



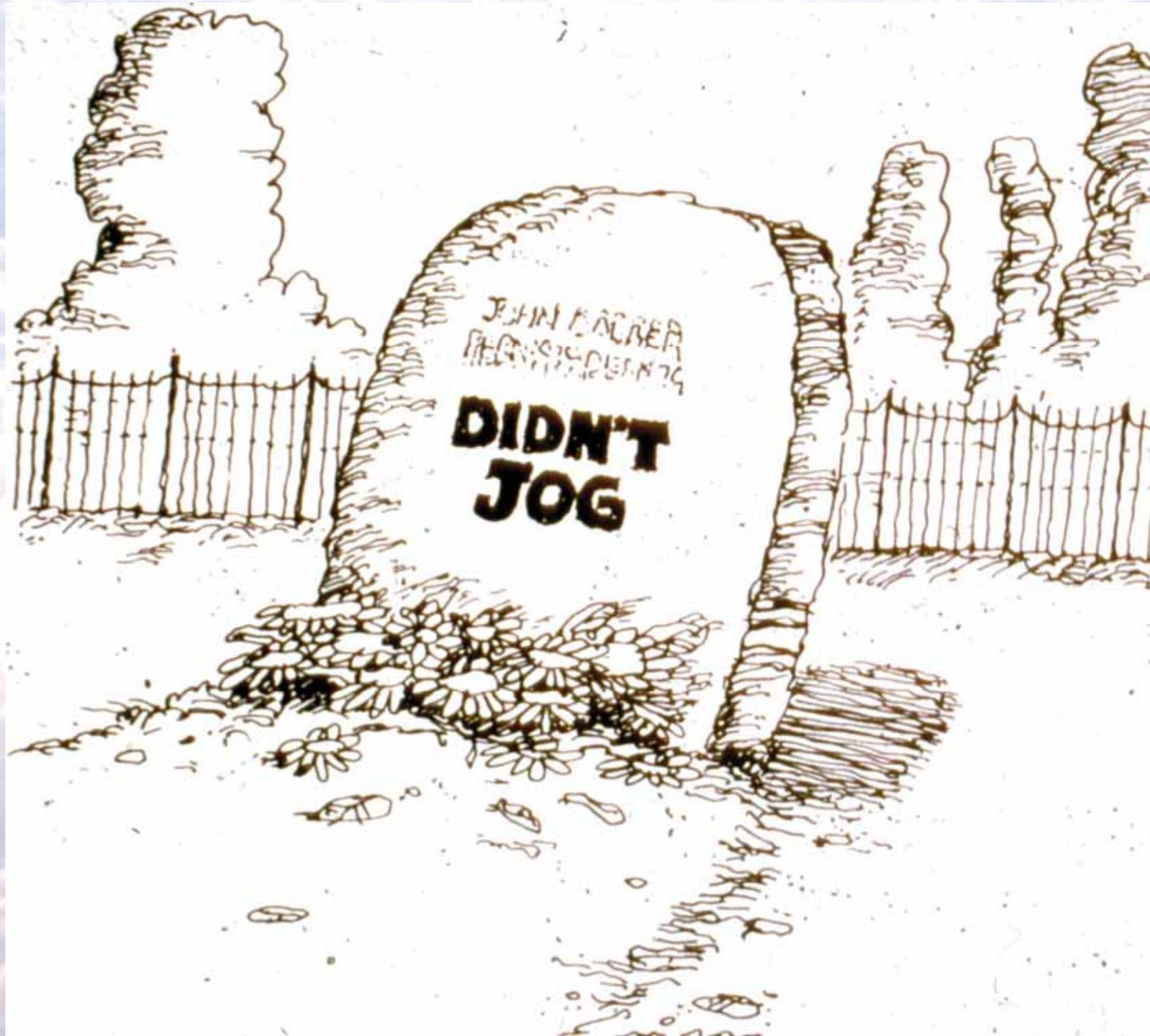
Why Here, Why Now, Why Walk? Cities for Cars and the Psychology of Sloths

James Sallis, PhD
Active Living Research
San Diego State University
www.drjamesallis.sdsu.edu

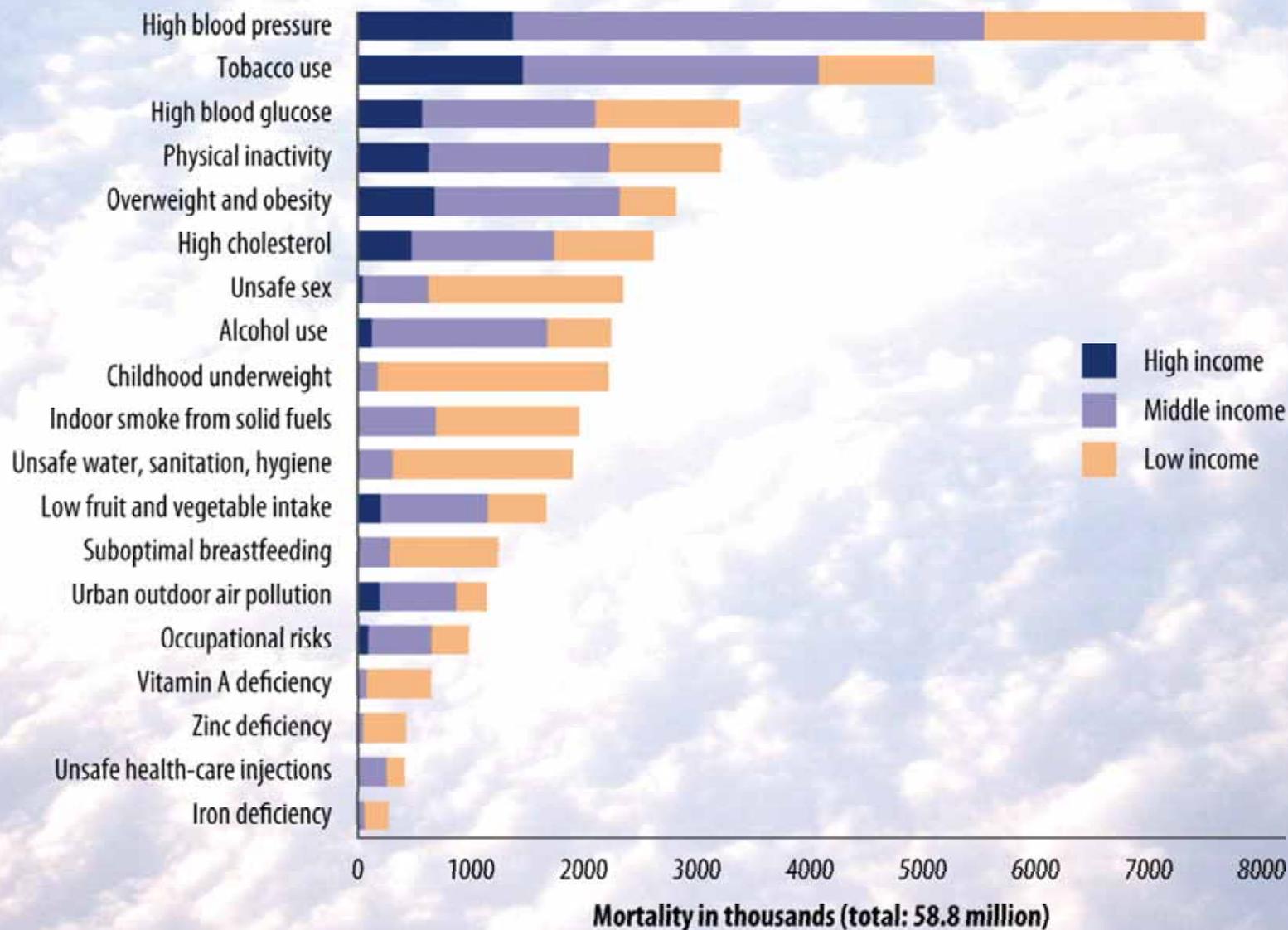
For Walk 21, Vancouver, BC, Canada
October 4, 2011

