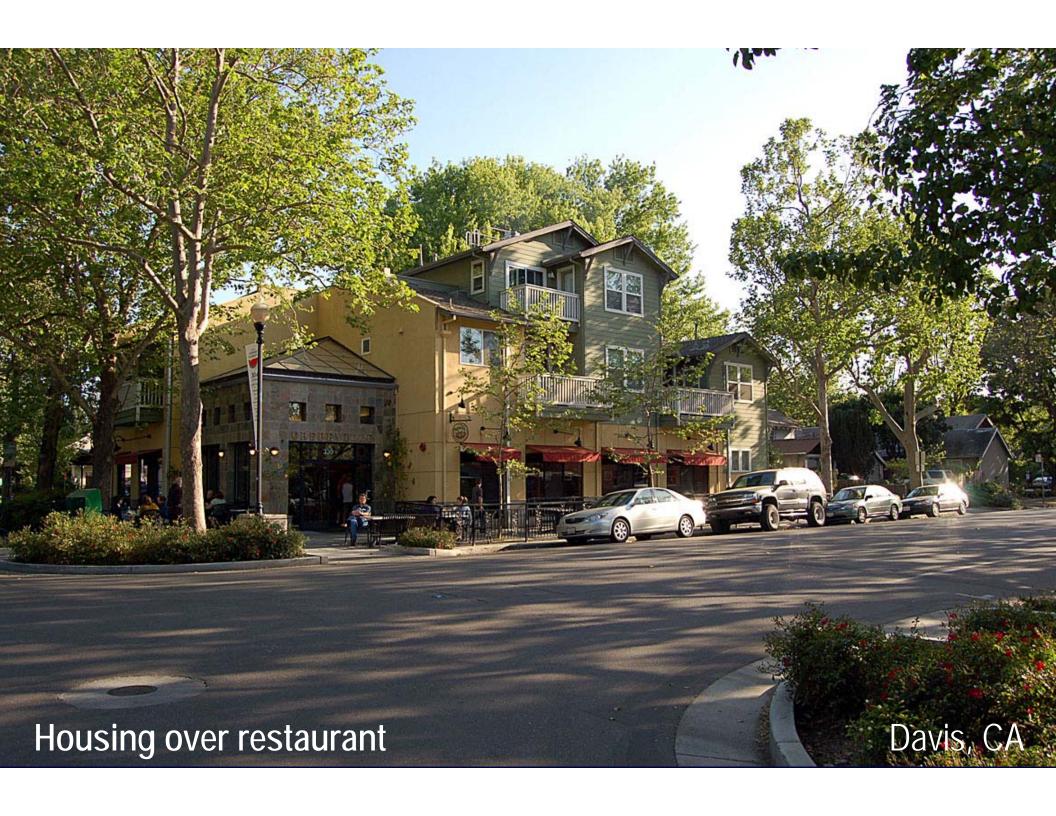
Traditional

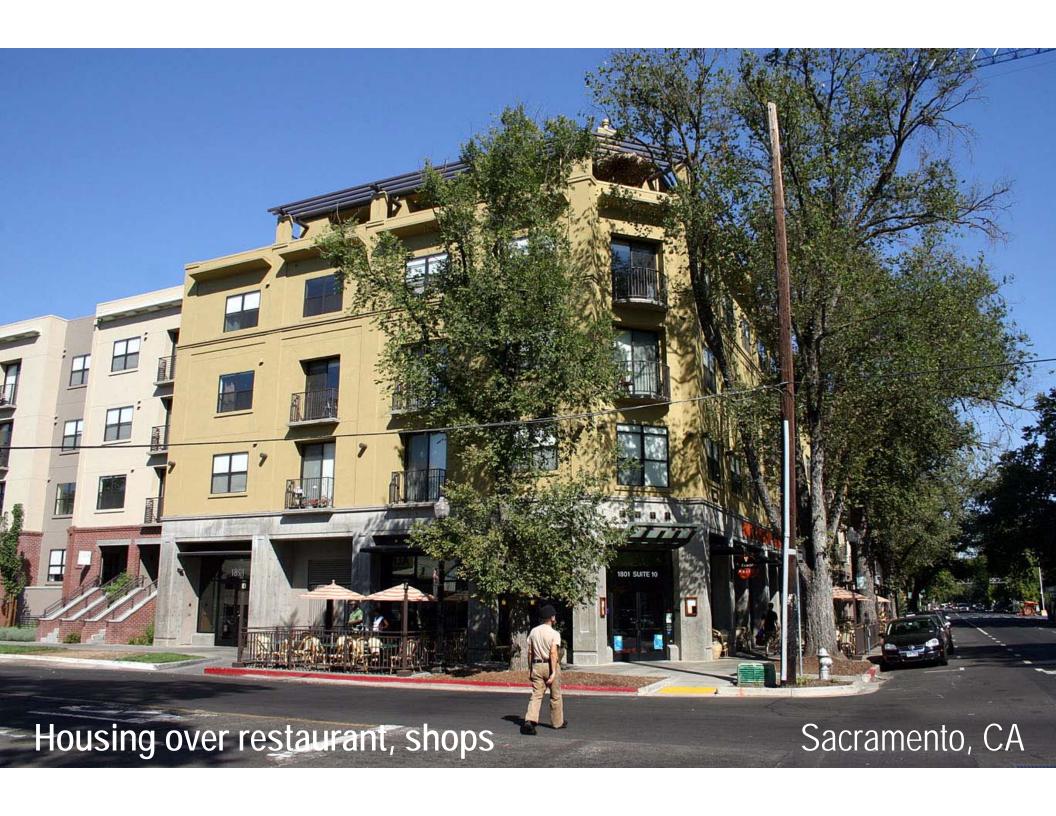
Conventional



Housing over retail shops

Sacramento, CA







Housing next to retail

Salinas, CA



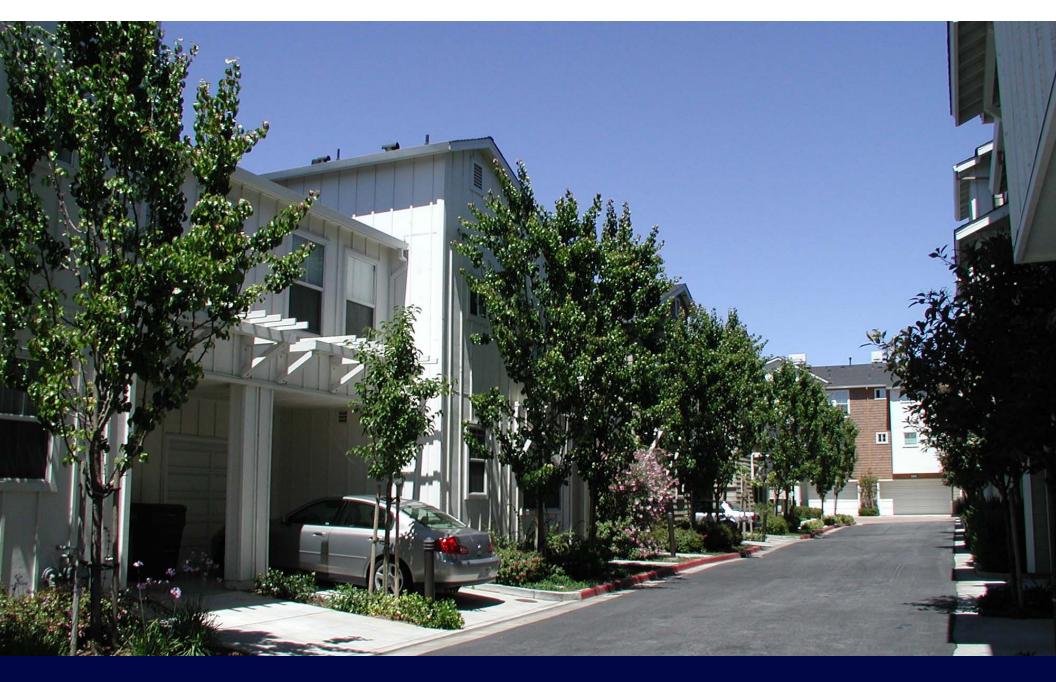
Housing next to and over retail

Sacramento, CA

# 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

San Mateo, CA



