

# Creating a *Healthy* Community by Design

—

North Central District  
Health Department

Ellington, CT  
June 2015



An active role model on  
Ridgeview Drive.

[www.markfenton.com](http://www.markfenton.com)

## Typical thoughts:

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



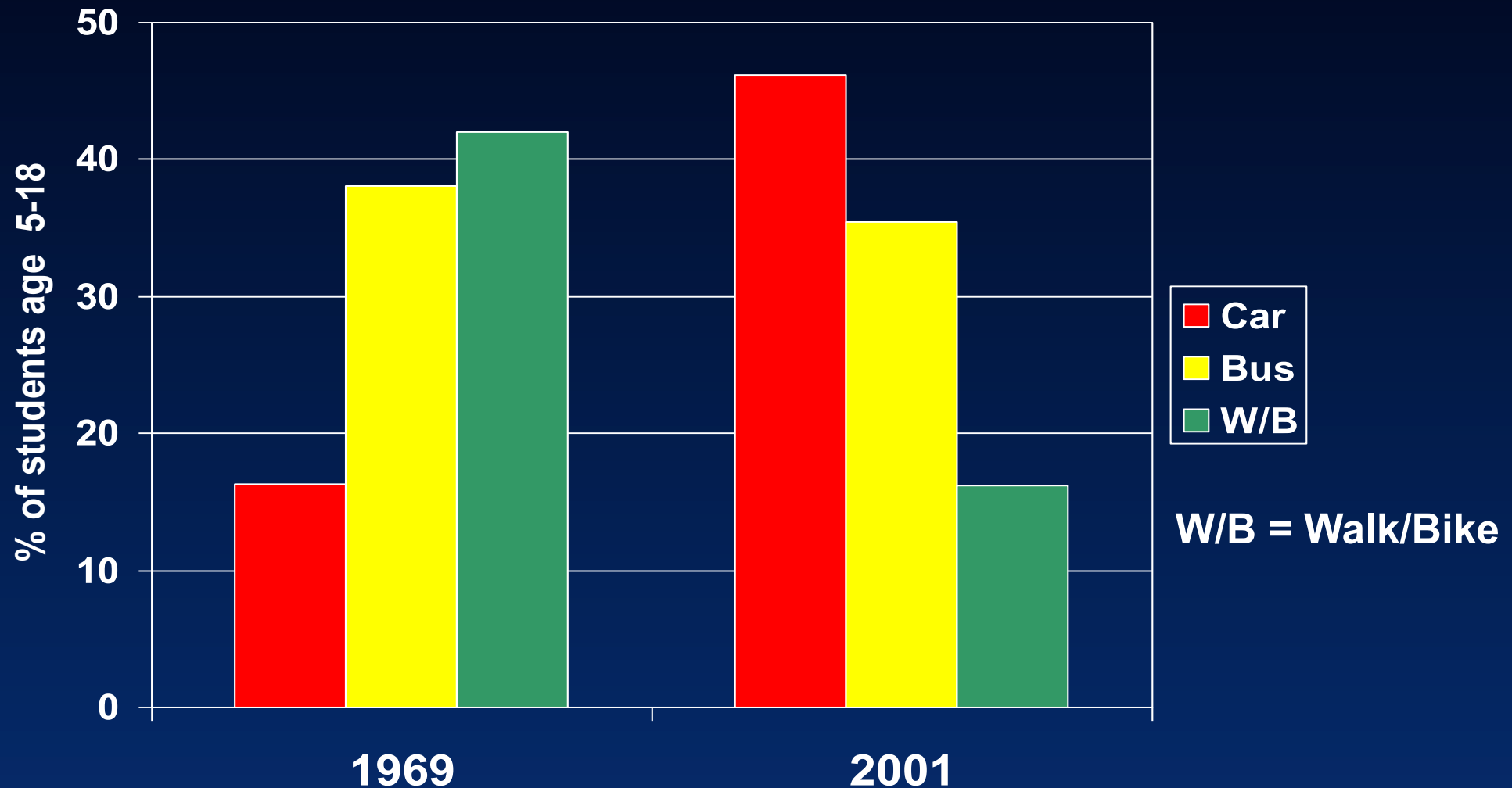
We just have to get motivated, right?

