

Getting There Is Half the Fun

Transportation Happiness & Our Quality of Life

Healthy Weight Initiative, Harvard School of Public Health
Board of Directors, LivableStreets Alliance

Steven E. Miller

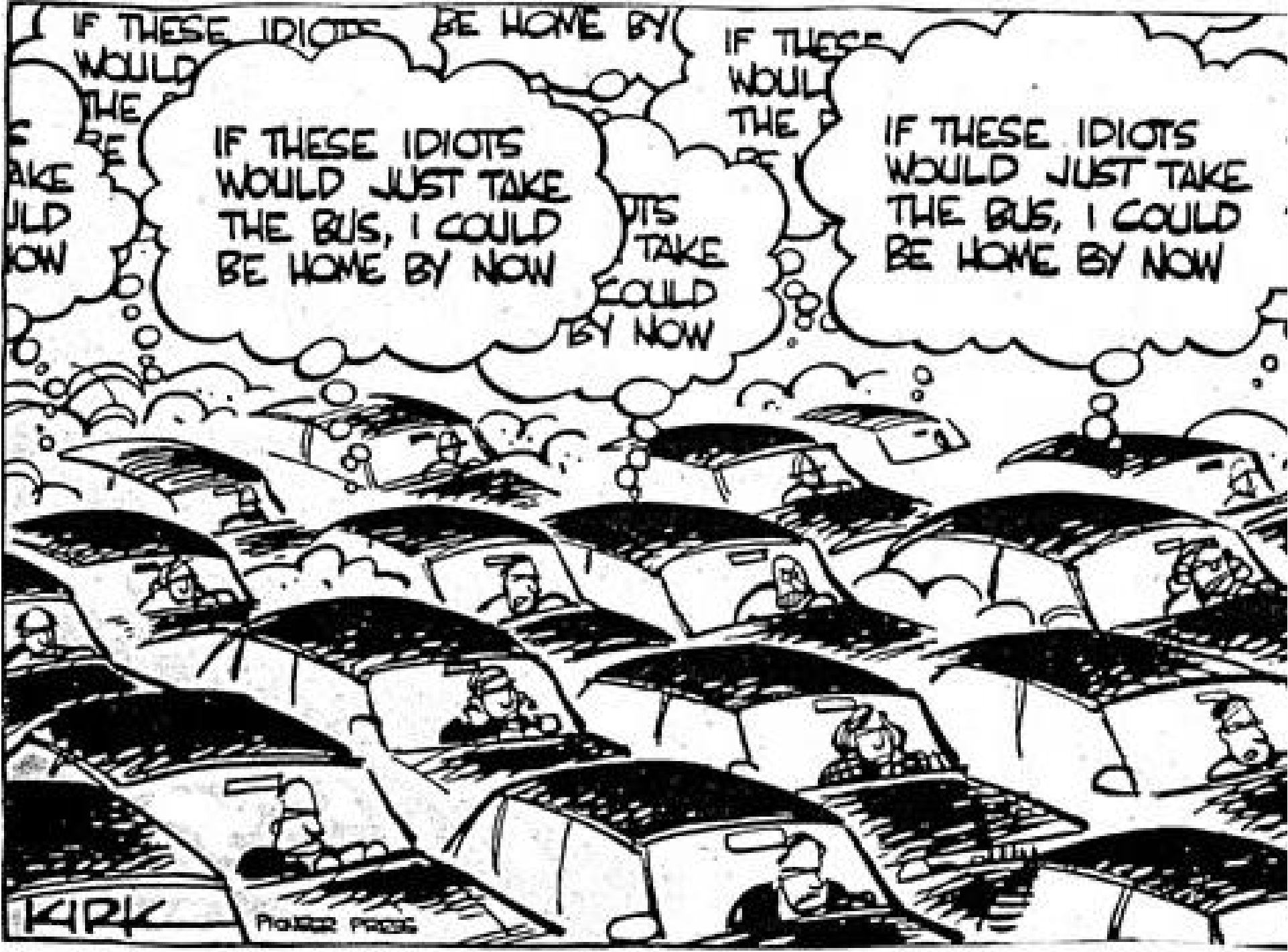
LivableStreets Rethinking urban transportation

www.LivableStreets.Info



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IF THESE IDIOTS WOULD JUST TAKE THE BUS, I COULD BE HOME BY NOW

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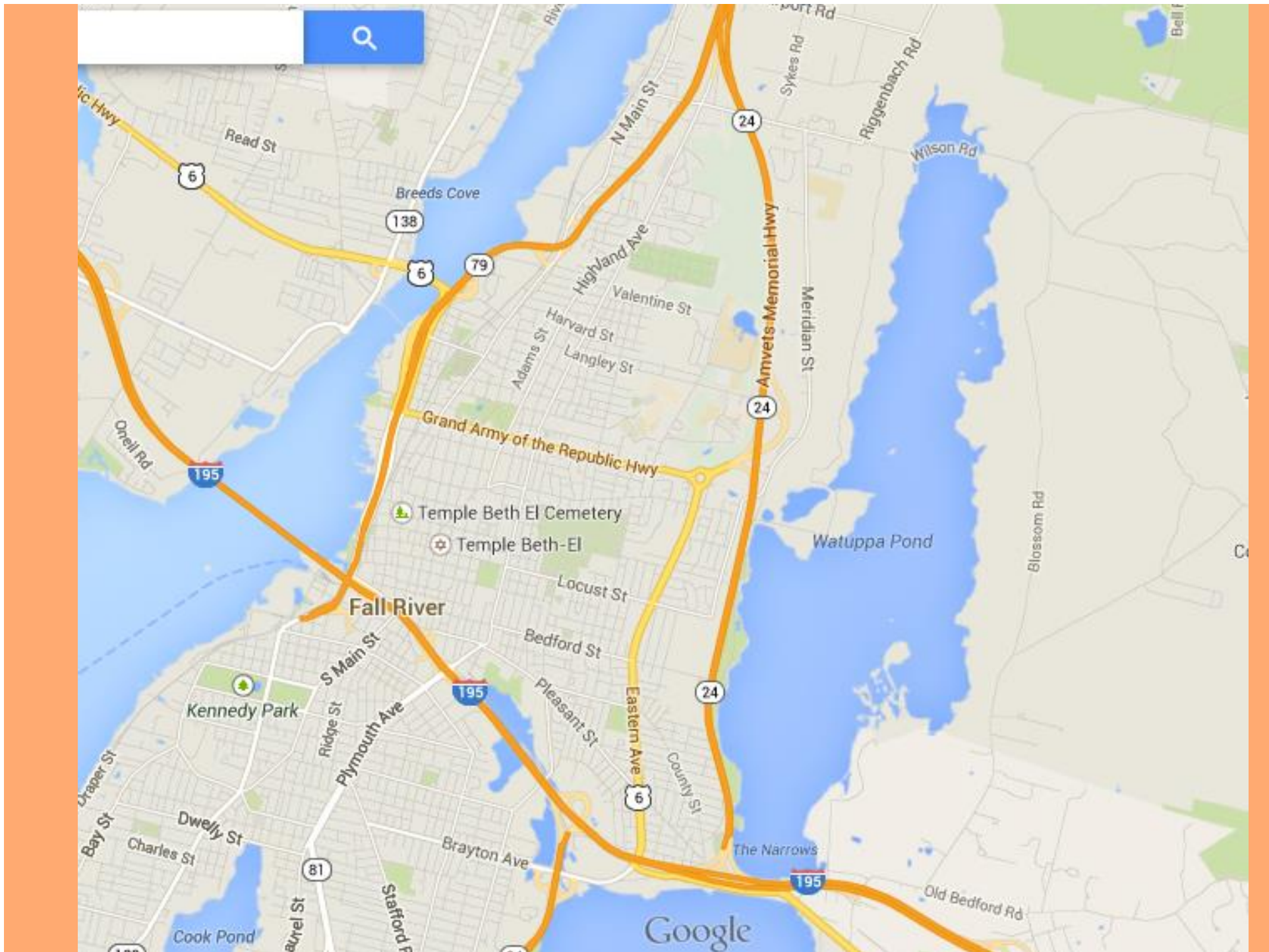
IF THESE IDIOTS WOULD JUST TAKE THE BUS, I COULD BE HOME BY NOW

KIRK

POLDER PRESS

“If you don’t know where you’re going it is hard to tell when you’re heading in the wrong direction.”