Mixed Income Housing

Redwood City, CA



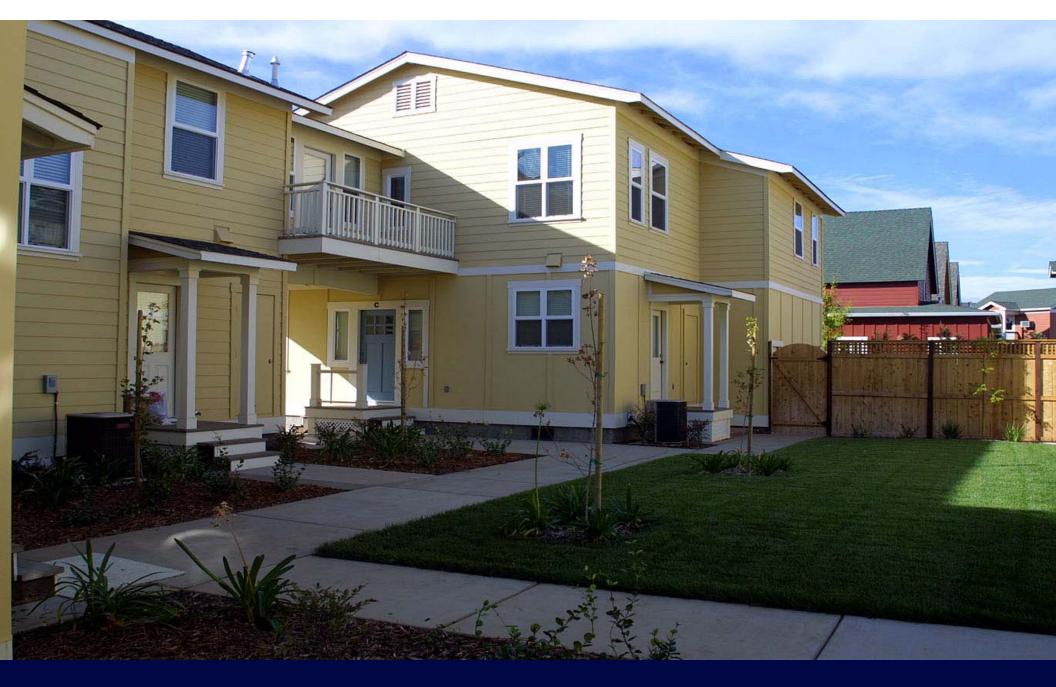
**Live-Work Units** 

Little Italy, San Diego, CA

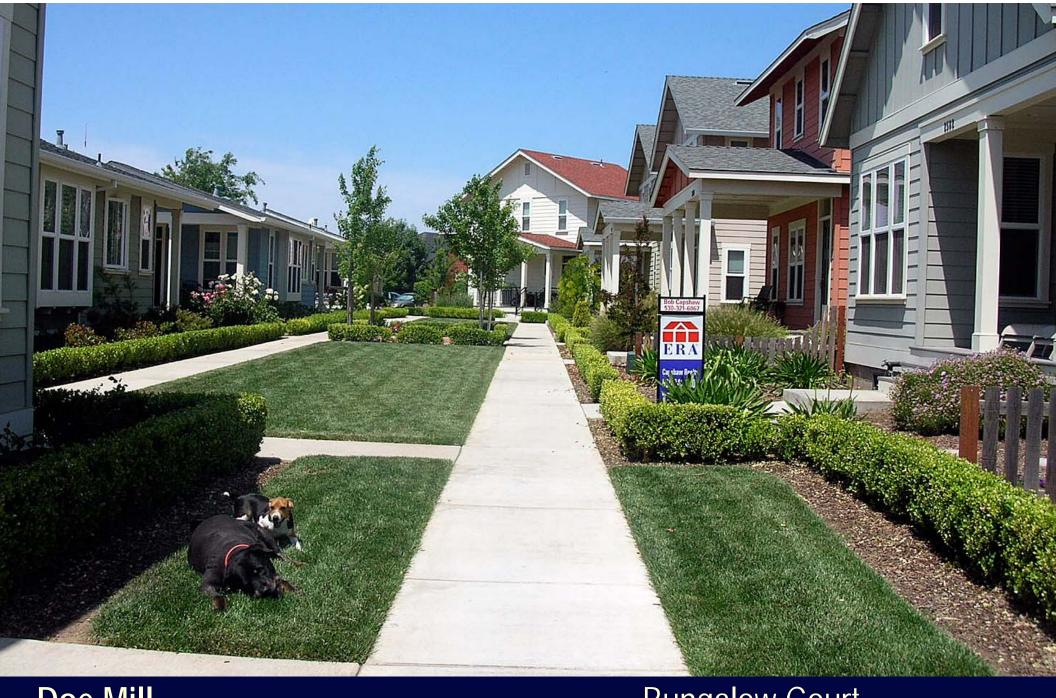


Mixed housing types

Doe Mill, Chico, CA



Doe Mill Fourplex



Doe Mill

Bungalow Court

