Speak Up, Act Up, & Step Up.

3 Lessons for Healthy Community Design.

> Boise, ID June 2013



Zion Nat'l Park, Lee Pass Trailhead, 3:15 am, May 14.

My lessons:

- The real risk our children face.
- It's not about me/you.
- It's the environment!
 (Overcoming the stickiness problem).
- A call to action: speak up, act up, step up!



Spring run-off in Zion.



Youthful recollections?





Not just my idea...

NATIONAL BESTSELLER Last Child in the Woods

SAVING OUR CHILDREN FROM NATURE-DEFICIT DISORDER



LOUV RICHARD RECIPIENT OF THE 2008 AUDUBON MEDAL

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

Pix Alexandra

OLYMPIC politin and Shans Cought has blashed chaldren's sports programs as "over organized" and holding hack the natural development of preside shifts contributing the physical stud noctal problems from the track. The reinpost who woo five stativities mediate at the 2772 Musica Olympics, vestanday nicke car against children as wante as five being pushed into



had at the Ann' Indust Institute of Public Minspectrers annual thirdeferture in A.S. Statist

"I believe that ituitives, and distributional and they that't nam more rather than exercise have enough opportunity are for The Australian, 14-Oct-2009

tohis water water in and the term metary defect that is pooly too discriber - of's not actually a true disorder, but we are bling Inwhich to see gootherns in children His concernation, issue shifty to even though & a mendate their emotions

Correctly working dit is 2029ters degree in book groupinging at the University of Taumanta Goold will publish her thought. on children's physical activity in the Osympton issue of the Child. middigetures in state capitals.

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ren's shifty to play midarally. "Public lighter sector he had the main focus for the design of. our children's plupprounds and all all us need to take some monomability for this ** Genil BOTCHES.

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"Children prefirs & Sog 400 8 detris to play structures."" Speaking after hir address.

Gould said home-improvement. TV shows emphasizing and adcally pleasing courtwards liad encourantel people by ditch traditional backsurds.

"Wids need Encloyards - they mend to dig dirt and guil up plants and sor the roots. They need to fied worms and beetlet and anthe ling has eviden blind that valuent times from again." the still

A mother of lists, Gould tapped hay children on a property of Margaret River in Western Autening where outdoor activity way an emportant part al every by life. in the article, Gould argues the Howard governments's focus on after achool sports to address childhood obesits was much meaning" but failed in attract most children who utten had a "can't do" attitude to sports.

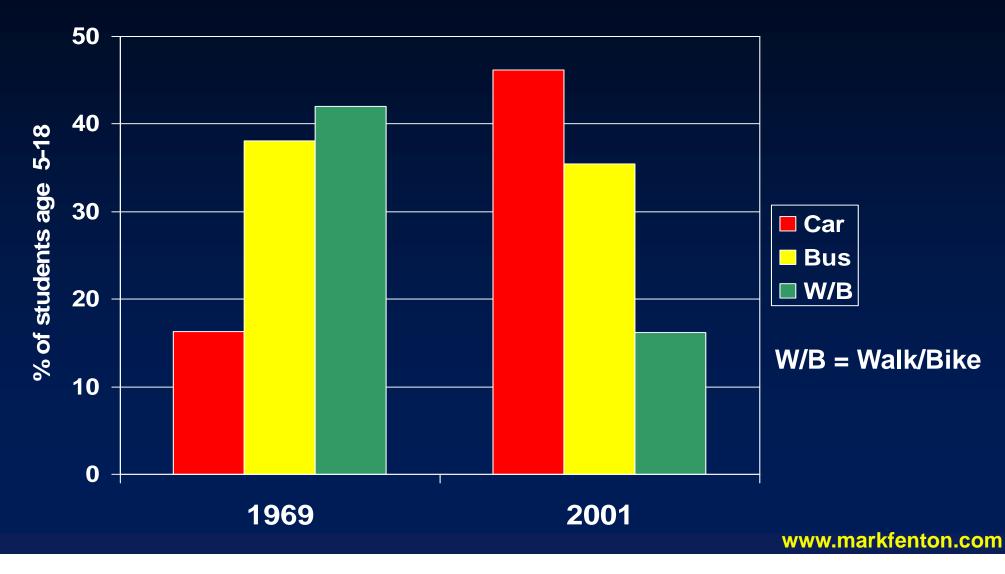
"Children, particularly woder malth, do not, in my opinion. next to be involved in organised statute," viar wydres.