Common Themes

• walkable, varied, and busy (but not overcrowded) retail areas, bikeable and transit-accessible transportation, lots of opportunity to meet and socialize with others, dense (but not high-rise) energy-efficient residential areas, clean air and lots of greenery, cultural options and quiet spaces, nearby parks and recreational facilities

LIVABLE STREETS

Efficient

Safe

Multi-Modal

Healthy

Green

Smart

Accessible

Fun

Complete Streets



Complete Streets are Safe Streets



- ” Design Elements & Process
- ” An Economic Development Strategy

HAPPINESS

“We need to walk, just as birds need to fly. We need to be around other people. We need beauty. We need contact with nature. And most of all, we need not to not to be excluded. We need to feel some sort of equality.”



Enrique Penalosa,
Mayor of Bogota, Columbia

Transportation & Happiness

“ Safe & Healthy

“ Walkable, Bikeable, Sociable

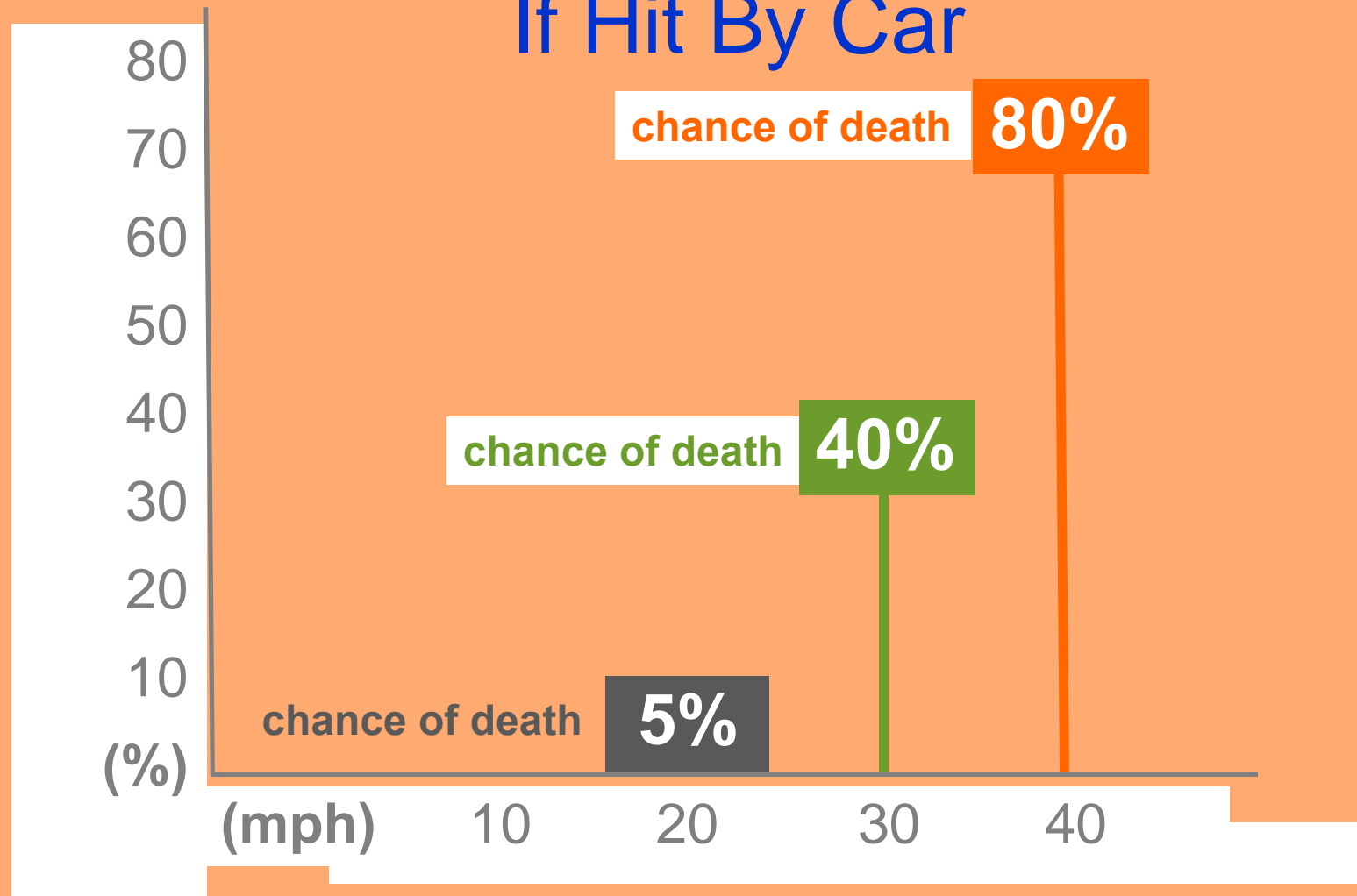
“ Beautiful, Sustainable, Nature-enhancing

“ Inclusive, Accessible, Equitable

“ Affordable, Efficient, Commerce-enhancing

SAFETY = SLOWING DOWN

Pedestrian Probability of Death If Hit By Car



Source: Pasanen (1992) <http://tinyurl.com/yuohsg>

Traffic Calming & Road Diets

- “ Sharper Corners & Turns
- “ More Activity
 - . On Street
 - . Alongside Street
- “ Bumps & Bulb-outs
 - . Pedestrian safety
- “ Weaving Curves
 - . Chicanes
- “ Fewer Lanes
- “ Narrower Lanes
 - . Physically
 - “ 10qor less
 - “ Wider sidewalks
 - “ Bike Lanes
 - . Visually
 - “ Bike Lanes
 - “ Trees
 - “ Storefronts

