

Childhood Obesity: Policy Choices for Healthy Fit Children

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Session Overview

- **Childhood Obesity Epidemic and Intractable Societal Problems**
- **Policy Wedges to Healthy Fit Children**
- **The Built Environment**
- **Food Access**
- **Physical Activity**
- **Culture and Health Literacy**
- **Lessons from the Field: What Has Worked?**

The Epidemic of Overweight Children

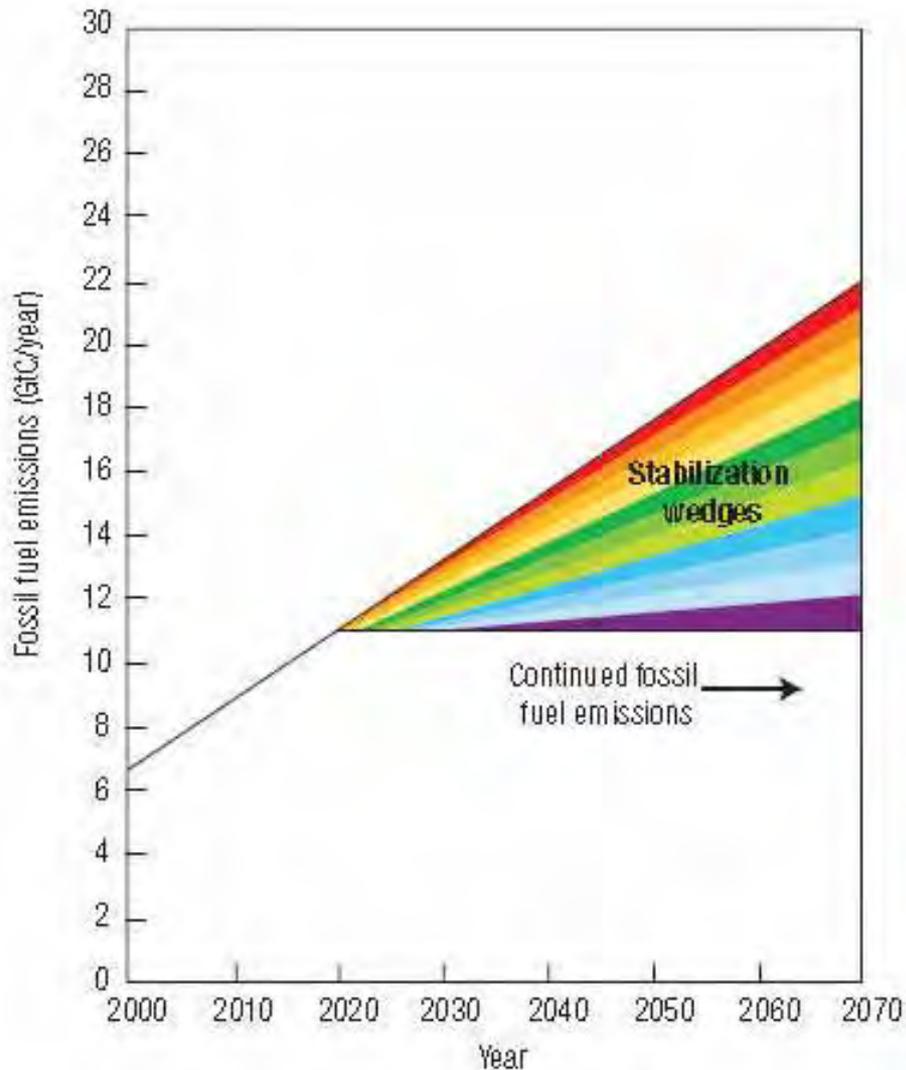


“I think we’re looking at a first generation of children who may live less than their parents as a result of the consequences of overweight and type 2 diabetes.”

Francine Ratner Kaufman, MD
Head, Division of Endocrinology & Metabolism
Children’s Hospital Los Angeles

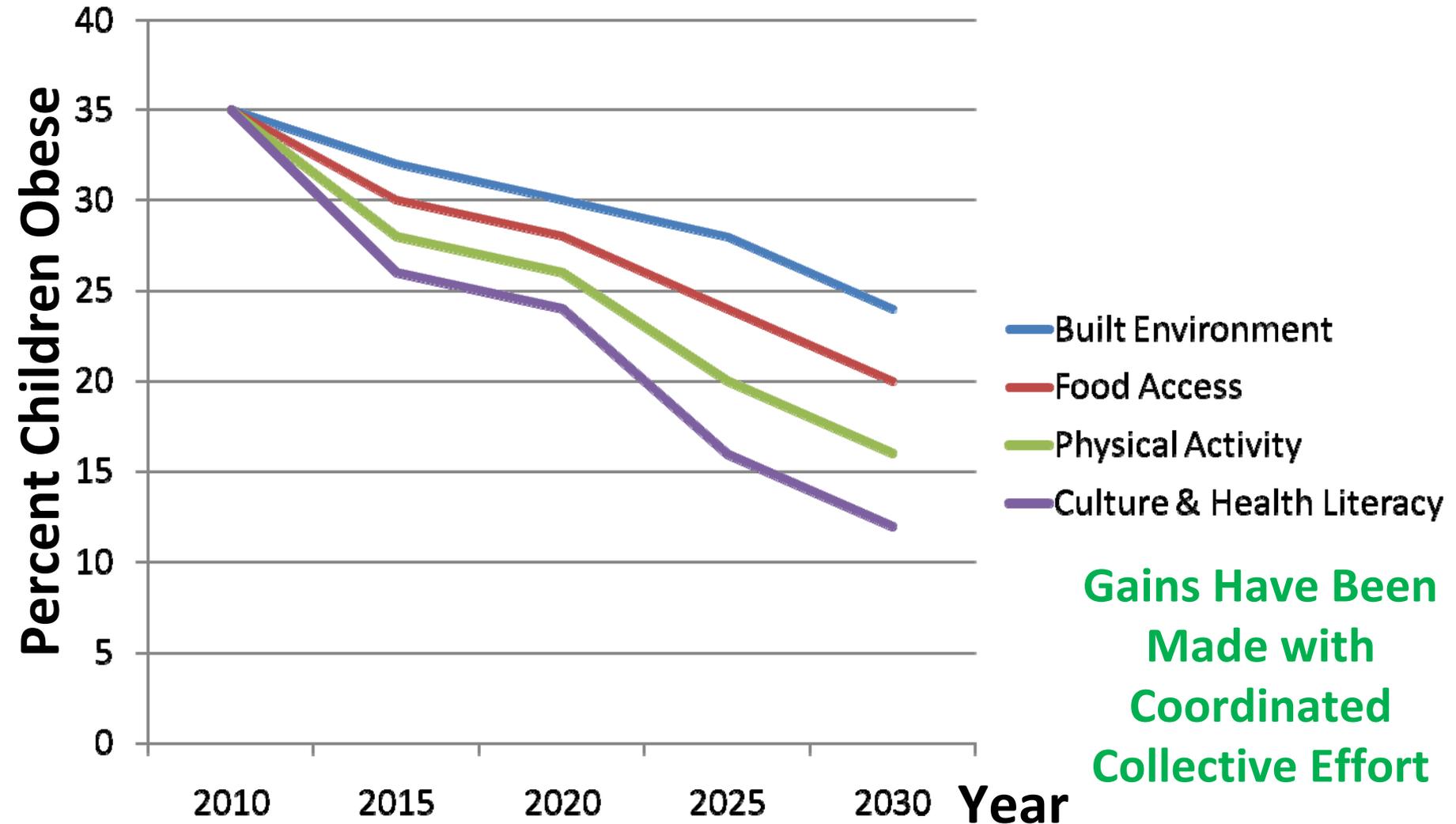
Intractable Problems Need Multifaceted Coordinated Collective Action

Climate Change Perhaps The Most Intractable Problem Confronting Society



- Coal: 800 gigawatt-sized plants with all the carbon captured and permanently sequestered
- Nuclear: 700 new gigawatt-sized plants (plus replacement plants)
- Concentrated solar thermal electric: 1,600 gigawatts peak power
- Solar photovoltaics: 3,000 gigawatts peak power
- Efficient buildings: savings totalling 5 million gigawatt-hours
- Efficient industry: savings totalling 5 million gigawatt-hours, including co-generation and heat recovery
- Wind power: 1 million large wind turbines (2 megawatts peak power)
- Vehicle efficiency: all cars 60 miles per US gallon
- Wind for vehicles: 2,000 gigawatts wind, with most cars plug-in hybrid electric vehicles or pure electric vehicles
- Cellulosic biofuels: using up to one-sixth of the world's cropland
- Forestry: end all tropical deforestation

Policy Wedges to Healthy Fit Children: Creating a Roadmap for Austin



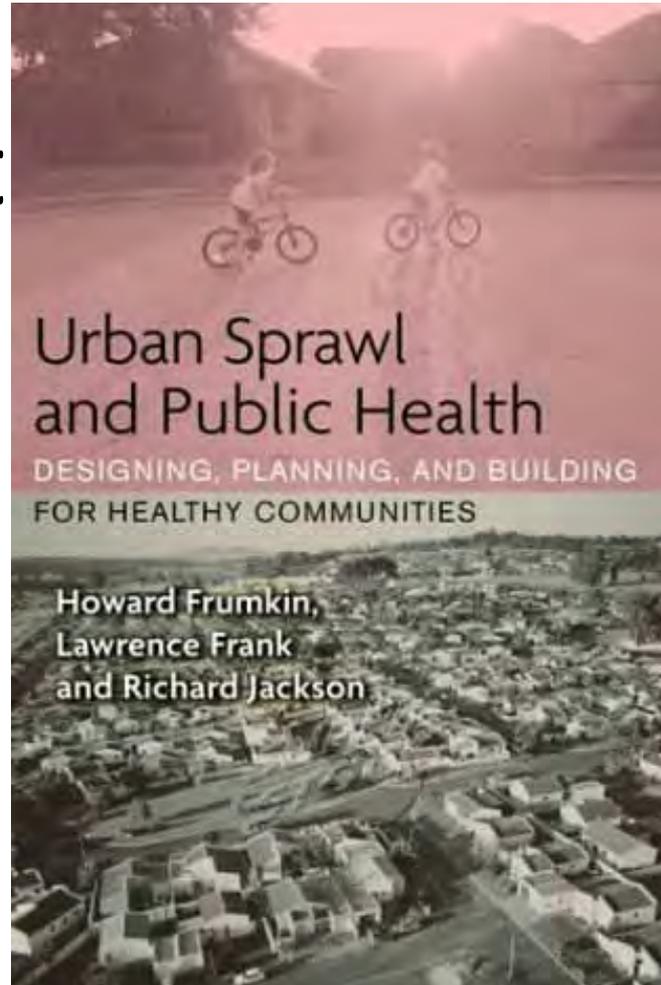
Policy Wedges to Reduce Childhood Obesity

- Need a Combined Approach – as policy interventions may be synergistic –
- Reinforce opportunities and motivation
 - **ONE: THE BUILT ENVIRONMENT**
 - **TWO: FOOD ACCESS**
 - **THREE: PHYSICAL ACTIVITY**
 - **FOUR: CULTURE AND HEALTH LITERACY**

The Built Environment

**Creating Capacity and Motivation for
Our Children to Be Healthy and Fit**

Built Environment Affects Us Much More Than We Realized



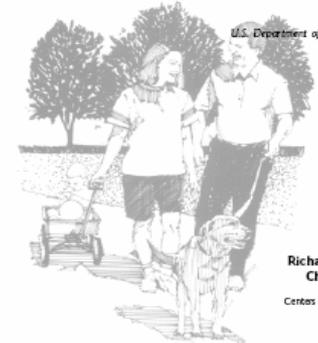
Health Impacts of the Built Environment
a review



Creating A Healthy Environment: The Impact of the Built Environment on Public Health

In its broadest sense, environmental health comprises those aspects of human health, disease, and injury that are determined or influenced by factors in the environment. This includes not only the study of the direct pathological effects of various chemical, physical, and biological agents, but also the effects on health of the broad physical and social environment, which includes housing, urban development, land-use and transportation, industry, and agriculture.

