

Using Trails to Build Stickier Communities

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Greater Cleveland Trails
& Greenways Conf.

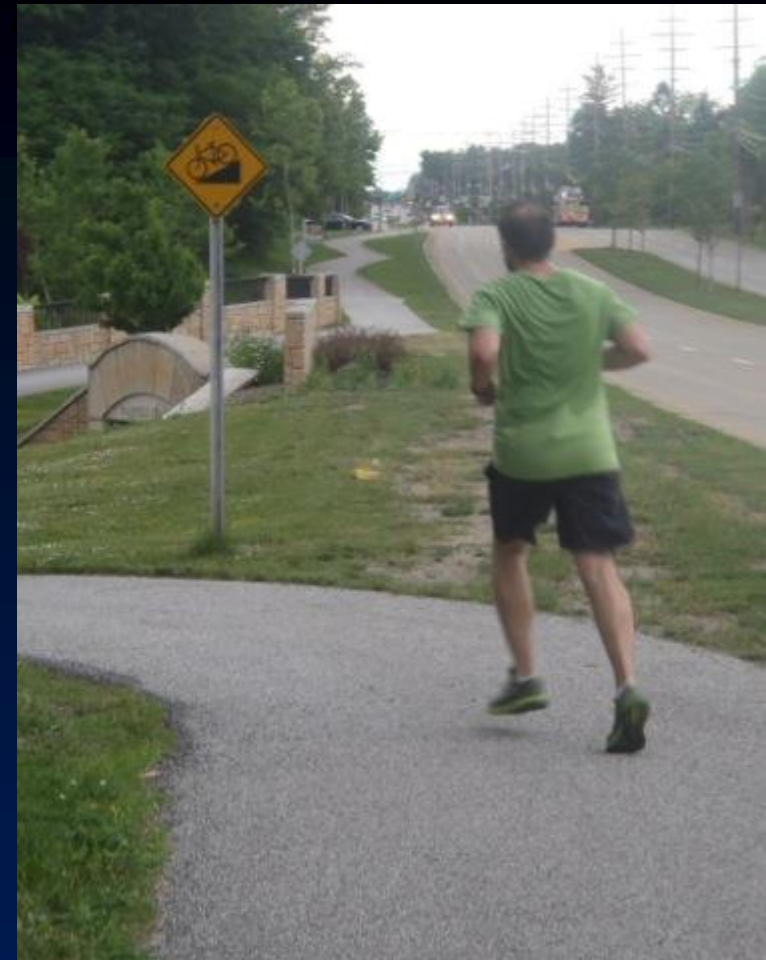
Mayfield Village, OH
June 2014



But is there demand?
(Mayfield Village Greenway Tr.)

Answers to the common questions:

- Isn't health a result of **personal decisions & habits**?
- If we build it, **will they come**? (People are just lazy . . .)
- Shouldn't the **free market** dictate how we build our cities & towns?
- So, what is the **prescription** for healthy design (& how do we **get there**)?



On the Mayfield
trail system

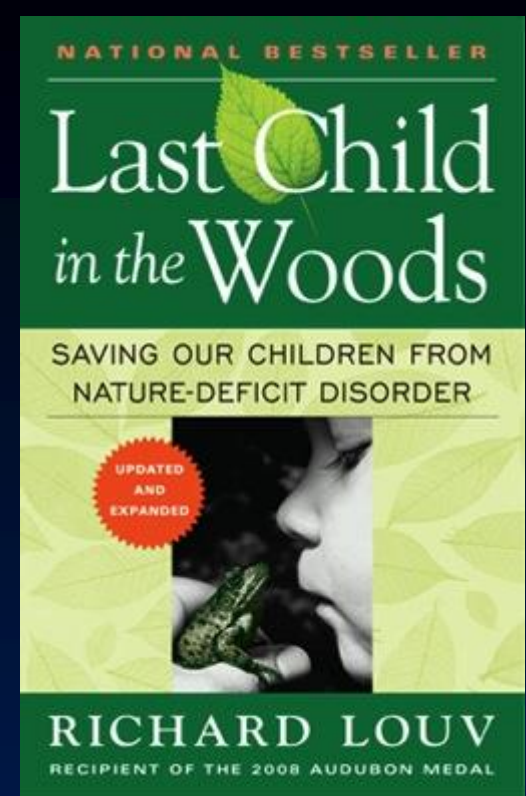
Youthful recollections





30-Nov-2009

Not just my
idea . . .



Kids held back with 'over-organised' play, says Shane Gould

Pia Akerman

OLYMPIC golden girl Shane Gould has blasted children's sports programs as "over-organised" and holding back the natural development of physical skills, contributing to physical and social problems down the track.

The swimmer, who won five individual medals at the 1972 Munich Olympics, yesterday took out against children as young as five being pushed into team sports rather than encouraged to play outdoors. "There's a real danger



Gould

"I believe that children are over-organised and they don't have enough opportunity just for free play outdoors, playing with their friends."

Gould coined the term 'nature deficit disorder' — it's not actually a true disorder, but we are going to start to see problems in children like concentration, inability to regulate their emotions."

Currently working on a masters degree in social geography at the University of Tasmania, Gould will publish her thoughts on children's physical activity in the December issue of the *Child* publications in state capitals.

She blames the loss of traditional Australian backyards and the "upgrading" of public playgrounds as factors reducing children's ability to play naturally.

"Public liability seems to be the main focus for the design of our children's playgrounds and all of us need to take some responsibility for this," Gould writes.

"The race to blame someone for a child's fall from a piece of playground equipment has had the appalling knock-on effect of almost criminalising child's play and led to this deadening impact on our public spaces."

"Children prefer a log and a ditch to play structures."

Speaking after her address, Gould said home-improvement TV shows emphasising aesthetically pleasing courtyards had encouraged people to ditch traditional backyards.

"Kids need backyards — they need to dig dirt and pull up plants and see the roots. They need to find worms and beetles and make tracks and build cubbies and pull them down again," she said.

A mother of four, Gould raised her children on a property at Margaret River in Western Australia, where outdoor activity was an important part of everyday life.

In her article, Gould argues the Howard government's focus on after-school sports to address childhood obesity was "well-meaning" but failed to attract most children who often had a "can't do" attitude to sports.

"Children, particularly under eights, do not, in my opinion, need to be involved in organised sports," she writes.

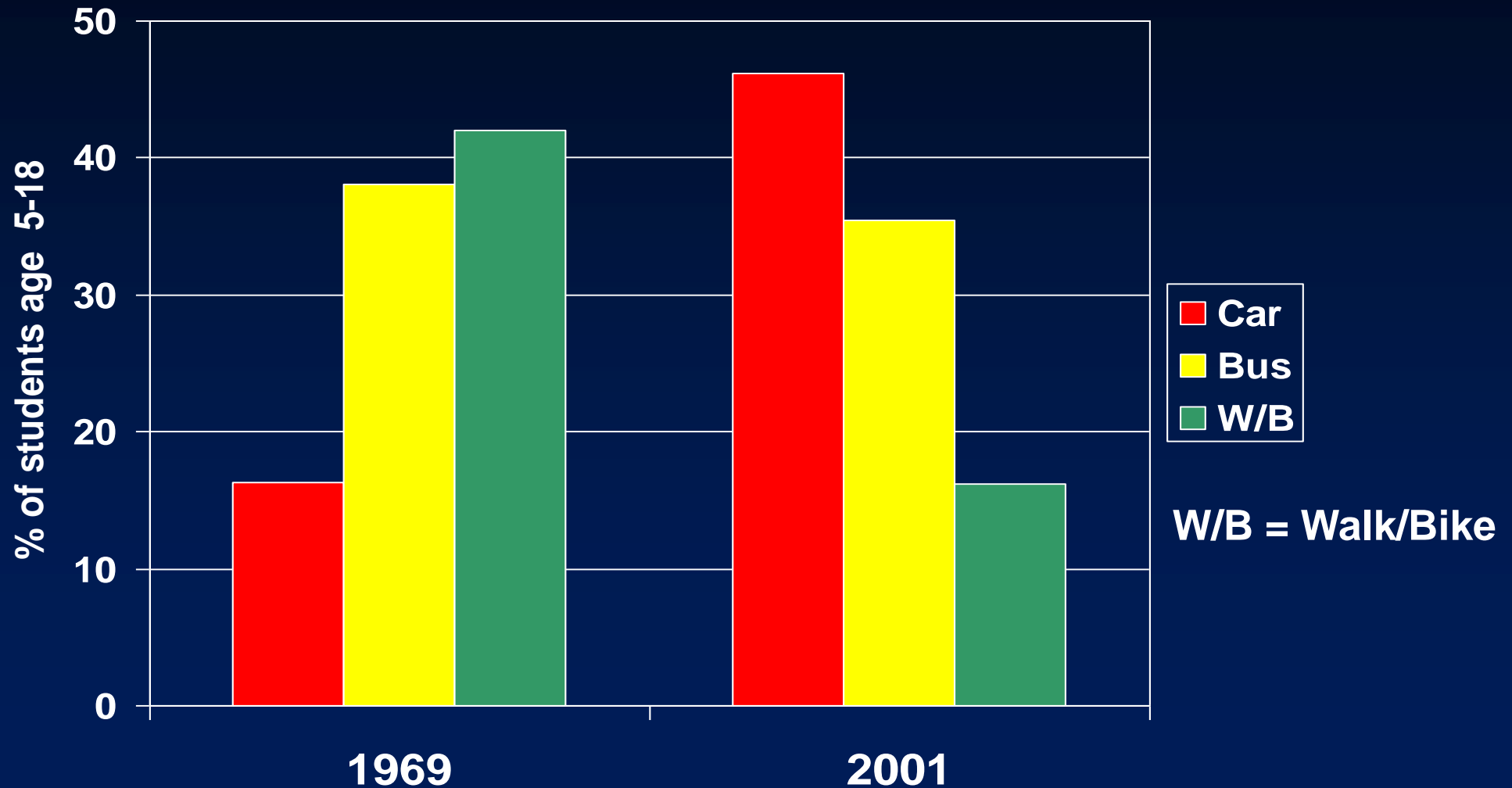
Gould said children today were clumsy due to "lack of movement experiences" such as reaching, climbing, hopping and spinning.