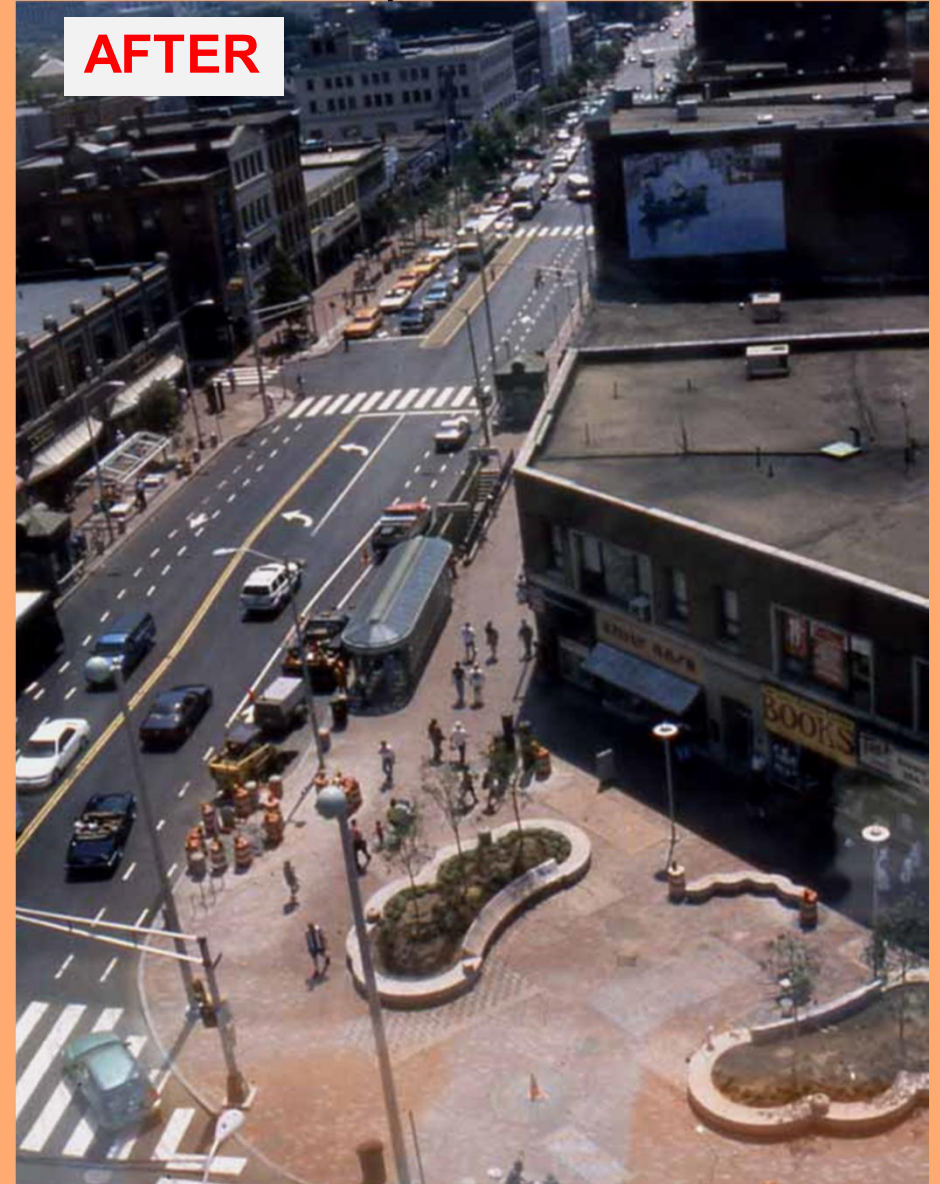


Mass. Ave. road diet, 1996

BEFORE



AFTER





SAFETY = SLOWING DOWN

Physical Activity Guidelines

- “ Health: Moderately intense exercise . at least 30 minute 5 days a week, or vigorous exercise at least 20 minutes for 3 days a week.
 - . Increases heart rate, causes sweat
 - “ Brisk walk, moderate speed cycling, light jog
- “ Weight Control: 60+ minutes daily
 - . To loose weight, change diet
 - . To maintain healthy weight, increase activity
- “ Spare Time vs Daily Routine

Lack of Physical Activity...

- “ High blood pressure; Stroke; Heart Disease
- “ Osteoarthritis & back pain
- “ Several types of cancer
- “ Diabetes
- “ Depression; Mental acuity; Alzhizmers
- “ Overweight & Obesity
- “ Social and Economic Struggle



CYCLING & HEALTH

- “ Over a 10 year study span, non-bikers, even if they were active in sports, were 40 percent more likely to die than bikers.+
- “ For every year of life lost to a bike crash, twenty years of life are gained from stress reduction, greater cardiovascular fitness, and improved mental health.+
- “ Per mile traveled, >3x as many pedestrians die from auto collisions than do cyclists.



Air Pollution

- “ **Combustion-caused particles cause up to 15% of all US death each year:**
 - . and take about 2 years off the average life span.
- “ **Families living <300’ from highway:**
 - . up to double the rate of childhood asthma,
 - . up to quadruple the risk of impaired lung function,
 - . up to double the adult rate of heart attacks and lung cancer.
- “ **Transportation related air quality health costs -- \$50 to \$80 billion a year**

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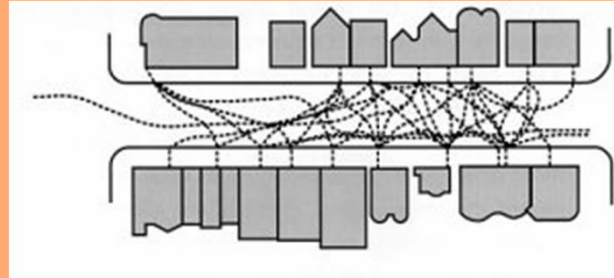
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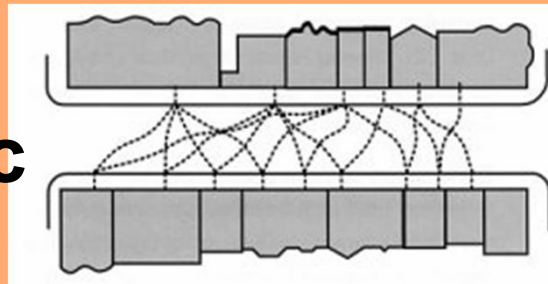
More traffic means fewer friends

light traffic



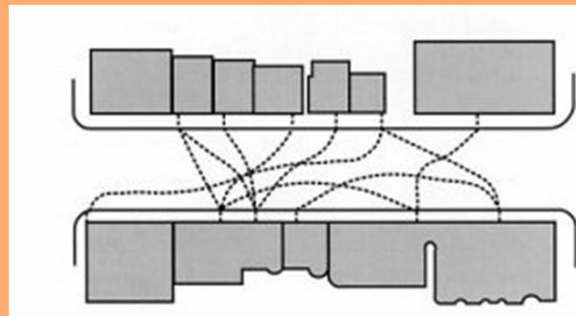
→ +3 friends

medium traffic



→ +1.9 friends

heavy traffic



→ +0.9 friends

Source: Donald Appleyard, [Livable Streets](#),
University of California Press, Berkeley, 1981.





COVERED BR. RD.
KEEP RIGHT

DANGER
SIDEWALK
ENDS











Walkable cities are backed up by good transit facilities: every bus ride begins and ends with a walk!

People in walkable neighborhoods have a nearly 8% lower incidence of overweight than people in car-dominated areas. After adjusting for age and sex, people in less walkable communities also had higher diabetes rates: 11.3 percent, compared with 8.5 percent.



PLACE-MAKING:
People attract
People



Broadway, NYC / Before

traffic, the mayor and his transportation commissioner, Janette Sadik-Khan, are proposing to route vehicles more efficiently along Sixth and Seventh Avenues.

... the mayor is right to provide more elbow room for people who give Broadway the life it needs. ”