—Healthy People 2010, U.S. Department of Health and Human Services¹



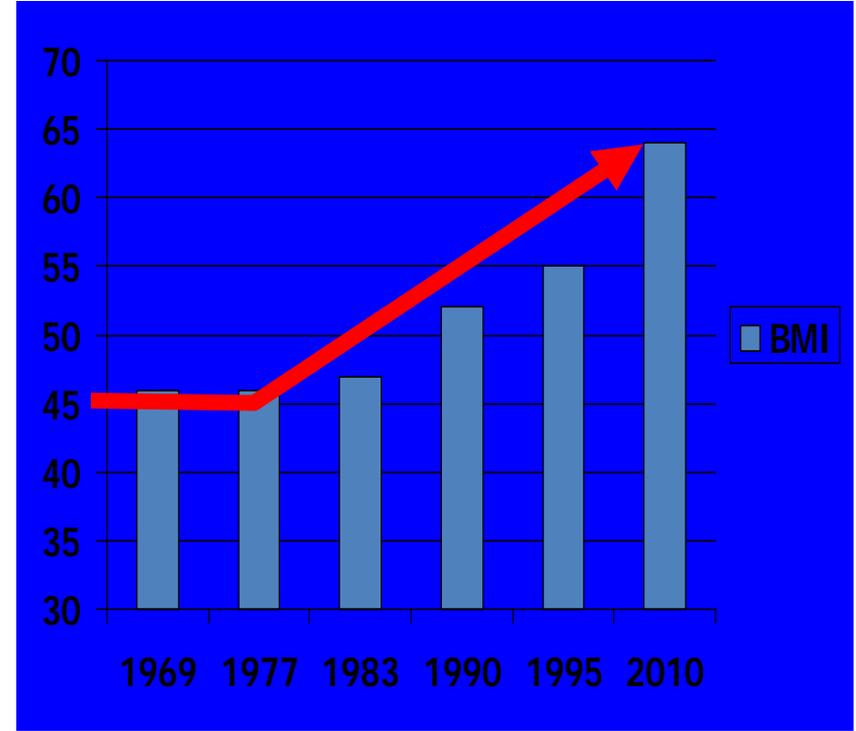
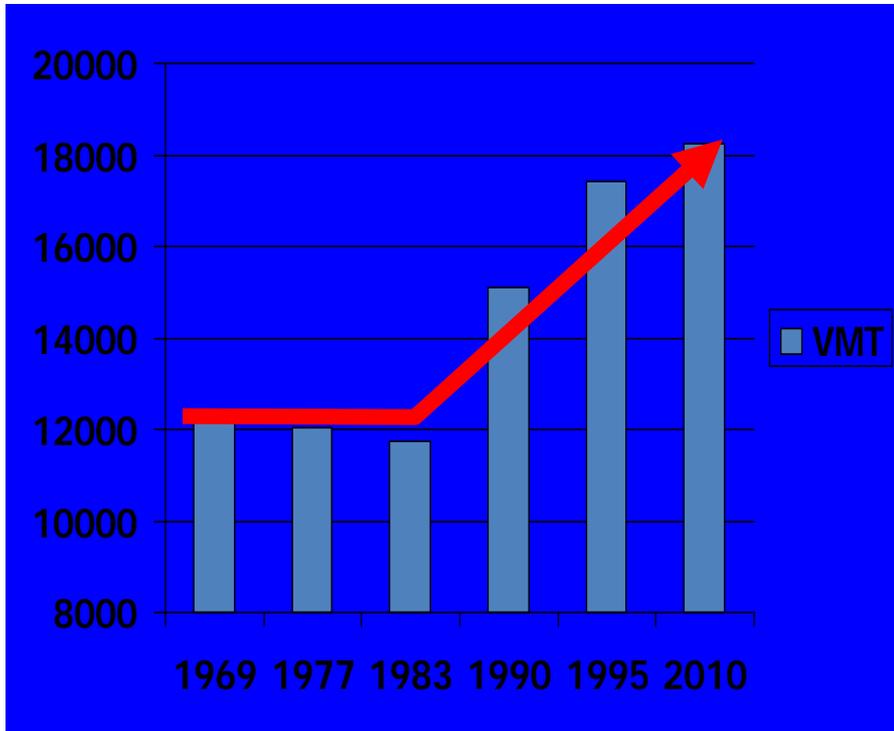
Richard J. Jackson, MD, MPH
Chris Kochitzky, MSP
Centers for Disease Control and Prevention

Urban Sprawl, Physical Activity, Obesity, and Morbidity

“Those living in Sprawling counties were likely to walk less ($p=.004$), weigh more ($p<.001$), and have a greater prevalence of hypertension ($p=.018$) than those living in compact counties.” (average six pound difference)

Ewing R et al: American Journal of Health Promotion
18 (1) Sept/Oct 2003

Growth in VMT and % Overweight

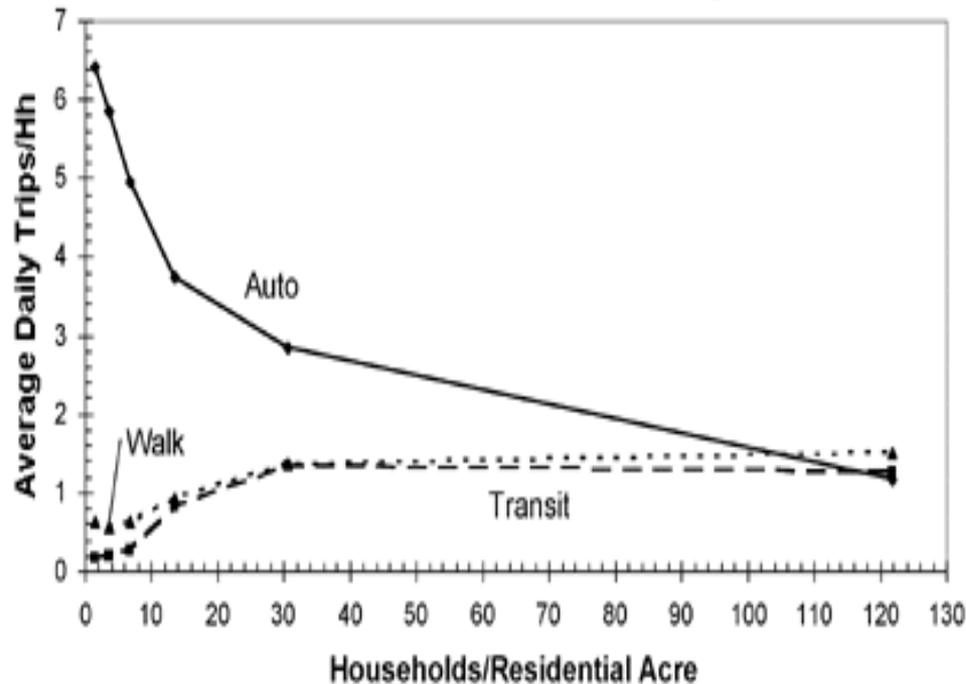


50 % overall growth trend
of annual household
vehicle miles of travel

40 % overall growth
trend of overweight
Americans

Density and Land Use Mix Provide Choice

Average Daily Trips/Household vs Density
MTC's 1990 Household Travel Survey

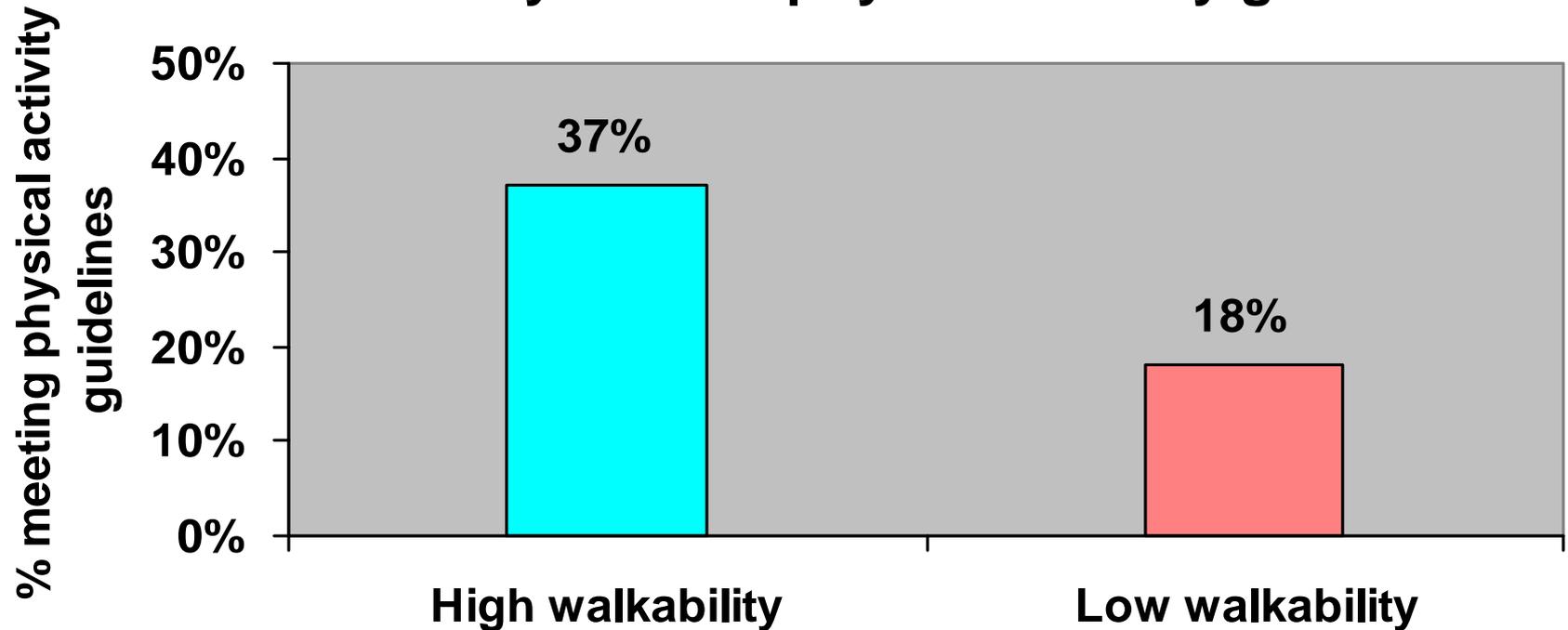


Transit use, walking and biking increase with density and land use mix as shorter trips make them possible.

Sources: Ewing and Cervero, 2001; Holtzclaw, 1994

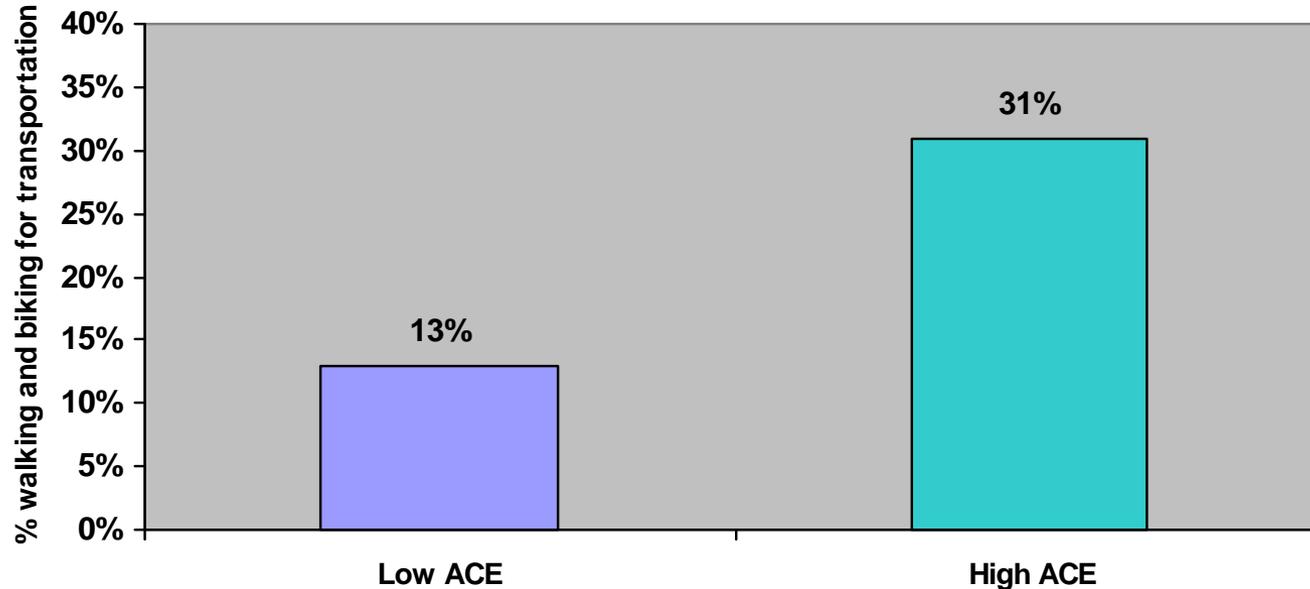
People who live in walkable neighborhoods are more likely to meet recommended daily levels of physical activity.

Residents of walkable neighborhoods were more likely to meet physical activity guidelines



Frank LD, Schmid TL, Sallis JF, Chapman J, Saelens BE. Linking objectively measured physical activity with objectively measured urban form. Findings from SMARTRAQ. *American Journal of Preventive Medicine* 2005; 28(2S2):117-125. A Study of 357 Atlanta adults using accelerometer data

A 2007 study of 6,694 residents in 67 North Carolina counties found those living in counties with the highest “Active Community Environment” (ACE) scores* were more than twice as likely to walk and bike for transportation than residents in counties with the lowest ACE scores.



* High ACE scores were determined mainly by the number of land use policies, and also implementation tools, supportive of non-motorized transportation implementation and/or mixed land use.