# Youthful recollections



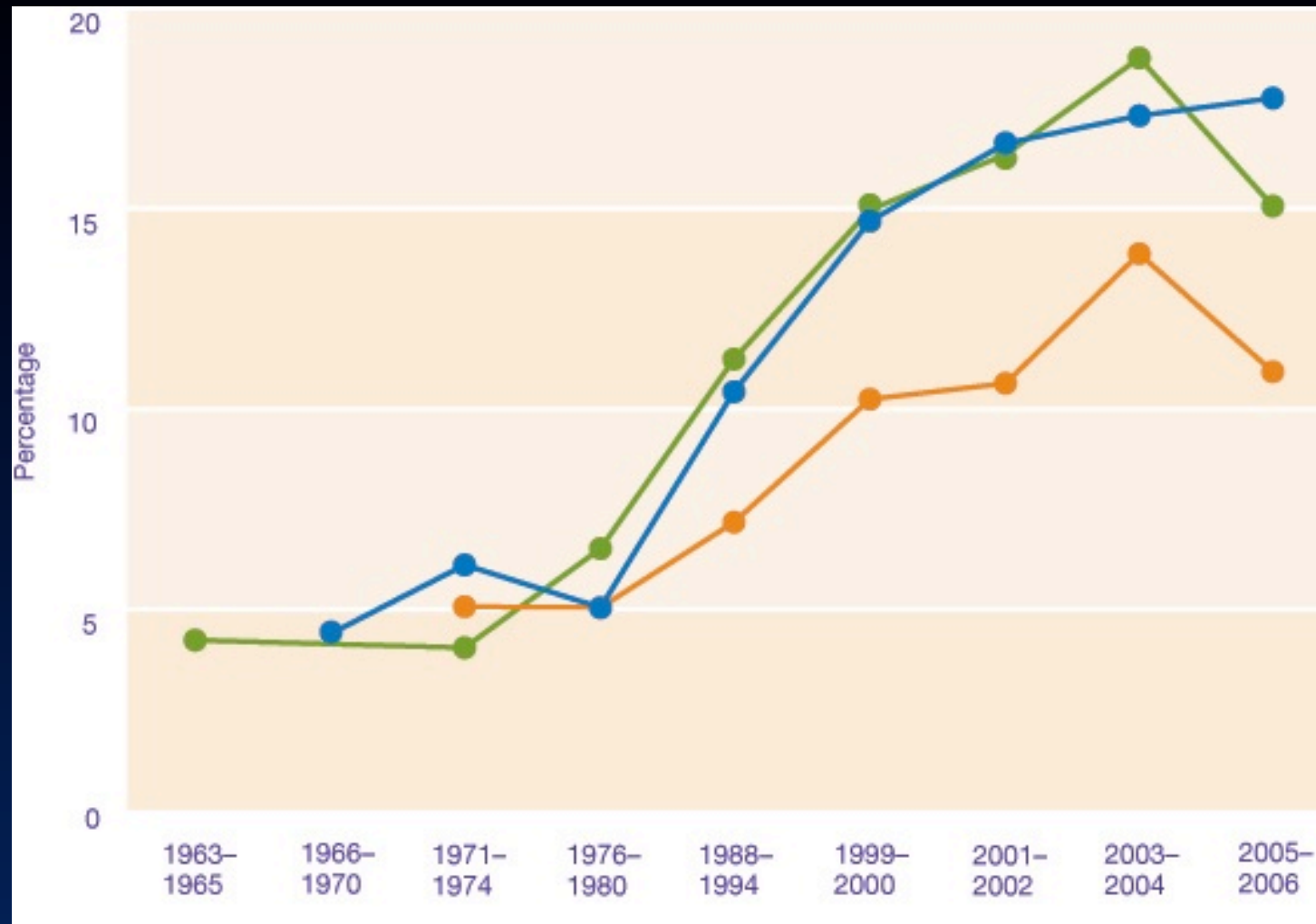
# Changes in Walking & Cycling to School, 1969 to 2001

