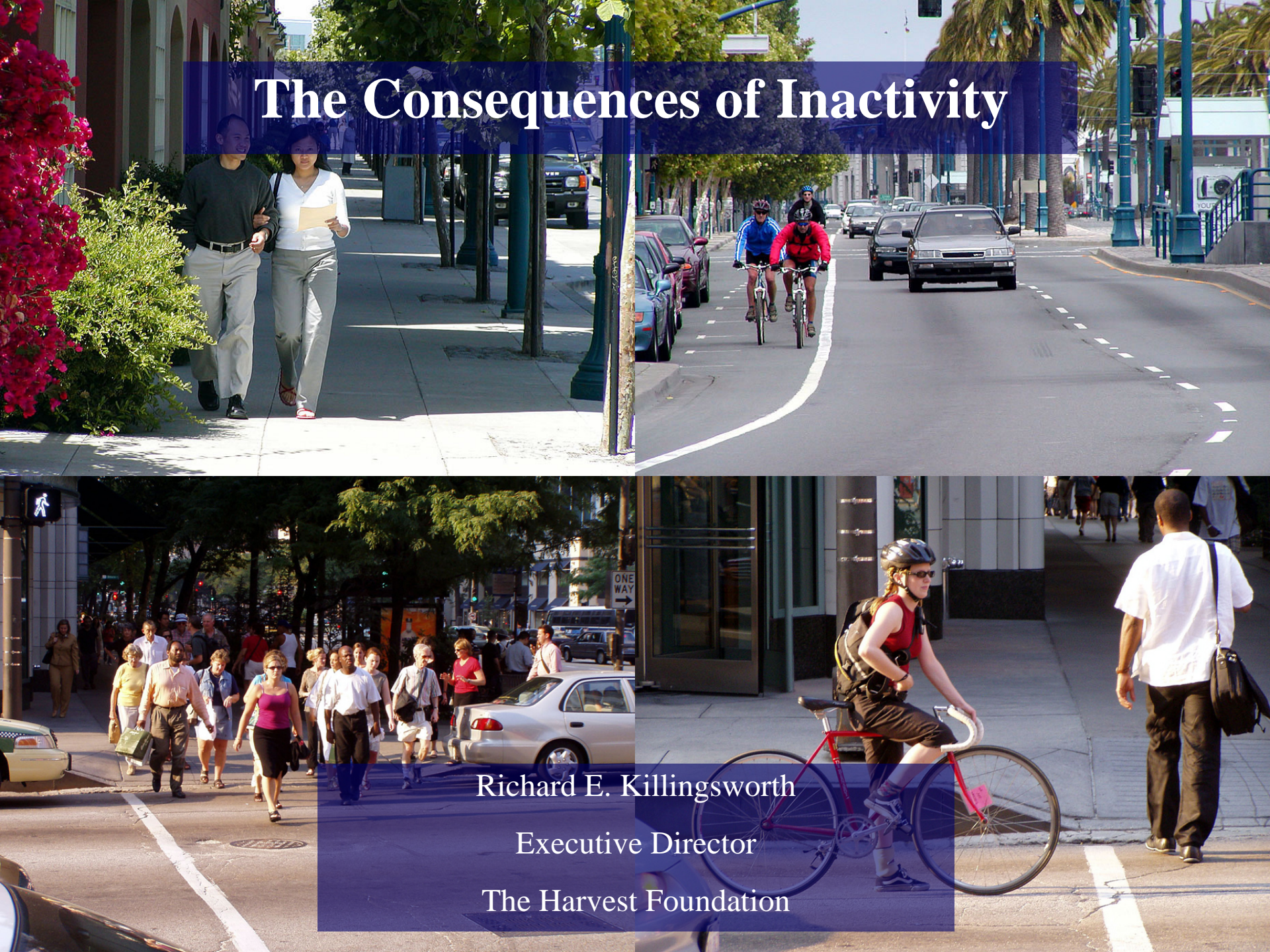


The Consequences of Inactivity



Richard E. Killingsworth
Executive Director
The Harvest Foundation



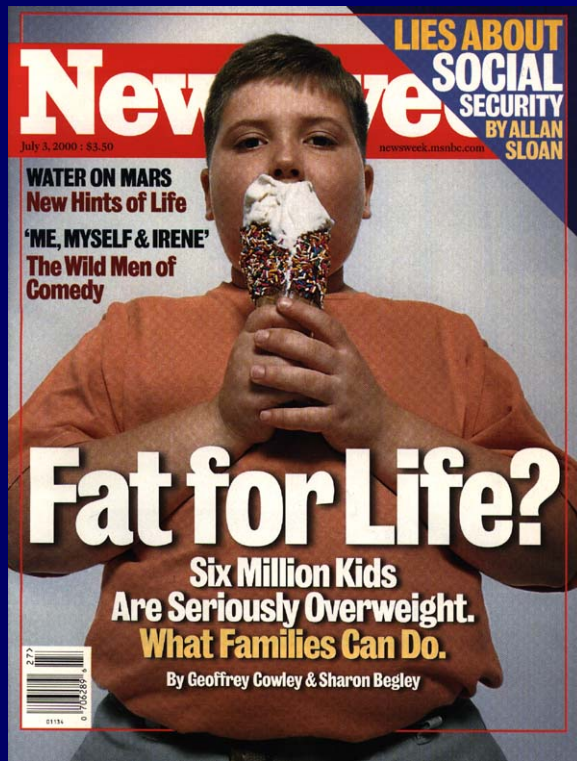
© Sandra Staas - virtourist.com



© Sandra Staas - virtourist.com



The Burden of Physical Inactivity



- The Problem
 - 1 in 4 adults are sedentary
 - Over two-thirds do not achieve recommended dose
- The Public Health Burden
 - 64% overweight and 1 in 4 obese
 - CVD, Cancer, Diabetes
 - Physical inactivity is a primary factor in over 200,000 deaths annually.
- The Economic Burden
 - Medical costs associated with physical inactivity exceed \$100 billion annually. Indiana = \$1.6B



We Are Where We Live: Placemaking and Health



Richard E. Killingsworth
Executive Director
The Harvest Foundation

Imagination





Why the Recent Obesity Epidemic?

■ Many competing theories

- Transportation
- Television
- Labor Saving Devices
- More Work Hours
- Less Physical Activity
- Fast Food
- Community Design
- Genetic
- Pathogenic



The Failure of Public Health

- The Culture of Fear
 - “the solution lies in focusing more attention on body weight by screening youth at school and educating them about the ‘dangers’ of obesity.”