Aytur SA, Rodriguez DA, et al. Promoting active community environments through land use and transportation planning. *American Journal of Health Promotion* 2007; 21(4;S4):397-407.

Designing For Activity-Friendly Communities

- Transportation Facilities & Services.
- Land Use Planning & Development.
- School Size and Placement.
- Recreational Facilities, Parks & Trails.
- Safety, Security, & Crime Prevention.

Robert Wood Johnson Foundation



Access Is Key

People who report having access to sidewalks are **28%** more likely to be physically active. And access to walking and jogging trails, **55%** more likely to be physically active



Brownson, Ross et al., Environmental Determinants of Physical Activity in the United States. American Journal of Public Health (2001), Vol. 91, No. 12



At least one person had the right idea – pedestrian and bike infrastructure must be a network or it fails...



Auto Dependent Urban Forms

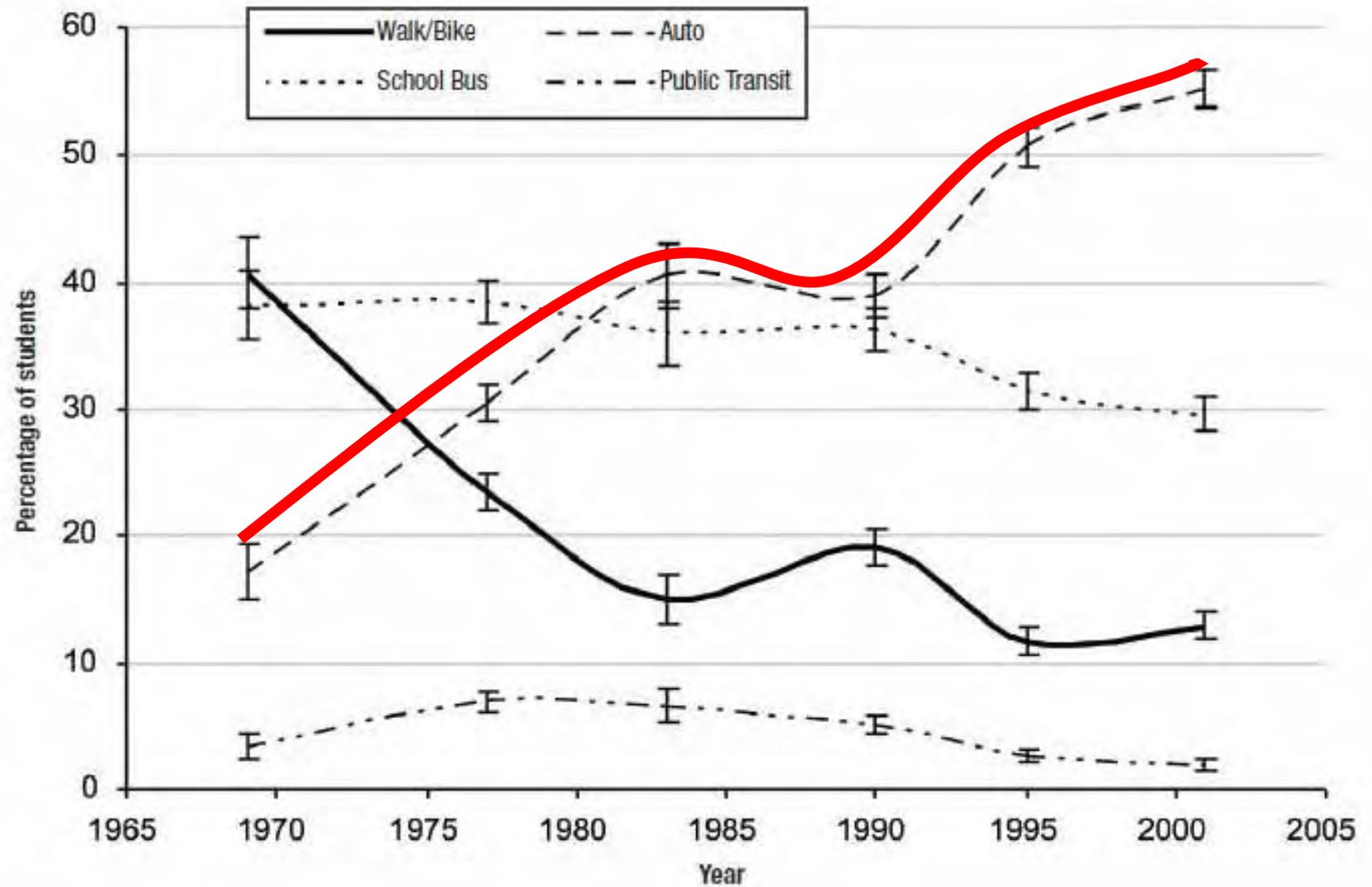
Disruptive Network of Intersecting

We have changed how much we walk or bike...

- Percent of children who walk or bike to school:
- 1974: 46%
- 2008: 13%
(CDC)

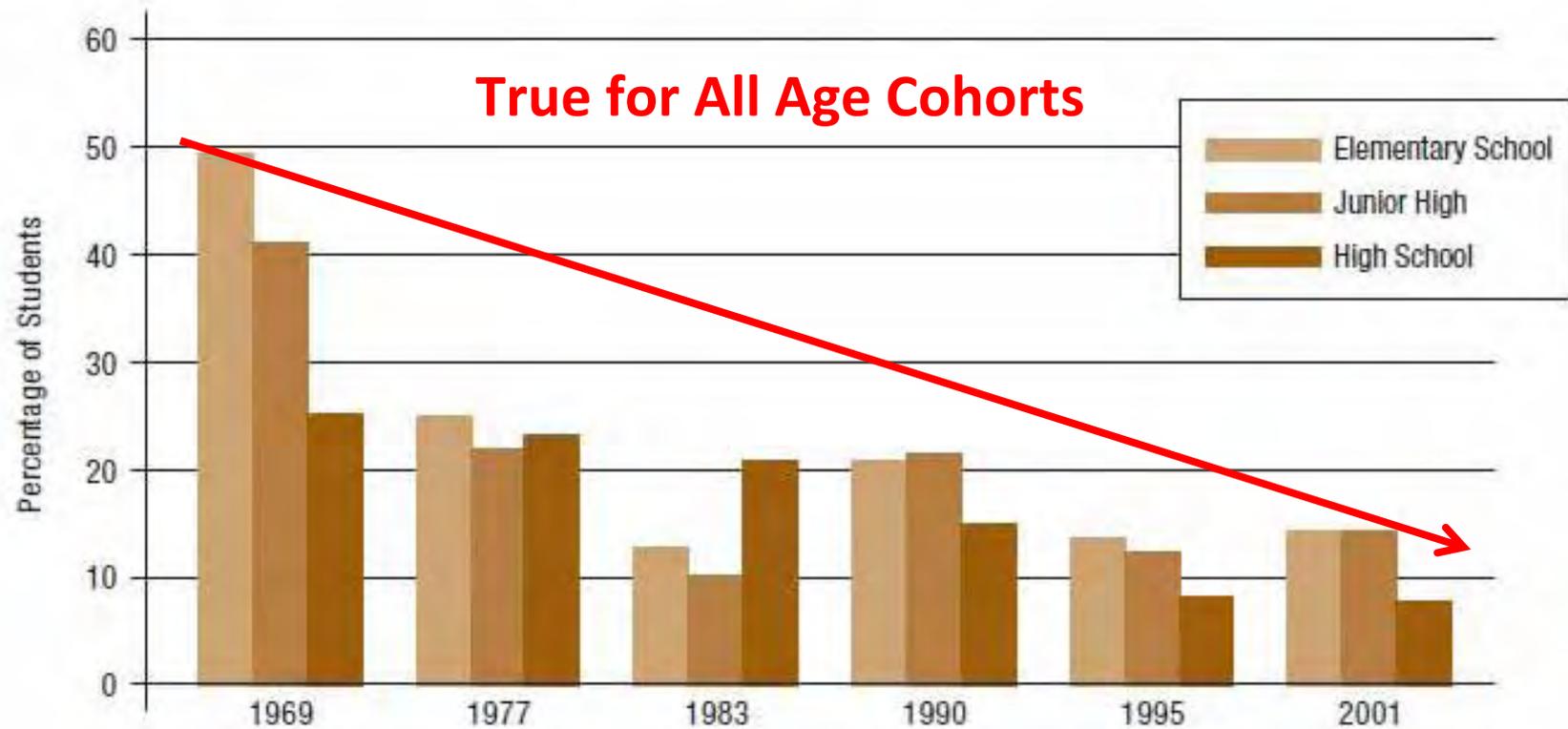


Trends in Mode of Transportation to School



Standardized to 2001 age and race distribution
Error bars represent the 95% confidence interval

Percentage of Students Who Walk and Bike to School by Grade Level



**A Tale of Two
Walks to School
Yes**

**The Built
Environment
Matters**



Mean Streets

Pedestrians are at risk in America:

- **12% of all traffic fatalities are pedestrians or bicyclists even though**
- **Only about 5% of all trips are made on foot**



Factors that Influence Decisions to Walk or Bicycle



- **Land Use Mix**
- **Network Connectivity**
- **Street Design**
- **Site Design**
- **Density**
- **Beliefs**
 - **Crime**
 - **Safety**

According to the 2008 American Community Survey, Portland observed a 6.4 percent bicycle commuter mode share—higher than any of the 30 largest cities in the nation.



RANKINGS
Portland: #1 for biking to work
Portland: highest percentage of bicycle commuters in the U.S.

Increasing Bicycle Use

Cyclists Per Day

Bikeway Miles

17,500

15,000

12,500

10,000

7,500

5,000

2,500

0

350

300

250

200

150

100

50

0

— Bridge Bicycle Traffic
 ■ Bikeway Miles

2004:
 Smarttrips program expands

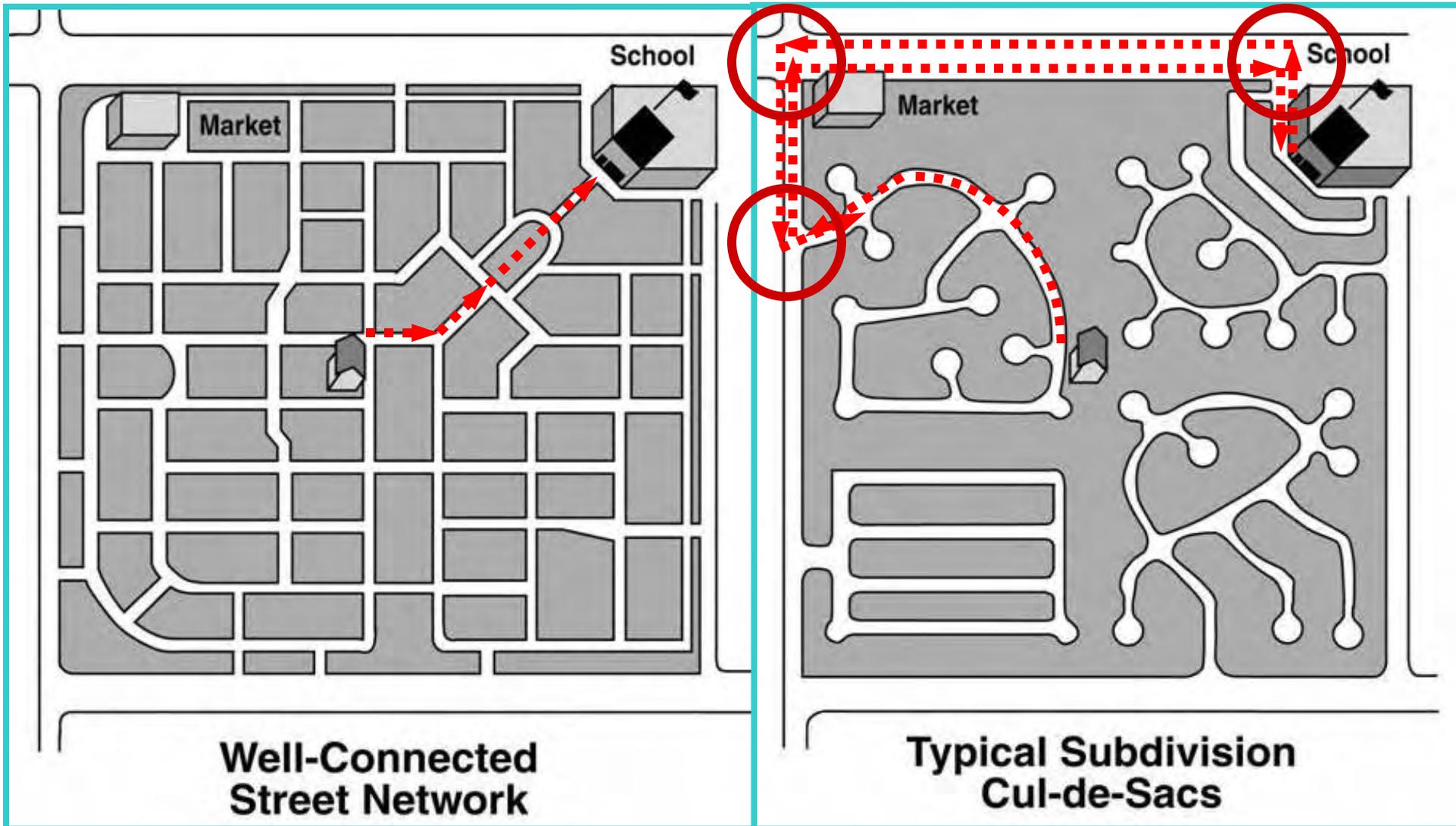
1992:
 83 miles of bikeways
 2,850 daily trips