Have your say at theaustralian.com.au

The Australian, 14-Oct-2009

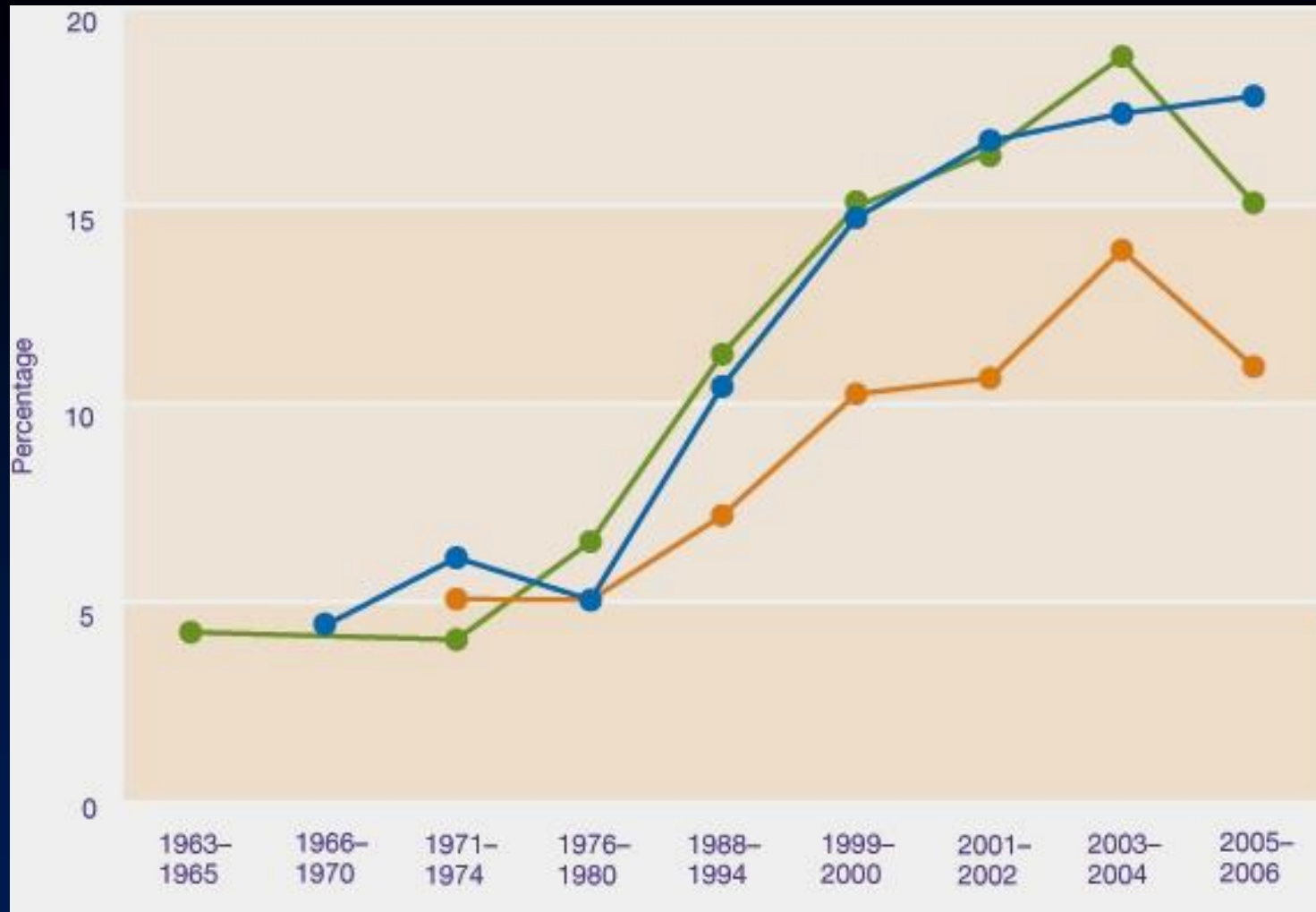
Changes in Walking & Cycling to School, 1969 to 2001

Ham et.al., *Jour. of Physical Activity & Health*, 2008, 5, 205-215



Trends in Childhood Obesity & Overweight

- 2–5 Years of Age
- 6–11 Years of Age
- 12–19 Years of Age



CDC, National Center for Health Statistics. *National Health Examination Surveys (NHANES) II (ages 6–11) and III (ages 12–17), and NHANES I, II and III, and 1999–2006.*

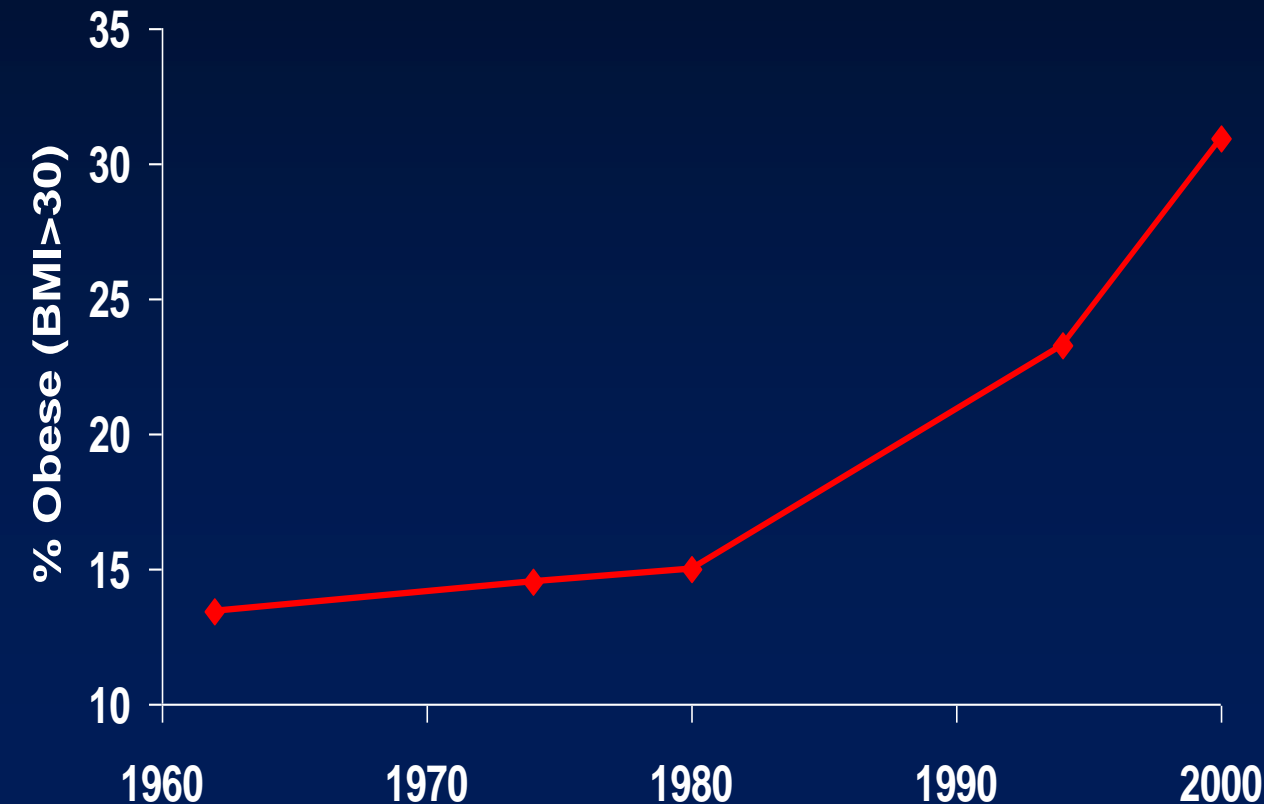
www.rwjf.org/files/publications/annual/2008/year-in-review/

www.markfenton.com

America's looming chronic disease apocalypse . . .