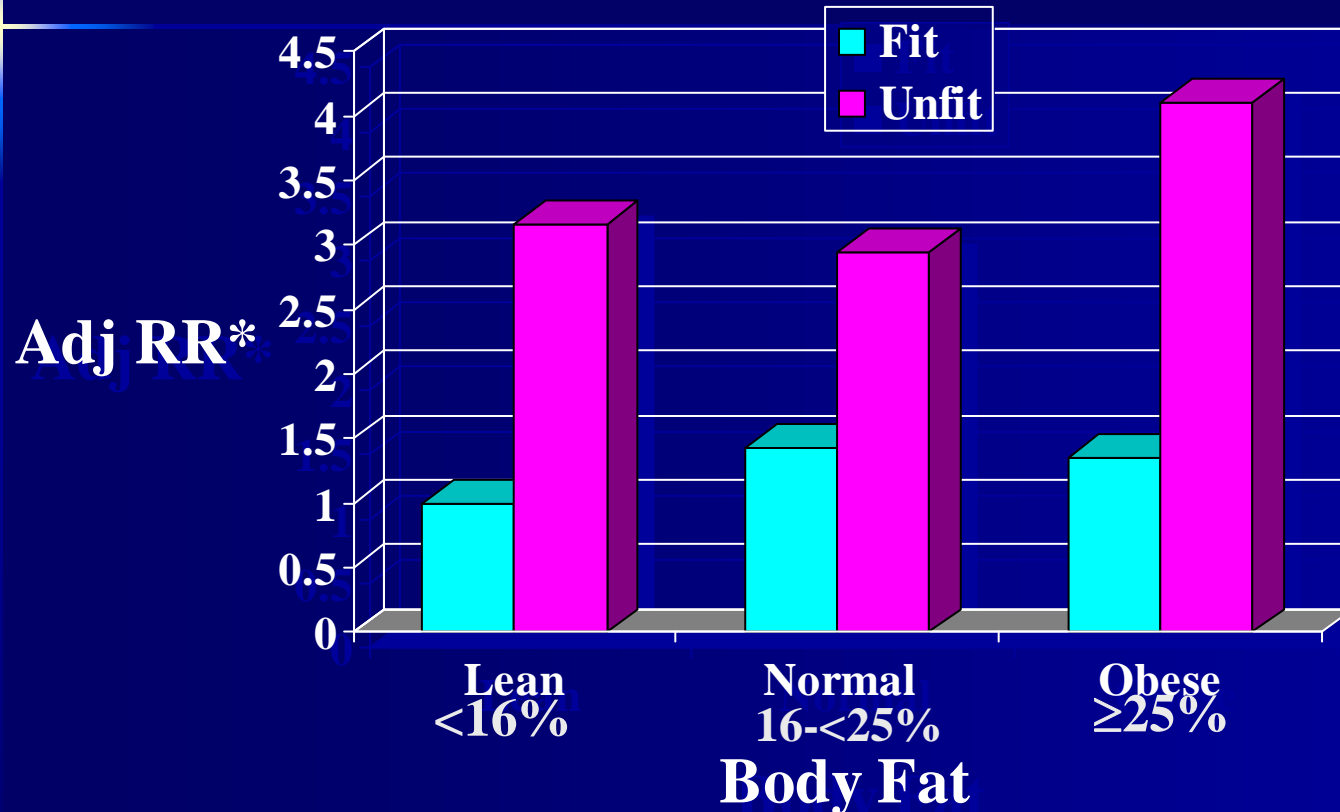


Problems with Current Obesity Campaigns

- Focus on the individual
- The subjects are the only responsible actors
- The problem becomes overwhelming
- Behavior change is the primary solution



A Controversial Position: Fit and Fat



*adjusted for age, exam year, smoking, alcohol, & family history

N = 13,000+ subjects

Lee CD et al. Am J Clin Nutr 1999.



We Are Where We Live



The Changing Face of Public Health 1950 - 2006

- **Pre-1950: Improving Sanitation**
 - Change zoning, clean-up slums and industrial pollution
- **1950s: Eradicating Infectious Diseases**
 - Polio, Typhoid, Malaria, etc.
- **1970s: Removing Toxic Environments**
 - Improve Air/Land/Water Quality, Love Canal, Asbestos
- **1980s: Preventing Risky Lifestyles**
 - Decrease Smoking, Drug Use, Drunk driving, etc.
- **21st Century: Creating Healthy Environments**
 - Active Living and Healthy Eating

Indicator Species



A Dream



A Detour



A Dependency



A Disturbing Trend

The Effect of Place on Livability



- Access to health care
- Quality of schools
- Economic opportunities
- Air, water, and land quality
- Enhanced public safety
- Choices for active living
- Choices for health eating
- Ease of social interaction
- Investment in social capital

Legibility & Coherence of Our Environment



Icdnuoltblveieetahtlcluodaulactyuesdnatnrdwaht
lwasrdanieg. Thephaonmnealpweorofthehmuan
mnid,aoccdrnigtoarscheearchatCmabrigde
Uinervtisy,itdeosn'tmttaerinwahtoredrtheltteersin
awrodare,theolnyiprmoatnttihngistahtthefristand
lsatlteerbeintherghitpclae.Thersetcanbewahevter
andyoucansitllraeditwouthitaporbelm.Tihsisbcuseae
thehuamnmiddeosnotraederveylteterbyistlef,but

I cdnuolt blveiee taht I cluod aulaclyt uesdnatnrd
waht I was rdanieg. The phaonmneal pweor of the
hmuan mnid, aoccdrnig to a rscheearch at
Cmabrigde Uinervtisy,

it deosn't mttair in waht oredr the ltteers in a
wrod are, the olny iprmoatnt tihng is taht the frist
and lsat ltteer be in the rghit pclae. The rset can
be wahevter and you can sitll raed it wouthit a
porbelm.

Tihs is bcuseae the huamn mnid deos not raed
ervey lteter by istlef, but the wrod as a wlohe.

I couldn't believe that I could actually understand what I was reading. The phenomenal power of the human mind according to a researcher at Cambridge University.

It doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be in the right place. The rest can be whatever and you can still read it without a problem.

This is because the human mind does not reach every letter by itself, but the word as a whole.