Gould used children bodge were r turner through "likely of powerpent, experiences" inght as praching alamborie haraping and sportant

Howeyoursey at the mathematical and an and

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

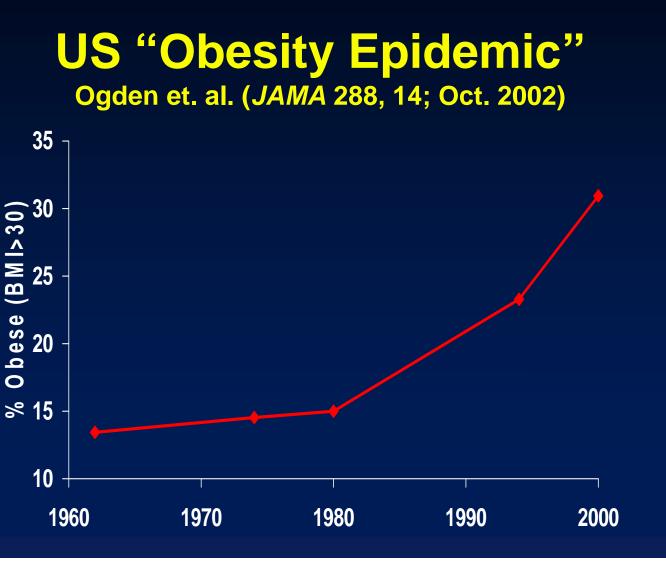
2-5 Years of Age
6-11 Years of Age
12-19 Years of Age



Centers for Disease Control and Prevention. National Health & Nutrition Examination Surveys.

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

The *real* risk the next generation faces . . .





My rant: Change the discussion. 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. Three numbers describe the epidemic of physical inactivity:
30 Minutes of daily physical activity recommended (60 min. for youth).

20 % of Americans who meet the 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

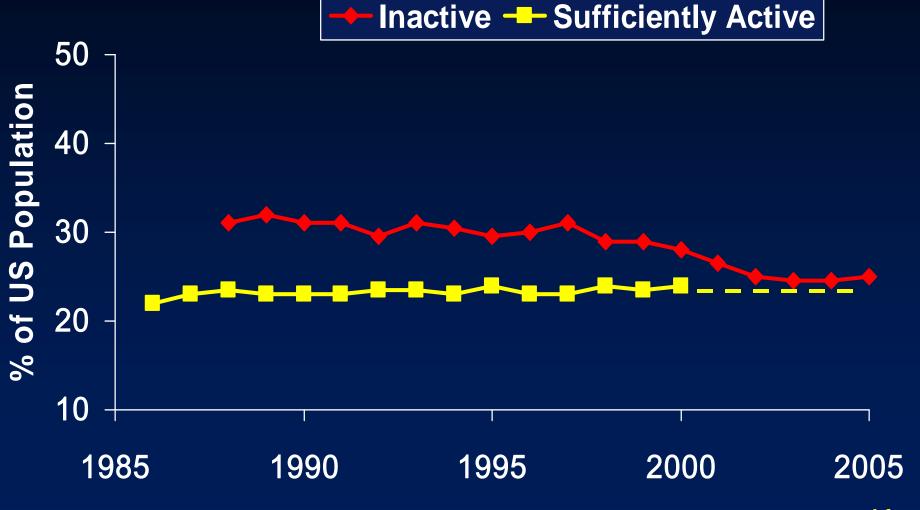
www.health.gov/paguidelines

- 150 mins/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!