US "Obesity Epidemic"

Ogden et. al. (JAMA 288, 14; Oct. 2002)



My Rant:

Change our thinking. It's *not* just an obesity epidemic. It's twin epidemics of **physical inactivity** and poor nutrition.*

* Two of the three biggest drivers of skyrocketing healthcare costs.

The bad news in just three numbers:

30 Minutes of daily physical activity recommended (**60** min. for youth).

< **20** % of American adults actually meet these recommendation (thru LTPA).

365,000 Estimated annual deaths in America due to physical inactivity & poor nutrition. (2nd only to tobacco.)

Surgeon General's Report 1996

Physical Activity Guidelines 2008

www.health.gov/paguidelines

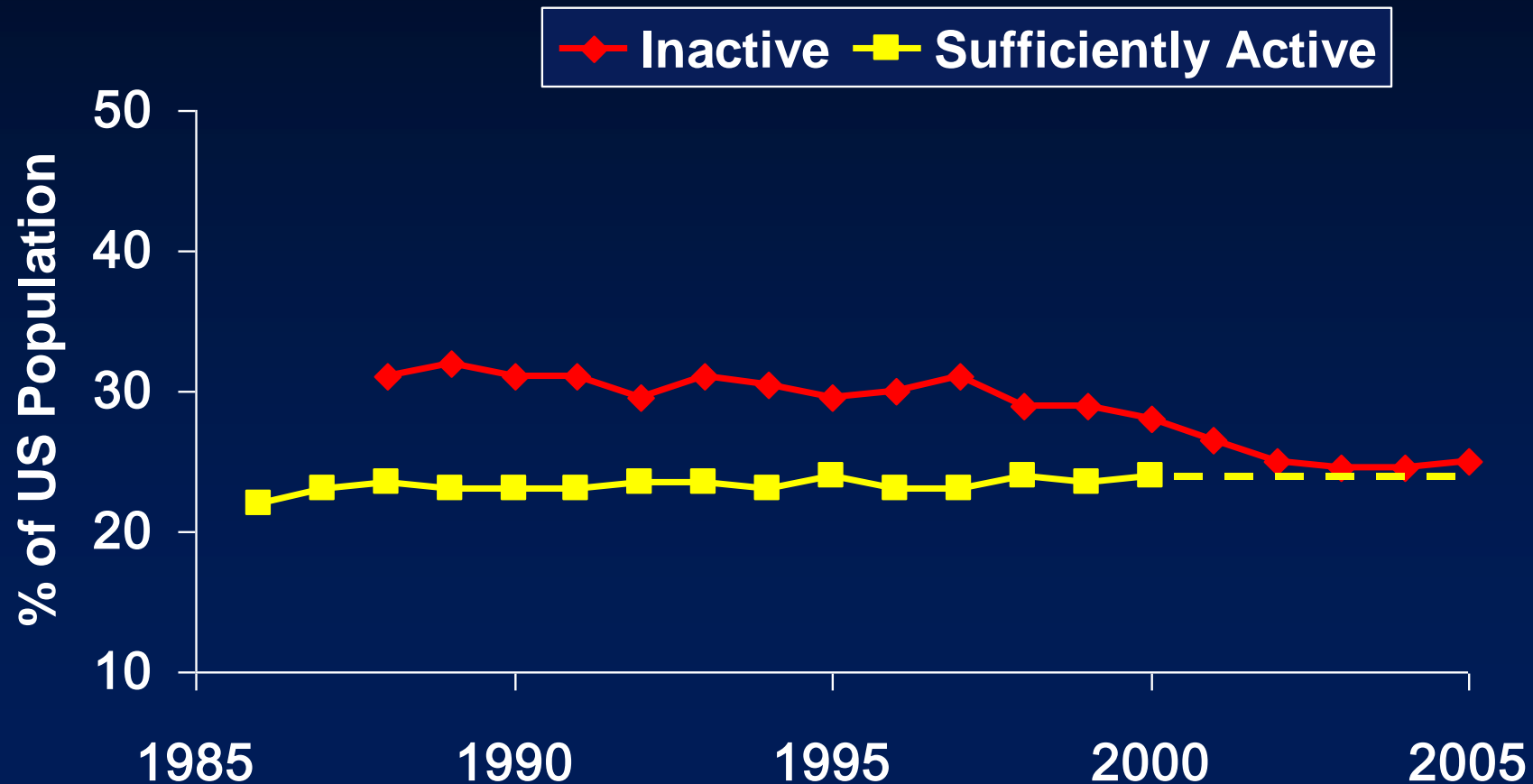
- **150 min/week** of moderate **physical activity**; more is better.
- Any activity is better than none.
- Can be **broken up**.
- **300 min/week** for children.
- Reduced risk for CVD, diabetes, osteoporosis, obesity, dementia in old age, clinical depression, a growing list of cancers . . .



This counts!

Leisure Time Physical Activity in the US

(MMWR: 50(09), 166-9; 54(39), 991-4)

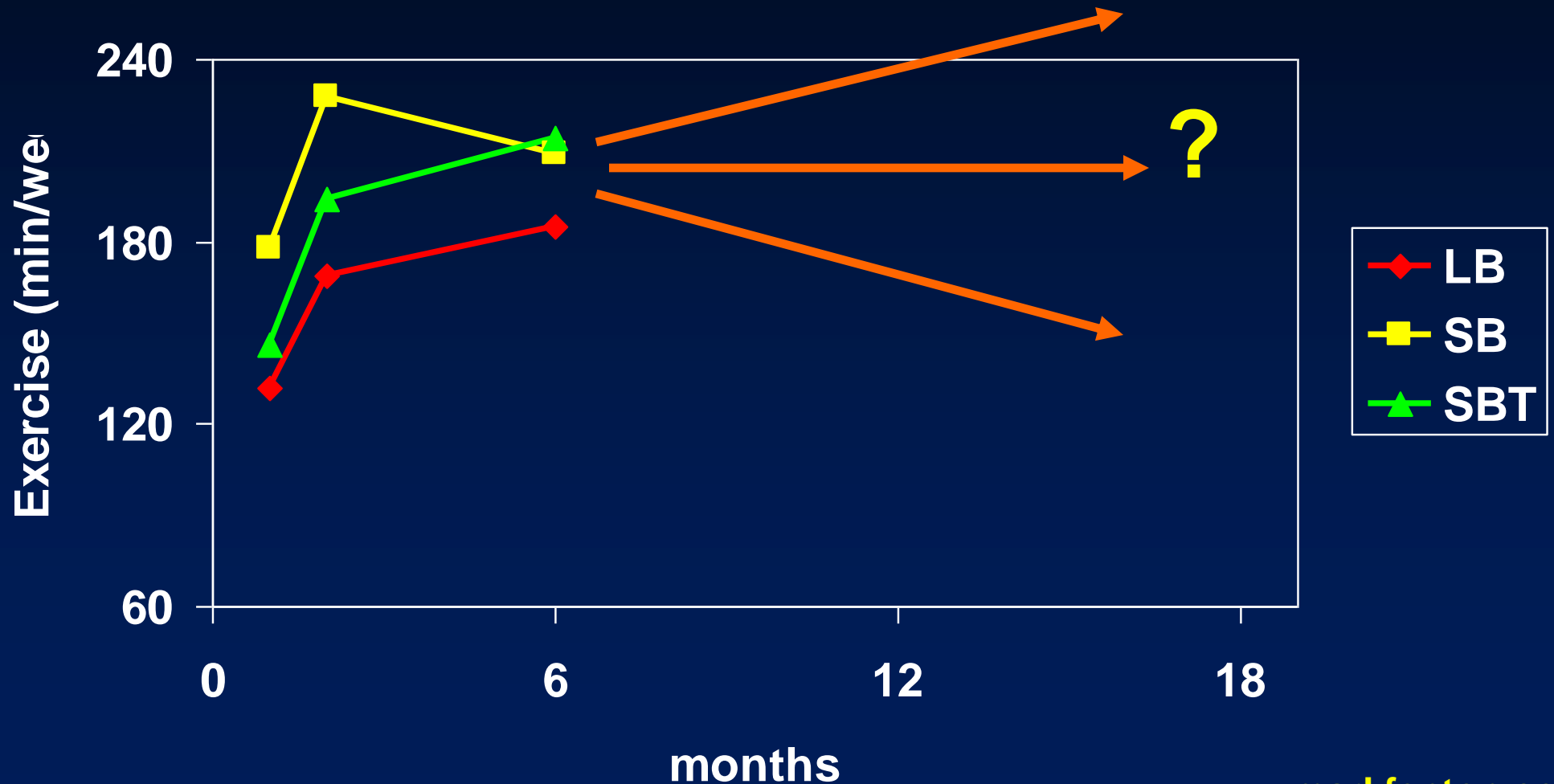


But in the end . . .