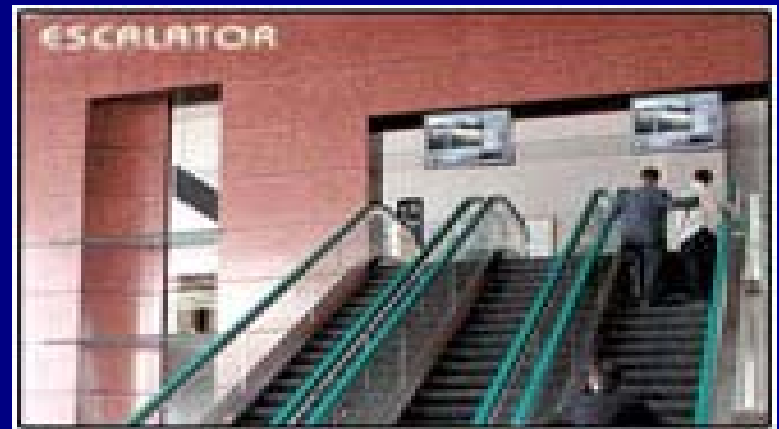
Placemaking Considers the Possibility That...

- the pattern of growth has upset the balance of human behavior.
- the social costs of the way we have developed may be far more reaching than traffic jams and sprawl.
- the healthy new subdivision we live in may be the opposite.



The Emergence of a Sedentary Society

- Automobile
- Television
- Computers
- Convenience Engineering
- Built Environment
- Human Nature



• CANINE CONSTITUTIONAL



Tom Saville / Dispatch

A brisk walk in the park keeps Marey II in shape between dog shows. His owner, Columbus resident Cathy Stumbo, got up early

to give her 3-year-old Doberman his regular workout. They typically log 15 miles in Berliner Park.

24
HOUR

FITNESS

OFFITNESS

OFFITNESS
QUALITY VITAMINS
&
MINERAL SUPPLEMENTS
NUTRITIONAL
SUPPORT
FOR YOUR
HEALTH

WELCOME TO
OFFITNESS
NUTRITIONAL
SUPPORT

24
HOUR

24
HOUR

POINT LO
HANDICAP
TO UPPER
LOCATED
24 HOUR

Promoting Physical Activity in the Built Environment



Advancing the Concept of Active Living



Active Living is a way of life that integrates physical activity into daily routines.



We Are Where We Live





Low Density



**Big, Segregated
Single-Use Zones**



**Sparse Street
Network**



Lack of Centers











Place Matters



- Place determines.....
 - Quality of Life
 - Overall Health Status
 - Economic Vitality
 - Intellectual Capital
 - Sustainability



Urban Form and Poverty

- 970 million people live in slums in 2005
- 72% of urban population in Africa live in slums
- 270 million urban residents in south and central Asia live in slums
- If urban poverty rises at the same pace nearly 2 billion people would be in slums by 2030



Good City Form

- Kevin Lynch
 - City form guides function
- Christopher Alexander
 - The pattern of the city develops the language of how people communicate



The Life of Cities

■ Jane Jacobs

- “....the need of cities for a most intricate and close-grained diversity of uses that give each other constant mutual support, both economically and socially.”



The Life of Streets

- Donald Appleyard
 - More traffic means smaller social networks, less neighboring, less interaction, and more isolation
 - Less traffic improves conditions for walking and bicycling and encourages social interaction



The Life of Public Places

- William H. Whyte
 - Intimate scale of public spaces invites socializing, activity, and neighboring.
 - Encourages communication, appreciation of place and community



Individual behavior change can only occur in a supportive environment with safe, convenient, and affordable choices for healthy behavior.



Nutrition Environment

- From 1972 to 1997 the number of fast food restaurants doubled.
- From 1977 to 1995 there was a 200% increase in the percentage of meals eaten at fast food restaurants.
- 10% increase in the number of fast food restaurants increases the number of overweight people by 4% and the number of obese people by 7%.
- Portion sizes have also been increasing at fast food restaurants and at home from 1977 to 1996



Jumbosizing Our Food

20 Years Ago



140 calories
3-inch diameter

Today



How many calories
are in this bagel?

20 Years Ago



140 calories
3-inch diameter

Today



350 calories
6-inch diameter

Calorie Difference: 210 calories

20 Years Ago



500 calories
1 cup spaghetti with sauce
and 3 small meatballs

Today



How many calories do
you think are in today's
portion of spaghetti and
meatballs?

20 Years Ago



500 calories
1 cup spaghetti with sauce
and 3 small meatballs

Today



1,025 calories
2 cups of pasta with sauce
and 3 large meatballs

Calorie Difference: 525 calories

20 Years Ago



320 calories

Today



How many calories are in today's turkey sandwich?