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.*

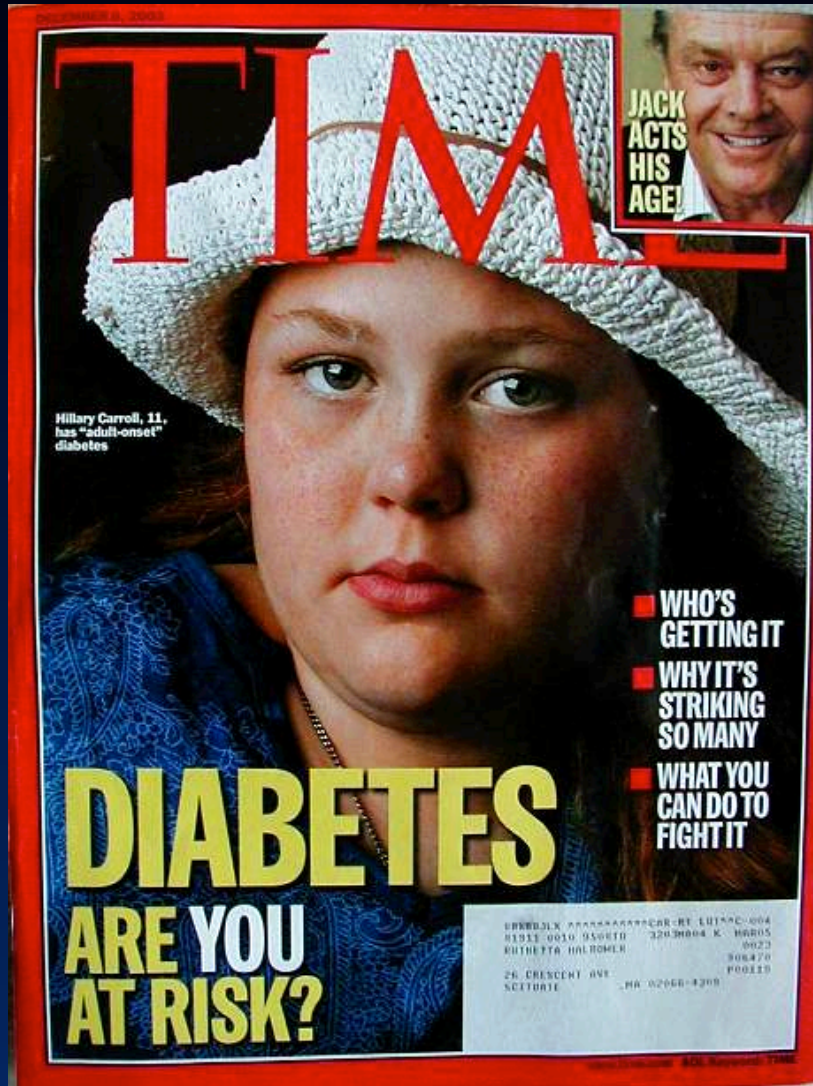
[www.rwjf.org/files/publications/annual/2008/year-in-review/](http://www.rwjf.org/files/publications/annual/2008/year-in-review/)

[www.markfenton.com](http://www.markfenton.com)



30-Nov-2009

The real risk our children face . . .