**It's a matter of personal
choice, isn't it?**

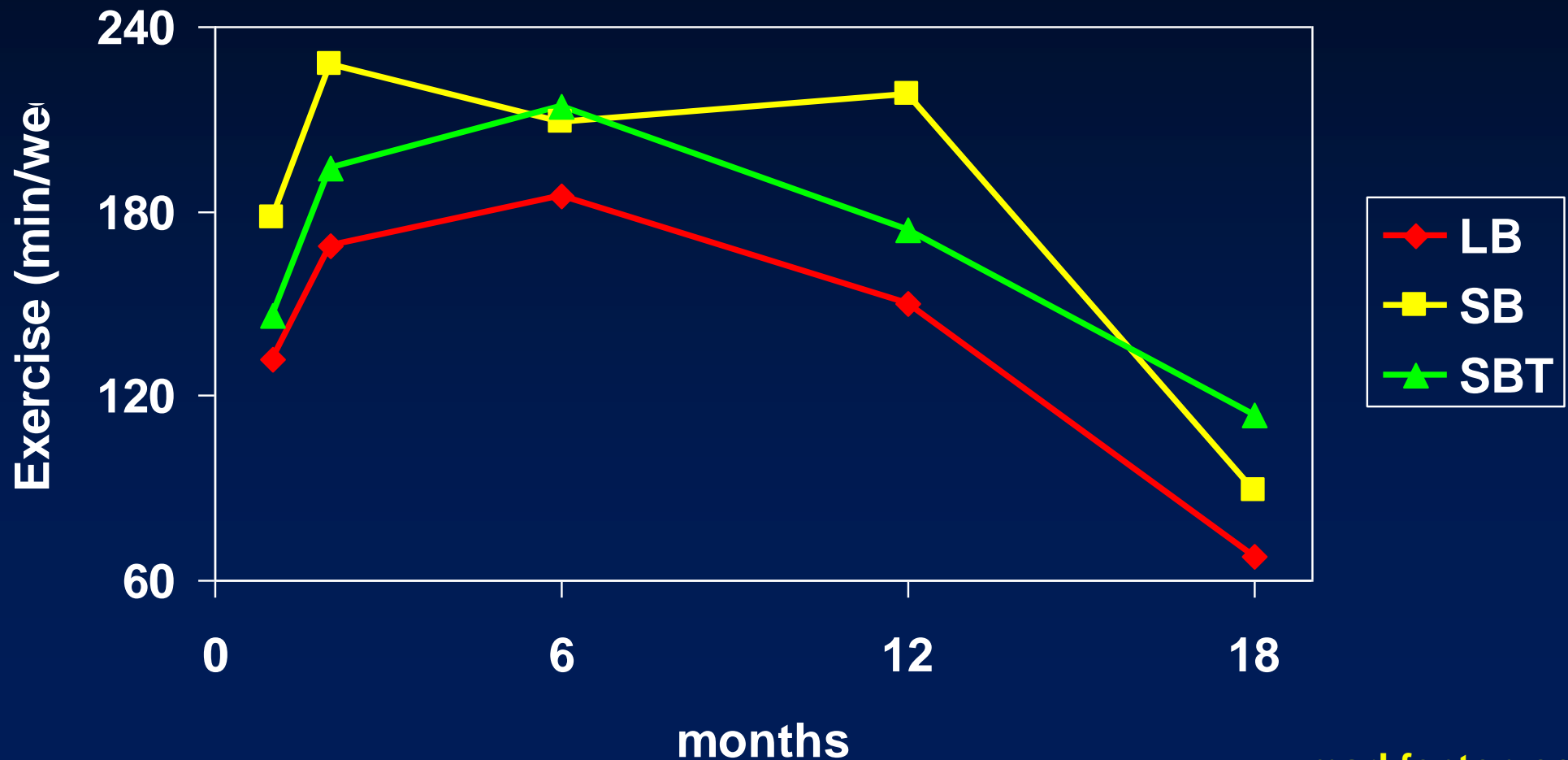
Exercise Participation

Effect of Short Bouts, Home Treadmills
(Jakicic et.al., *J. Amer. Med. Assoc.*, 282, 16)



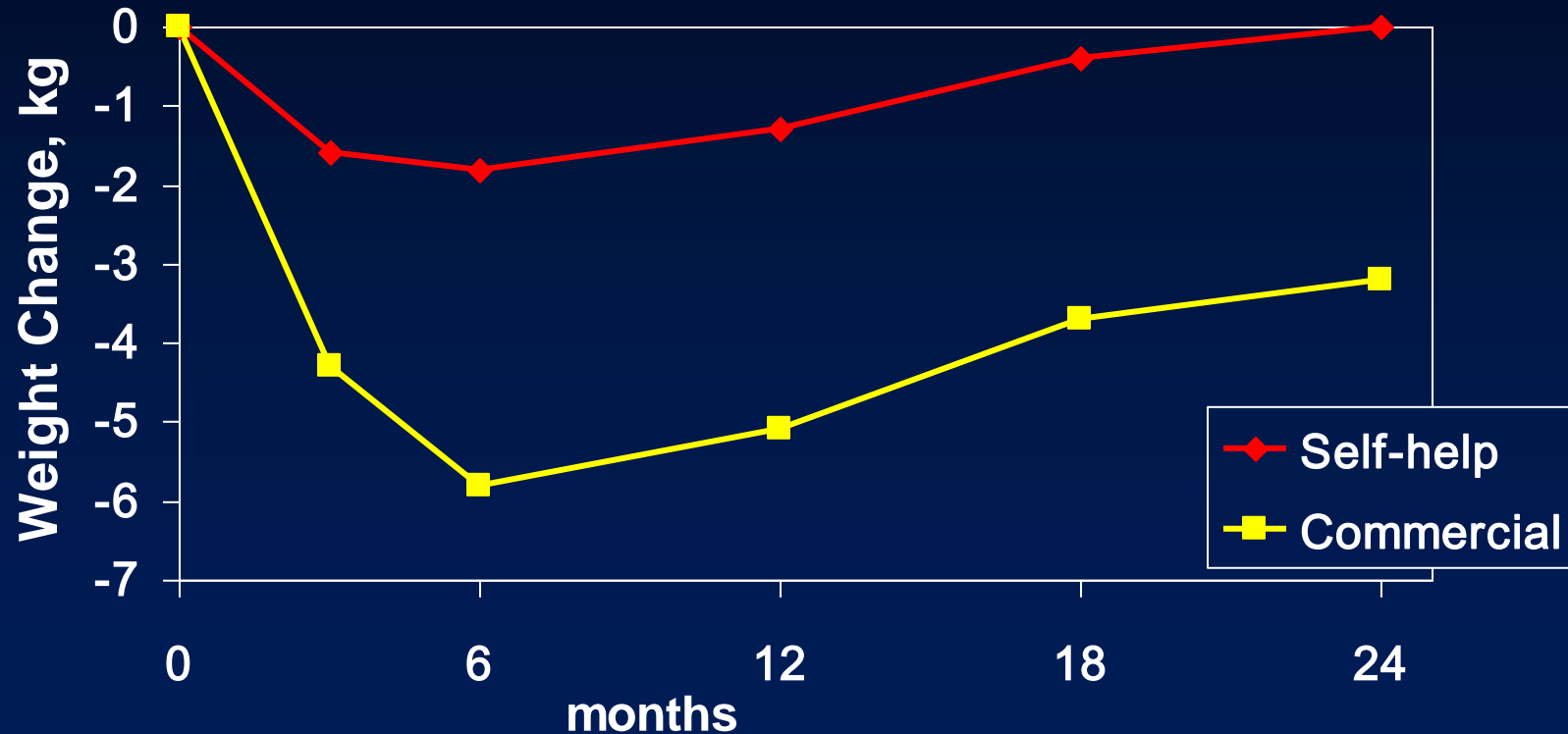
Exercise Participation

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Self-help vs. Commercial Weight Loss Programs

(Heshka et.al., *J. Amer. Med. Assoc.*, 289, 14; Apr. 2003)



A realization:

Simply telling & teaching people to “exercise” is not enough. We need to support increases in routine, daily physical activity for everyone.

Social Ecology Model

Sallis & Owen,
Physical Activity & Behavioral Medicine.

Determinants
of behavior
change

Individual
motivation, skills

Interpersonal - family,
friends, colleagues

Institutional - school, work,
health care & service providers

Community - networks, facilities

Public Policy - laws, ordinances,
permitting practices & procedures

Socio-ecological successes?