20 Years Ago



320 calories

Today



820 calories

Calorie Difference: 500 calories

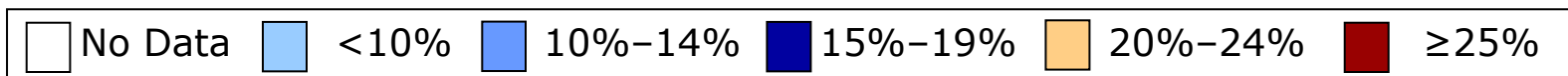
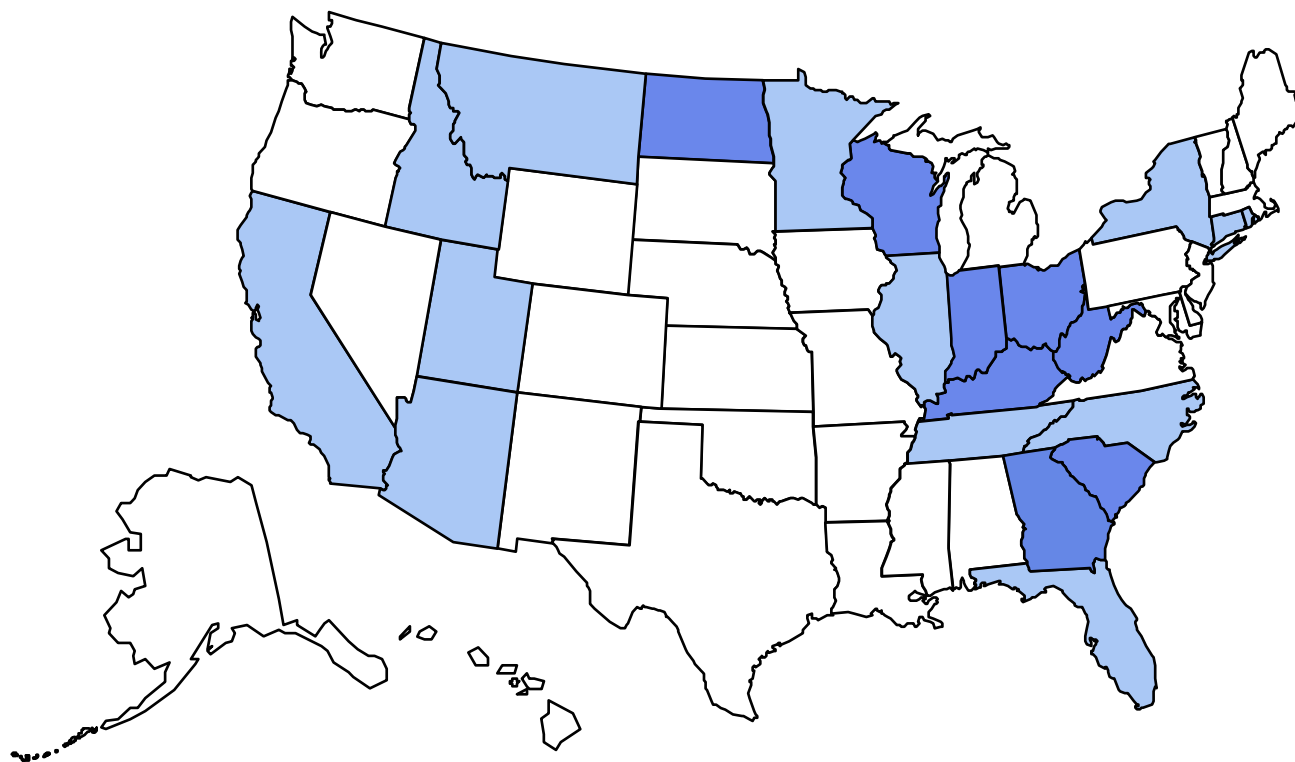
Toxic Food Environments

- The average per capita calories consumed increased 550 calories per day from 1970 to 1997
- Just an extra 100 calories a day leads to an extra 10 pounds a year



Obesity Trends* Among U.S. Adults BRFSS, 1985

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

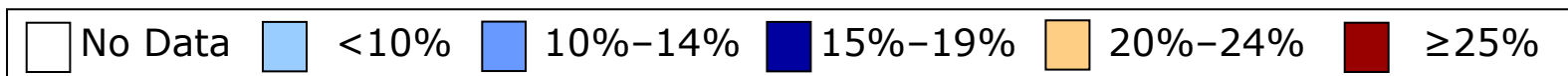
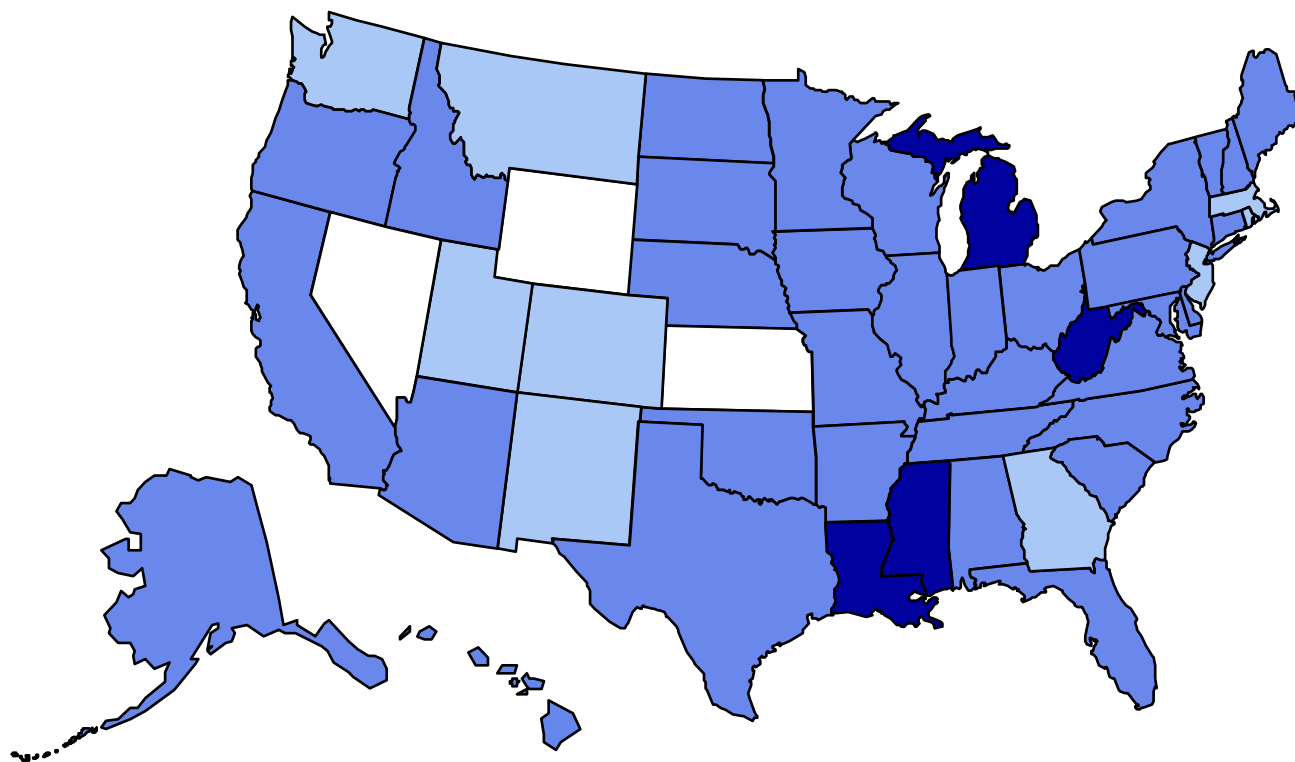


Source: Behavioral Risk Factor Surveillance System, CDC.