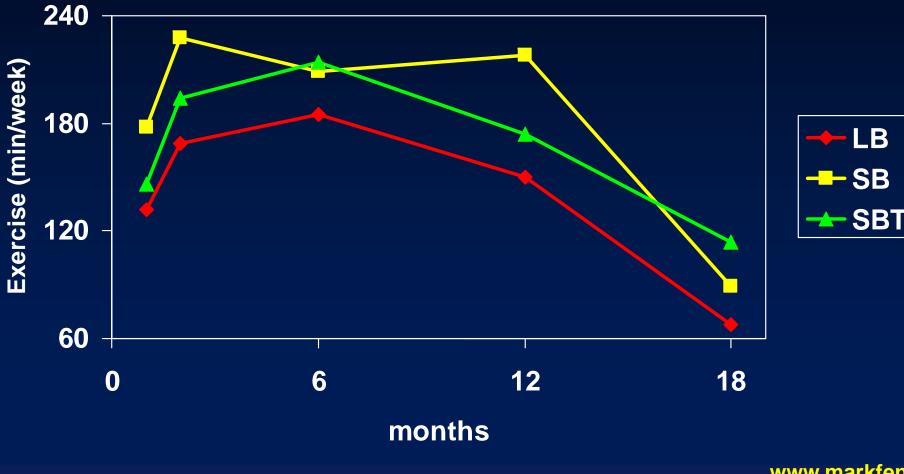
Leisure Time Physical Activity in the US (MMWR: 50(09), 166-9; 54(39), 991-4)



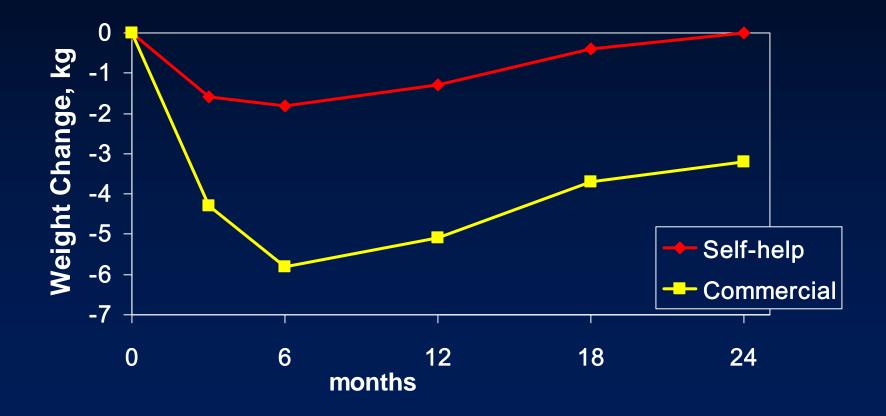


At least in part the stickiness problem.

Exercise Participation Effect of Short Bouts, Home Treadmills (Jakicic et.al., JAMA 282, 16)



Self-help vs. Commercial Weight Loss Programs (Heshka et.al., JAMA 289, 14; April 9, 2003)



Social Ecology

Sallis & Owen, Physical Activity & Behavioral Medicine.

Individual motivation, skills

Interpersonal - family, friends, colleagues Determinants of behavior change

Institutional - school, work, health care & service providers

Community - networks, facilities

Public Policy - laws, ordinances, permitting practices & procedures

Easier to Implement

Individual motivation, skills

Interpersonal - family, friends, colleagues Greater Impact

Institutional - school, work, health care & service providers

Community - networks, facilities

Public Policy - laws, ordinances, permitting practices & procedures

Socio-ecological successes?