2008:
 274 miles of bikeways
 16,711 daily trips

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bridge Bicycle Traffic	2,850	3,555	3,885	3,830	3,207	4,520	5,225	5,690	5,910	6,015	7,686	8,250	8,562	8,875	10,192	12,046	14,563	16,711
Bikeway Miles	79	84.5	87	104	114	144	167	183	214	222.5	236	253	256	262	265.5	269	272	274



Street Network - Connectivity of the Streets



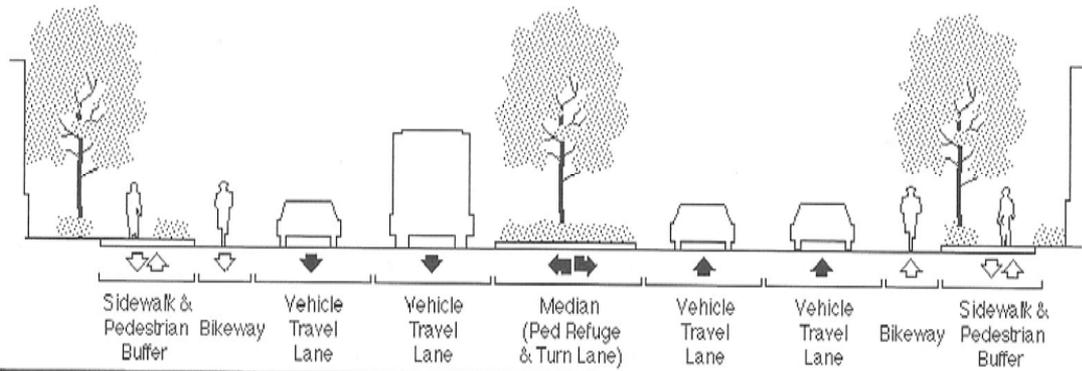
**Well-Connected
Street Network**

**Typical Subdivision
Cul-de-Sacs**

Interconnected Streets: reduce walking/biking distances

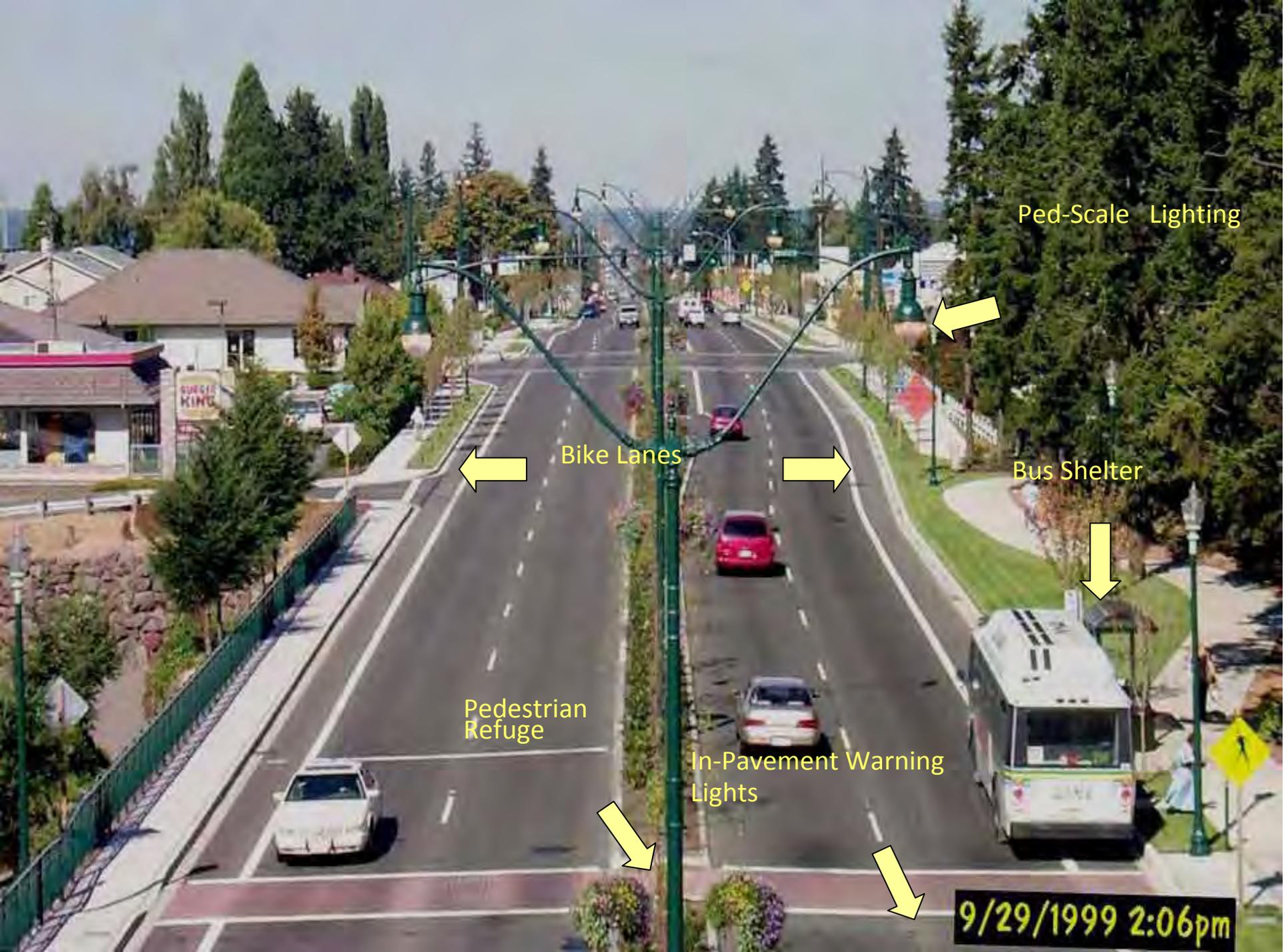
Disconnected Streets: barriers to walking & biking

- Better connectivity to make non-motorized and transit travel more viable and create more livable streets (complete streets)



Regional Street

2040 Design District	Buildings Oriented Toward Street	Vehicle Travel Lanes	Vehicle Speed	Turn/Median	Street Connect	Drive-ways	On-Street Parking	Transit Amenities	Pedestrian Amenities	Improved Ped Xings	Bikeways	Freight Function
Corridor, Some Main Streets, Inner Neighborhood, Outer Neighborhood	All major intersections and transit stops	Usually 4; add'l lanes in some situations	Moderate	Mix of medians and turn lanes that provide pedestrian refuge	Some to many	Few (combined when possible)	Allowed	High-quality service supported with amenities at major stops and station areas	Moderate sidewalk width with buffering; lighting and special crossina	At signaled intersection	Striped or shared	Primary freight routes; provide access to markets and may include loading amenities within the right of way



Ped-Scale Lighting



Bike Lanes



Bus Shelter



Pedestrian Refuge

In-Pavement Warning Lights



9/29/1999 2:06pm

Food Access

Creating Healthy Environments

- **Children and parents need healthy environments to make healthy choices**
- **Many children live in places where the unhealthy choice is the easy choice**
 - IOM National Academy of Sciences

Food Insecurity

- A Person is **Food Insecure** When They:
 - “Do not have access at all times to enough food for an active and healthy life”
 - ...with no need for recourse to emergency food sources or other extraordinary coping behaviors to meet their basic food needs.

Food insecure households

- Rates of food insecurity were higher for the following groups in the U.S.
 - Households with income below the poverty line (36.5%)
 - Households with children, headed by a single woman (31.9%)
 - Black households (21.3%)
 - Hispanic households (21.8%)
 - Households in central cities and nonmetro areas

Reasons for Community food insecurity ...

- Inadequate resources to purchase food
- Available resources not accessible to all community members (retail – housing balance)
- Food available is not sufficient in quality or quantity
- Food is not competitively priced, not affordable to all households
- Inadequate food assistance resources
- No or limited local food production resources and little support

SOME CONSEQUENCES FROM RESEARCH

- ▶ In low-income neighborhoods, each additional supermarket increases residents' likelihood of meeting nutritional guidelines by one-third.³⁵

- ▶ Residents in communities with a more “imbalanced food environment” (where fast food and corner stores are more convenient and prevalent than grocery stores) have more health problems and higher mortality than residents of areas with a higher proportion of grocery stores, when other factors are held constant.³⁶

- ▶ The presence of a supermarket in a neighborhood is linked to higher fruit and vegetable consumption and a reduced prevalence of overweight and obesity.^{37, 38}

POLICY LINK REPORT

FOOD DESERTS – Neighborhoods that...

lack places where residents can buy fresh fruits and vegetables and other healthy foods. Convenience stores, gas stations, and fast food outlets are often the only food retailers available in low-income neighborhoods, where there may be high concentrations of households eligible for food stamps.³⁴ Residents who can't drive are left to either take a bus or taxi to the nearest grocery

Policy can reverse these statistics

Supermarket proximity is associated with a better diet.

Limited access to fast food for schoolchildren is associated with better diet.

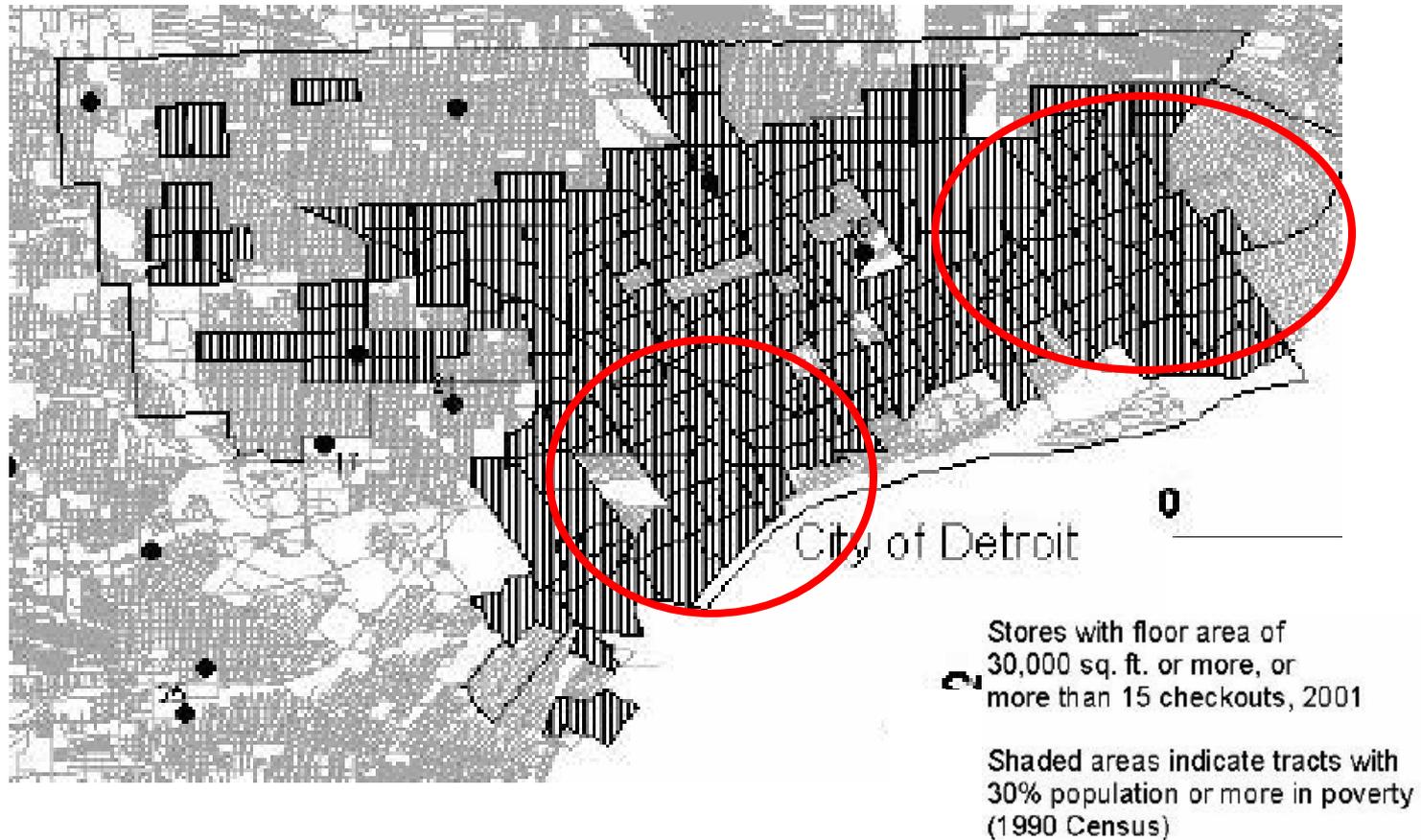
LA LOMA PRODUCE #14

3052 - 16TH ST.