Obesity Trends* Among U.S. Adults

BRFSS, 1991

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

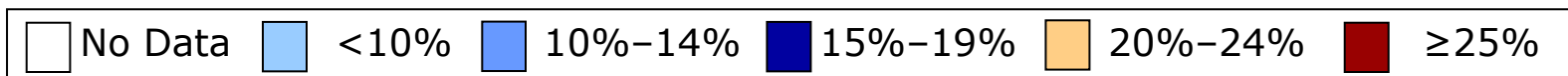
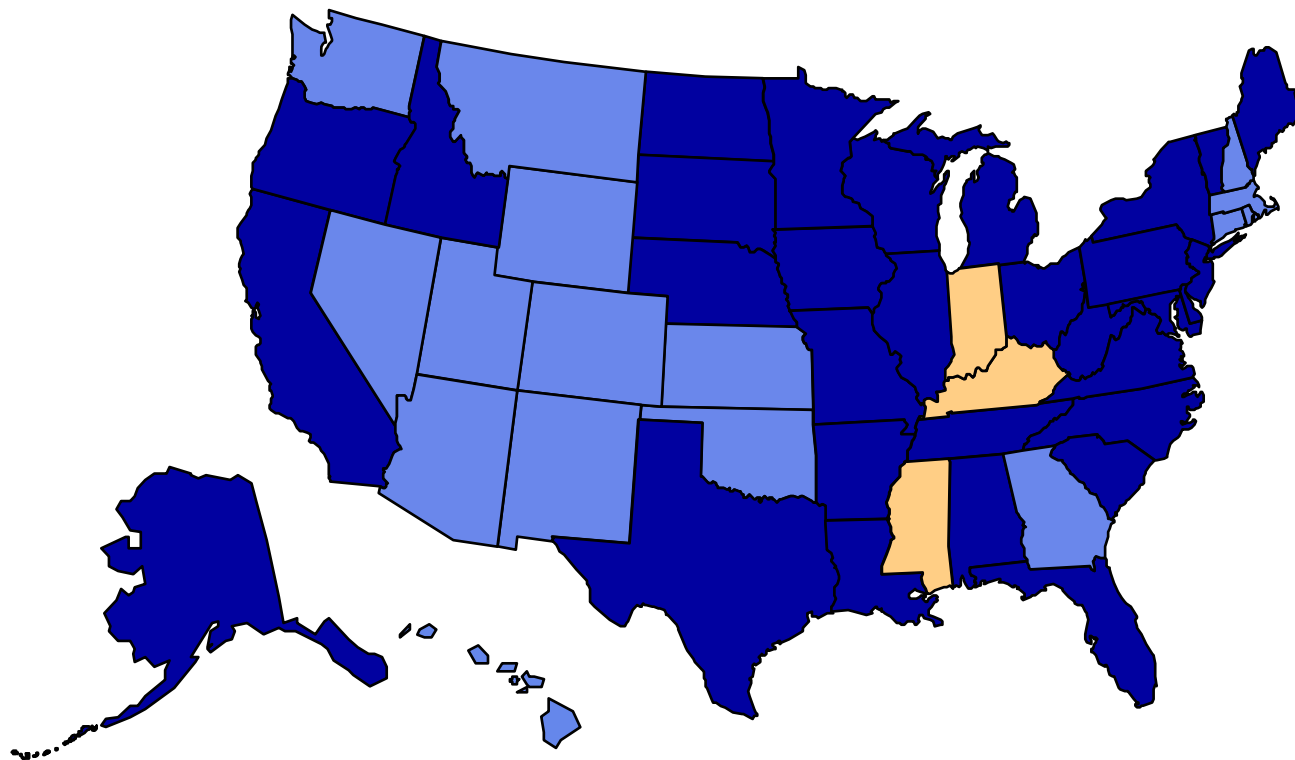


Source: Behavioral Risk Factor Surveillance System, CDC.

Obesity Trends* Among U.S. Adults

BRFSS, 1997

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

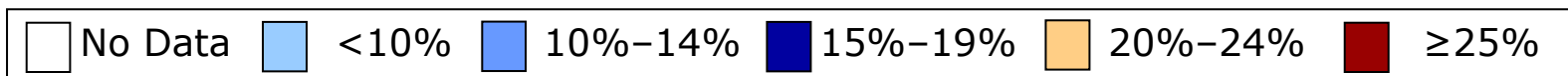
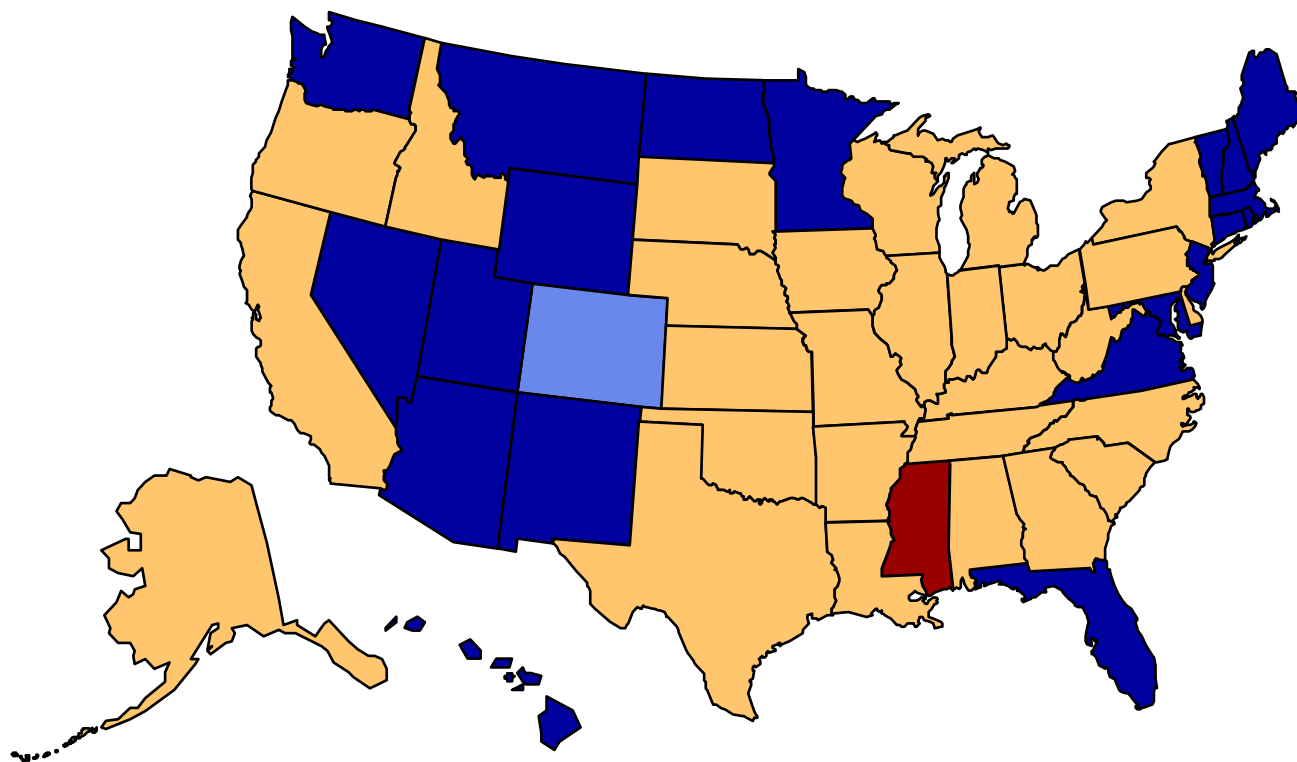