**Tobacco
use**

**Seatbelts,
child safety
restraints**



Water-borne disease

Recycling



Haiti



**Necessary and
important,
but not enough. >**



**< We must build
communities
where people are
intrinsically
more active.**



**If we build it, will
they come?**

YES! Four elements:

1. Variety of uses within walk, bike, & transit distance.
2. Connecting facilities: trails, sidewalks, bike lanes, transit.
3. Destinations are functional & inviting for pedestrians, bicyclists, & transit users.
4. Safe & accessible for all ages, incomes, abilities



Cleveland

www.thecommunityguide.org

CDC Guide to Community Preventive Services

www.markfenton.com

1. Land use. Live, work, shop, play, learn, pray.



Compact neighborhoods
& shared open space.

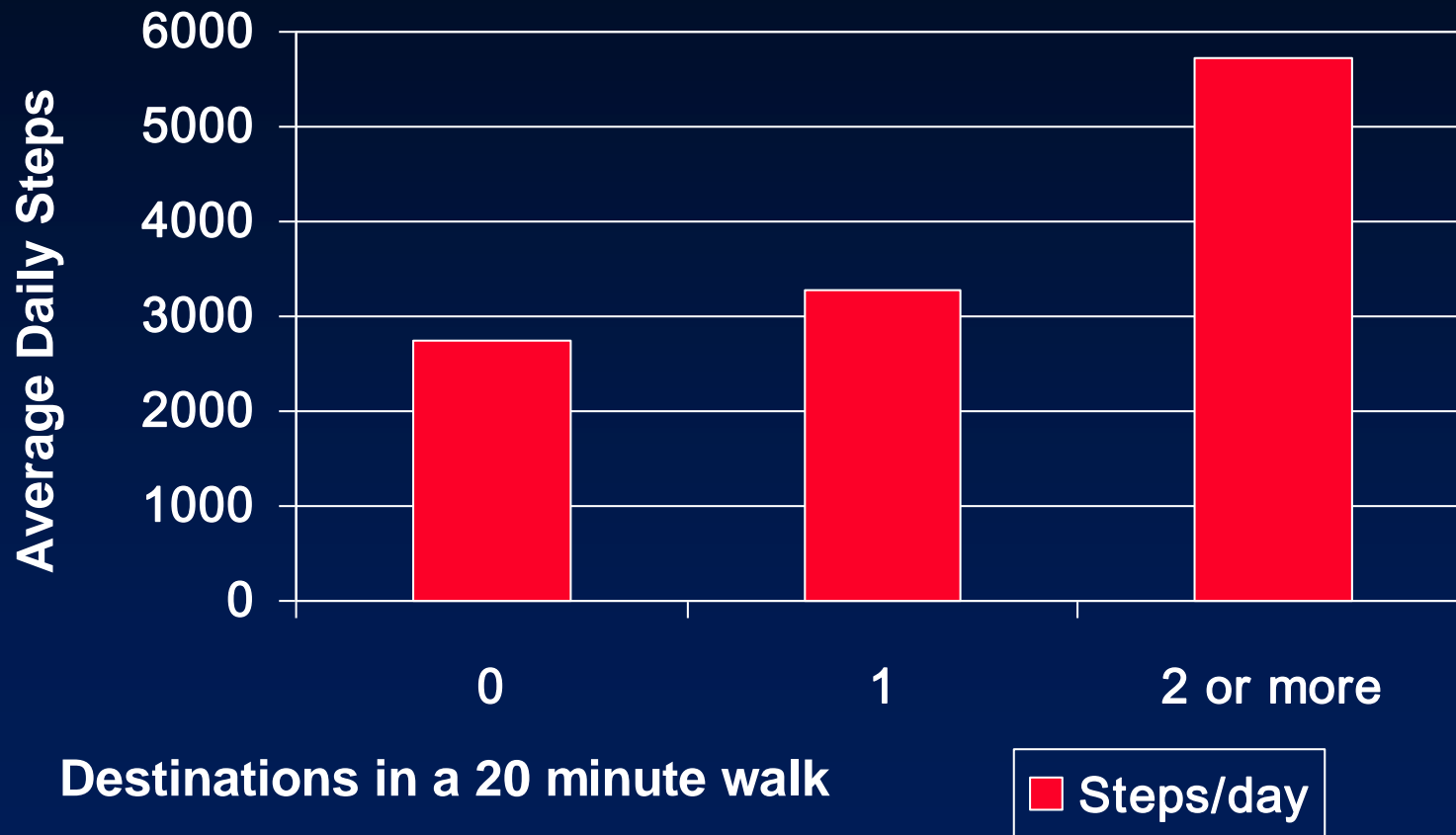


Housing
above,
retail
below.



Convenience of Destinations and Walking for Older Women

King et.al., *Am. J. Health Promo.*, 18(1) Sep. 2003.



* Park or trail was one of the most frequently cited destinations.



Nearby destinations matter!

2. Network is more complete with:



- Presence of sidewalks, bike lanes, pathways.
- Shorter blocks, cul-de-sac connectors, more intersections.
- Access to affordable, reliable, frequent, *transit*.



Building a bicycle network:



On street



American River Trail
Sacramento, CA

Shar-row
(shared use arrow)



Bike lanes

3. Site Design:



Which setting is more inviting for travel on foot or by bicycle?

Site design?

Research & practice suggest:



- Buildings near the sidewalk, not set back; parking on street or behind.
- Trees, benches, lighting, awnings, “human” scale.
- Details: bike parking, open space, plants, art, materials.



Possible incentives:

- Decrease, share parking (include bike racks).
- Build-to, not set-back requirements.
- Mixed use, multi-story, w/ density bonus.
- Expedite permits.



**You must support
your elected &
appointed officials
if you expect them
to act!**

Appleton WI



Austin, MN



www.markfenton.com

4. Safety & access.

- Engineering can markedly improve safety.
- Increasing pedestrian and bike trips *decreases* overall accident & fatality rates.



Median islands



Roundabout (Neenah, WI)



Curb extensions

(Jacobsen P, *Injury Prevention*, 2003; 9:205-209.)

www.markfenton.com

**Diagonal
parking
increases
on-street
capacity,
but . . .**



Hudson



Des Moines, IA



Reverse angle:

- Less severe, costly collisions.
- Safer for bikes
- Pedestrians off the road.

Reverse diagonal parking with bicycle facilities . . .

Chattanooga, TN



Akron, OH

Lane re-alignments

- Often called road diets.



Urbana, IL; before & after.



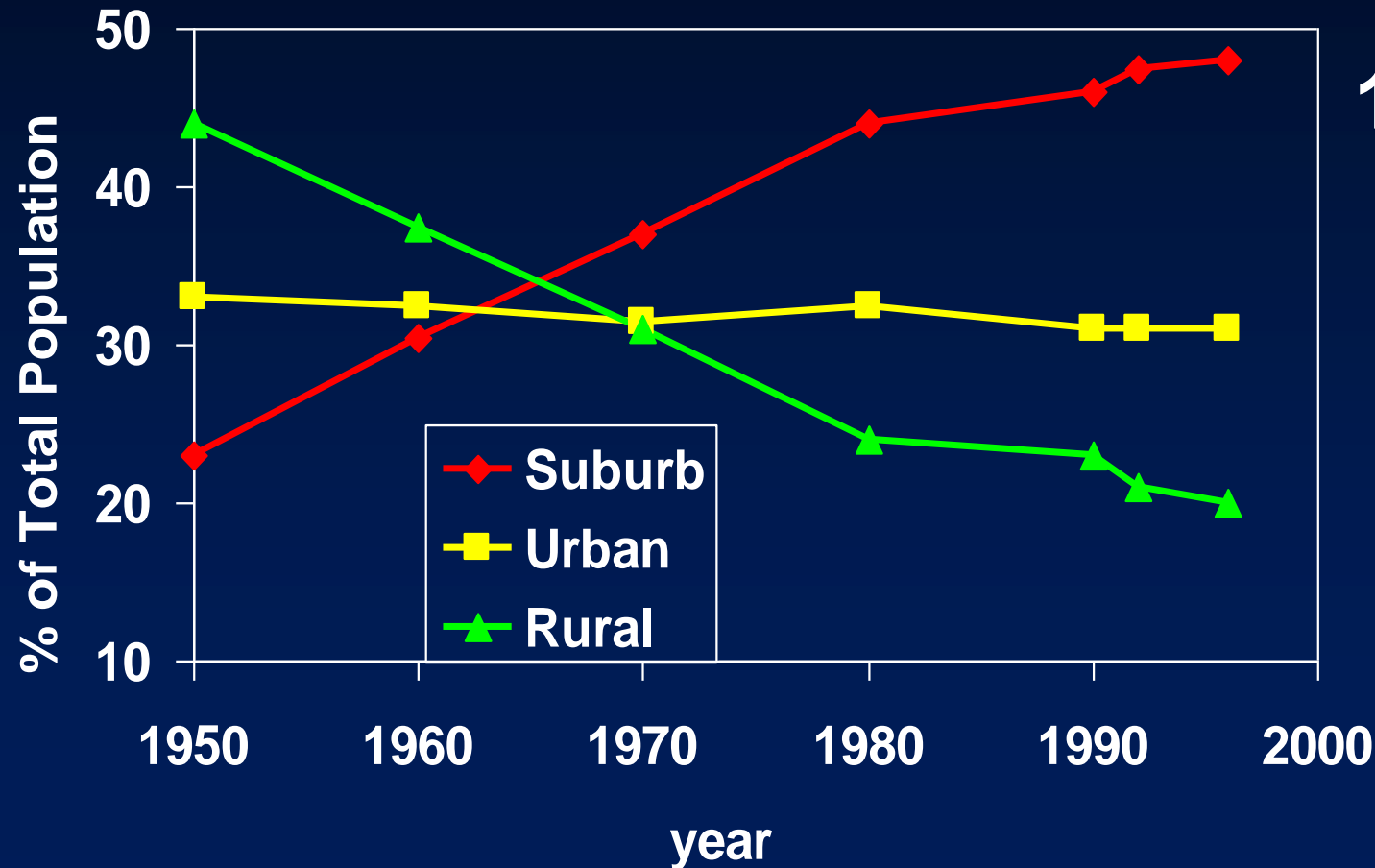
- Can reduce collisions & severity.
- Dramatically improves performance for pedestrians & cyclists.