Tobacco Use is Prohibited on Marlborough Hospital Property

Tobacco use

Seatbelts, child safety restraints



Water-borne disease

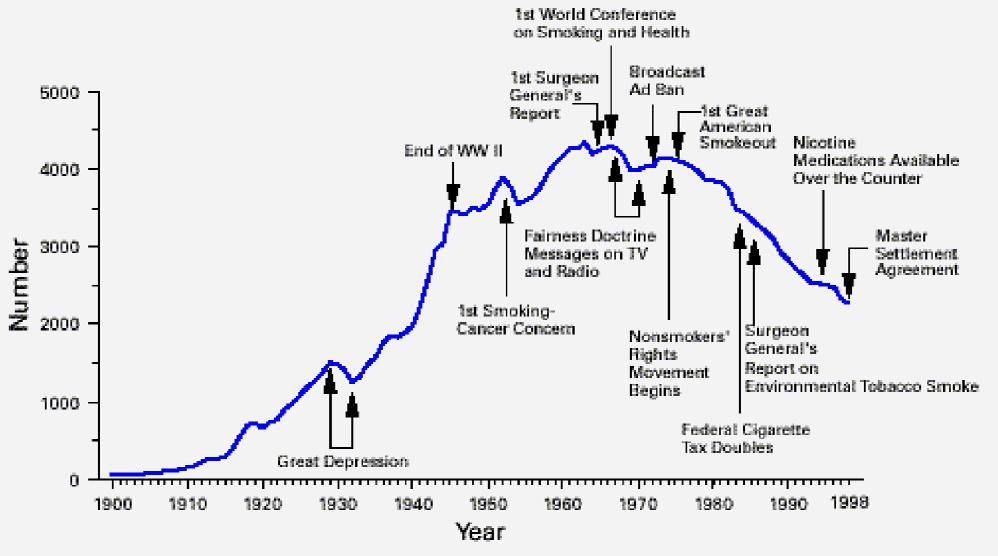


www.markfenton.com

Recycling



FIGURE 1. Annual adult per capita cigarette consumption and major smoking and health events — United States, 1900–1998



Sources: United States Department of Agriculture; 1986 Surgeon General's Report.

Thanks to Prof. Ross Brownson, Wash. Univ., St. Louis



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Necessary and important, but not enough. >



Quiz II: Find 10 signs of activity supporting environments & policies.





Swift Current, Saskatchewan

10 Signs of a truly Active Environment in Swift Current, SK.

- 1. Sidewalk exists and . . .
- 2. It has been cleared, and . . .
- **3.** Ice rink is located in neighborhood.
- 4. Two sheets; boards for older kids; lights.
- **5.** Back alley garages, utility poles = better sidewalks.
- 6. Informal game, kids developing "life" skills.
- 7. He kept a wary eye on us while there ...
- 8. Corner store where he can stop for a snack, drop off mail, pick up something for mom.
- 9. It's a really cold day (~ -20C) and he's still walking.
- **10.** Parents believe it's safe enough for walking.

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

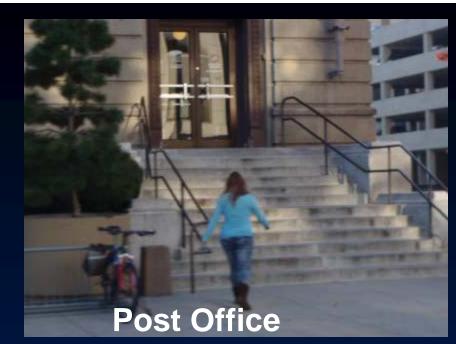
www.thecommunityguide.org





In planner language:

- Mix of land uses; varied clusters.
- Comprehensive network, all 4 modes.
- Functional & inviting site designs.
- Universal safety & access for all.





1. Land use.

Varied destinations in proximity.





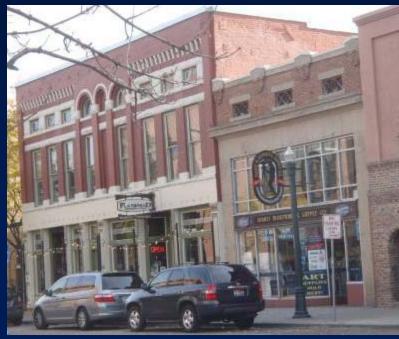


E.g. post office, grocery, schools

Compact neighborhoods & shared open space.



Mixed use, multifamily. Housing above, retail below.