# 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 Streetcar** 



**Portland Bus Mall** 



Los Angeles Metro Rapid Bus

## 7. Create walkable communities

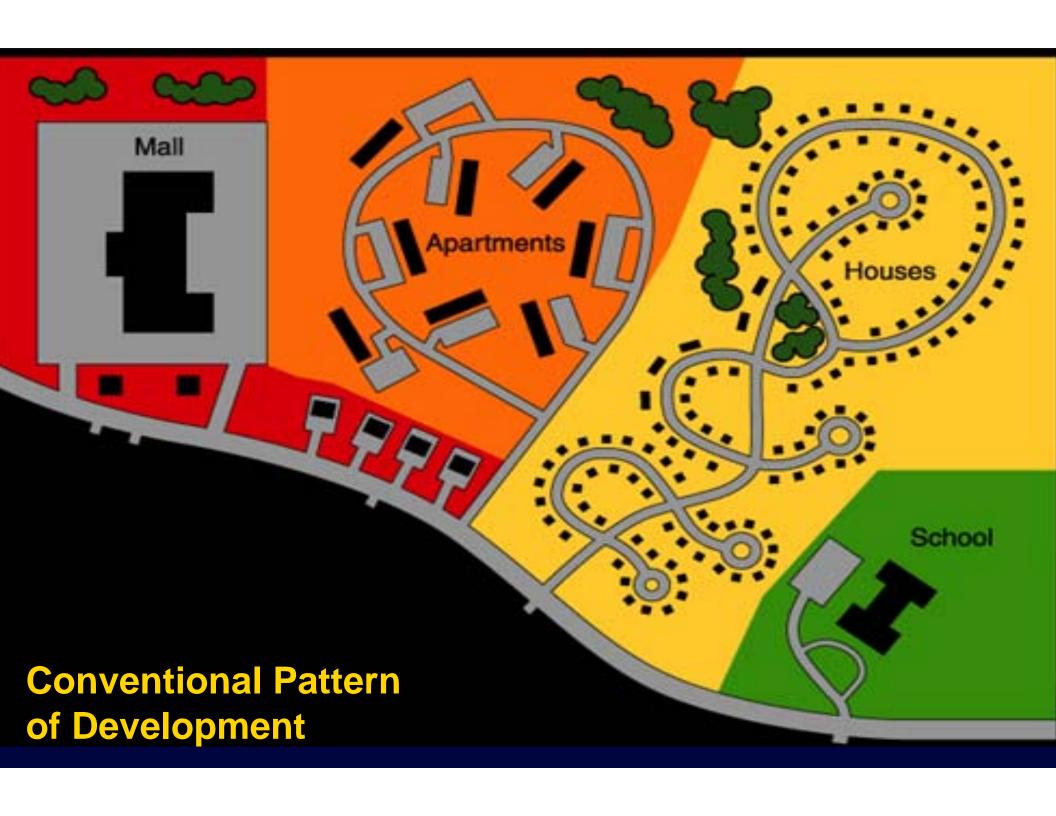
- Mix land uses, build compactly, and provide safe and inviting pedestrian corridors
- Create "complete streets"
  - Accommodate pedestrians, bicyclists, transit users