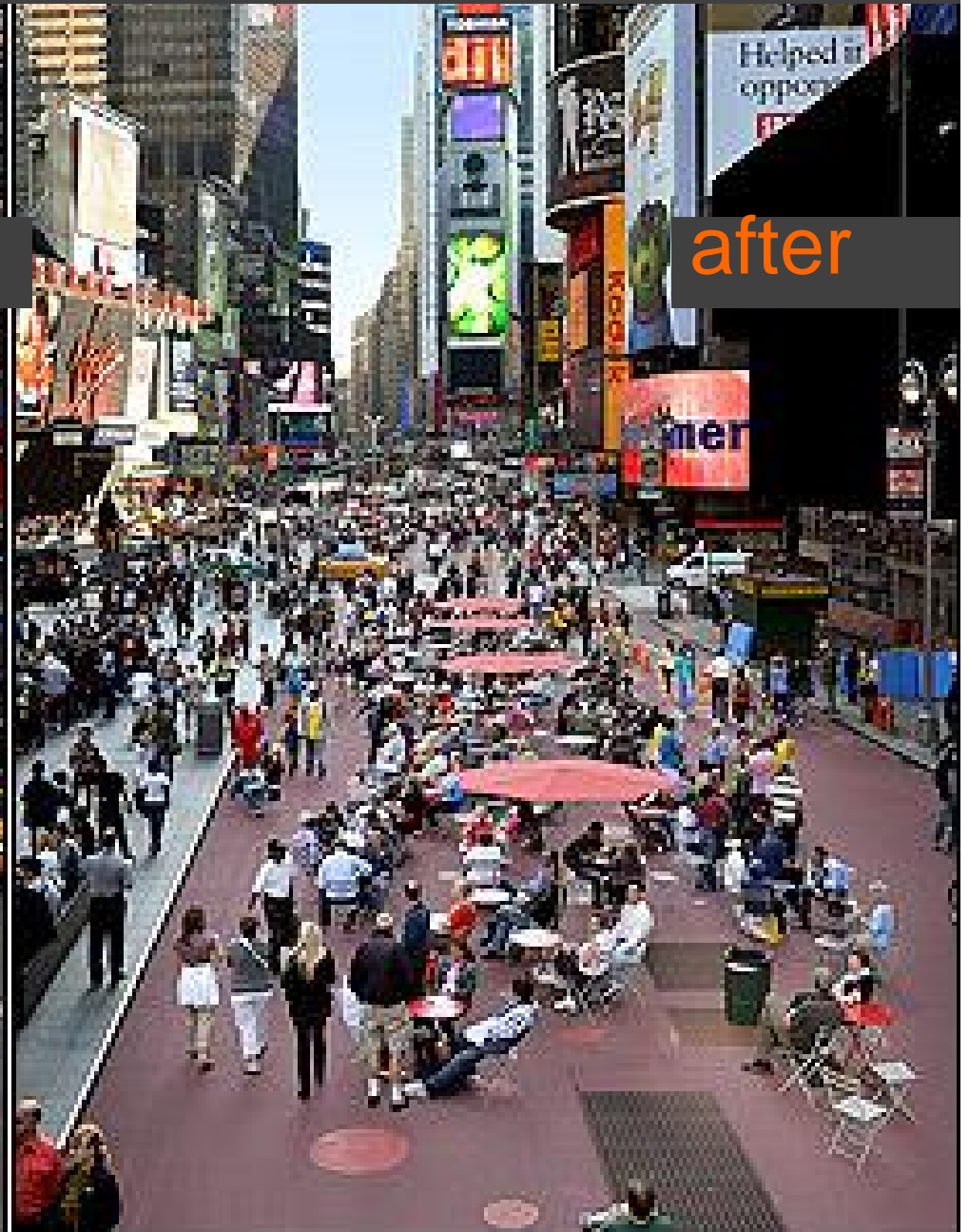
NYTimes



Broadway, NYC / After



Times Square, New York City







Park(ing) Day



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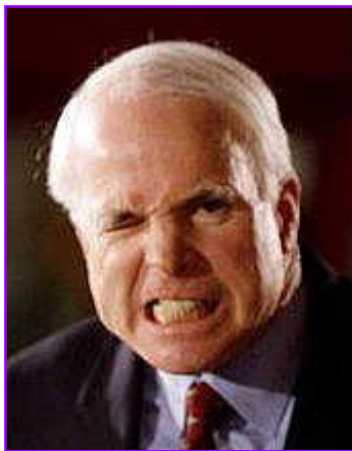
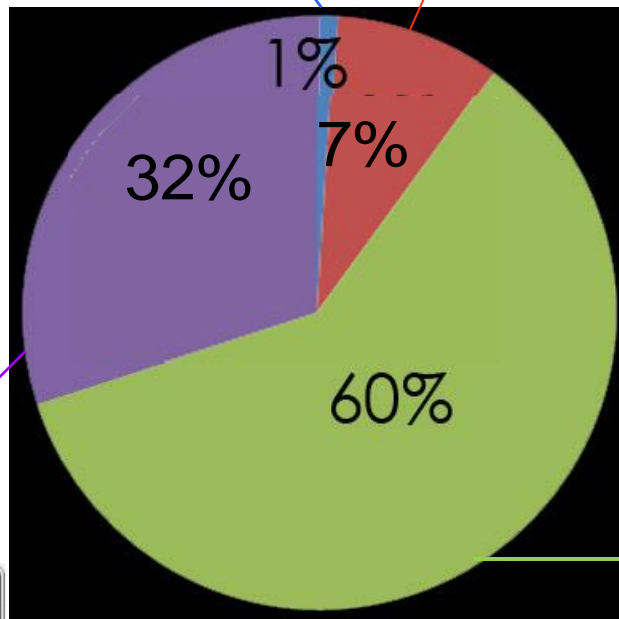
Types of Cyclists