LA LOMA PRODUCE #14

MEXICO Y LATINOAMERICANOS

Access for All Members of a Community: Detroit Study



Food Deserts

Proportion of Population Within 1/2 Mile Access to a Full Service Supermarkets

City of San Francisco

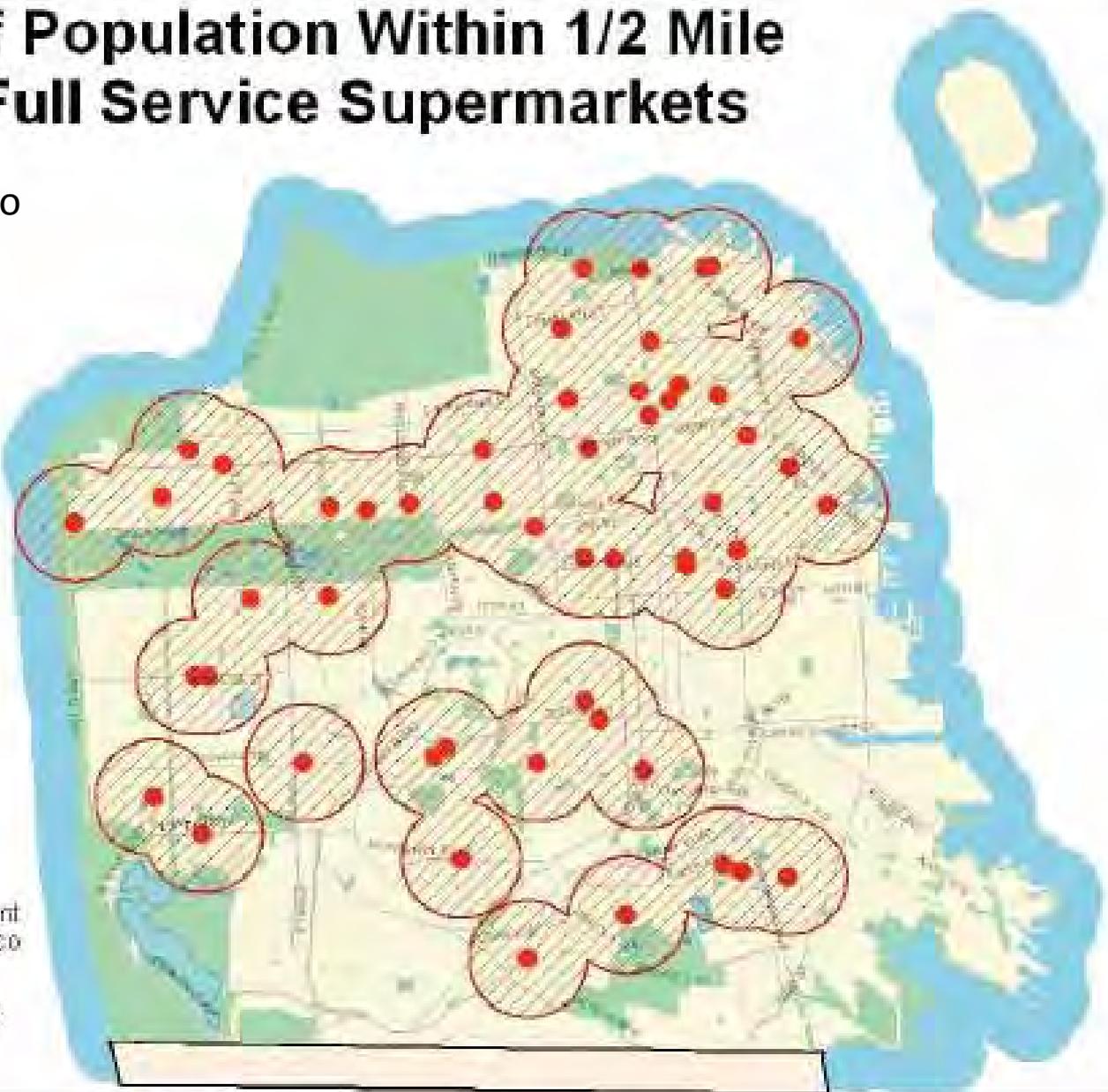
● Supermarkets

▨ 1/2 Mile Buffer



Source: San Francisco Department of Public Health and San Francisco Food Systems

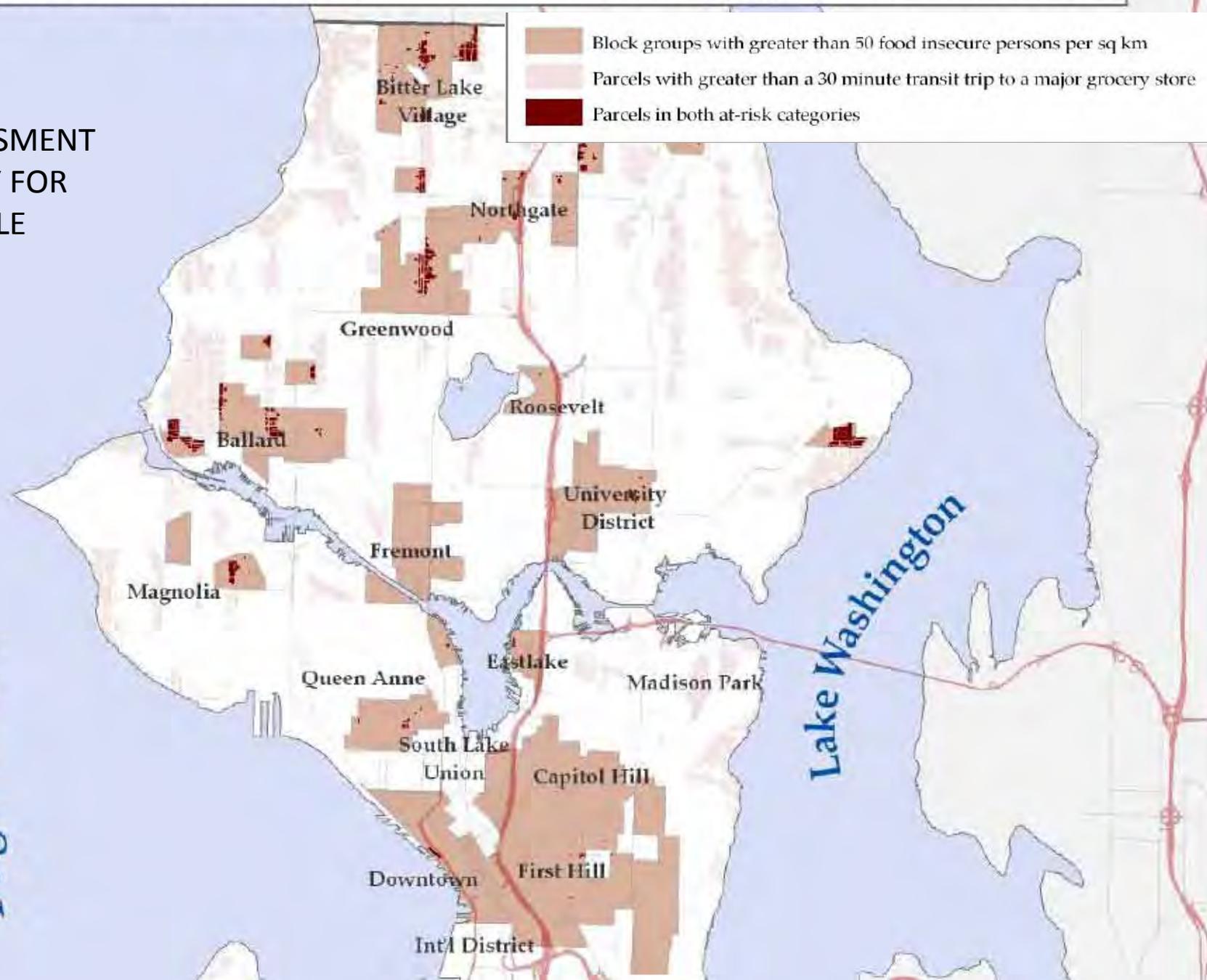
City and County of San Francisco
Department of Public Health
Environmental Health Section



Map 3. Combined Areas of Concern for Food Insecurity and Transit Access

FOOD
ASSESSMENT
STUDY FOR
SEATTLE

Puget Sound



The Food Security Continuum

Community

Unsustainable

Sustainable



Charitable

Food banks

Soup kitchens

Community

Community kitchens

Community gardens

Community-shared ag

System Redesign

Food policy councils

Food-related social
enterprise



Planning a Healthy, Sustainable Food System

The American Planning Association's **Planning and Community Health Research Center** is dedicated to strengthening the connection between urban, regional and rural planning and community health. The Center engages in collaborative, multidisciplinary research; education and outreach activities; and policy development work aimed at addressing today's pressing health issues (such social inequities, physical inactivity, poor food access) through urban, regional and rural planning.

<http://www.planning.org/nationalcenters/health/food.htm>

Uncle Sam says -

GARDEN

To Cut Food Costs

National War Garden Commission's campaign: By 1918 -- **5.3 million gardens were planted**, \$525 million in food was produced, and 1.45 billion quarts of fruits and vegetables canned.

Ask the

U.S. Department of Agriculture Washington, D.C.

For a **FREE** Bulletin on Gardening - *It's Food for thought*



WWII: Victory Gardens

PLANT A VICTORY GARDEN



This gardening program was so successful that by 1943, the Department of Agriculture estimated that across the United States over 20 million Victory Gardens produced approximately 8 million tons of fruits and vegetables.

This output represented about 40 percent of all vegetables produced in the United States during that time.

A GARDEN WILL MAKE YOUR RATIONS GO FURTHER

Limiting Fast Food Through an Innovative Zoning Ordinance

By Raquel Bournbonesque, CFSC

With obesity rates at an all-time high, fast food—typically high in fat, salt, and sugar—is being targeted as a major contributing factor in the obesity epidemic. While food system advocates and public health officials work to make healthy food more readily accessible, limiting access to unhealthy food remains an ongoing challenge. Communities across the U.S. have been strategizing about how to restrict fast food restaurants, particularly in low income neighborhoods and near schools.

In the summer of 2002, the small Northern California university town of Arcata identified an innovative way to prevent more formula restaurants from opening within the city. In May of that year, the Arcata City Council voted four to one to enact a zoning ordinance that capped the number of formula restaurants within the jurisdiction at nine (the existing number). This essentially barred a formula restaurant from locating within the city unless it replaced another formula restaurant at the same location. The measure became law in July 2002.

“High school students were a large part of the effort to curb formula restaurants in Arcata,” said Mike Mullen, Senior Planner with the City of Arcata, who staffed the effort. “A number of high school students came out to the public hearings and spoke about being concerned about the proliferation of fast food.” Not only were students involved in the public hearing process, but one also participated in the subcommittee that created the ordinance. The entire process took about a year, starting in 2001 when members of the City's Democracy and Corporations Committee began researching a ban of formula restaurants from Arcata's downtown area. They quickly formed a Formula Restaurant Subcommittee and conducted research, including reviewing ordinances from other jurisdictions. The subcommittee included such diverse members as a student, a natural resource specialist, and a business owner.

As the subcommittee researched the issue, they found that Arcata had a remarkably strong economic sector of bars and restaurants which were “in excess” according to Mullen. Therefore, this ordinance could not be construed as hurting a weak industry. No restaurants would be put out of business, and when one went out of business another could open. Mullen also noted that Arcata has lots of small, independent, restaurants spread throughout the community, including in low-income areas.

The policy process included holding four public hearings on the issue. About 75% of Arcata residents who spoke at the hearings voiced support for the ordinance. Proponents noted the need to protect Arcata's unique character from the cookie-cutter development that had spread throughout the country. Many also spoke about the importance of supporting locally owned businesses and keeping money in the local economy. The opposition included local franchise owners, until they realized that this ordinance meant they had cornered the formula restaurant market in Arcata. However, a National Restaurant Association representative did testify against the ordinance.