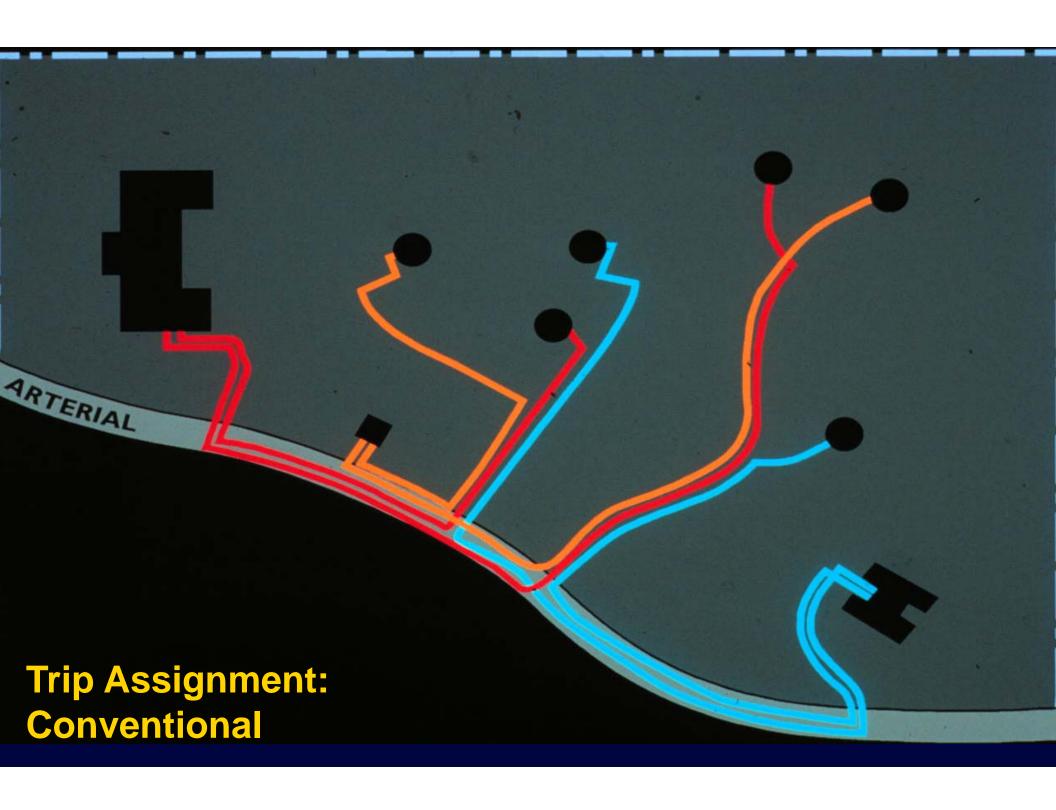


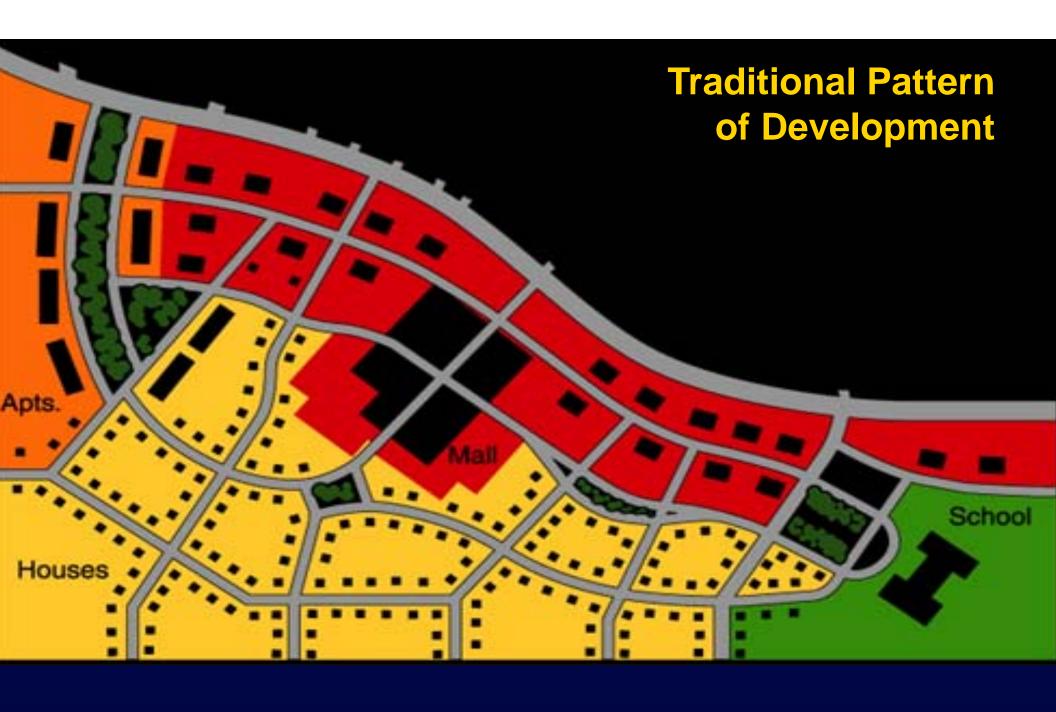
# Street Design

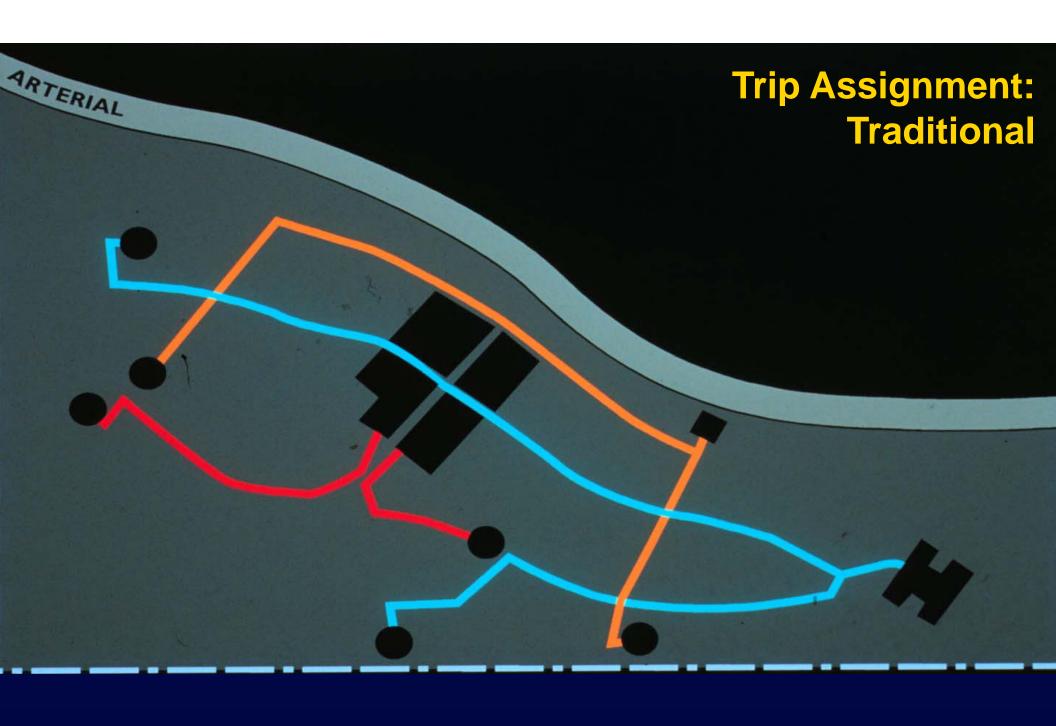
- Influences trip choices
  - Safe, quiet, slow, shaded streets encourage people to walk, ride bicycle or take transit instead of driving a car