“But what about rural areas . . . ?”

Suburbanization of America

US population shift, 1950-1996

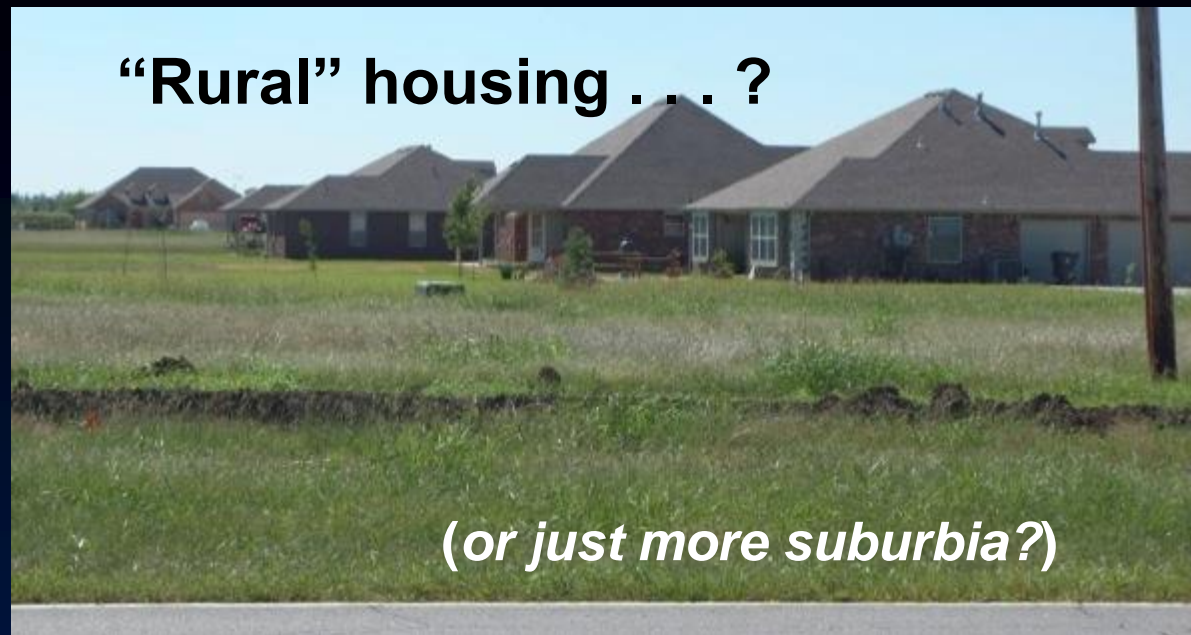
(after *Bowling Alone*, R. Putnam, 2000)



1. Suburbia is steadily consuming the landscape . . .

2. Rural areas are
where we can
affect the shape of
development
before it's done!

“Rural” housing . . . ?



Four Elements of Healthy Community Design:



Mix of destinations

Ped, bike,
& transit
network



Safety &
access



Site design

www.activelivingresearch.org

www.markfenton.com

**Shouldn't the free market
dictate how we build our
cities & towns?**

Economics. ***Walking the Walk: How Walkability Raises Housing Values in U.S. Cities.*** (CEOs for Cities report)*



Higher score = ↑\$4,000-\$34,000 home value

***www.ceosforcities.org/work/walkingthewalk
www.walkscore.com**

Specific benefit of proximity:

Houses nearer to trails sell in less time, and at a larger % of asking price, than equivalent homes further away.



LINCOLN: Highland Falls! Two attractive 2 bed, 2 bath units in converted mill along bike path! Central air, all appliances, one with carport! From \$219,900. Carole, RE/MAX Town & Country, 334-1180.

LINCOLN: Historic Highland Falls. Three spacious units! 2 bed, 2 bath each, all with open floor plans, appliances, lots of windows near bike path, \$250's-\$305. Coleman 333-6066.

LINCOLN: Highland Falls Condo, 2 bed, 2 bath, master walkin closet, brick, near bike path, \$270s. Coleman 333-6066.

LINCOLN: Highland Falls! Brick mill, Custom Contemporary Condo. Large 1st floor-corner, 2 bed, 2 tiled baths, bright open floor plan, high ceilings/large windows, central air, bike path/river. \$235,000. 401-334-1602.

LINCOLN: Highland Falls! Two pretty 2 bed units, fully appliances, air, french doors, one with brick beam/carport! Mill complex on bike path! From \$229,900. Carole, RE/MAX Town & Country, 334-1180.

LINCOLN: Open House

LINCOLN: Highland Falls. Beautiful, spacious 2 bed, 2 bath oversized windows, high ceilings, bike path/Blackstone, 1440 sq. ft. \$237,500. 401-451-0668.

3207,700. Lamontagne 724-8660.

LINCOLN: Highland Falls. 2 bed 2 bath, bright attractive exposed brick, oversized windows, high ceilings, close to bike path/shopping, 1700 sq. ft. \$260,000. McNulty Real Estate Group, 333-9520.

LINCOLN: HIGHLAND

*Trails & Greenways:
Advancing the Smart
Growth Agenda
Rails-to-Trails
Conservancy*

On Common Ground

Nat'l Assoc. of Realtors pub.; Summer 2010

www.realtor.org

The Next Generation of Home Buyers:

- **Taste for in-town living.**
- **Appetite for public transportation.**
- **Strong green streak.**
- **Plus, Americans are driving less overall!**



What's happening?

- 1st & 2nd generation malls & big boxes are struggling.
- Which generates more economic activity, a dying mall or thriving downtown?



More simply:
Employers seek
livable communities,
for employee health,
satisfaction, retention.

The Triple Bottom Line . . .



Prosperity



Planet



**Healthy
Economy**

**Healthy
Population**

**Healthy
Environment**



People



- **Green Infrastructure:** Embrace a broader perspective of system benefits that result from “green infrastructure,” including essential environmental, economic and community health benefits.
- **Scale:** Consistent with the green infrastructure perspective, extend organizational thinking beyond the reservation scale to more deliberately address the interaction with the surrounding community in the Northeast Ohio region.
- **Regional Greenway System:** Focus land acquisition and trail development on filling gaps within the “Emerald Necklace,” providing regional links that connect to adjacent systems, and/or provide open space and recreational resources to underserved areas.

CLEVELAND METROPARKS 2020: THE EMERALD NECKLACE CENTENNIAL PLAN

Executive Summary

prepared by: The EDGE Group | PROS Consulting, Inc. | Wallace Roberts & Todd, LLC



“... essential
environmental,
economic, and
community health
benefits”

www.markfenton.com

So how to get there?