- **Land use** Accommodate public structures such as farmers' and public markets to serve as direct sales outlets for local producers. Retain industrial land for local businesses critical to the food system. Regulate undesirable land uses such as fast food drive-thrus. Affect the location of supermarkets and community gardens.
- **Open space:** Accommodate urban agriculture and community gardens and promote farmland preservation.
- **Housing:** Incorporate community gardens into the design of multi-family units and as central gathering places within larger neighborhoods.
- **Transportation/circulation:** Improve roads to make them safe for pedestrians and bicyclists; connect public transit to major retail areas; and create pedestrian-centered commercial corridors.
- **Conservation:** Compost green waste (such as food scraps and yard trimmings) and use gray water for urban agriculture and community gardens.
- **Noise:** Absorb noise pollution through green space such as community gardens and urban farms.
- **Safety:** Form closer-knit communities through community gardens and farmers' and public markets.
- **Jobs and economic development:** Pursue an industrial land use development and retention policy that identifies land for local food processors, distributors and other Examples of food system provisions included in Comprehensive Plans include:
 - Encourage and **support community gardens** as important open space resources that build communities and provide a local food source, particularly in high density neighborhoods where there is little private space suitable for gardening (Open Space and Recreation Element, Berkeley, CA General Plan).
 - **Establish community gardening** as a desired use, with specific guidelines for one garden within walking distance of every 2,500 residents (Urban Villages Element, Seattle Comprehensive Plan)
 - **Adopt a policy** to allow for closure of streets to provide urban parks in which gardens can be incorporated, where there is broad community and local support and where legally permissible (Open Space Conservation and Recreation Element, Oakland, CA Comprehensive Plan)
 - **Educate farmers** with operations in the city about incentive programs that will help them
- **Protect agricultural lands** by maintaining parcels large enough to sustain agricultural production, preventing conversion to non-agricultural uses (Natural Systems & Agriculture Element, Marin County, CA General Plan)
- Set a goal to maintain a low unemployment rate and promote **diversification of the local economy**. Support existing businesses and industries and the establishment of locally owned, managed, or controlled small businesses (Economy Element, Corvallis, OR Comprehensive Plan).



Create a targeted **grocery** attraction and improvement strategy

Help with location and expansion, and streamlining fees and permitting processes, provide grants/loans



LITTLE GROCERY

OPEN!
EBT
Accept!

399
12 PK CANS

CANS
50¢

299
Winner

4 25
Marlboro

Outreach to small markets

Offer incentives and assistance:
façade improvements; infrastructure; business
planning, WIC/Food Stamp participation; link to
distribution channels



Plan for urban agriculture

- Zone for gardens as defined and allowed use
- Comprehensive planning and redevelopment opportunities**
- Require developers to **provide set-asides**

Goal/Objective: Protect existing and establish new community gardens and urban farms as important community resources that build social connections; offer recreation, education, and economic development opportunities; and provide open space and a local food source.

Policies/Actions

- Encourage the creation and operation of one community garden of no less than [*one*] acre for every [*2,500*] households. Identify neighborhoods that do not meet this standard and prioritize the establishment of new gardens in neighborhoods that are underserved by other open space and healthy eating opportunities.

COMMENT: The standard presented here is based on Seattle's standard – one community garden per 2,500 households.¹⁷ This standard matches closely the National Recreation and Park Association's widely used "best practice standards" for a neighborhood park or tot lot (1/2 acre: 2,500 households for a tot lot; 1 acre: 5,000 households for a neighborhood lot¹⁸). Communities that are more or less urban will need to assess whether this standard is appropriate for them.

- Identify existing and potential community garden sites on public property, including parks, recreation and senior centers, public easements and right-of-ways, and surplus property, and give high priority to community gardens in appropriate locations.

Getting to Grocery

Tools for Attracting Healthy Food Retail
to Underserved Neighborhoods



www.healthyplanning.org

**Economic Development
and Redevelopment**

**How to Create and Implement
Healthy General Plans**

General Plans and Zoning

Joint Use of School Facilities

nplan

NATIONAL POLICY & LEGAL ANALYSIS NETWORK
TO PREVENT CHILDHOOD OBESITY

phlp
public health
law & policy

Establishing Land Use Protections for Farmers' Markets

Establishing Land Use Protections for Community Gardens



Physical Activity

How Much Physical Activity Do Children Need?

- **Children and adolescents should do 60 minutes (1 hour) or more of physical activity daily.**
 - **Aerobic Activities**: Most of the 60 or more minutes per day should be either moderate- or vigorous-intensity aerobic physical activity. Include vigorous-intensity physical activity at least 3 days per week.
 - **Muscle-strengthening Activities**: Include muscle-strengthening physical activity on at least 3 days of the week, as part of the 60 or more minutes.
 - **Bone-strengthening Activities**: Include bone-strengthening physical activity on at least 3 days of the week, as part of the 60 or more minutes.

Why is Physical Activity Important For Schools?

- Associated with lower levels of stress and anxiety¹
- Can positively affect concentration, memory, and classroom behavior among adolescents²
- Can improve standardized test scores³



1. HHS. Physical Activity Guidelines Advisory Committee Report;2008.
2. J Pediatr 2005;146(6)719–20.
3. Res Q Exerc Sport 1999;70(2):127–34.

Comprehensive School-Based Physical Activity Program¹

- **Components include:**
 - Quality physical education
 - Daily recess period
 - Activity breaks throughout the day
 - Intramural sports
 - Interscholastic sports
 - Walk- and bike-to-school programs
 - Staff wellness and involvement
 - Family and community participation



1. National Association for Sport and Physical Education. Comprehensive School Physical Activity Programs Package; 2008.



24
HOUR

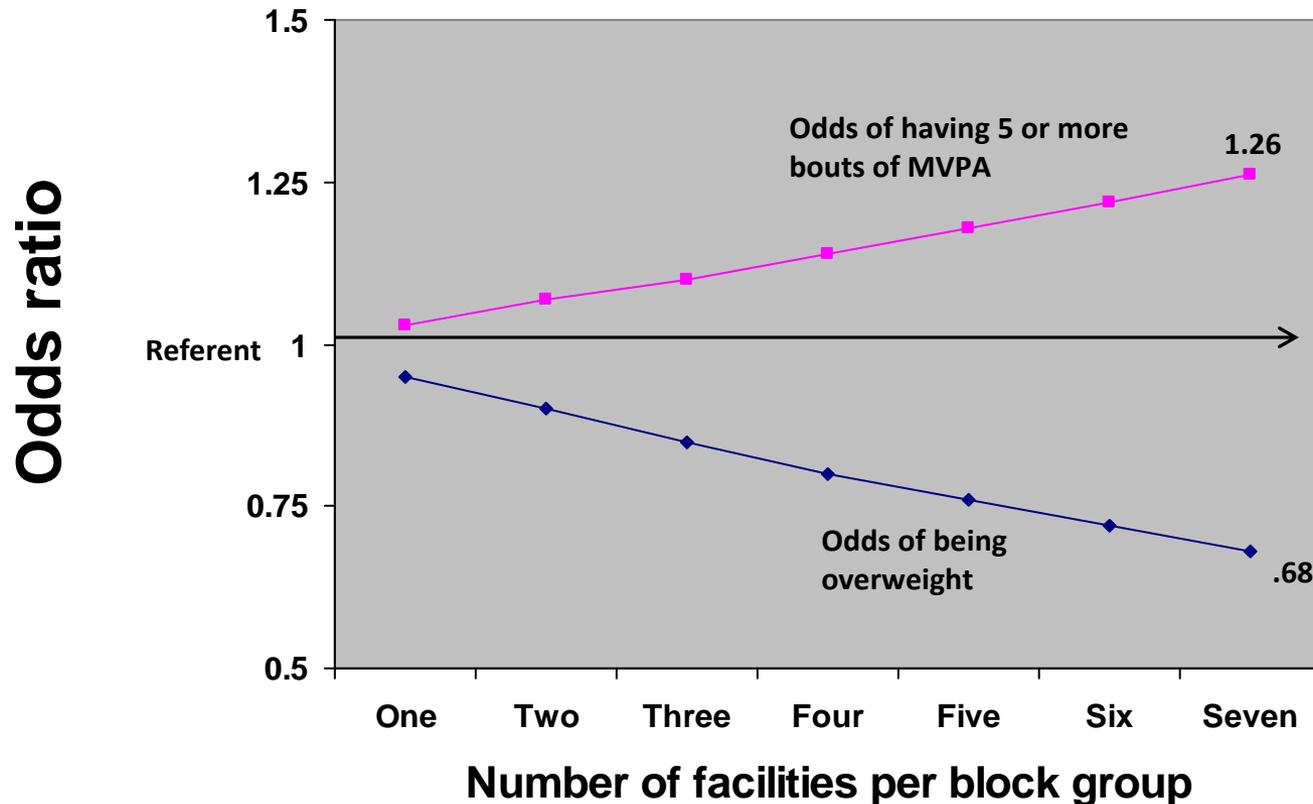
FITNESS

ENTRANCE

24
HOUR

POINT LOU
HANDICAP
TO UPPER
LOCATED
34 ROOM

A national study of US adolescents found a greater number of physical activity facilities is directly related to increased physical activity and inversely related to risk of overweight



Gordon-Larsen P, Nelson MC, Page P, Popkin BM. Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics* 2006; 117(2): 417-424. <http://www.pediatrics.org/cgi/content/full/117/2/417>

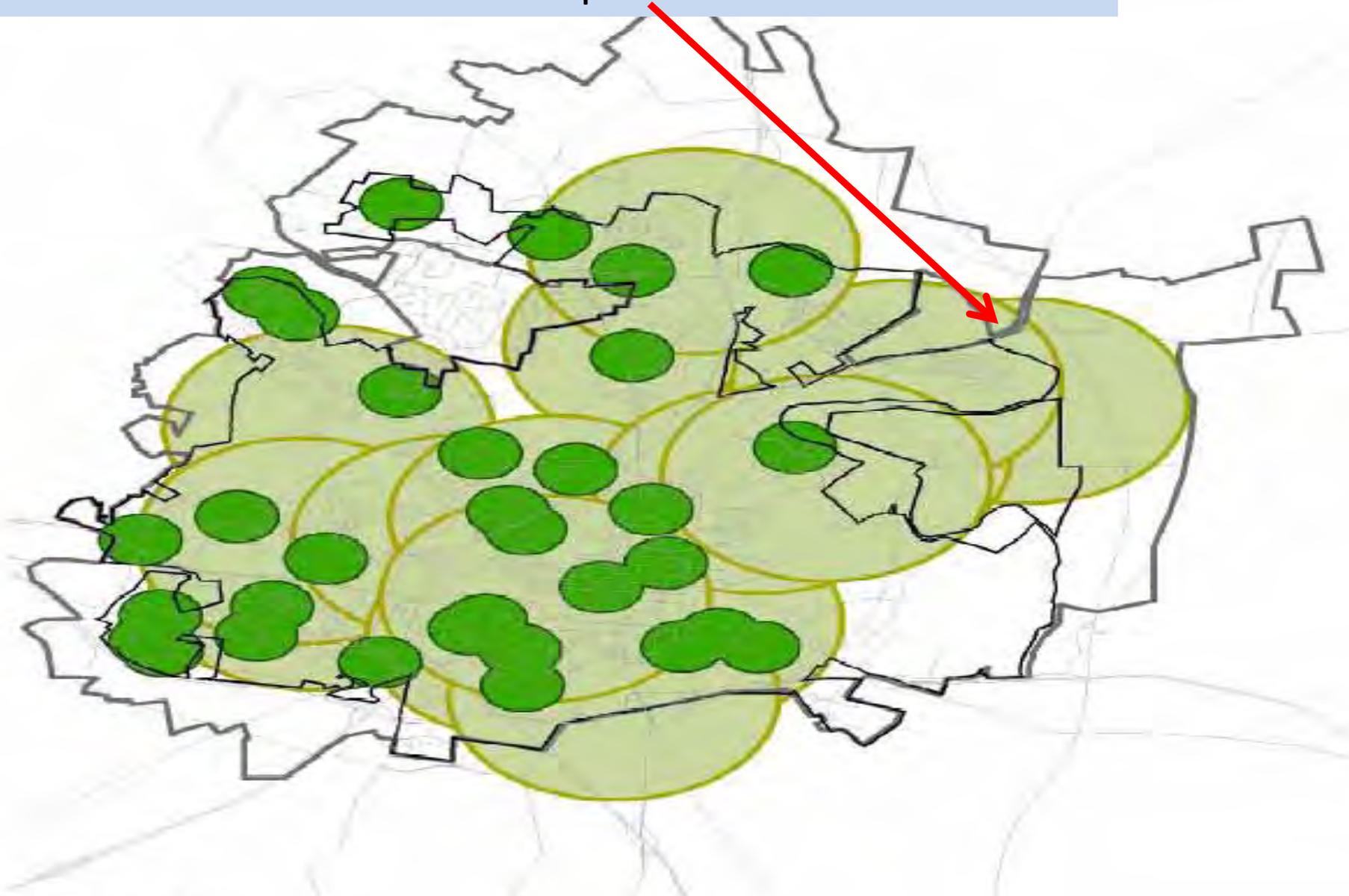
Meta Study of Correlates of Physical Activity

[Van Der Horst](#), [Paw](#), [Twisk](#), and [Van Mechelen](#) (2007)

- Male Children (age range 4-12), self-efficacy, parental physical activity (for boys), and parent support were positively associated with physical activity
- Female Children (age range 13-18), positive associations with physical activity were found for parental education, attitude, self-efficacy, goal orientation/motivation, physical education/school sports, family influences, and friend support