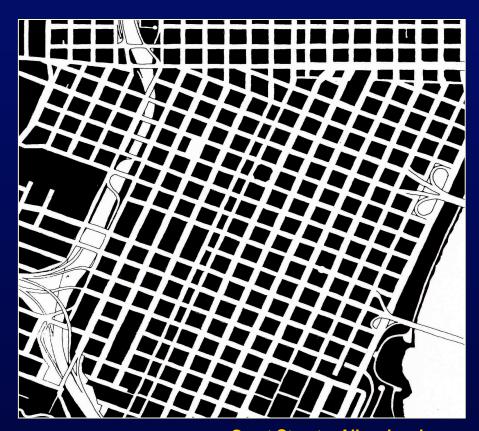






## Traditional vs. Conventional

Central Business Districts at the same scale



**Great Streets, Allen Jacobs** 

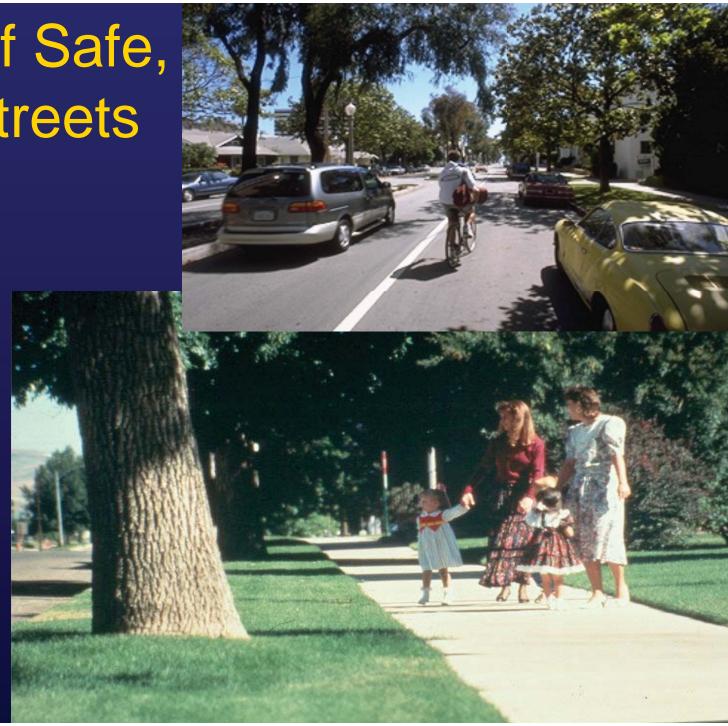
**Great Streets, Allen Jacobs** 

Portland, Oregon

Walnut Creek, California

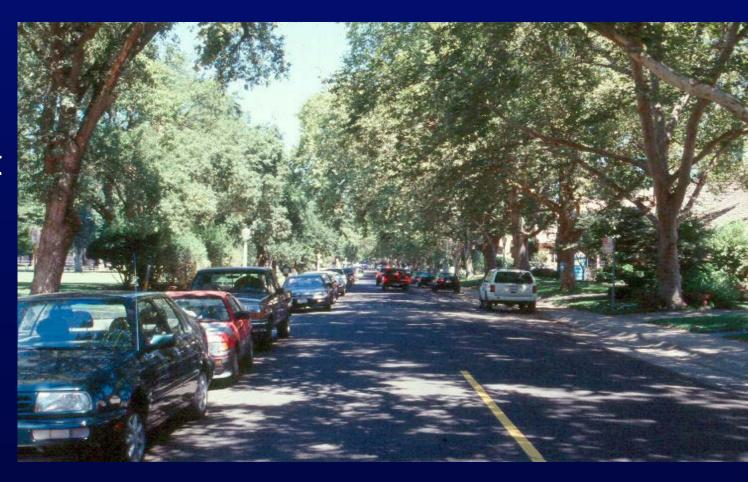
# Principles of Safe, Walkable Streets

- CompleteStreetsdesigned forpeople, notjust 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 street2.23 a/m/y

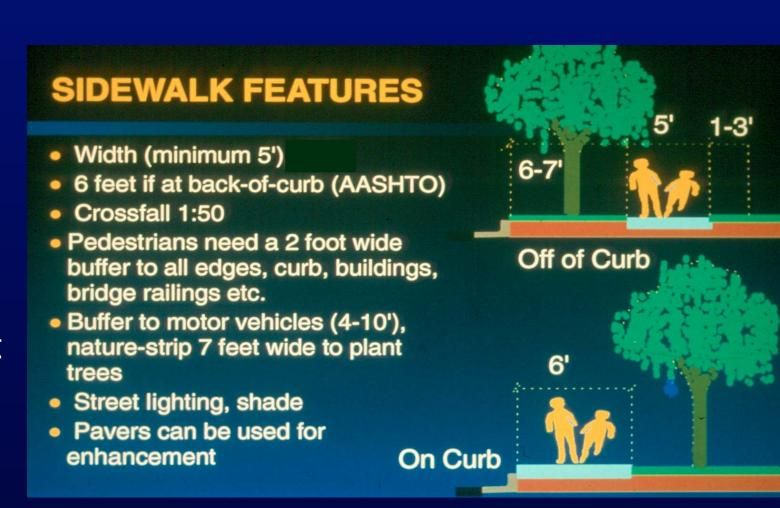
36-foot wide street1.21 a/m/y

24-foot wide street0.32 a/m/y

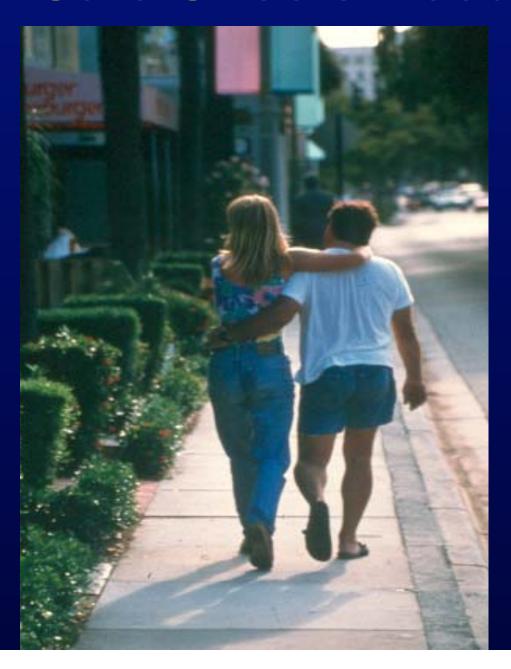
Source: "Residential Street Typology and Injury Accident Frequency," Swift and Associates, Longmont, CO, 1997