Source: Behavioral Risk Factor Surveillance System, CDC.

Obesity Trends* Among U.S. Adults

BRFSS, 2001

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

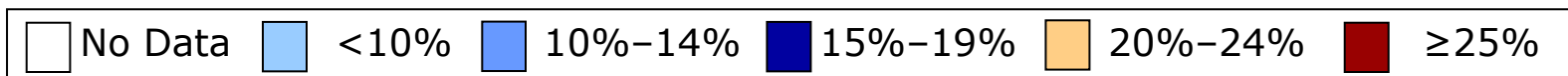
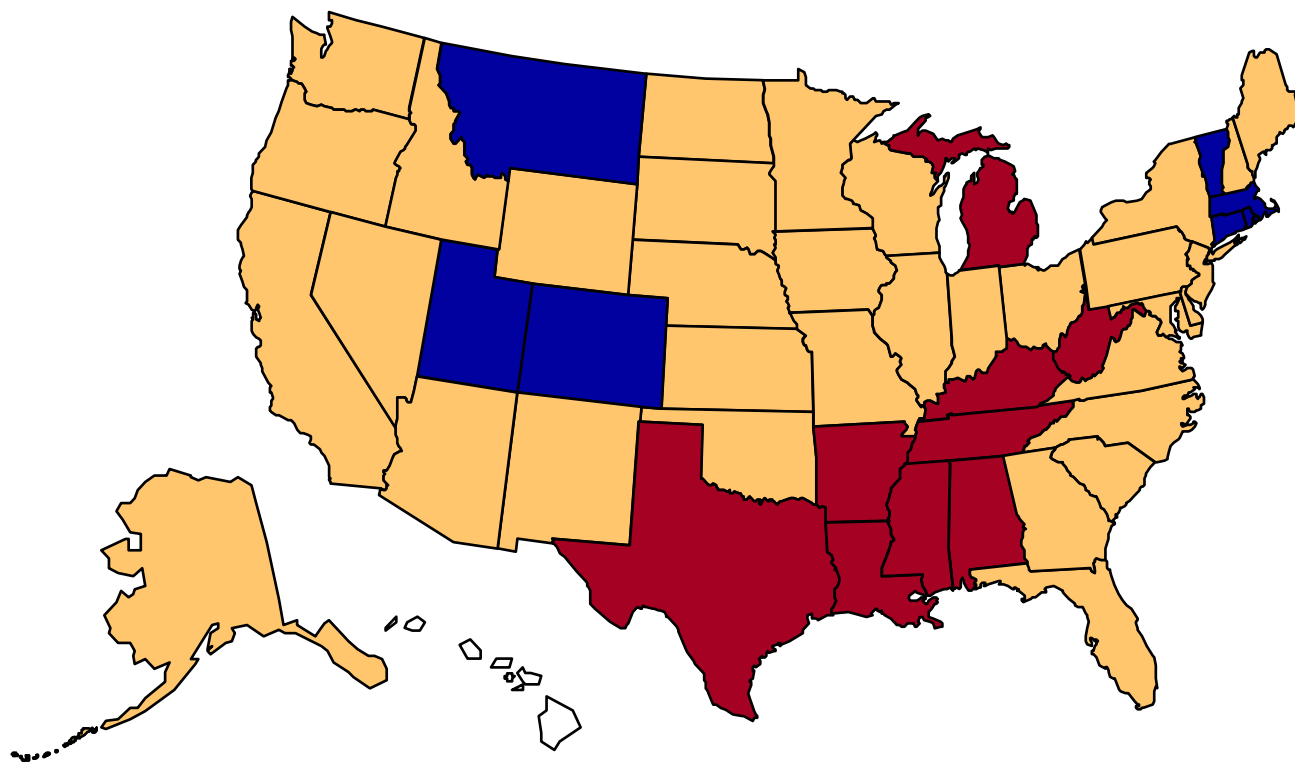


Source: Behavioral Risk Factor Surveillance System, CDC.

Obesity Trends* Among U.S. Adults

BRFSS, 2004

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)