Strong and fearless



Enthusied and confident



No way, no how



Interested but concerned











SAFETY through SEPARATION

cycle track / physically separated
protected bike lane 9th Avenue, NYC

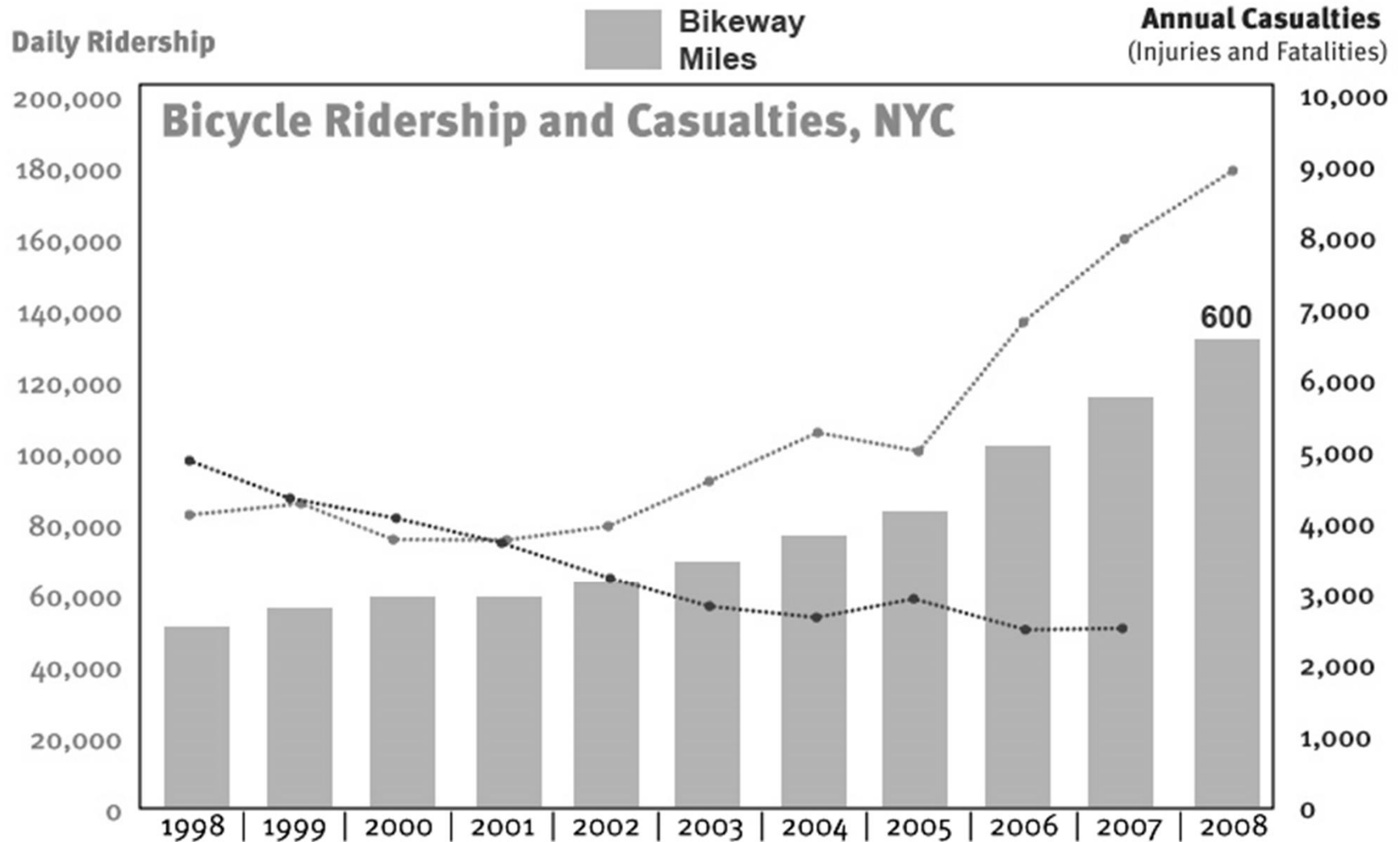




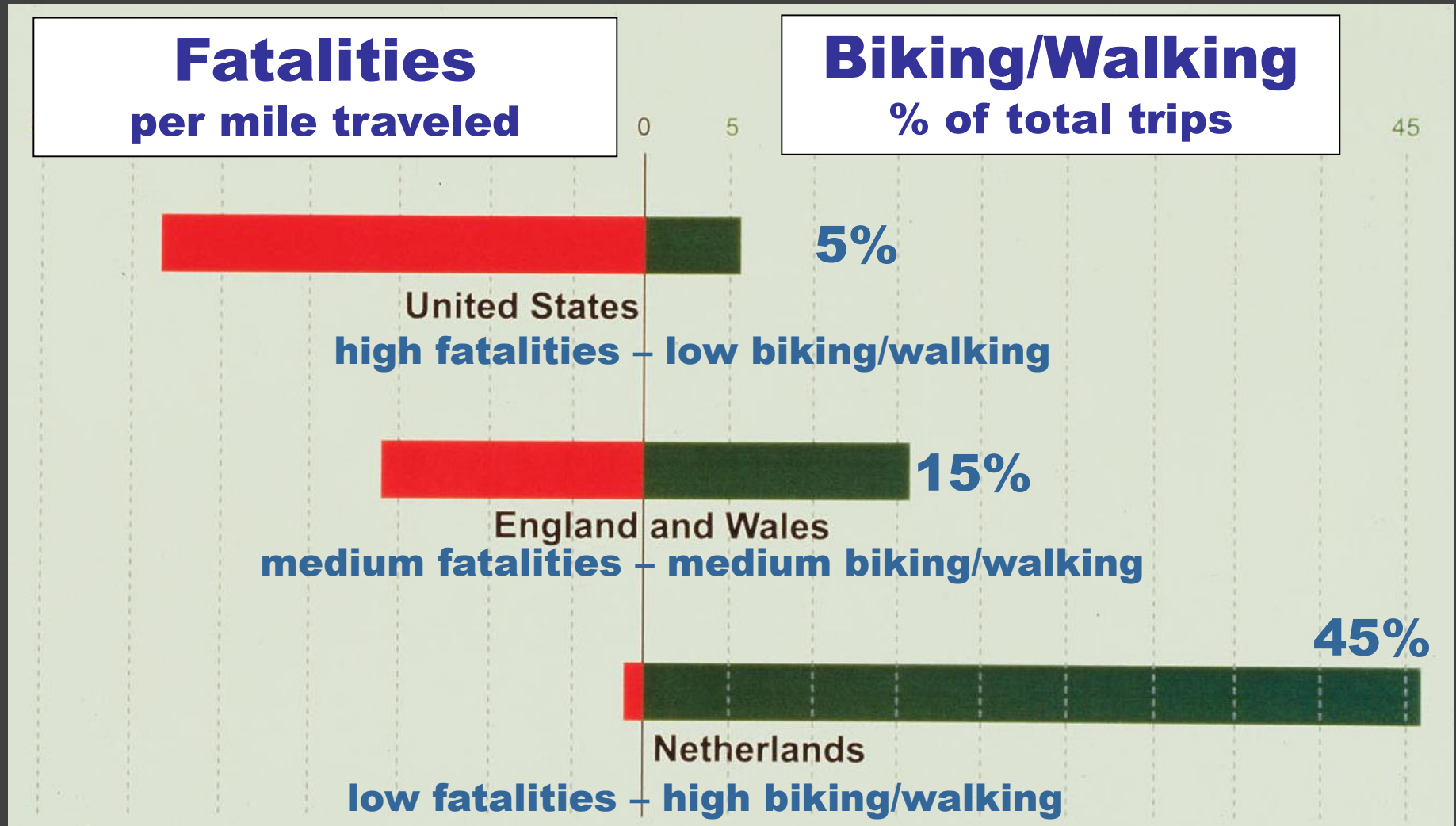




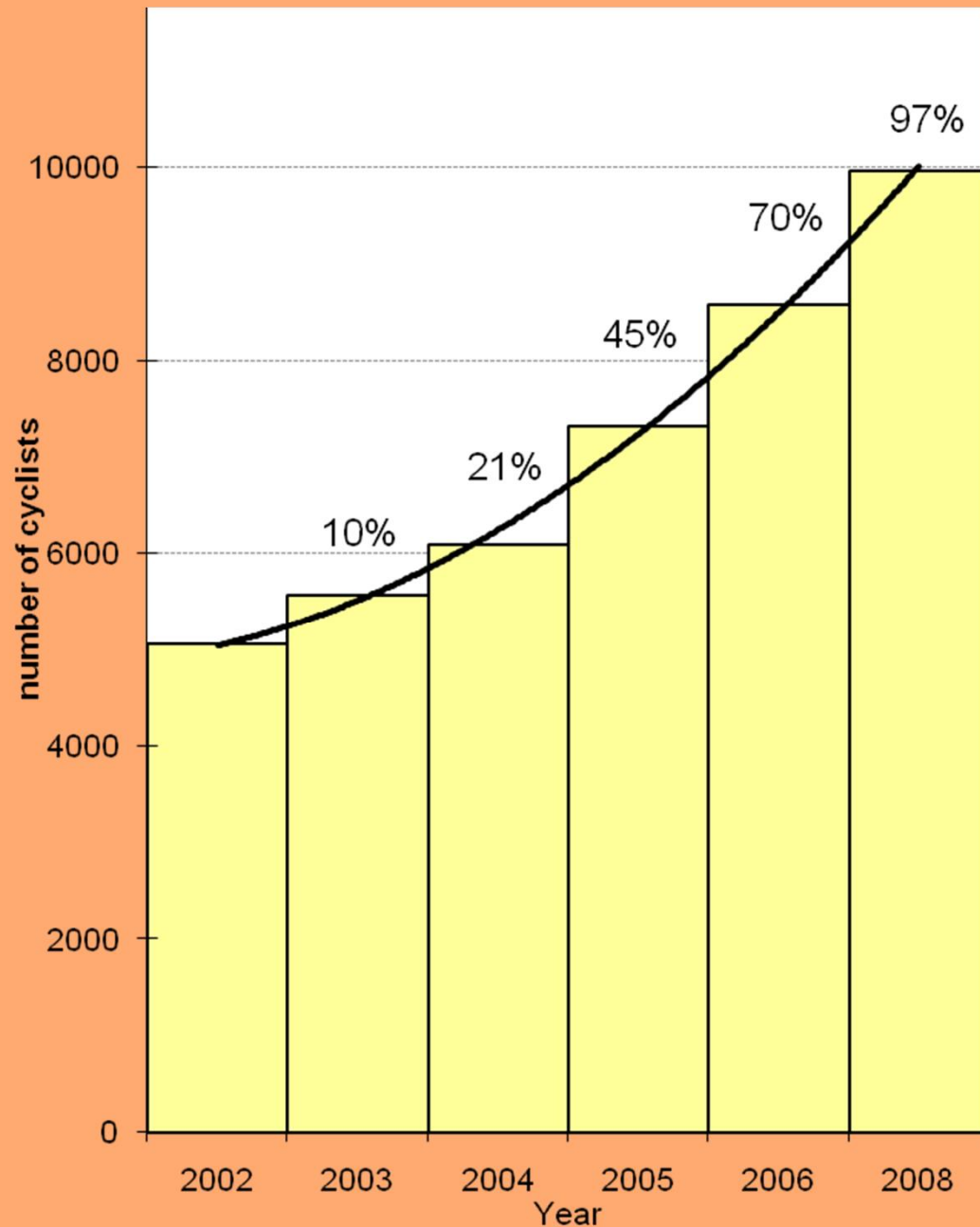
Safety in Numbers



Safety in Numbers



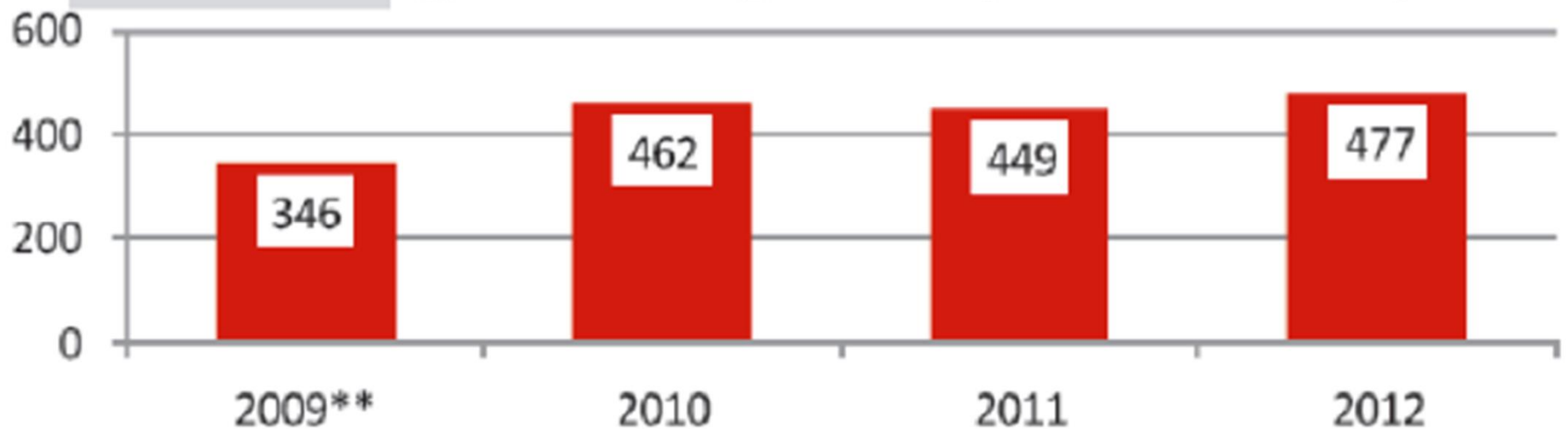
If You Build
it
in
Cambridge,
bicycle trips
doubled in 6
years



Boston Police Data

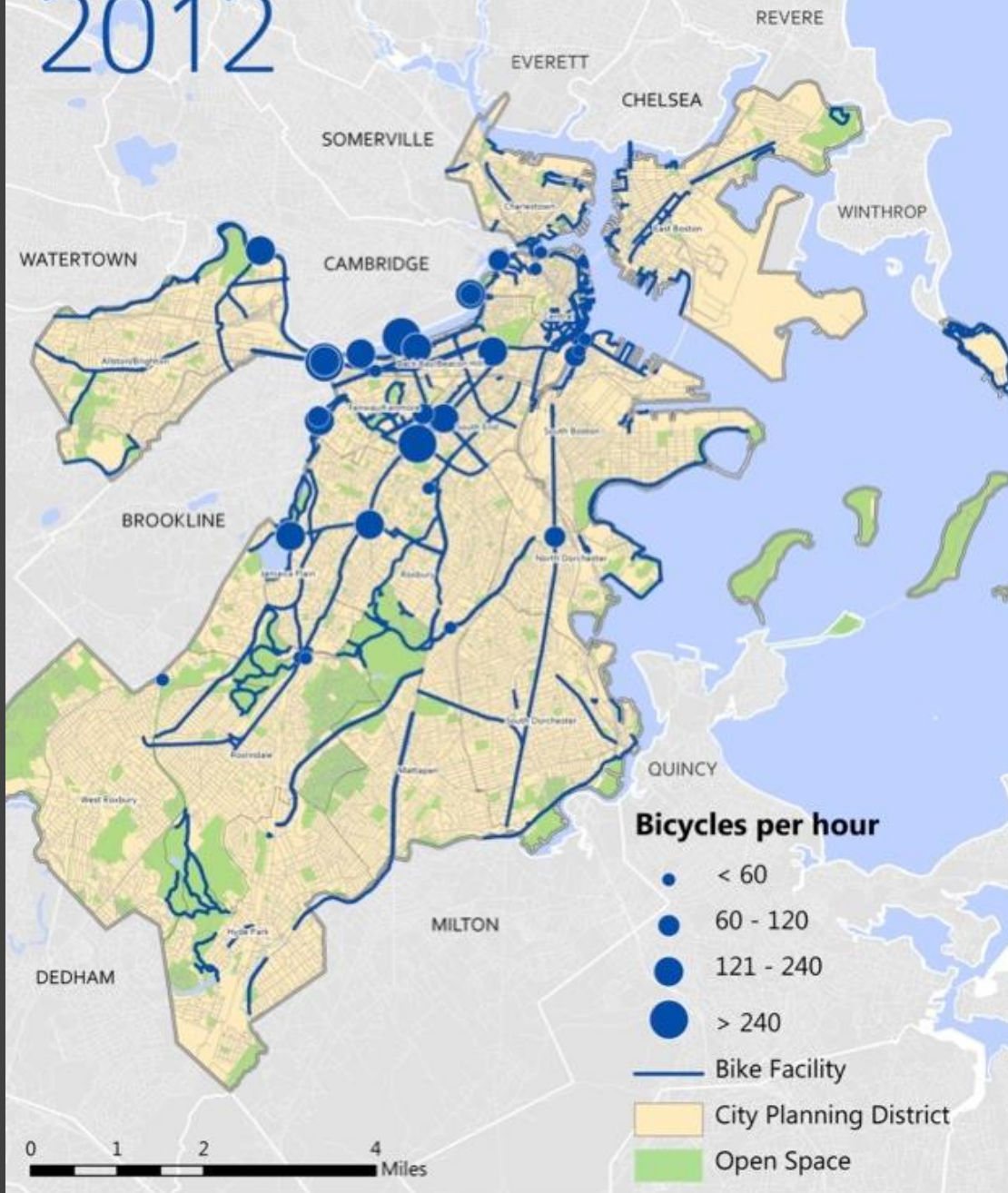
FIGURE 2

NUMBER OF BICYCLE COLLISIONS BY YEAR



**Note: Incomplete data for this year.

Boston Bike Network 2012





RAIL-TRAIL PATHS ÷ GREENWAY CORRIDORS

Rail-Trail Myths

- “ Rail-to-Trail paths create trash
 - ” vs. filth on abandoned ROW
- “ Off-road facilities attract crime
 - ” vs. creating more eyes on the street+
- “ Bike facilities reduce property values
 - . Parking, noise, loss of privacy
 - ” vs. 10% to 25% increase, tied to proximity
- “ No equipment or staff for maintenance
 - ” vs. volunteers and shifting priority

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Decatur Street, Atlanta / Before