3Four50.com

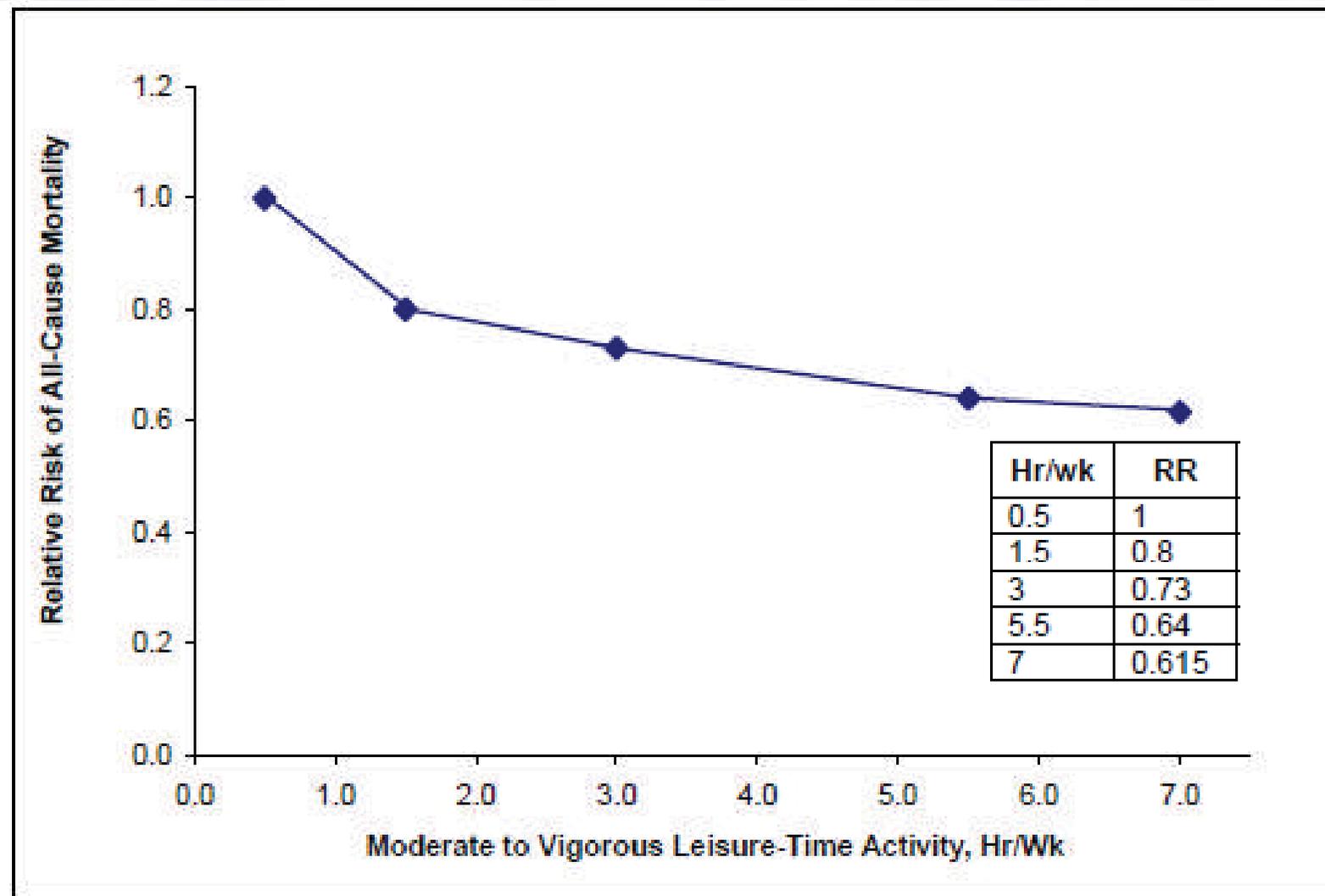
- Oxford Health Alliance's key message:
- 3 risk factors –
 - tobacco use, poor diet, lack of physical activity
- Contribute to Four chronic diseases –
 - heart disease, type 2 diabetes, lung disease and some cancers
- Which, in turn, contribute to more than 50 per cent of deaths in the world
 - 70-80% in the US



Deaths attributed to 19 leading factors, by country income level, 2004

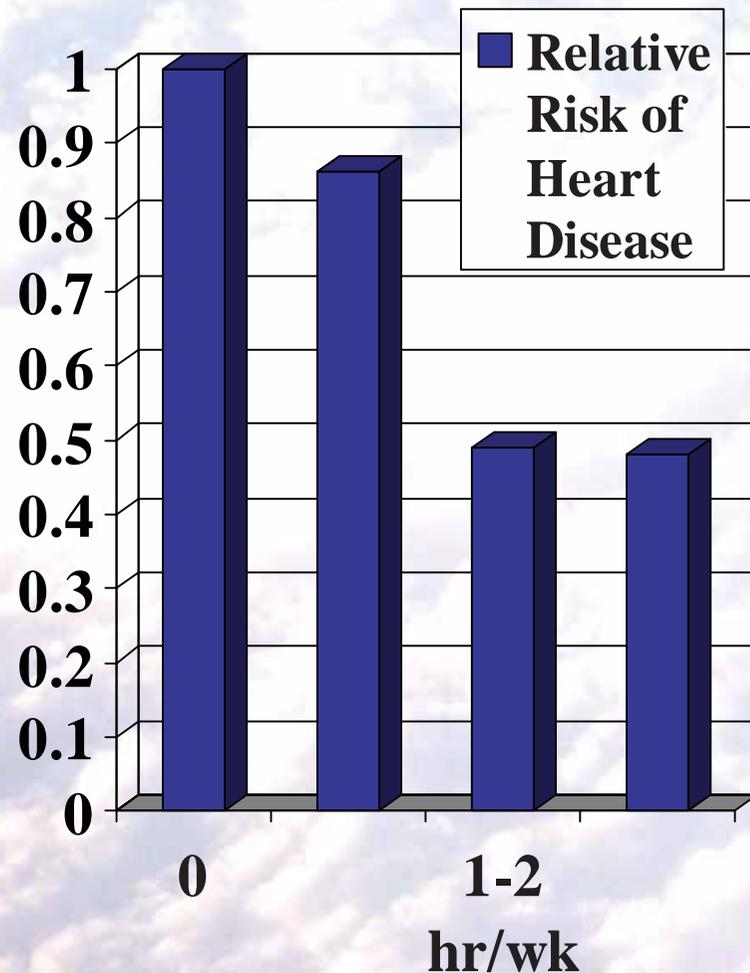


Physical Activity and All-cause Mortality



(PAGAC, 2008).