### Safe Streets Need Good Sidewalks

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

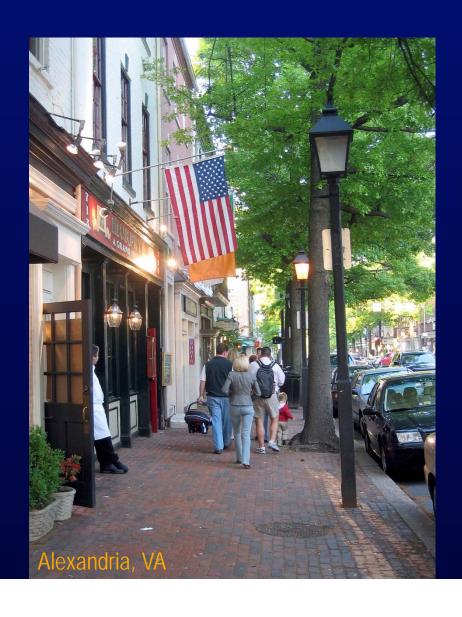


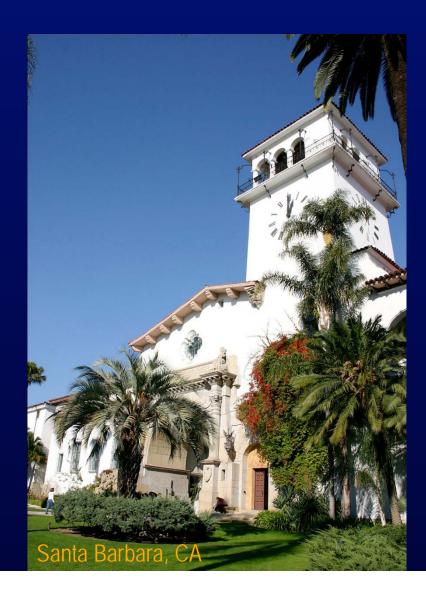
# Safe Streets Need Good Sidewalks





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

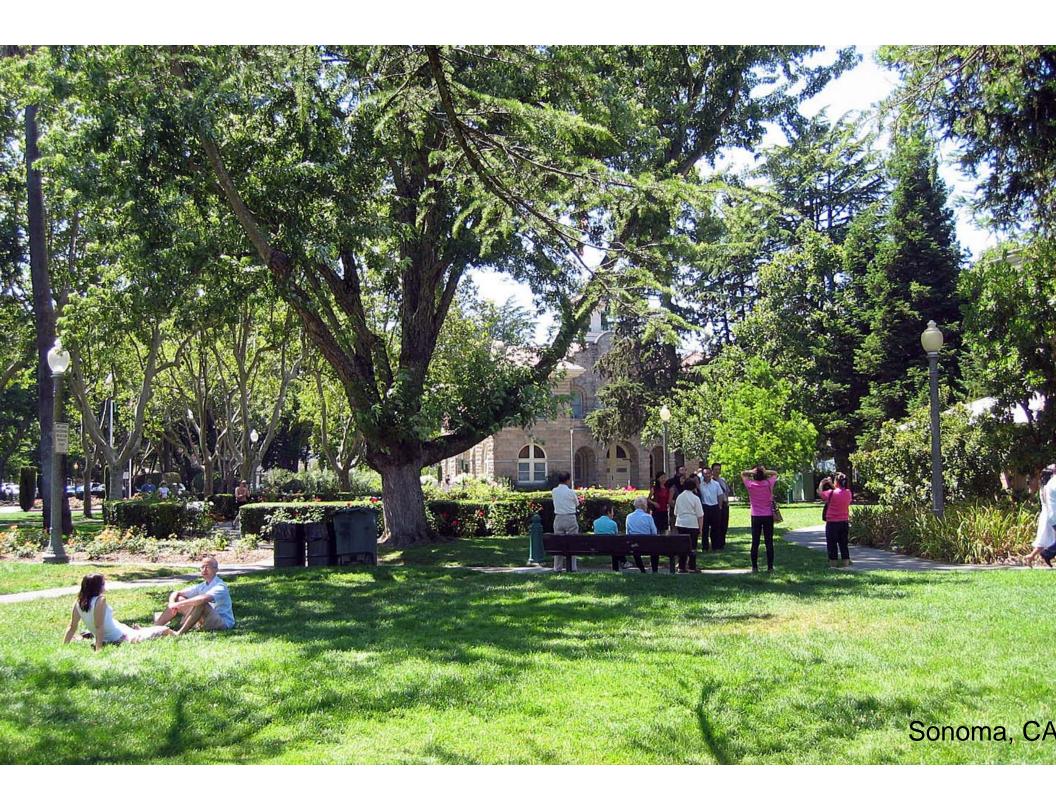






"There is little sense of having arrived anywhere, because everyplace looks like no place in particular."

— 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





Side Wall Finished 2 Better ighting 3. Stop zign on Main





# 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

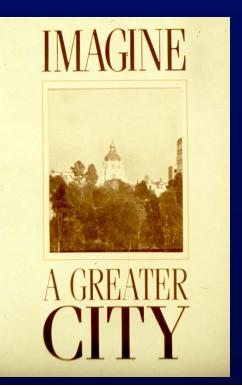
Update comprehensive plan and implementing regulations to incorporate Livable Communities, and apply regulations consistently