Map PR.1: Existing Park Service Areas

1 Mile Service Zone – Park Gaps noted and added to CIP



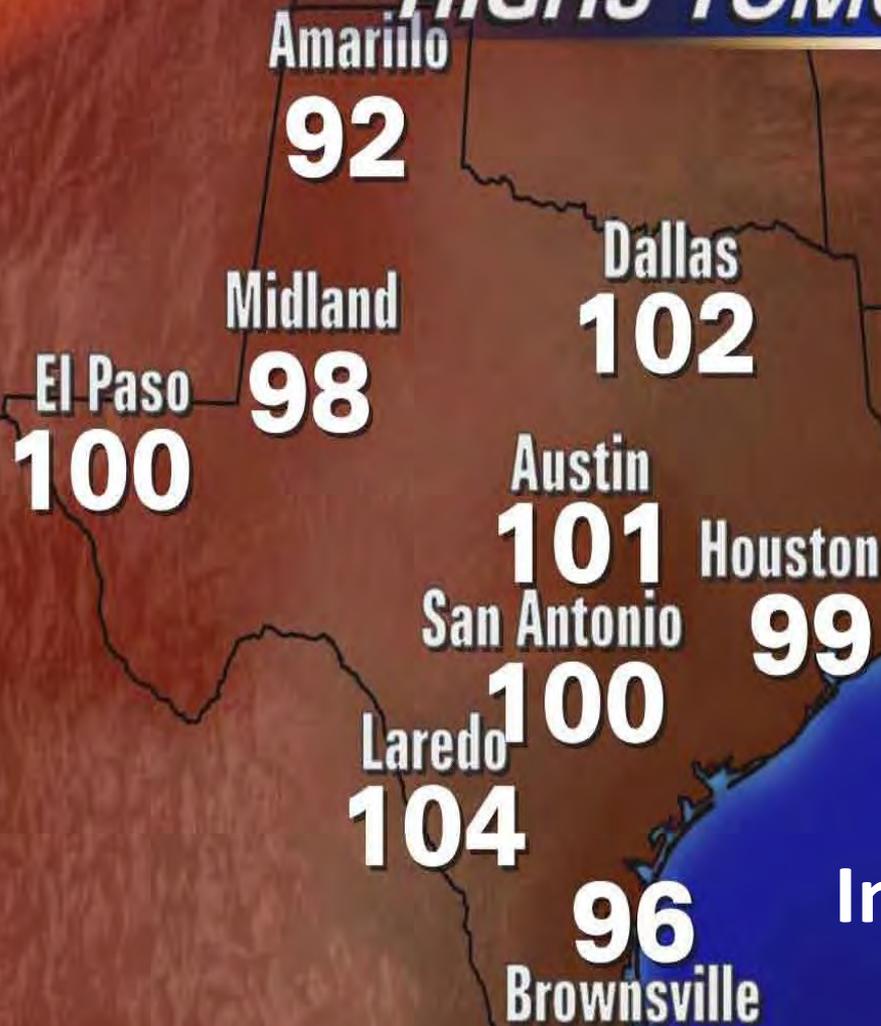


- 
- * TRAIL NOT MAINTAINED BY THE CITY.
 - * RIDE AT YOUR OWN RISK.
 - * SAFETY EQUIPMENT RECOMMENDED.
 - * PLEASE DO NOT RIDE IN THE MUD.
 - * TRAIL NOT INTENDED FOR MOUNTAIN BIKE USE.
 - * PLEASE DO NOT LEAVE SMALL CHILDREN UNATTENDED.
 - * NO LITTERING PLEASE.

**PARK CURFEW HOURS:
10 PM - 5AM**



HIGHS TOMORROW



In 2009, Austin had
67 Days of 100+
degree Heat ☹️





LANDA PARK SWIMMING POOL, NEW BRAUNFELS, TEXAS.











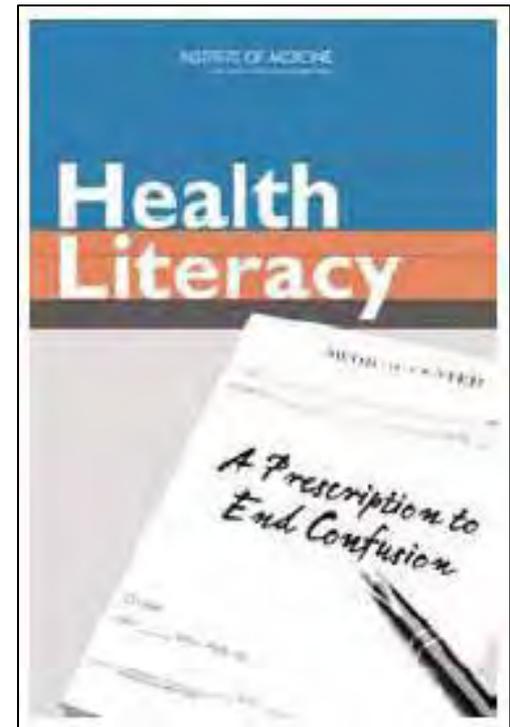
What Can We Do?

- Integrate **FUN FUN FUN** into the Built Environment (**ENABLE AND SPUR ACTIVITY**) 😊
- High Performance Infrastructure for CIP projects – Can Just a Wall become a **Climbing Wall?**
- Re-program our parks space with challenges and equipment that enable active healthy exercise
- Create even more **EVENTS** that inspire people to train 😊
- More – you dream it up.....

Health Literacy

Health Literacy

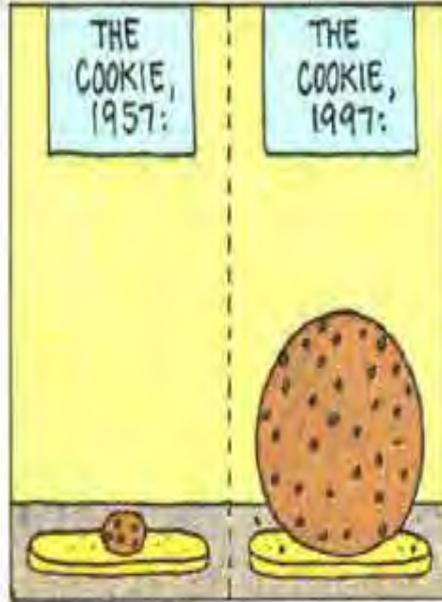
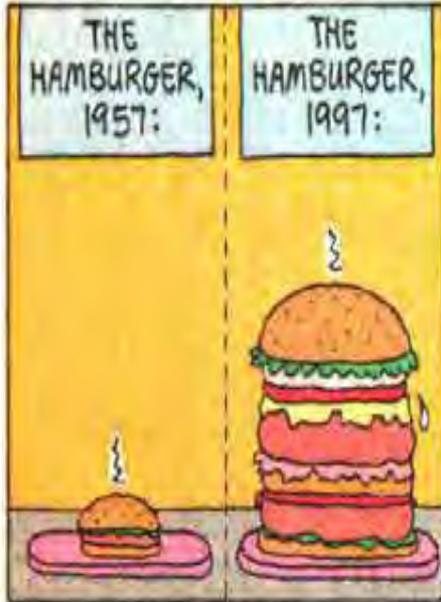
Degree to which individuals have the capacity to obtain, process, and understand basic information and services needed to make appropriate decisions regarding their health.



IOM Definition

Healthy Eating Is Key, But....

- There is strong evidence that marketing works, especially when it is specifically targeted at children and takes advantage of their impressionability.
- There is also strong evidence that the types of food and beverages marketed to children are overwhelmingly energy - dense and nutrient - poor.
- There is strong evidence that a high intake of energy - dense foods promotes unhealthy weight gain



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Fast Food Nation

Approximately 40% of budgeted food money is spent away from home.

Americans' spending on fast food:

Increased from \$60 billion to \$110 billion in the last 30 years.

Children 11-18 y/o eat fast-food an average of *twice a week*.

– *A Diet High in Fats and Sugars typically...*



Kids and Fast Food

- **Most fast-food menus – especially kids' menus**
 - **High in saturated fat, trans fat, sugar, sodium and calories**

US Guidelines: Calorie Needs For Teenagers

Teenage Girls Age

11-14 years

15-18 years

Average Calorie Needs Each Day

2200 calories

2200

Teenage Boys Age

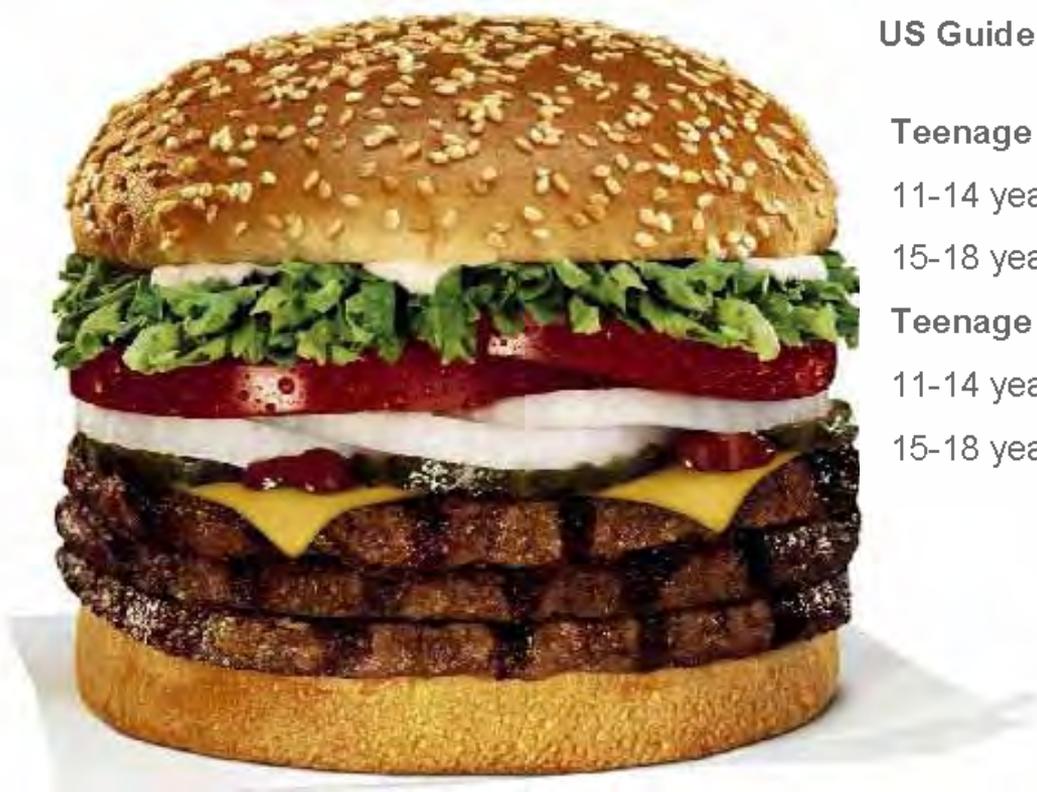
11-14 years

15-18 years

Average Calorie Needs Each Day

2500

3000



**Burger King Large Triple
Whopper with Cheese Value
Meal with Fries
1790 calories**

111 g fat (38 g saturated, 3.5
g trans)

2430 mg sodium



Denny's Fried Cheese Melt with Wavy Fries and Marinara

1,260 calories

63 g fat

**(21 g saturated, 1 g
trans)**

3,010 mg sodium



Sedentary Adult Male Needs 2300 Calories a day



Applebee's®

Neighborhood Grill & Bar



**Applebee's Provolone-
Stuffed Meatballs with
Fettuccine**

1,550 calories

97 g fat (46 g saturated)

3,910 mg sodium

IHOP New York Cheesecake Pancakes 1,270 calories



Coca Cola Is Certainly **Not** Interested In Healthy Food Choices

- Coca-Cola spent more than \$1.7 million in 2007 to lobby against marketing regulations, school nutrition legislation, and trade issues among other issues
- Not surprising.....