Walking Reduces Heart Disease Risk



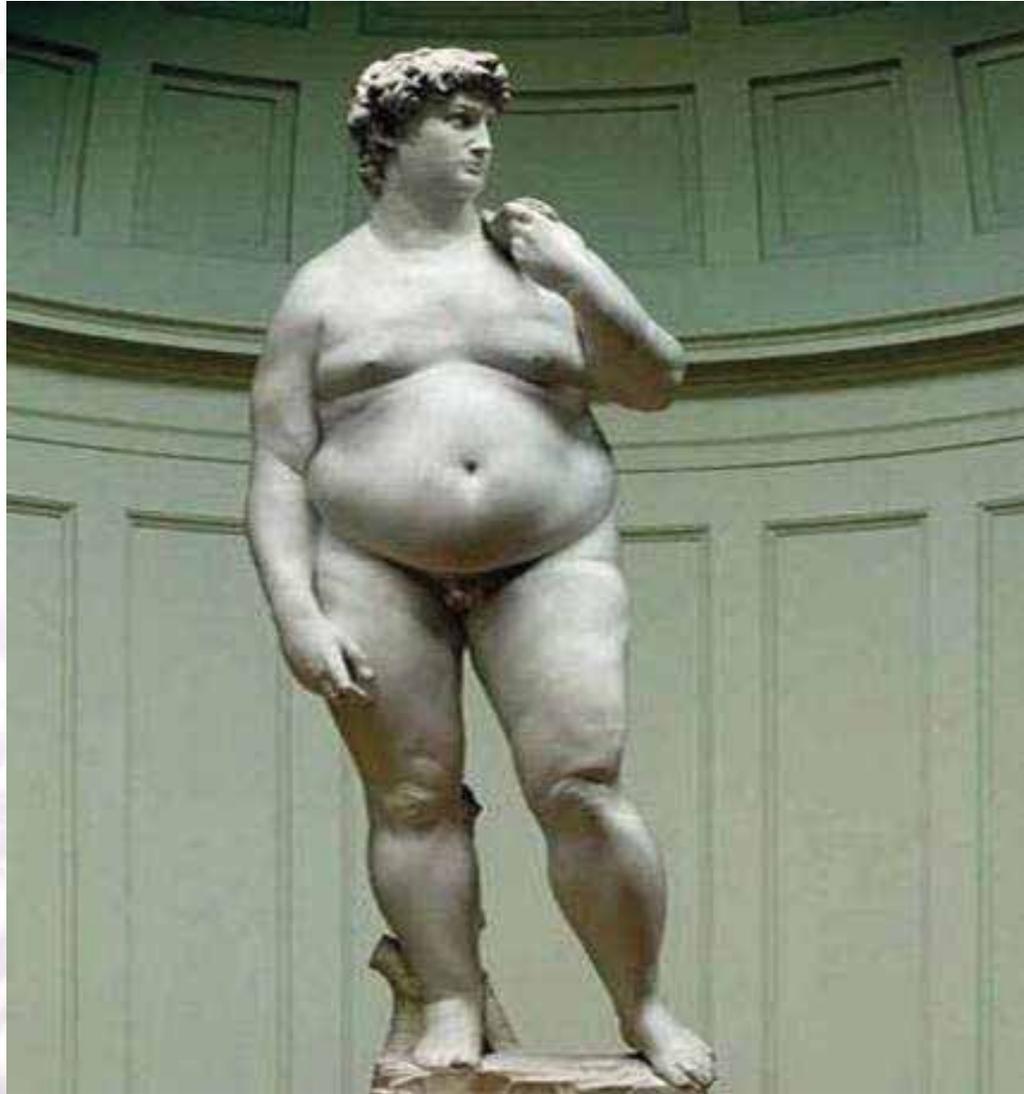
- Lee studied 5826 women (JAMA, 2001)
- Walking at least 1 hr/wk reduced risk by 50%
- Results adjusted for other risk factors

Walking is as effective as other activities

TYPE OF PA MEASUREMENTS	Deaths /10⁵ p.yrs	Rel risk
Walking <5km	86	1.0
5-14km	67	.78
15+ km	58	.67
Stairs climbed <20	80	1.0
20-54	63	.79
55+	60	.75
Index Kcal <500	110	1.0
500-999	69	.63
1000-1499	69	.62
1500-1999	61	.56
2000 +	55	.70

Cohort: Harvard Alumni

David visits America



Diabetes is a worldwide epidemic

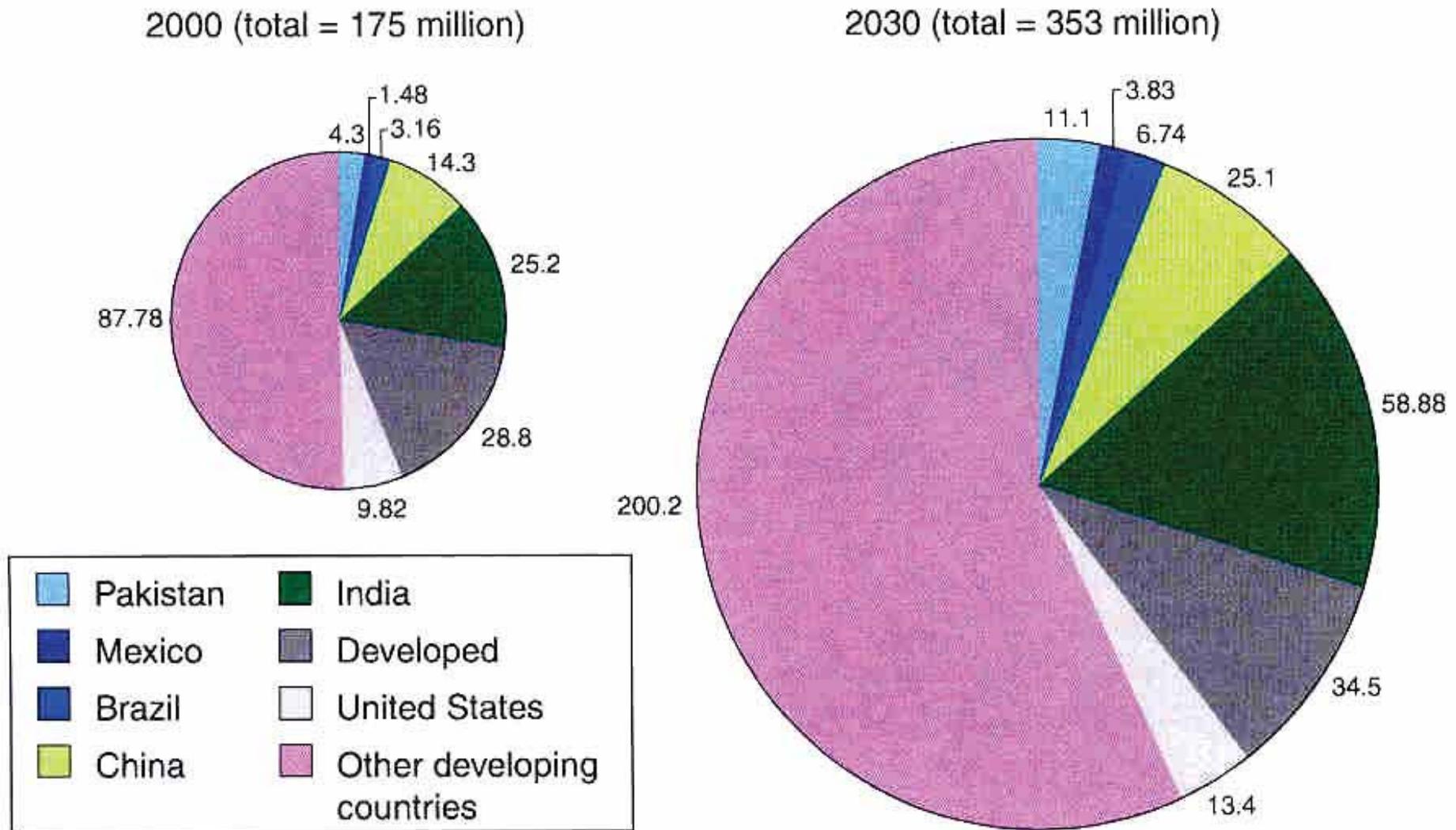


Figure 1 Number of people with diabetes: 2000 estimated for 2030

Why Should You Care?