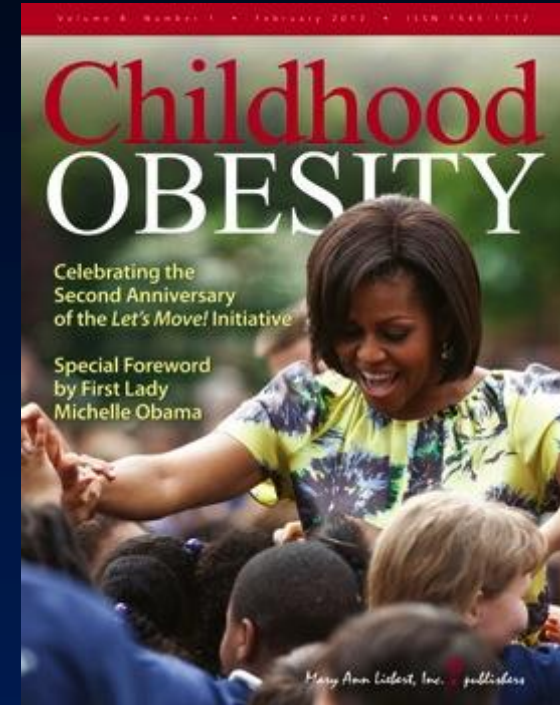
Randolph Park Trail



The evolving physical activity playbook . . .

Fenton, Community Design . . ., *Childhood Obesity*, 8(1); Feb 2012.

- Land use planning & **zoning ordinance**.
- **Complete streets** guidelines & routine practice.
- **Transportation trail** networks.
- Bike & transit infrastructure & incentives.
- **Safe Routes to School**, schools as healthy community centers.



1. Enlightened zoning policies.

- Use Main Streets & compact neighborhoods as a guide.
- Density bonuses for corner stores, affordability, infrastructure improvements.
- Residential clusters in centers, near transit.
- Require *multi-modal transportation* (not just traffic impact) analysis.



More of this . . .



. . . less of this?

Require not just *traffic*, but *multi-modal* transportation analysis for all development.

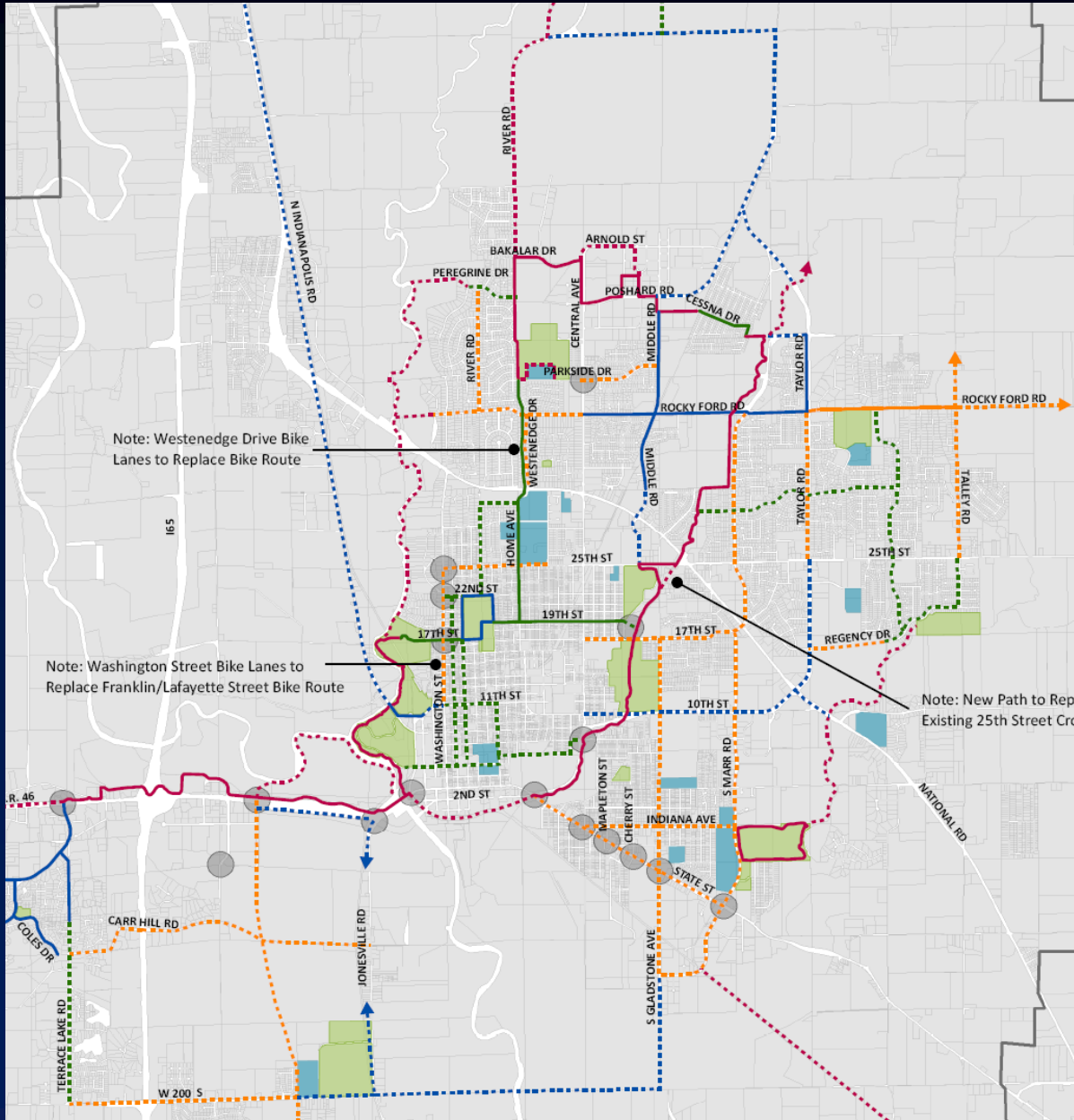


Mitigation = transit, bike, & pedestrian facilities, possibly systemic rather than on site.



Westerville, OH

E.g. Columbus, IN Bicycle & Pedestrian Plan



**Voted into community
Comprehensive Plan.**

Columbus, Indiana Bicycle & Pedestrian Plan



An Element of the
City of Columbus
Comprehensive Plan

Adopted: Month DD, YYYY



**Built opportunistically,
during road widening,
sewer & storm water work.**

2. Build Complete Streets into ordinance:

- All users (pedestrians, cyclists, transit riders, & drivers) of all ages & abilities considered in every road project (new, repair, maintenance).
- Start w/ resolution (*whereas . . . Be it resolved . . .*)
- Incorporate during **routine painting, paving, maintenance, utility work!**