2. Network encourages active travel with:





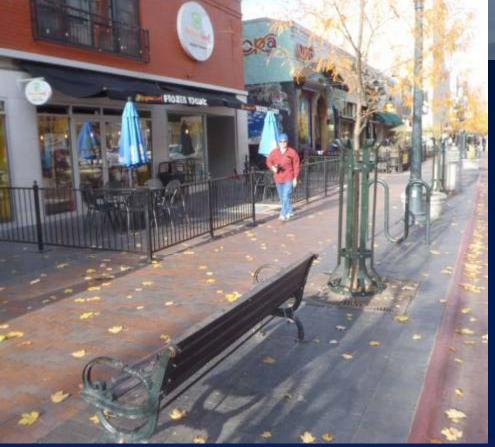


- Presence of sidewalks, trails, bike lanes, sharrows.
- Shorter blocks, cul-de-sac cutthroughs, more intersections.
- Access to quality, reliable, affordable *transit*.



3. Site design:





Which setting seems more appealing for travel on foot and by bike?

Site design?



- 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 (bike parking req., bonus).
- Build-to, not set-back requirements.
- Residential bonus.
- Expedite permits.



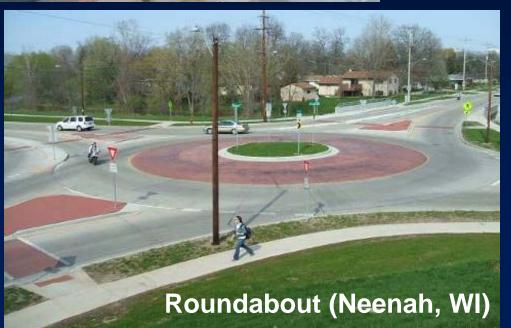


Elected & appointed officials must be supported if you expect them to act courageously!

4. Safety.



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





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

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







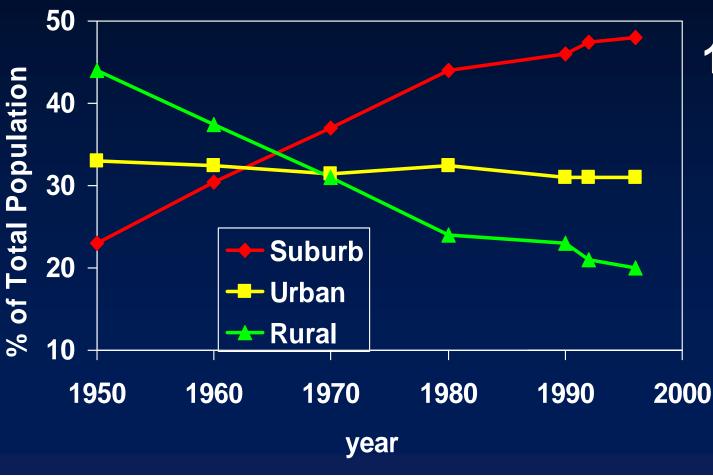
Reverse angle:
Fewer, less severe collisions.
Safer for bikes.
Slows traffic.





"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 you can affect the shape of development before it's done!

"Rural" housing?







Five Elements of Healthy Community Design:









Healthy affordable



www.activelivingresearch.org

How do you help?

- Speak up: To family & friends, students, colleagues, the media, especially community leaders.
- Act up: Help improve the built & policy environments for P.A.
- Step up: Be a role model—build lifestyle activity into your day!

Speak up:

- Not just an obesity epidemic; twin epidemics of physical inactivity & poor nutrition!
- Suggest, prescribe physical activity to students, administrators, patients, family, friends, colleagues, everyone.
- Help build active lifestyle skills for every day activity, not just structured exercise.
- Be a vocal advocate for more walkable, bicycle-, & transit-friendly communities.

Act up: Support five national movements changing the physical activity landscape.