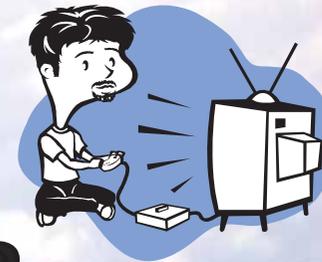
- Obesity accounts for at least 1/3 of increased health care costs in US Medicare
 - About \$150 billion per year
 - About 10% of all health care costs
- Obesity is counteracting the health improvements from reduced smoking
- Inactivity accounts for 4-6% of health care costs in multiple countries

SLOTH Model of Physical Activity

- Sleep



- Leisure



- Occupation



- Transportation



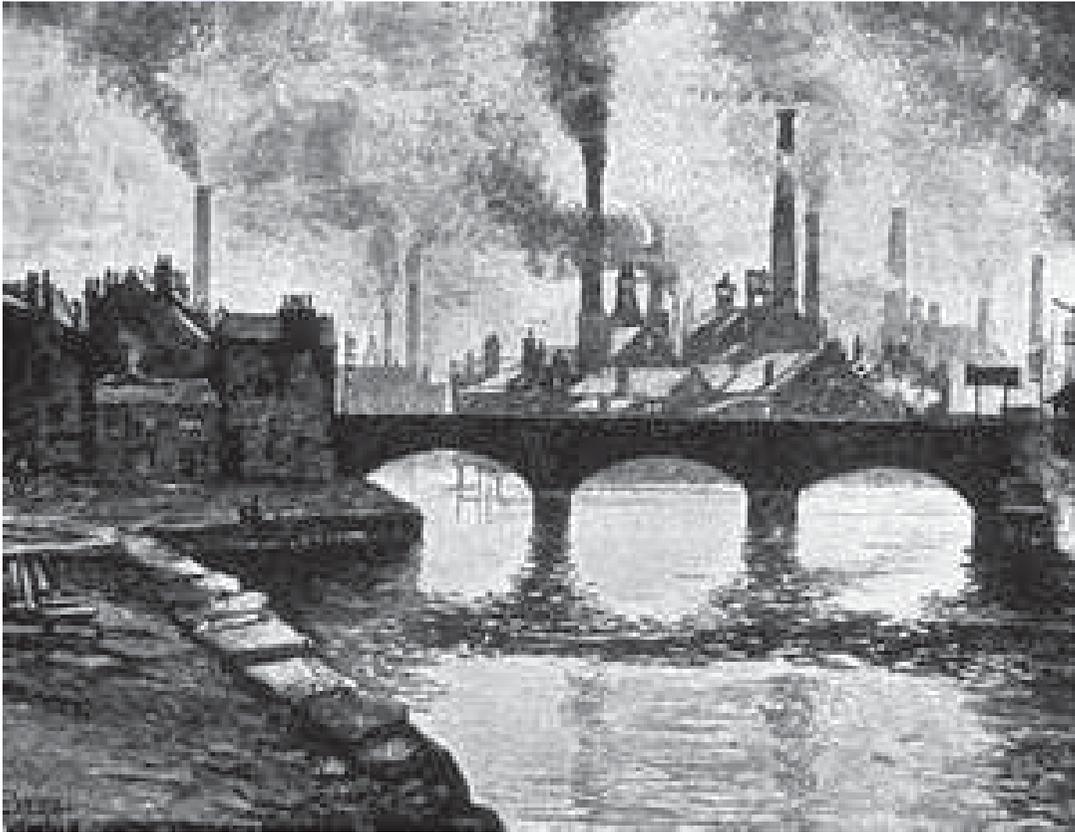
- Household



The Future?

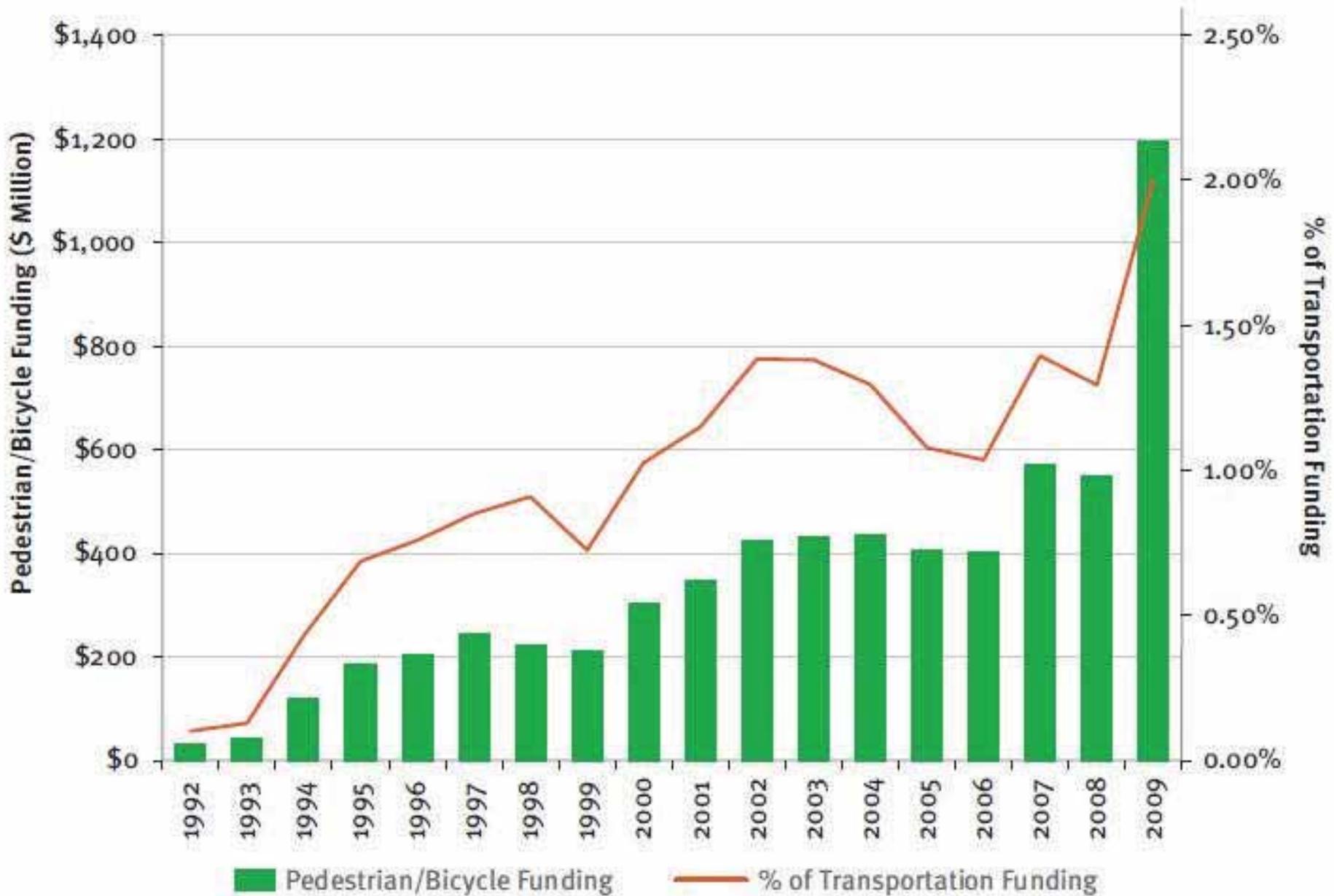


200 years into the Industrial Revolution



- Purpose was to make life easier
- Many fortunes made on labor saving devices
- Physical activity is no longer necessary to live
- Success in exterminating physical activity

Federal Pedestrian and Bicycle Funding, 1992-2009



Source: USDOT

Are people sloths?



- Yes, but why?
- In times of famine, you want to save energy
- We are biologically programmed to enjoy activity less with age