Healthy Food Information – Needs A Better Chance

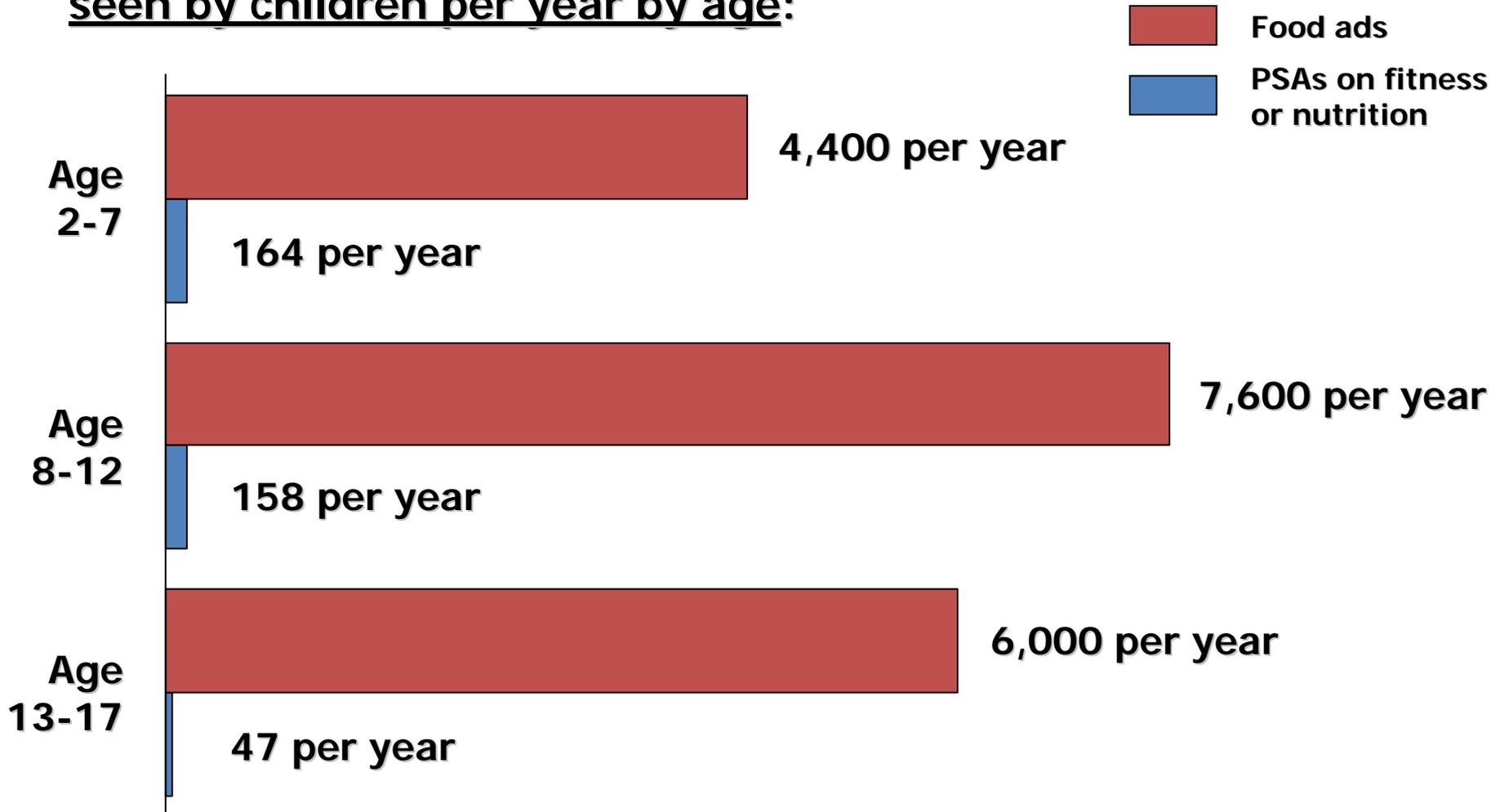
- Food marketers spend \$1.6 billion a year to reach U.S. children and adolescents through television, the Internet, radio, packaging, in-store promotions, video games, and text messages.
- Compare this to the “5-a-day” fruit and vegetable program, which at its peak cost the National Cancer Institute \$2 Million.
 - Harris et al., 2009. A Crisis in the Market Place, Annual Review of Public Health

Healthy Food Information – Needs A Better Chance

- Consider that the Robert Wood Johnson Foundation **committed \$100 million per-year to reverse child obesity trends in the US**—the single largest effort of its type in history.
- BUT -- The food industry spends **more than that annual total every month**, marketing primarily junk foods directly to youth...

TV Advertising for Food vs. Public Service Announcements for Fitness or Nutrition, 2005

Average number of food ads and PSAs on fitness or nutrition seen by children per year by age:



Community Based Approaches Can Matter

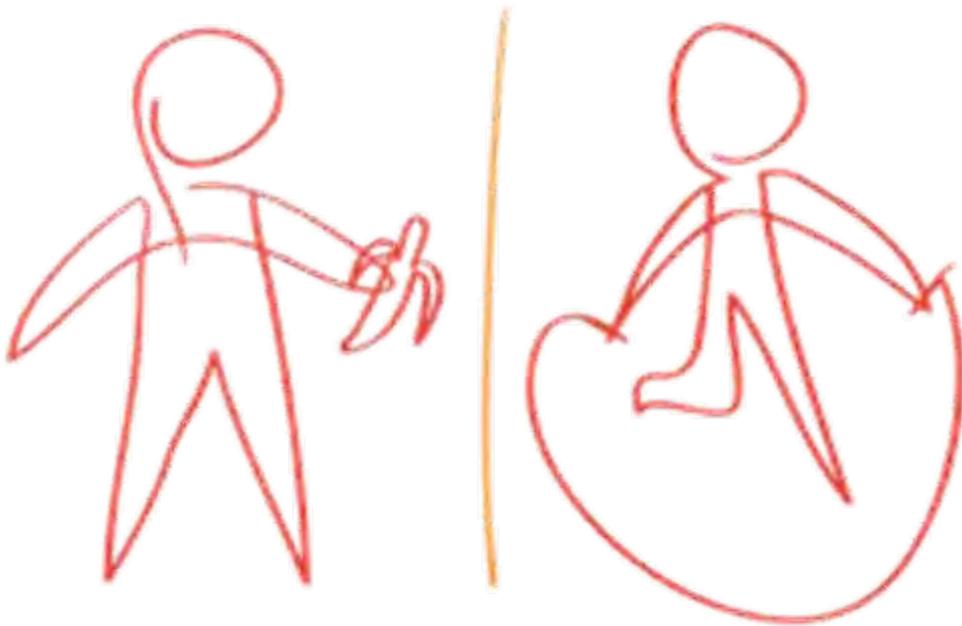
- Shape Up Somerville (SUS): Eat Smart, Play Hard TM , was one of the first community - based participatory research (CBPR) initiatives Designed to change the environment to prevent obesity in early elementary school children,
- Focused on creating multi – level changes to prevent weight gain among early elementary school children through community participation. Changes within the before - , during - , and after – school environments provided a variety of increased opportunities for physical activity.

Table 1. Components of the SUS intervention

Before school	After school
Breakfast program Increase fresh fruits, low-fat milk, whole grains Taste tests Adult monitors Walk to School Campaign Walking to school bus Traffic calming tactics Walking contests International Walk to School Day Safe routes to school maps	SUS after-school curriculum Increase physical activity Cooking lessons Promote healthy snacks Farm trips Professional development for program staff Walk from school campaign (see Walk to school campaign)
During school	Home
Professional development (nutrition and physical activity) for all school staff School health office Anthropometric equipment Height/weight data collection School food service Increase whole grains, fruits and vegetables, low-fat dairy Healthier a la carte snacks Monthly taste tests New vegetarian recipes Ice cream sold only one day/wk New equipment to enhance food presentation SUS classroom curriculum 10-minute daily "Cool Moves" 30-minute nutrition and physical activity lesson (~1 week) Fun and healthy giveaways Enhanced recess New play equipment/game cards School "wellness" policy development School food service Classroom environment Physical education environment Structured day environment After-school environment School health environment To/from school environment	Parent outreach and education Bi-monthly newsletter Free and reduced coupons Family events Parent nutrition forums Child's "Health Report Card" mailed each year
	Community
	SUS Community Advisory Council Ethnic-minority group collaborations Support from local "community champions" Walking/pedestrian trainings City Employee Wellness Campaign "Farmers Market" initiative Local physician and clinic staff training SUS "approved" restaurants City ordinances on walkability/bikeability Annual SUS 5 K Family Fitness Fair Regular local media placement Monthly SUS column in the <i>Somerville Journal</i> Collaborated on City of Somerville health events Resource guides Physical Activity Guide Healthy Meeting Guide Health Message Translations Booklet

Somerville Study 2002-2005

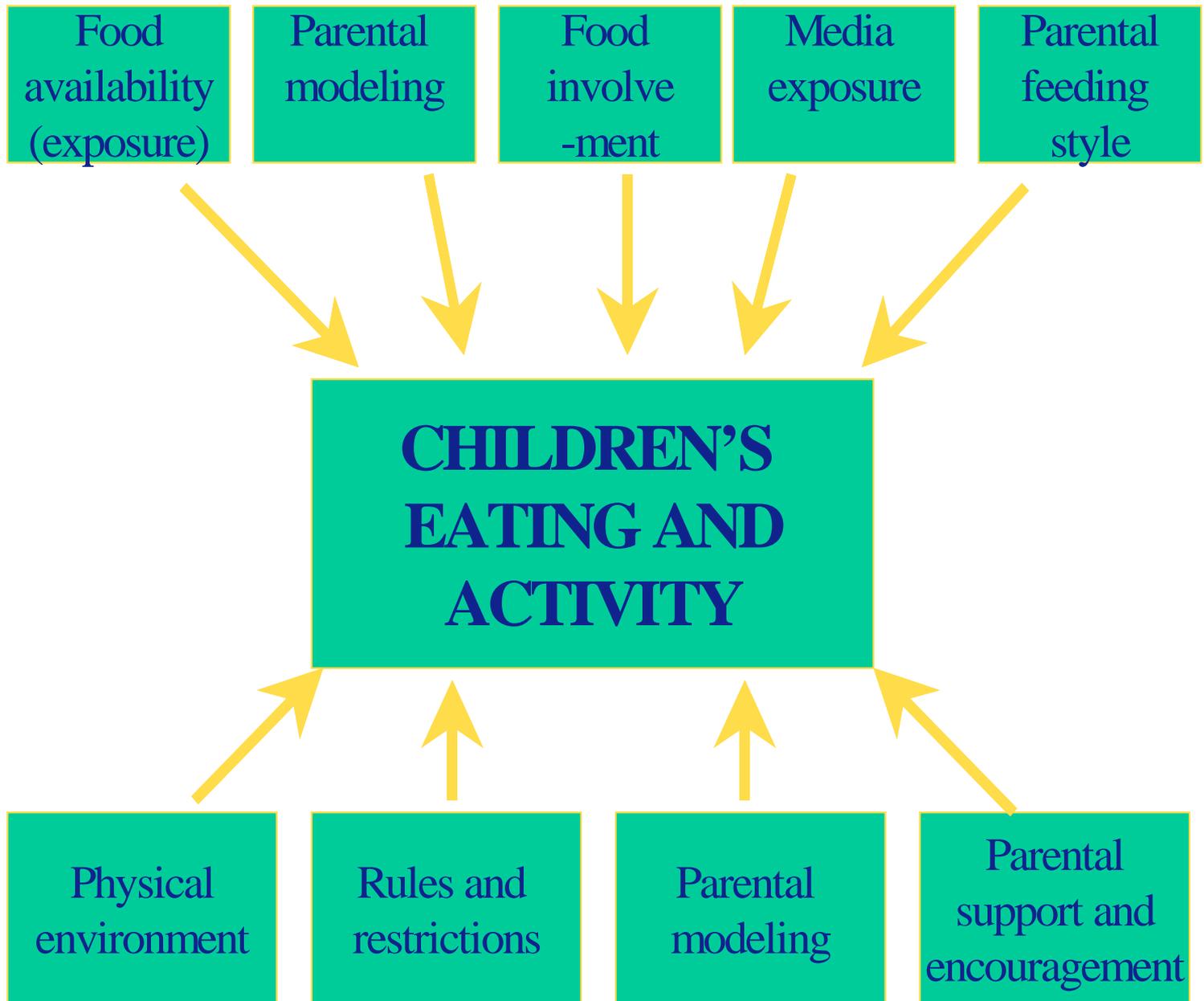
Shape Up Somerville:



After the first school year of intervention, BMI z - score decreased by -0.1005 ($P = 0.001$) compared to children in the control communities after controlling for baseline covariates.

Eat Smart. Play Hard.

FAMILY ENVIRONMENT



What We Can Do

- **Require menu labeling in chain restaurants**
- **Mandate and implement strong nutrition standards for foods and beverages in government-run buildings or regulated after-school programs**
- **Promote Partnership with AISD and Austin Food Council and City to Have the Healthiest Kids in America – Salad Bar in Every School 😊**
- **Media campaigns and events**
- **Community Based Interventions – Pilots that Coordinate Public, Private and Nonprofit Effort**
- **City Boards can.....you be creative and suggest 😊**

Evidenced Based Keys to Success?

- **One - Recognition that there is a problem and it is significant;**
- **Two - Science based research /evidence that points to probable solutions;**
- **Three - Leaders that Keep Obesity Issue on Radar and Builds A Coalition for Change**
- **Four – sustained involvement of the local and state government to leverage regulatory and fiscal resources,**
- **Five - Effective health communication that includes consistent positive messages supported by scientific consensus and repeated in a variety of venues;**
- **Six - Changes to the environment to promote healthy lifestyle behaviors; and**
- **Seven - A plan of action that includes the many above parts which work synergistically.....**

So There You Are – Today Is An Opportunity to Start Moving the Pieces into Place

Thank You

Questions?