(Fenton, Community Design & Policies for Free Range Children, *Childhood Obesity* 8(1), Feb 2012)

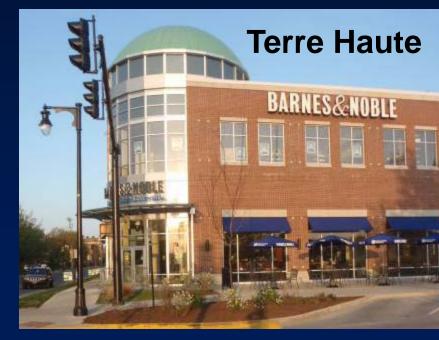
- 1. Healthy planning & zoning.
- **2.** Complete Streets.
- **3.** Transportation trail networks.
- 4. Transit- & bicycle-friendly policies.
- **5.** Comprehensive Safe Routes to School.

's Move! Initiativ

1. Show up at a planning or school board meeting. Testify in behalf of:

- Keeping schools close to where kids live!
- Neighborhood corner stores, pocket parks, services...
- No more big box & strip malls—build villages!

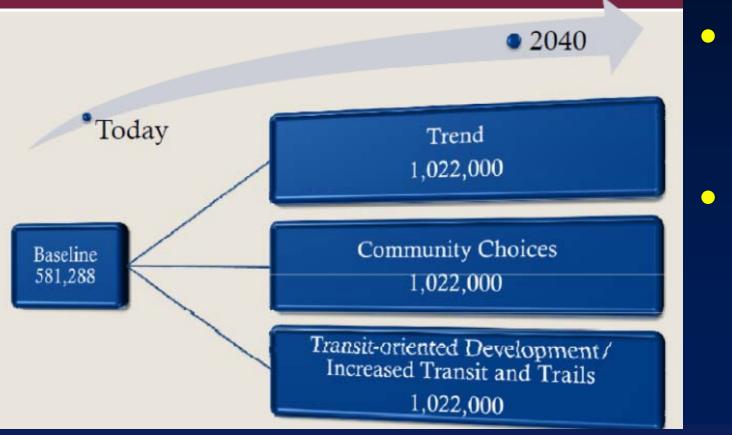




www.activelivingbydesign.org

Communities in Motion 2040:

- Transit, Trails, & Transit Oriented Development (TOD) option most in-line w/ healthy design.
- Steer, don't just respond, to land use.



E.g. Health Impact Assessments. Count costs of physical inactivity!

2. For ACHD, COMPASS actively support:

 Complete Streets. All users (pedestrians, cyclists, transit riders, & drivers) of all ages & abilities considered in every road project (new, repair, maintenance).





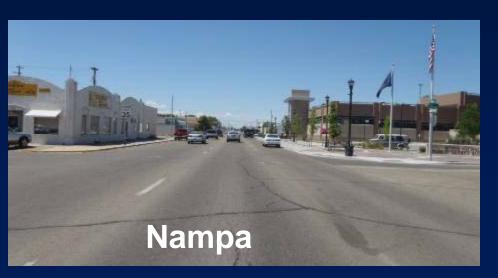
www.completestreets.org

Some challenging CS work:

 Complete Streets: during paving, painting, maintenance.
 Multi-lane one-way roads w/ one purpose.



4-lane, one-way streets?

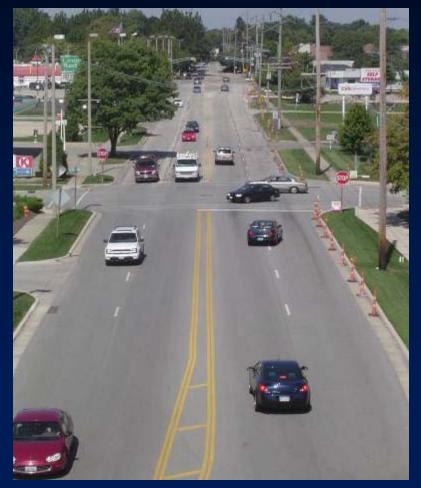


www.completestreets.org



Chinden, designed for 35 mph?

Lane re-alignments Often called road diets, being seen more often.