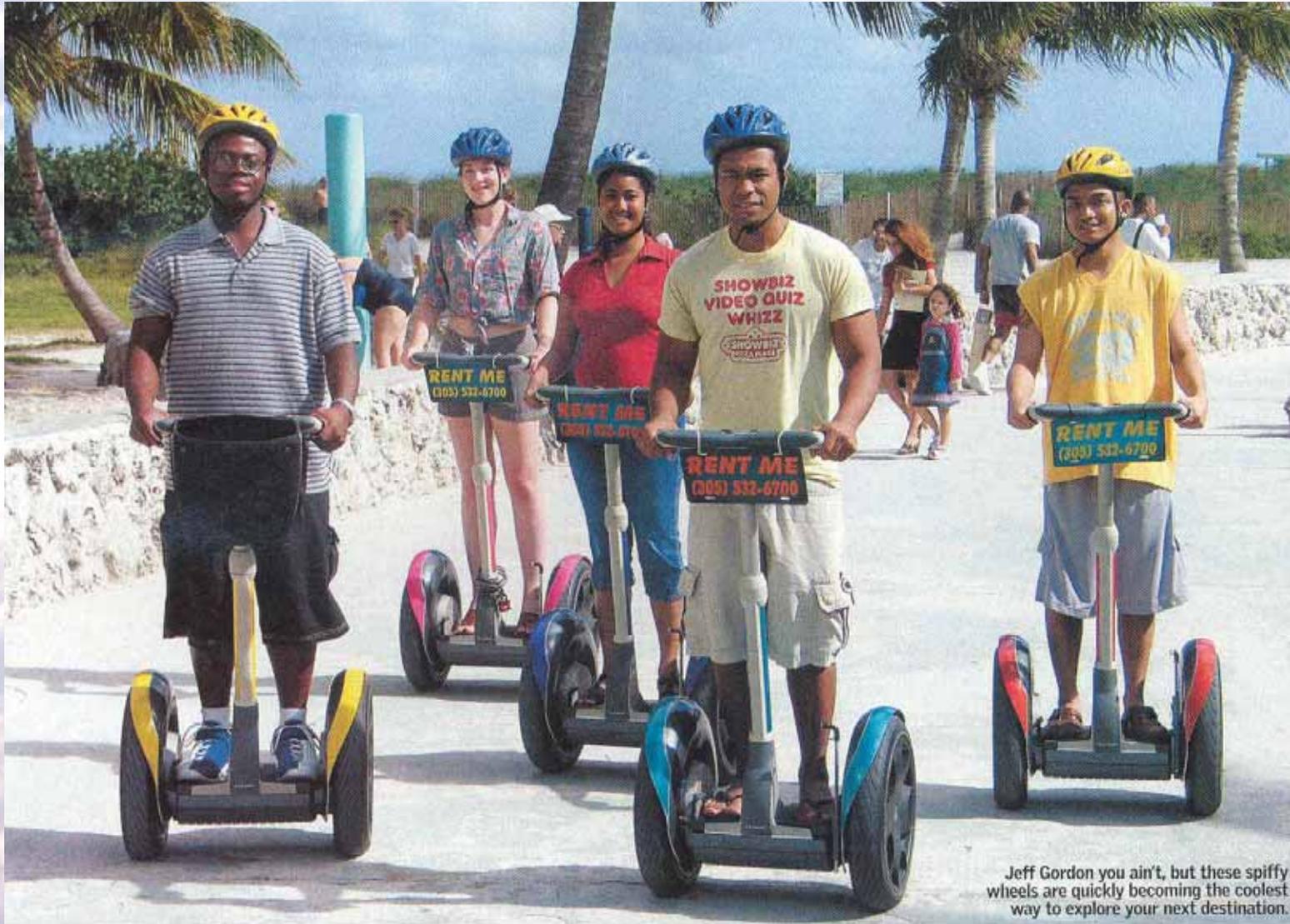
Children love to be active, but we adults work hard to keep them sitting



By adulthood, we are only active if we need to be



We have many inducements to
reduce activity even further



Jeff Gordon you ain't, but these spiffy wheels are quickly becoming the coolest way to explore your next destination.

Passing on slothfulness to the next generation



Elements of An Active Living Community

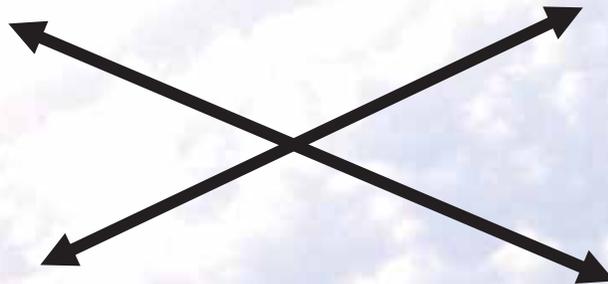
**Community Design
Destinations**



Home



Transportation System



School & Worksite



Park & Rec





“Walkable”: Mixed use, connected, dense

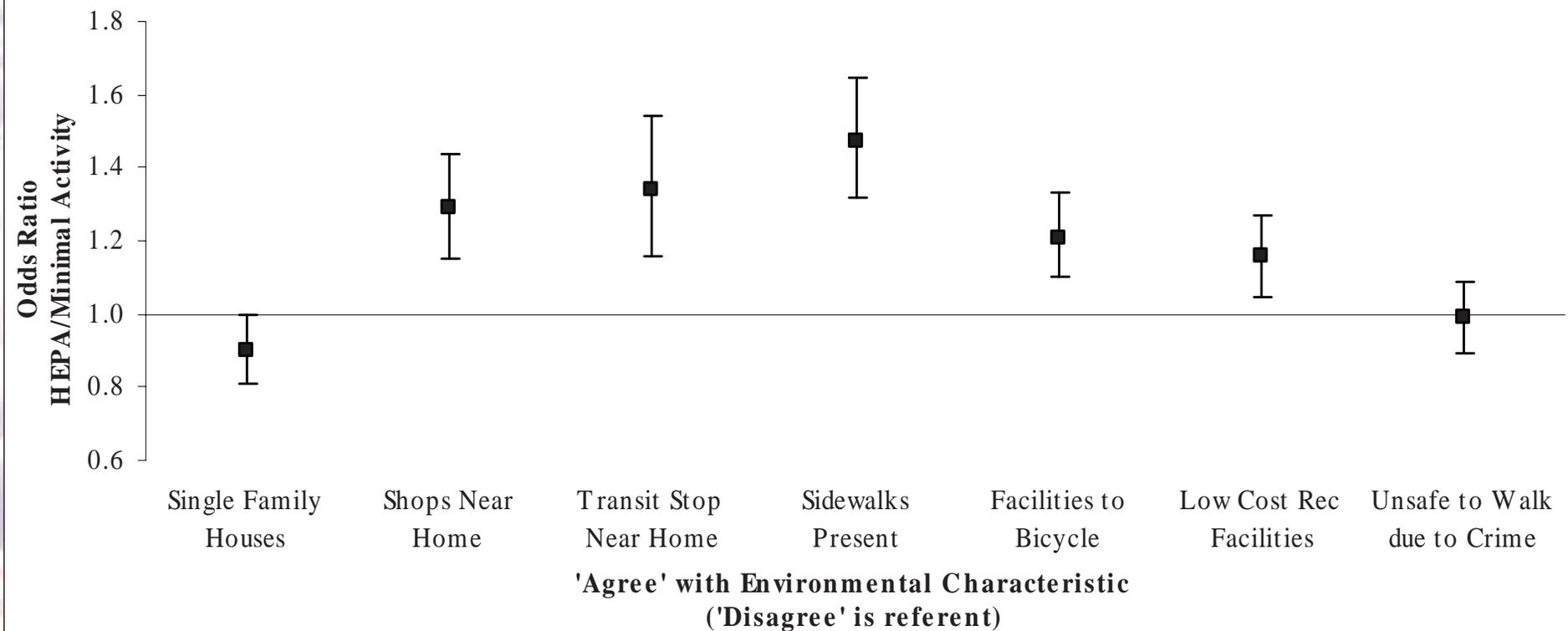


Not "walkable"