Decatur Street, Atlanta / After



Chico, CA

Nord Avenue



Chico, CA

Nord Avenue



Chico, CA

Nord Avenue



Chico, CA

Nord Avenue



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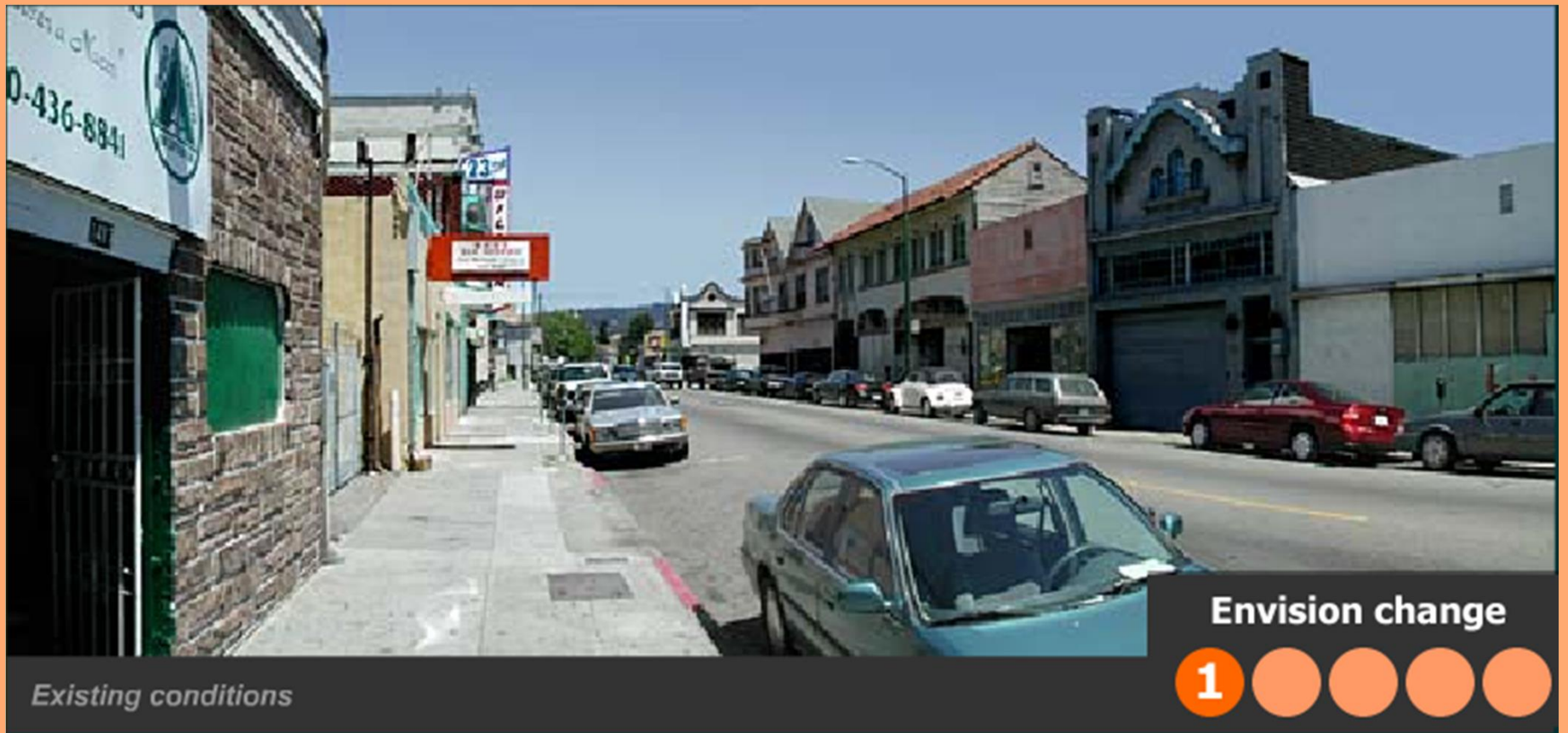
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Streetscape Transformation