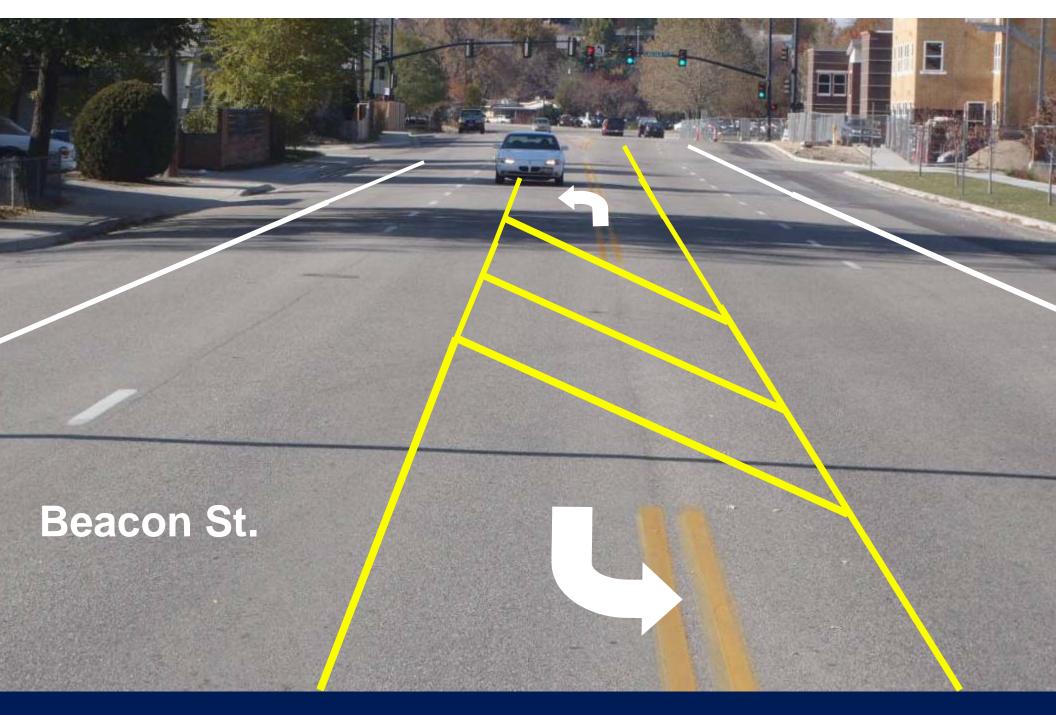


Urbana, IL; before & after.



 Can reduce collisions & severity.

 Dramatically improves performance for pedestrians & cyclists.



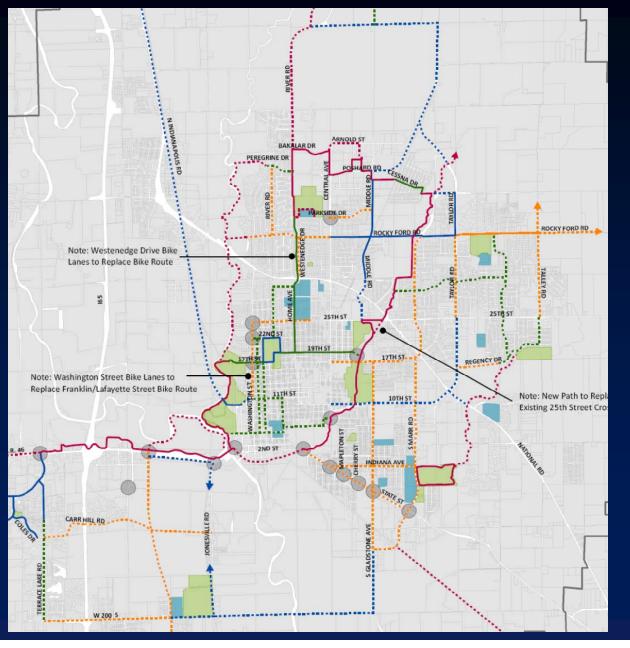
3. Support a comprehensive network of *transportation* trails.