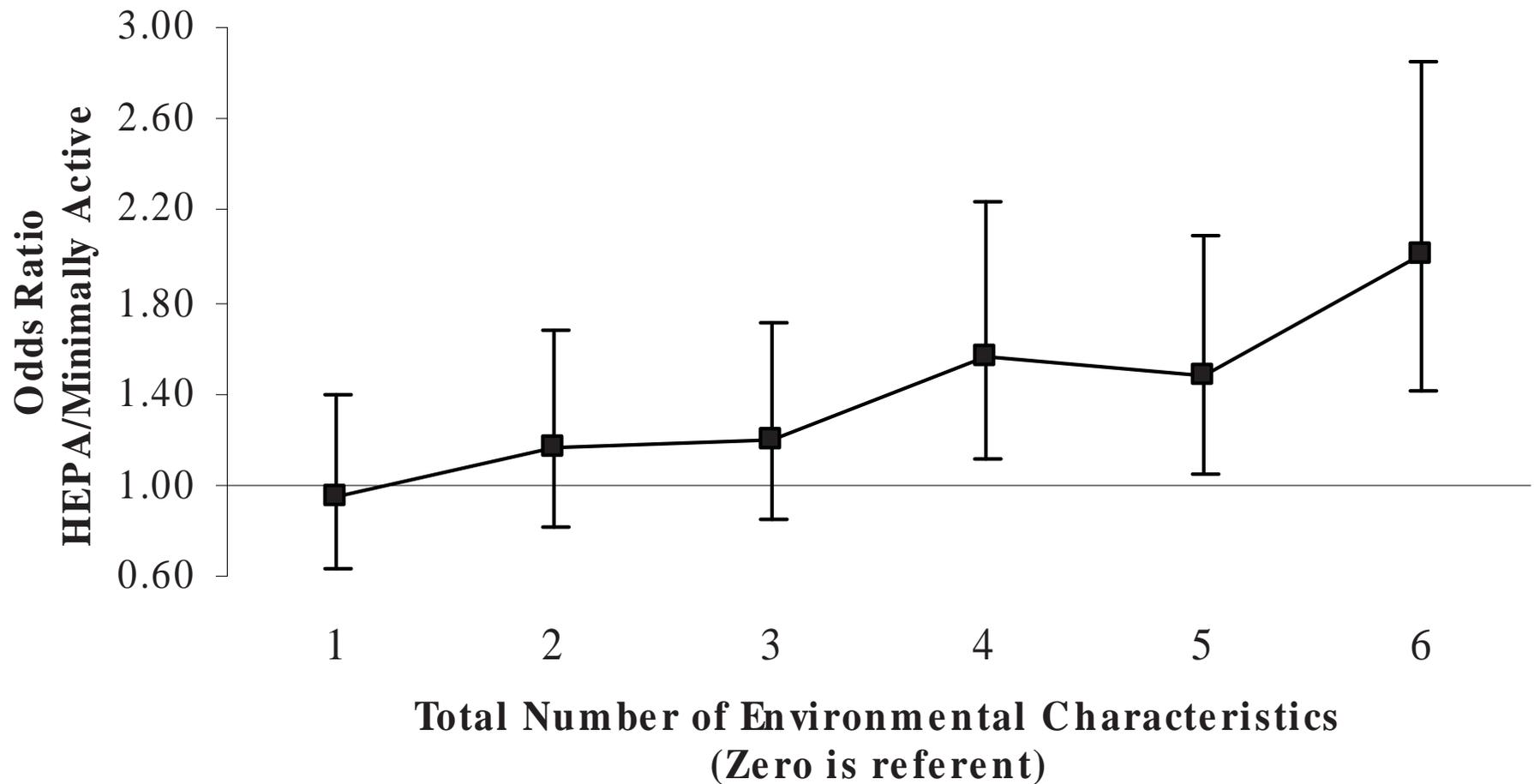
↓ street connectivity and ↓ mixed land use

Neighborhood attributes are related to meeting PA guidelines in 11 countries

Associations Between Individual Environmental Characteristics and HEPA/Minimal Activity Among Respondents who Live in Cities with Population $\geq 30,000$



Dose Response between Number of Environmental Characteristics and HEP A/Minimal Activity (Pooled City Sample)



10,000 Steps Ghent Ilse DeBourdeaudhuij

Multi-strategy intervention

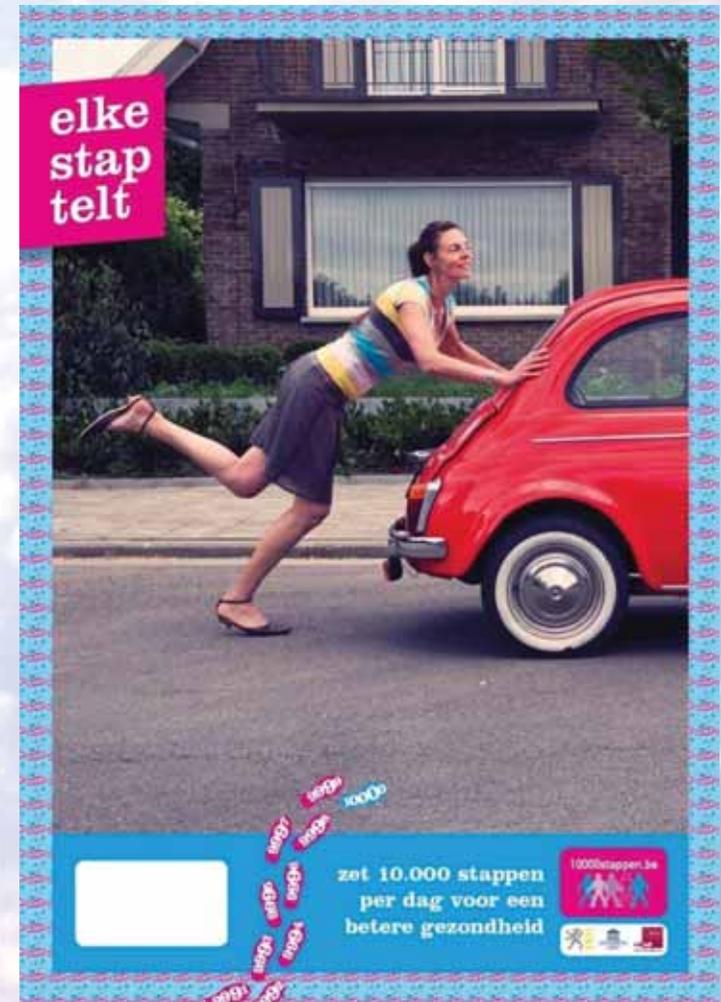
- - Local media campaign
- - Website www.10000stappen.be
- - Environmental approaches: signs & walking circuits
- - Sale and loan of pedometers
- - Workplace projects
- - Projects for groups of older people
- - Dissemination of information



Posters



pilotproject



10.000 stappen Vlaanderen



Media



THE MAYOR

Town magazine Zone 09

Deed jij 10 000 stappen vandaag?

Reeds 42 % van de Gentenaren wel!



Elke stap telt!

Menselijke evolutie.

De mens kreeg, als 2-voetig wezen, heel wat bewegingsmogelijkheden. Meer dan de helft van de Vlamingen benut deze te weinig. Zij bewegen niet voldoende om hiervan unieke gezondheidsvoordelen te ondervinden.

1 440 minuten in een dag.

Trappen doen, winkelen, fietsen, wandelen, tuinieren,... Ieders omgeving zit vol met uitnodigingen tot beweging op verschillende momenten van de dag. Wie elke dag 30 minuten beweegt is gezonder.

Zet jij 10 000 stappen per dag?

Vertrek van jouw persoonlijk bewegings- en/of stapniveau en drijf dit geleidelijk op. Zoek naar bewegings- en/of stapmogelijkheden in jouw omgeving en dagelijkse routine. Maak gebruik van een stapenteller, streef naar 10 000 stappen per dag en ga zo op weg naar een actievere en gezondere levensstijl!