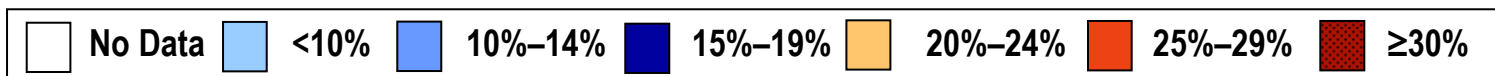
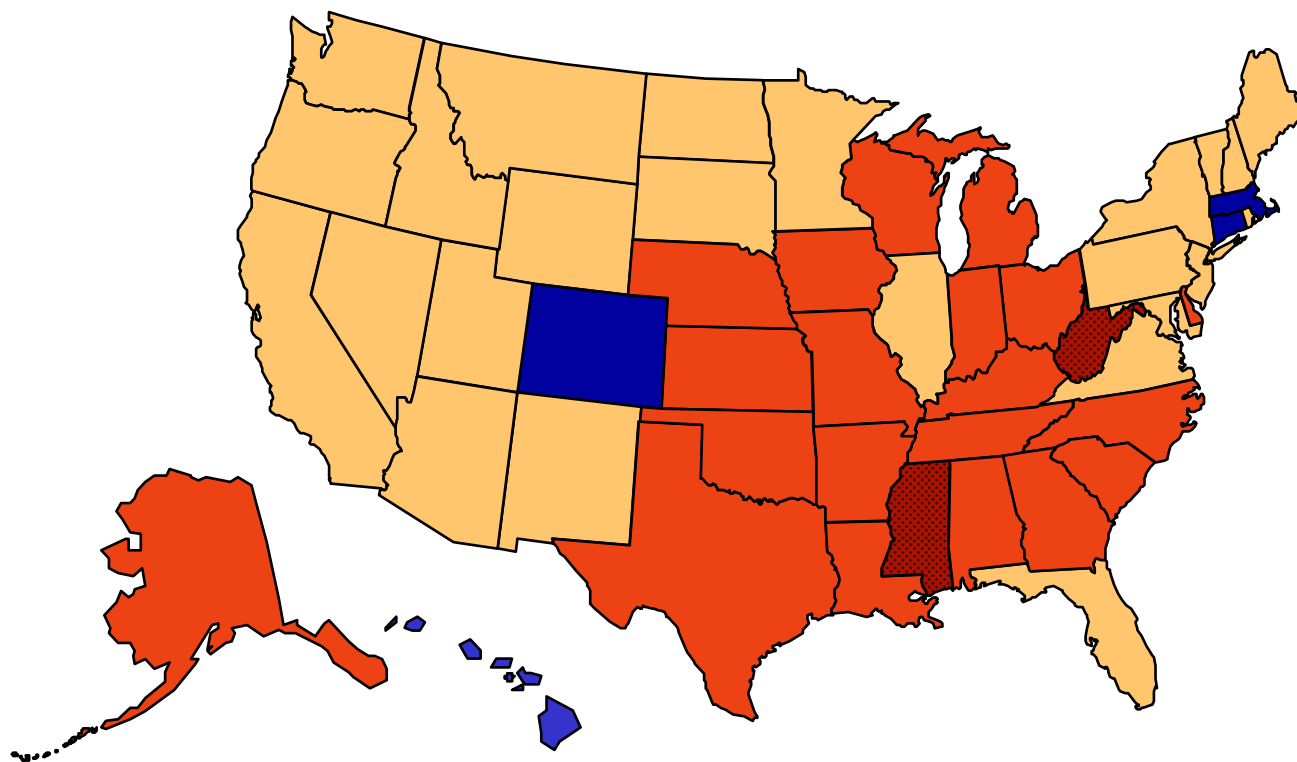


Source: Behavioral Risk Factor Surveillance System, CDC.

Obesity Trends* Among U.S. Adults

BRFSS, 2006

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



Source: Behavioral Risk Factor Surveillance System, CDC.



Transportation

Transportation Choices

Quality of Life,
Livability,
Economic
Sustainability

Access to
Healthier
Options

Health

Healthy
Communities,
Housing,
Schools, Parks,
Water, etc.

Environment

Built Environment and Physical Activity Research Conclusions

- Living in Activity Friendly Communities could...
 - Generate 2 more walk/bike trips per person per week
 - Prevent up to 1.7 pounds of weight gain per year
 - Positively affect walking/cycling for transport
 - Positively impact the total minutes of physical activity (40% more physical activity)
 - Decrease amount of time spent in a car. Each hour spent in a car is associated with a 6% increase in the likelihood of obesity.
 - Increase life expectancy by 4 years.



■ Ewing et al 2003, Saelens et al 2003, Giles-Corti 2003, Frank et al 2003, Sturm et al 2004, Frank et al 2004, Lopez 2004

Active Living Strategies



- Preparation
- Promotion
- Programs
- Policies
- Physical Projects

Strategy 1: Preparation

- Build diverse partnerships
- Build a vision
- Assess policies and environments
- Build a plan of action
- Identify a champion



Strategy 2: Promotions

- Utilize mass media for awareness and advocacy
- Schedule Events
- Develop key messages for focus areas and people
- Develop Awards and Recognition Program



Strategy 3: Programs

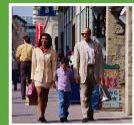
- Safe Routes to School
- Commuter Choice Programs
- Incentive Campaigns:
Bicycle Friendly
Communities
- Parks and Trails Programs
- Walking / Bicycling Clubs



Strategy 4: Policies

- School Siting - provide pedestrian accessible elementary school sites
- Update codes to encourage density and mixed land use
- Reexamine parking policies and fees
- Develop health impact statements for new development

Spartanburg Area Active Living Assessment



Presented to Upstate Forever August 8, 2005
by the Lawrence Group Architects & Town Planners

Strategy 5: Physical Projects

- Build safe and well-connected pedestrian and bicycle networks
- Design close-to-home play areas for families
- Adopt traffic calming measures to reduce speed, noise & volume
- Create pleasant and functional urban “greenspace” settings



Calls to Action

- Imagine Something Different
- Do “One Thing” That Supports Active Living
- Volunteer for an Advocacy Organization
- Be and Active Citizen and Vote