### Plan proactively

## Develop a Vision for Community

Pasadena General Plan





### Plan proactively

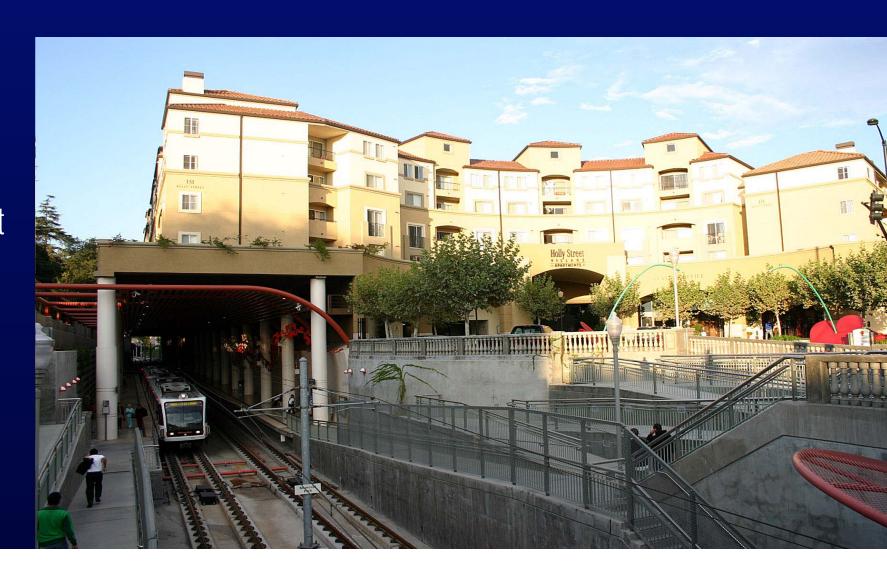
## Develop a Vision for Community

Pasadena General Plan

Holly Street Village

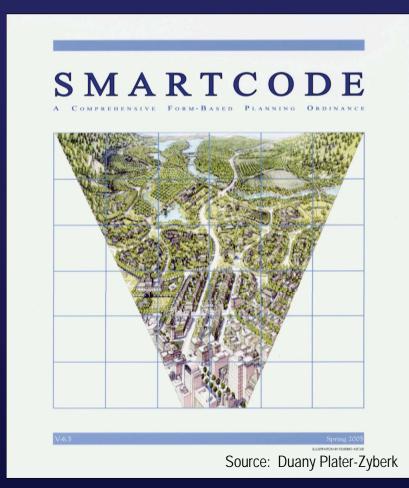
Infill, mixed use rental housing

Model: Early 1990s



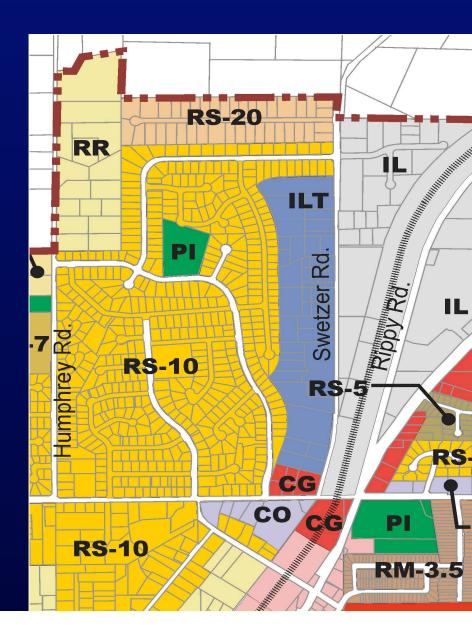
# Implementing the Vision

- 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

CENTRAL PETALUMA SMART CODE PETALUMA, CALIFORNIA SECTION 2 ZONING MAP ZONING LEGEND T4 Urban General T5 Urban Center T6 Urban Core D-1 District D-2 District D-9 District REQUIREMENTS Arcade or Gallery Required Shopfront, Arcade, or Gallery Frontage Required Shopfront, Arcade, or Gallery Frontage Recommended Recommended, not required road location Recommended Focus Point of Terminated Vista (see Definitions)

#### 2. If Zoning Map Requirements and Urban Standards Conflict, the Zoning Map prevails. Note: Lot lines are for illustrative purposes only.

@00®

Notes:

Transit Stop

Maximum Building Height Allowed on this road frontage Preferred location for Parking Structure (Does not preclude other sites)

1. Where no maximum building height is shown, refer to Urban Standards

Min. % Required building frontage between arrows



#### 1. Four Lane Avenue

The Four Lane Avenue is designed for locations where the movement of larger volumes of traffic is desired. Wide sidewalks, on-street parking and doors and windows facing the street make this high traffic street pedestrian friendly as well.

#### A. Building Placement:

Build-to-line location: 0 to 10ft. From (Typical) Property line

Space Between

Buildings:

0 ft. if attached 6-10 ft. if detached

#### B. Building Volume:

Bldg. Width: 16 ft. minimum

160 ft. maximum

Bldg. Depth: 125 ft. maximum

Bldg. Height: 2 stories minimum 4 stories maximum

55 ft. maximum The first floor shall be a

The first floor shall be a minimum of twelve (12)

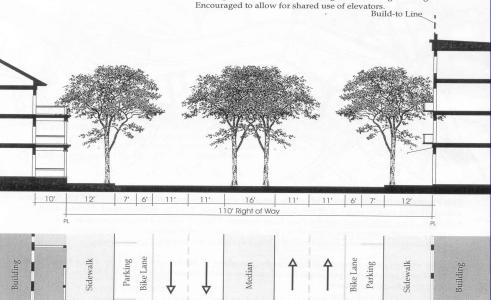
feet in height

#### C. Notes:

1. Appurtenances may extend beyond the height limit.

Building fronts are required to provide shelter to the sidewalk by means of at least one of the following: marquee, awning, or second floor balcony.

3. The alignment of floor-to-floor heights of abutting buildings is Encouraged to allow for shared use of elevators



#### 6. Neighborhood Street

The Neighborhood Street is a quieter, more intimate street. Build-to lines are set back and a green strip is incorporated. If needed, the Build-to location can be paved to provide a wider sidewalk for intense uses thus eliminating the door yard.

#### A. Building Placement:

Build-to-line location: 10

10 ft. from Property line

Space Between

Buildings:

0 ft. if attached 6-15 ft. if detached

#### B. Building Volume:

Bldg. Width: 16 ft. minimum

160 ft. maximum

Bldg. Depth: 125 ft. maximum

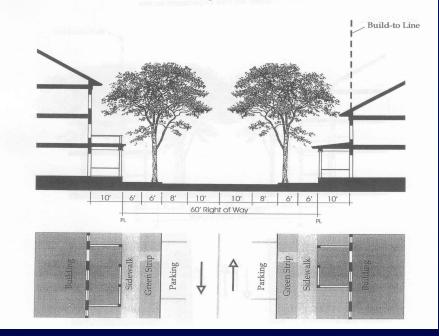
Bldg. Height: 2 stories minimum

4 stories maximum 55 ft. Maximum

Motor

1. Appurtenances may extend beyond the height limit.

The alignment of floor-to-floor heights of abutting buildings is Encouraged to allow for shared use of elevators.



### Hercules, CA — Form-Based Code

Street type determines location, height, features of buildings

## Can it be done?



### 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

## For more information

Web: <u>www.lgc.org</u>

Phone: 916-448-1198

e-mail: center@lgc.org