www.10000stappen.be



Street signs



Gemeentehuis

10000stappen.be

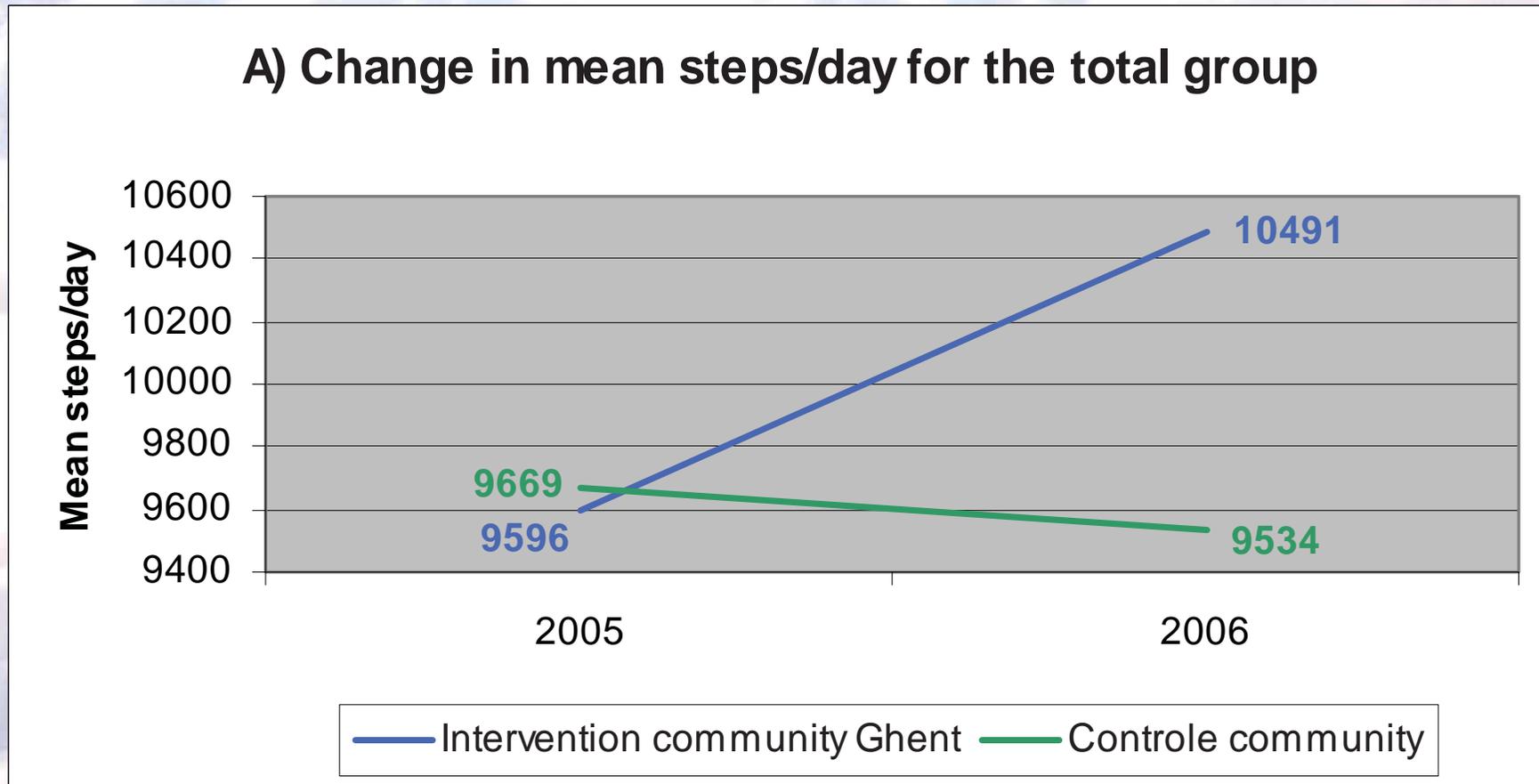


500m = 714 stappen



elke stap telt

10,000 Steps Ghent Results: steps/day

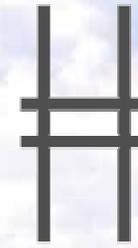


$F(\text{time} \times \text{community})=22.6, p<0.001$

NYC is becoming Fit City. Here is one of many innovations



**HIGH
LINE**



Friends of the High Line

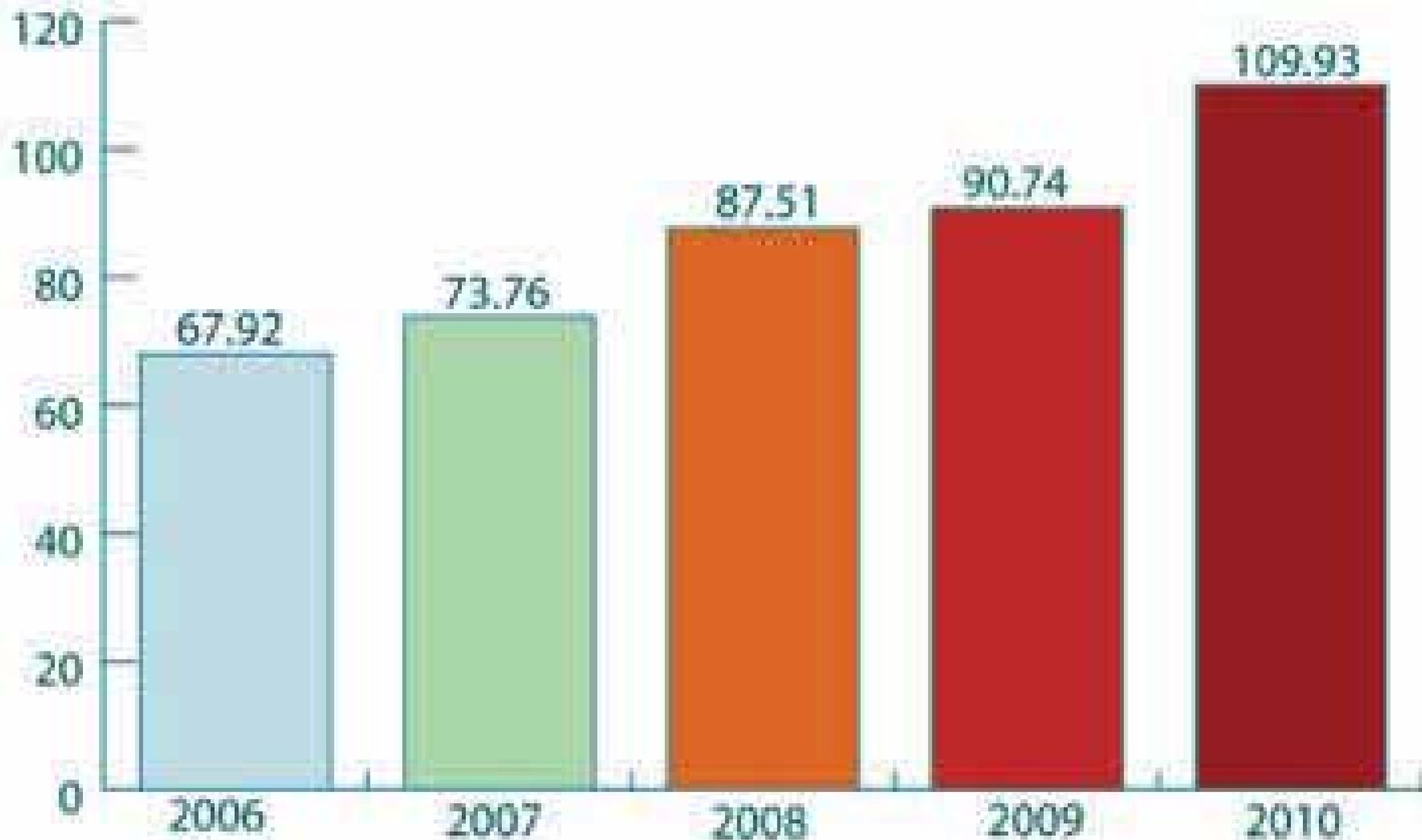


It can take years and the combined and persistent efforts of community advocacy groups, planners and politicians to build new trails.