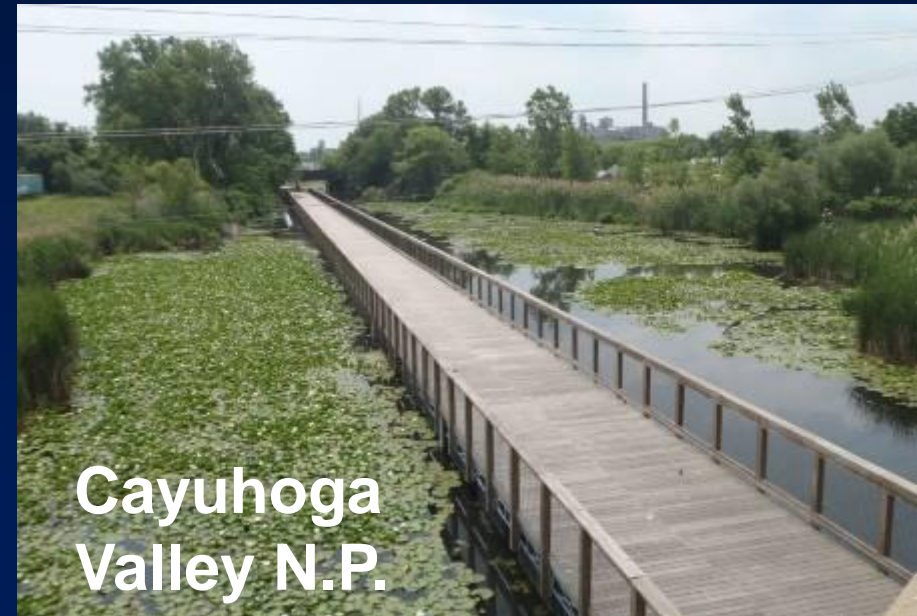
**Wooster Rd.
Barberton**



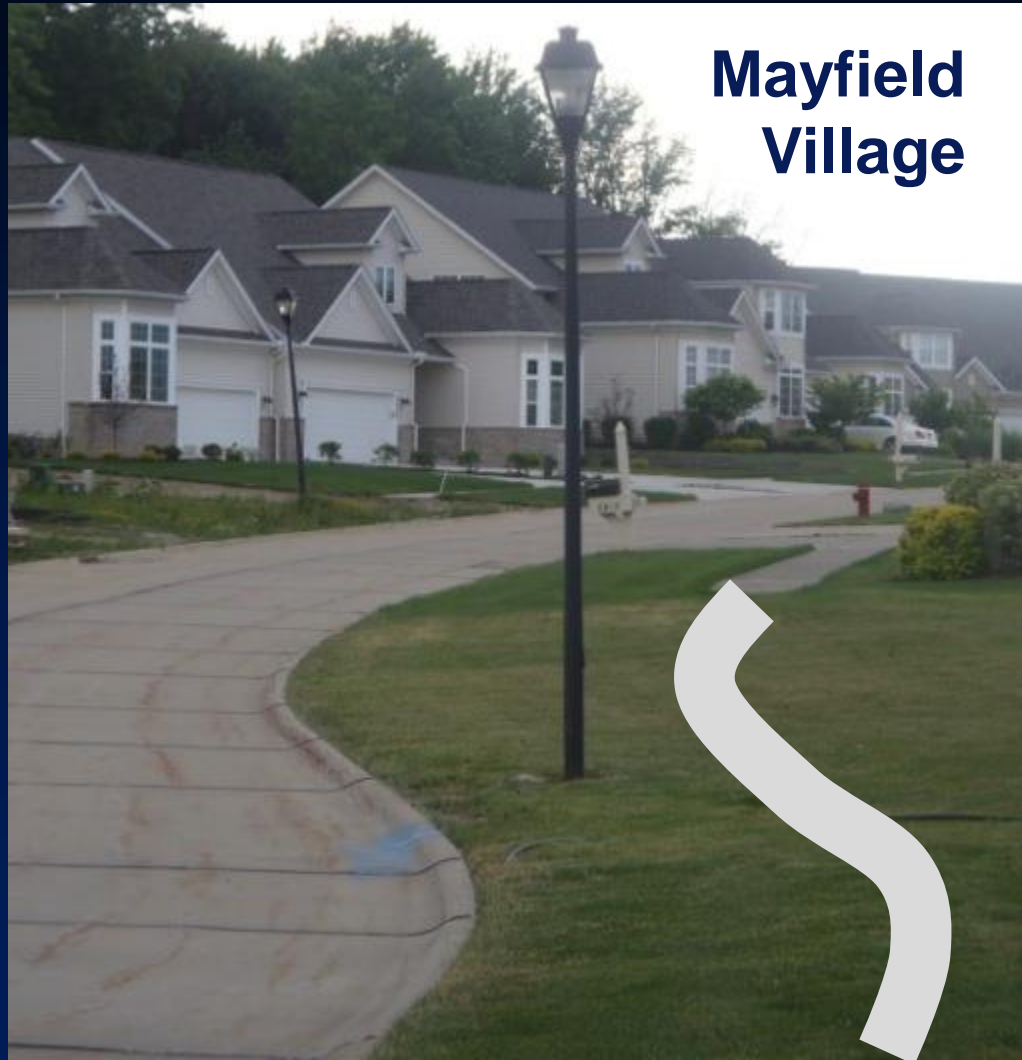


3. Develop a comprehensive network of *transportation* trails.

- **Connect** to other elements of transport network (e.g. sidewalks, bike lanes, transit stops)
- Focus on **destinations** (e.g. schools, shopping, parks, senior housing).
- Build into the **fabric of the community.**



Focus on short links to destinations; boost functionality!



Pursue all possible corridors, including roads, utilities, and rail-with-trail projects.

**See *Rails-w-Trails,*
*Lessons Learned.***

www.altaplanning.com



Blackstone Bike Path, RI

**Highline
Trail,
Eagan MN**

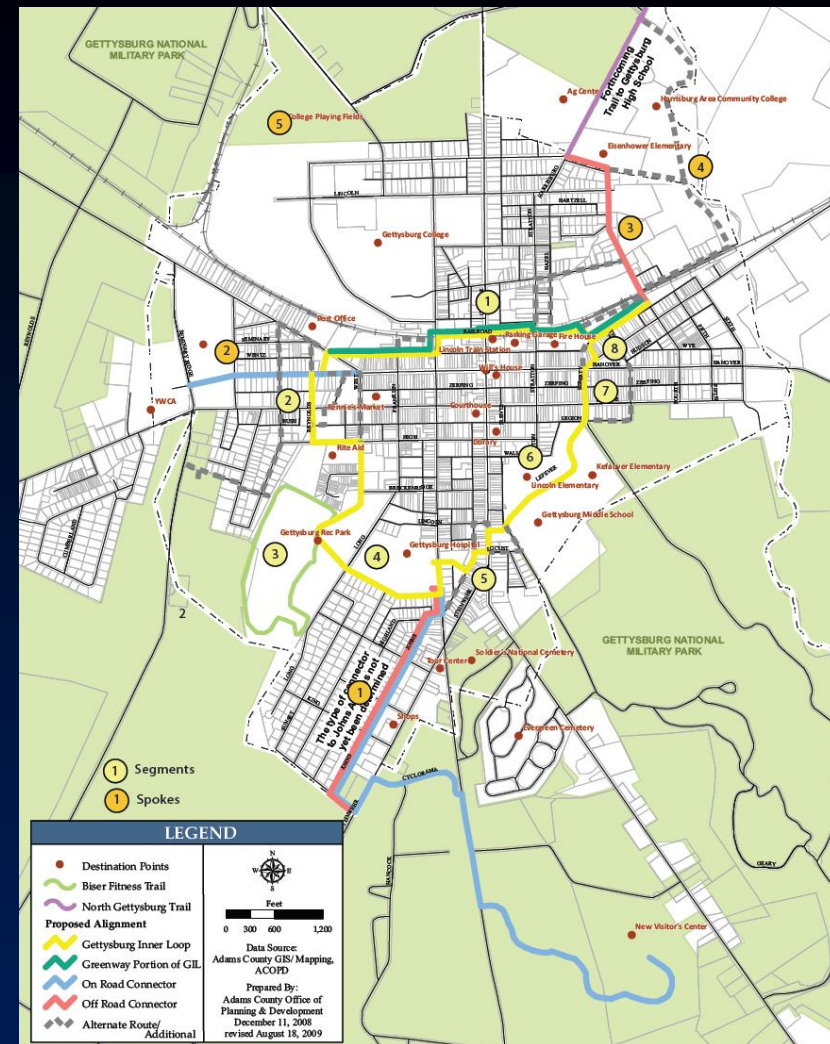


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Plan for maintenance & operation over time.

- E.g. Gettysburg, PA Trail Plan cost estimate included capital construction *and* a maintenance endowment. ➤
- Lack of maintenance will undermine use over time.

Rapid City, SD



E.g., Rivers & Trails Conservation Assistance program, NPS

4. Create bicycle-friendly communities.

- Bike Friendly **Community, Campus, & Business** recognition.
- Bike racks downtown & at destinations: schools, library, farmers market.
- Maps, way-finding signs.
- Bike sharing; start small then grow.

www.bikeleague.org
www.altaplanning.com



E.g. Work Site Walking Path.

Mark or create an “on-campus” loop; tie to **community trails.**

E.g.,

- LL Bean in Brunswick, ME
- Thrivent in Appleton, WI
- Crum Assoc., Dunedin, FL





Progressive Insurance, Mayfield Village



E.g. Model sticky worksite effort.

- **Programs:** Walk, bike, transit to work days; bike mentors.
- **Projects:** Covered, secure bike parking; repair areas; lockers, showers; **loaner bike fleet on site.**
- **Policies:** Earned health care discounts, vacation days.
- **Sticks, too:** Charge the true cost of car parking.



CA Dept of Trans.

5. Safe Routes to School as a catalyst for trails.

- **Evaluate** where kids come from, what mode, & why at each school.
- **Engineer** safer routes.
- **Educate & encourage** safer, healthy behavior (drivers & kids).
- **Enforce** proper speeds, procedures for all.

www.saferoutesinfo.org



www.markfenton.com

Trail 'discovered' in adjoining park >

- **Encourage.** Walking school busses, bicycle trains, safety **education**, events.
- **Engineer.** Extend trail to drop-off area in the park.
- **Enforce:** Relocate bus/car drop-off/pick-up to park; **5 min. car safety delay** to let ped, bike, bus riders clear.

www.saferoutesinfo.com



www.markfenton.com

Core principals (my thought):

- We should all move more . . .
- And simply telling people to exercise **does not work!**
- We know how to build “active communities by design.”
- Trails are **integral & necessary**, but not sufficient conditions for success.
- You must create systemic change!

VISION

LEADERSHIP

Why care about sticky design?

- The **inactivity** epidemic; **our kids may pay!**
- **Quality of life**; safety & comfort; **social equity**.
- **~4,000** pedestrian, **~40,000** motor vehicle, **~400,000** sedentary-related deaths/year.
- **Greenhouse gasses**, over an hour of average commute time/day, traffic congestion and costs.
- Dependence on **foreign oil**; **wars** in Mid-east.
- More eyes on the street, **less crime**.
- Shopping locally, healthier **housing values**.
- Higher employee retention, higher productivity, **lower health care costs**.



**Olshansky et.al., “A
Potential Decline in Life
Expectancy . . .”**

***New Eng. J. of Med.,
March 17, 2005***