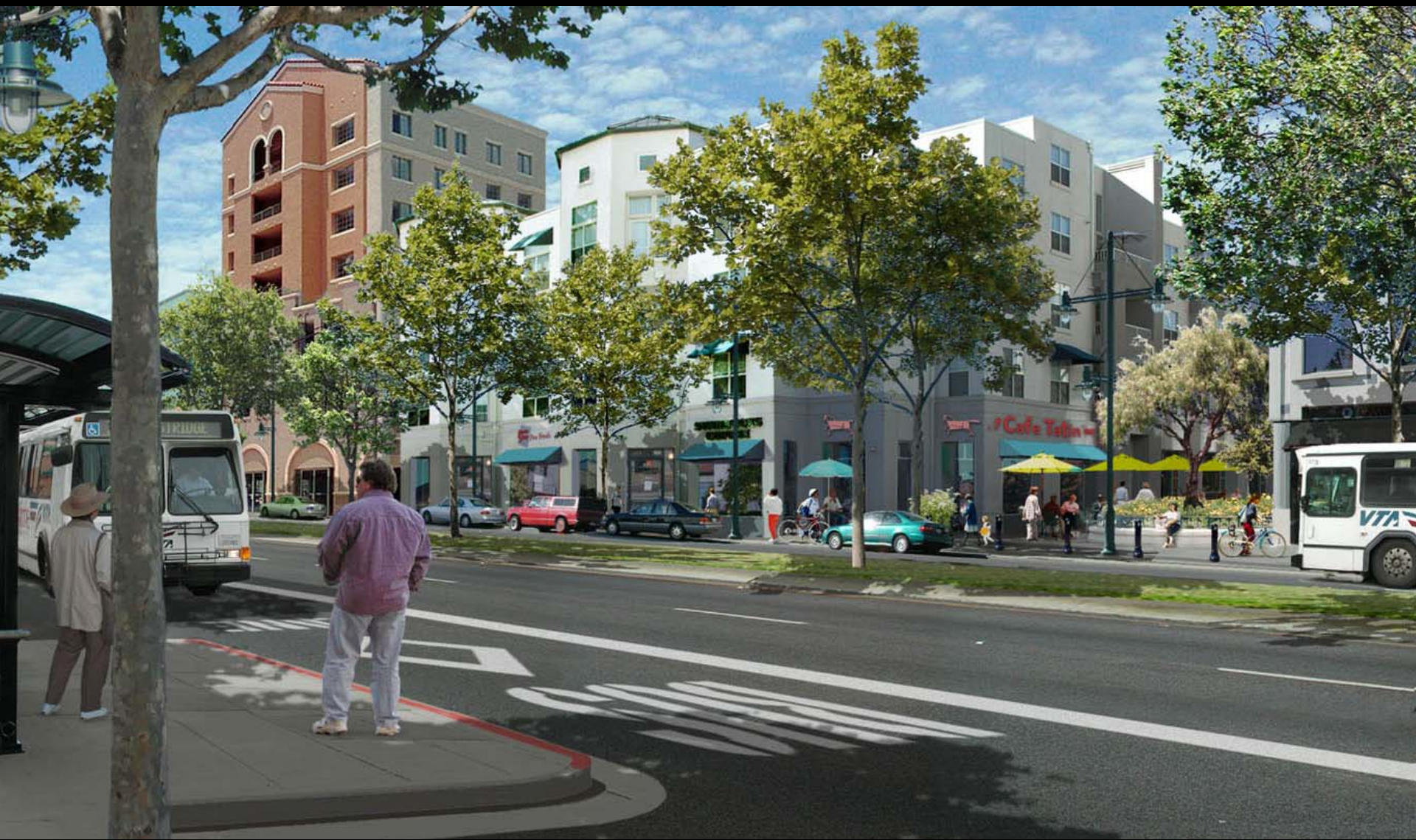
What Will Your Community Look Like in 2027?







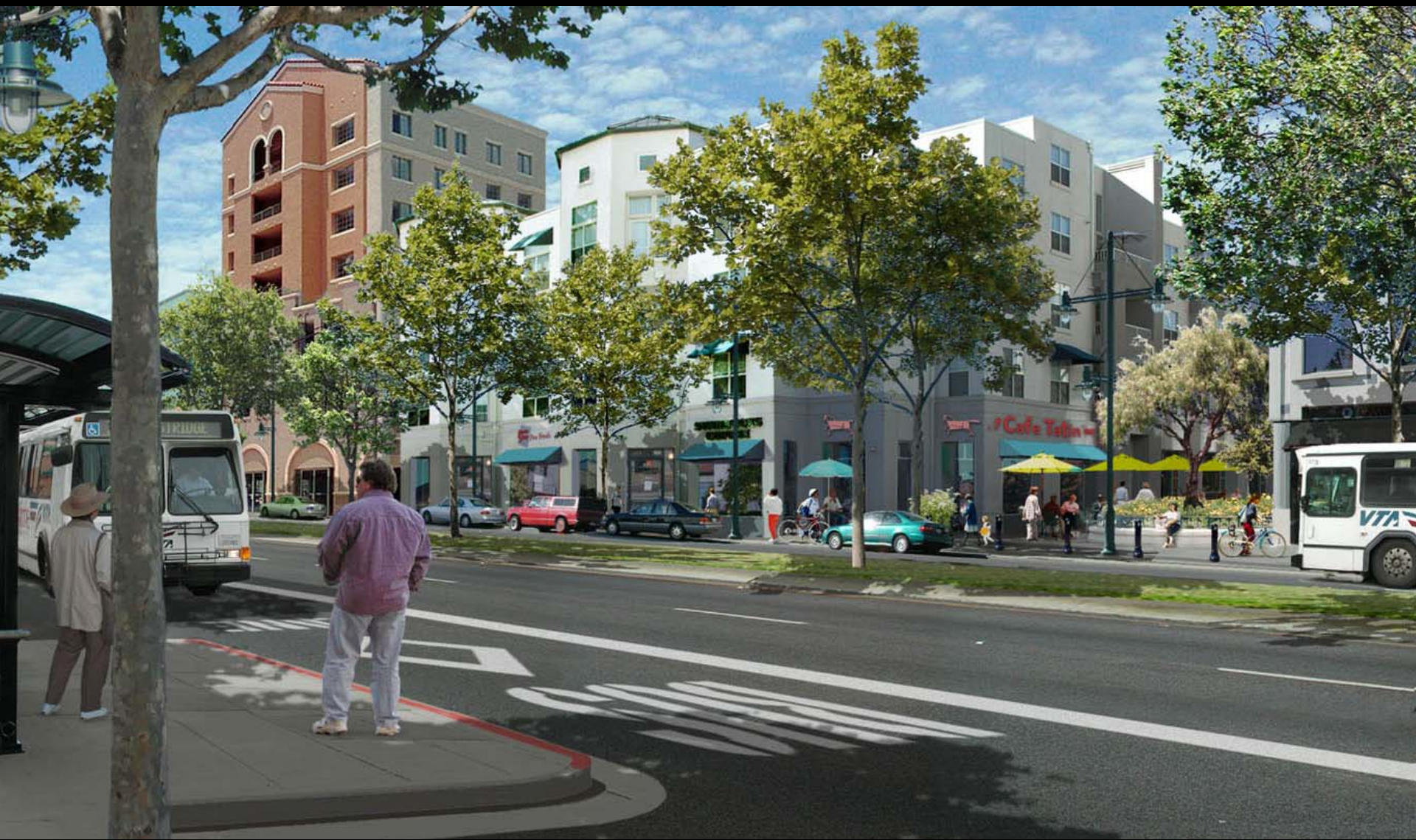
















“Come my friends, ‘Tis not too late to
seek a newer world.”



Alfred Lord Tennyson, Ulysses, 1842