A car city reforms. La Mesa, CA



Miles of Trails in Spartanburg County, SC

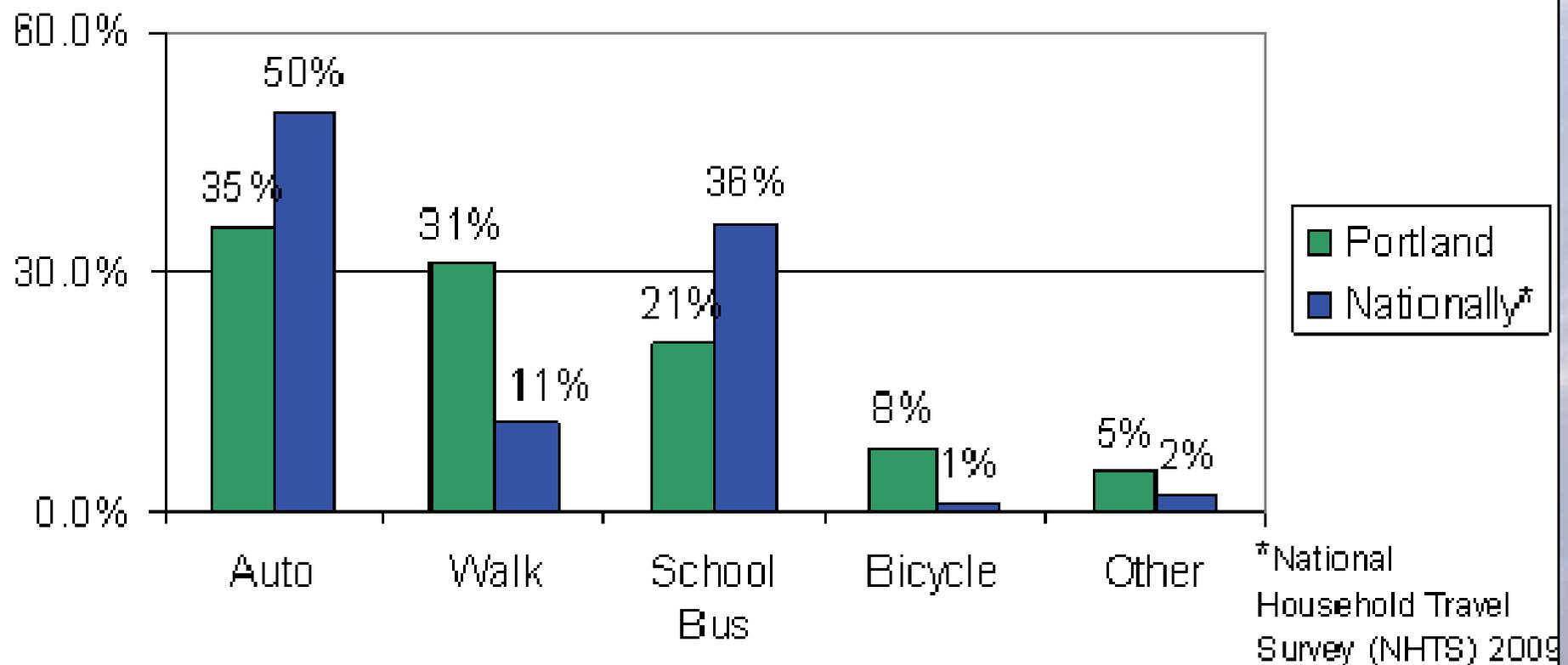


Once you have facilities, you can promote them. Spartanburg, SC



Walking to School Improvements in Portland, OR

**Travel statistics to school comparing Portland's
Safe Routes program to national data**



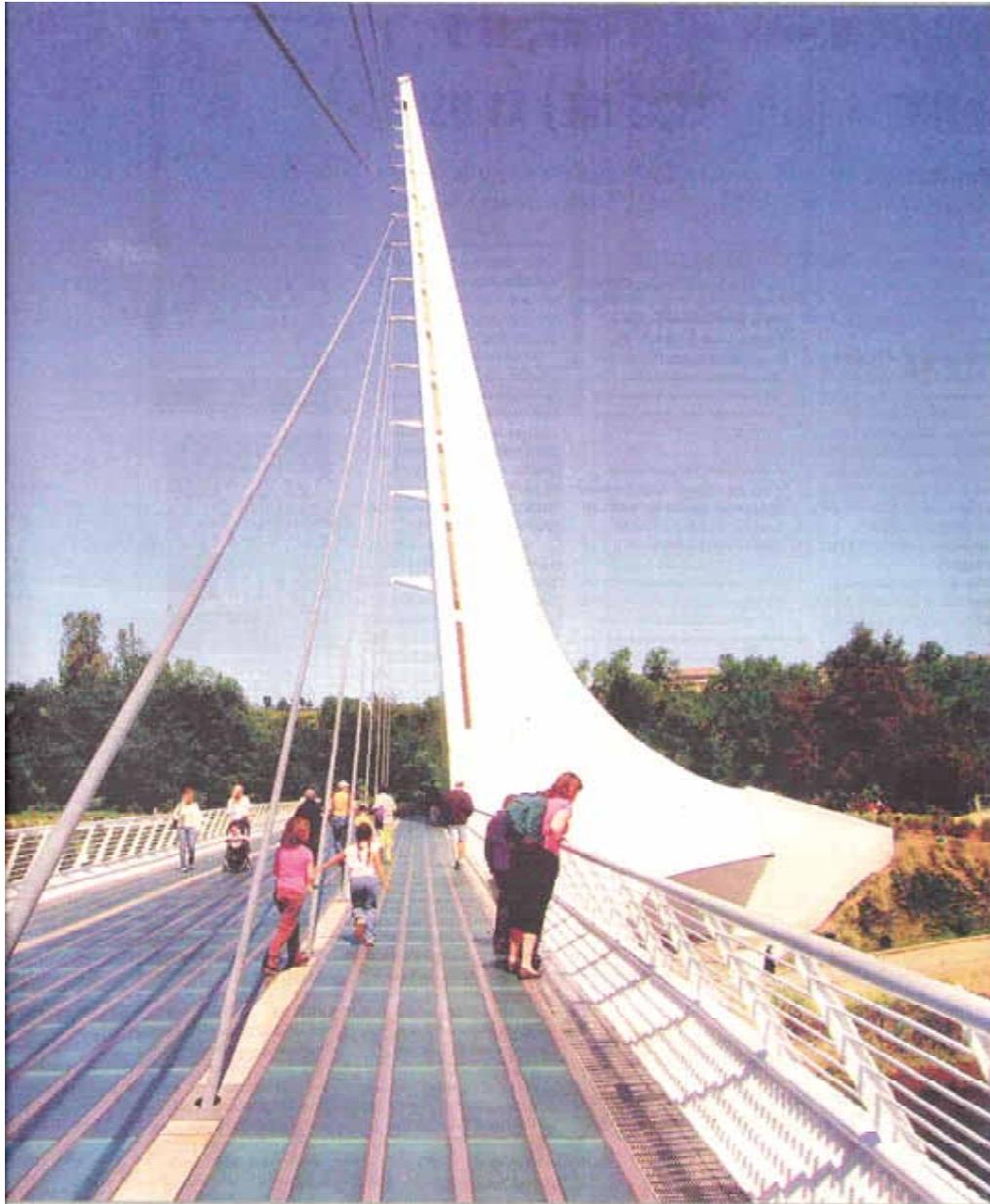


For every \$1 spent on trails, there was an estimated \$3 savings in direct medical costs

For every \$1 spent on sidewalks, the payoff in medical savings was about \$4



There are economic reasons to invest in walking facilities



Pedestrian Bridge
Redding, CA.
“The \$23.5 million
Pedestrian bridge
Is now Redding’s
No. 1 tourist
Attraction.”
Mayor Dick
Dickerson.
LA Times 6/3/07

What can we learn from bicycle advocates, then do better than them?

- Understand bicyclists' advantages
 - Acute fear is motivating
 - Some industry support for advocacy
 - Stronger identification with the activity
 - Bicycle as technology
 - The stars of bicycling

What can we learn from bicycle advocates, then do better than them?

- Work with bicycling advocates on issues of common interest
 - Activity friendly community design
 - Trails
 - Ped/bike funding sources
 - Promotion of active travel and physical activity
 - Safe routes to school

What can we learn from bicycle advocates, then do better than them?

- Build on the advantages of walking
 - More people do it; help them identify with walking
 - Make walking a “brand” to build loyalty & intensity
 - Identify more industry partners; think broadly about relevant industries
 - Focus more on children
 - Engage seniors, who are politically active
 - Cultivate celebrity spokespeople

Resources at www.activelivingresearch.org