- Connect to other parts of network (sidewalks, bike lanes, transit).
- Focus on destinations (schools, shopping, parks, senior housing)
- Balance the cries of the NIMBY, BANANA, & CAVE people.





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

4. Work for a bicycle- & transitfriendly community.

- Bike Friendly Campus or Bike Friendly Community rating (bronze to platinum).
- Student, staff ID's as transit passes. Use them!
- Community "buy a bike rack" program.
- Teach bicycle skills, safety, repair in your school. > www.bikeleague.org









The High Cost of Free Parking D. Shoupe





Boise Bicycle Project – skills, maintenance, ...

5. Safe Routes to School – more than just an encouragement program!

- All 5 E's: Engineer bike lanes, racks, sidewalks; educate & encourage walk/bike groups; enforce proper speeds.
- Measure BMI? Must evaluate how kids get to school (walk, bike, bus, car) and why ... !

www.saferoutesinfo.org









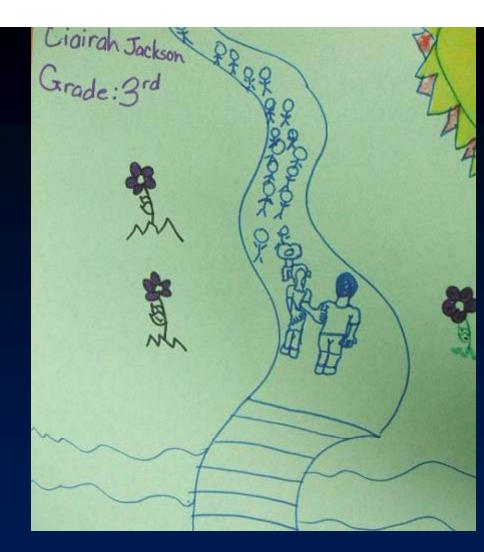




What did the kids think? The ENVIRONMENT

• "I had to walk with my little brother to keep him out of trouble . . ." (Ciairah)





 "We saw a dog across the creek, in the trees" (Jarrette)

What did the kids think? FUN.

• "This is Tyshion falling in the water off of the bridge . . ." (Khalil)





• "This is the pipe the water comes out of, and this is Khalil falling in the water . . ." (Tyshion)



Recommendations:



- Do this all the time, not just as an "event."
- Improve the trail through the park.
- Plant a garden, trees along the way.
- 5 minute safety delay on cars at dismissal. www.saferoutespartnership.org www.saferoutesinfo.org

Step up: Be an active role model.

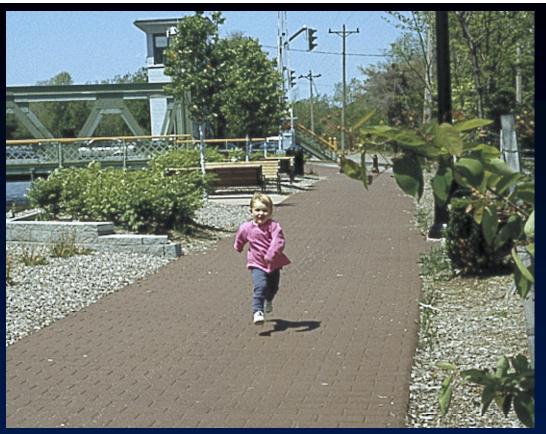




Leave the car behind at least one trip per week; walk, bike, or take transit instead. And take a friend along.

Why care about stickier communities for active living?

- The inactivity epidemic; our kids may pay!
- ~4,000 pedestrian, ~40,000 motor vehicle, ~400,000 sedentary-related deaths/year.
- Carbon footprint, air & water pollution.
- Failing transport infrastructure; hour+ commute time/day, traffic congestion & costs.
- Dependence on foreign oil; wars in Mid-east.
- More eyes on the street, less crime.
- Livable communities, where employers want to locate.



Olshansky et.al., "A Potential Decline in Life Expectancy" *New Eng. J. of Med.,* March 17, 2005



Brockport, NY