Streetscape Transformation



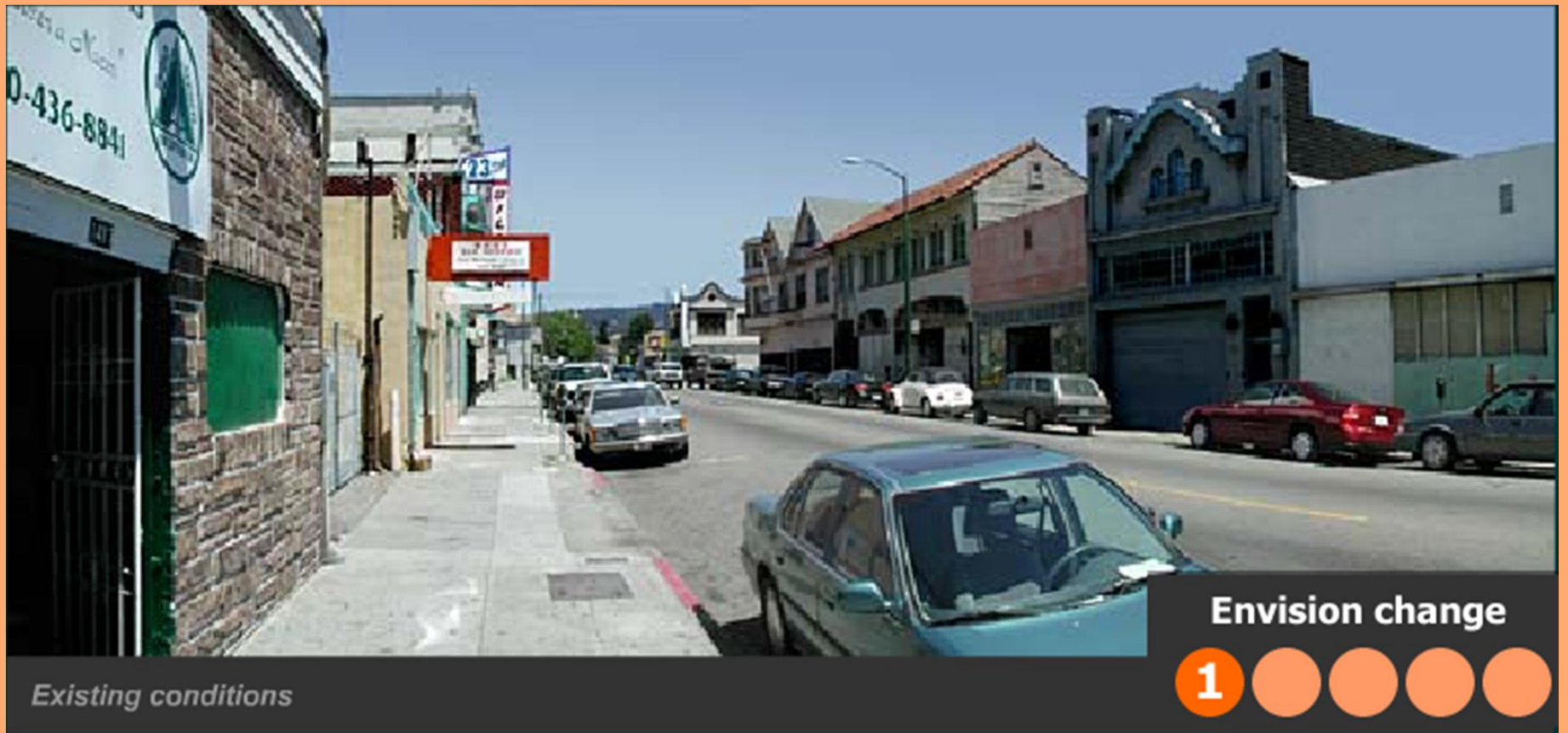
Open businesses, patrons

Envision change



**Green Livability:
The Aesthetic Bonus**

Streetscape Transformation



Streetscape Transformation

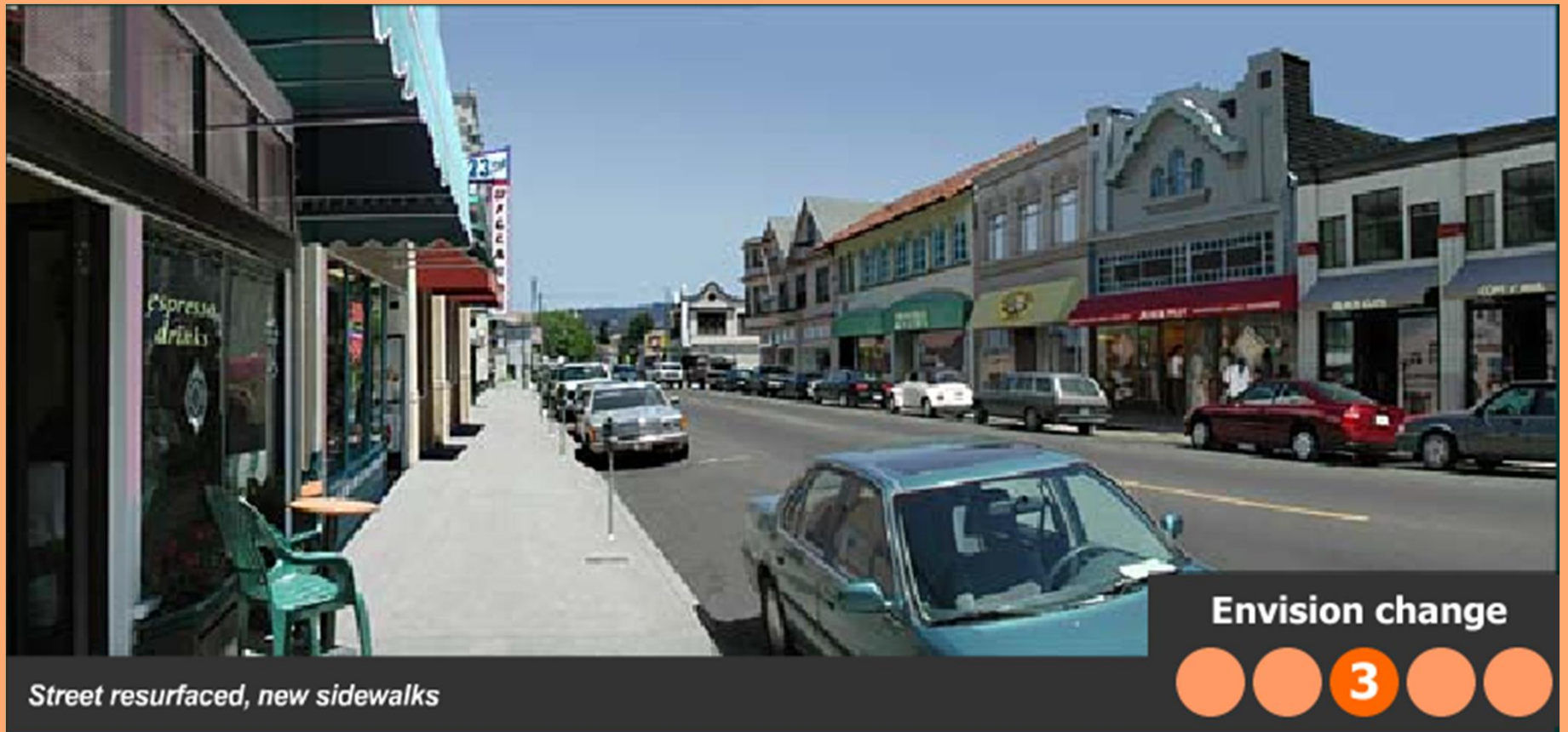


Building facelifts, restoration of ground floor retail, infill development

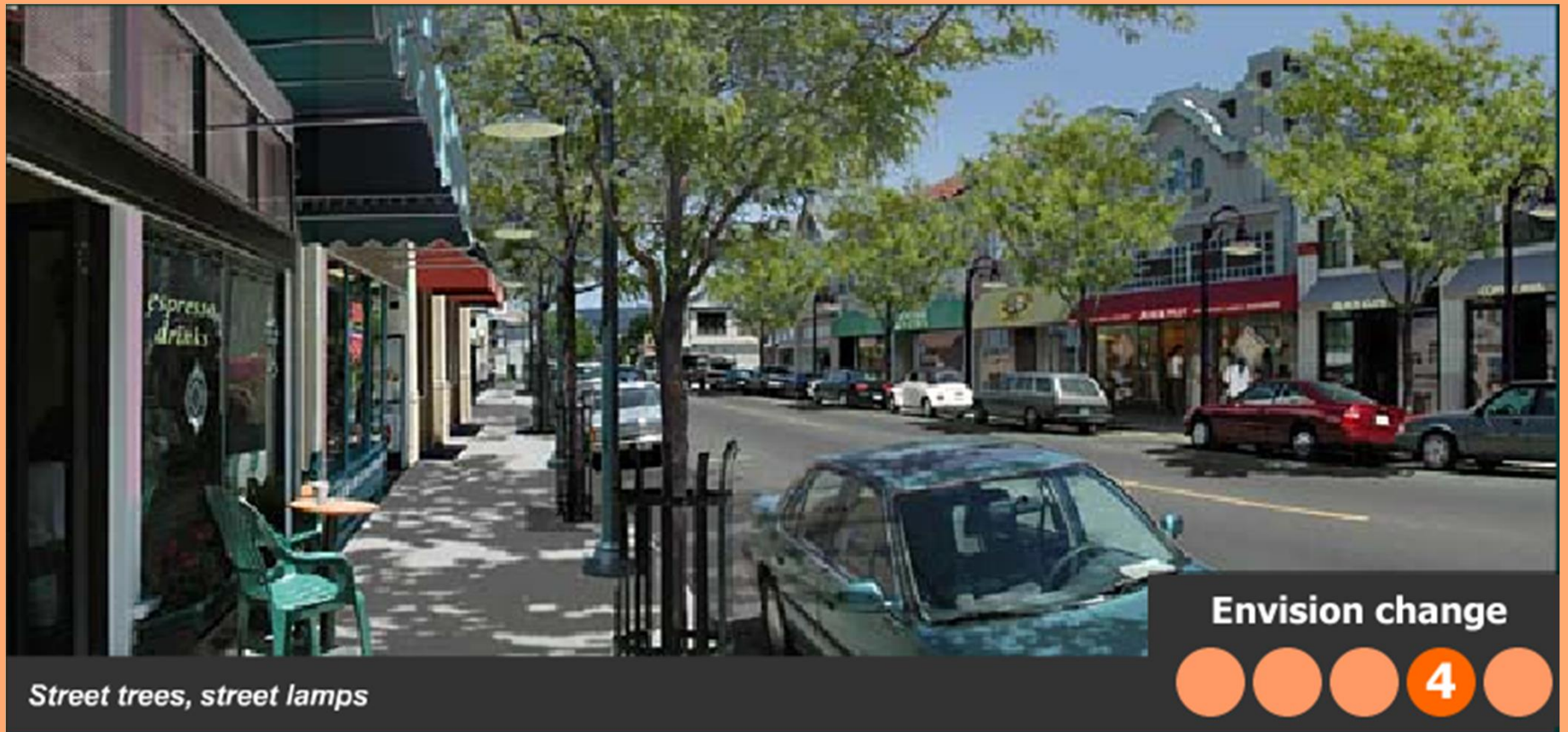
Envision change



Streetscape Transformation



Streetscape Transformation



Streetscape Transformation



Open businesses, patrons

Envision change



**Green Livability:
The Aesthetic Bonus**



“If you don’t know where you’re going it is hard to tell when you’re heading in the wrong direction.”

**If you plan for cars and traffic,
you get cars and traffic.**

**If you plan for people and places, you get
people and places.**

- Fred Kent, Project for Public Spaces

Key Concepts Underlying Positive Examples

1. Slow Traffic Down

- . 20 mph; focus on %throughput+not speed
- . %traffic calming+

2. Expand Alternative Infrastructure

- . Train, trolley, bus (BRT)
- . Bike lanes, paths, cycle tracks
- . Sidewalks, plazas, %shared space+

3. Prioritize transit, bikes, walking

- . Lane width, parking, hidden costs
- . Reduce car traffic

Key Concepts Underlying Positive Examples

4. Design from %Outside In+
 - . %Complete Streets+(taken seriously!)
 - . Sidewalk, bike lane, transitõ .then traffic
5. Focus on Safety
 - . Everyone benefits when needs of most vulnerable are addressed
 - . Safety in numbers!!
6. Treat Streets as Public Space
 - . Don't restrict use to traffic or travel
 - . Full range of uses: quality of life!



Hub on Wheels / Storrow Drive



MY CAMPAIGN PLATFORM

“ Better Health

- . less asthma, diabetes, high blood pressure
- . stronger bones, muscles
- . greater fitness, feeling of wellbeing
- . less dementia, heart attacks, strokes

“ Less Crime

- “ Better School Performance
- “ Cleaner Environment
- “ Reduced Greenhouse Gases
- “ Less War
- “ Better Looking Communities
- “ Friendlier Neighborhoods
- “ More Prosperous Business District

Active Transportation



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