## The 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 Americans actually meet these recommendation (thru LTPA).

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



# Surgeon General's Report 1996 Physical Activity Guidelines 2008

[www.health.gov/paguidelines](http://www.health.gov/paguidelines)

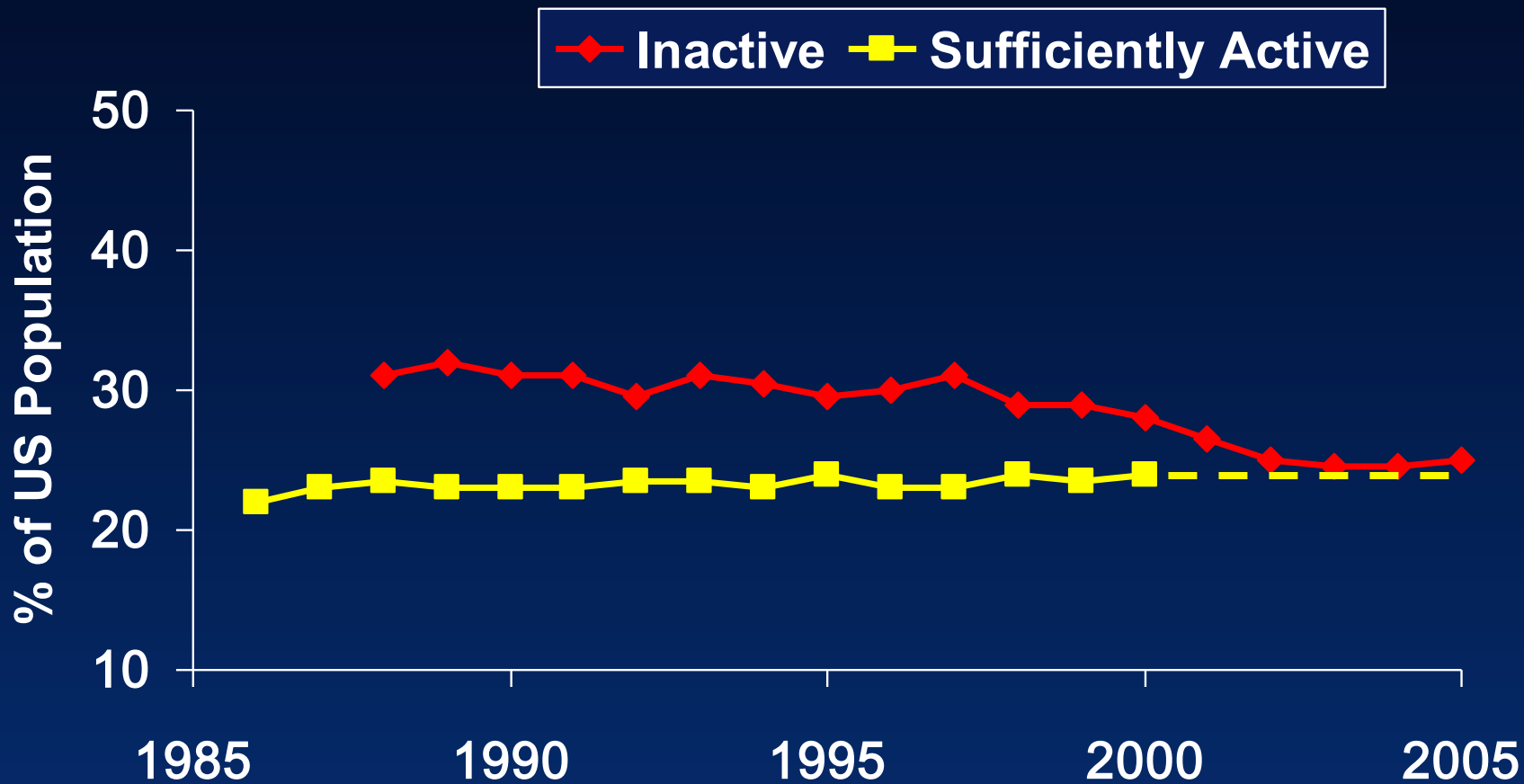
- **150 min/week** of moderate **physical activity**; more is better.
- Any activity is better than none.
- Can be **broken up**.
- **300 min/week** for children.
- Reduced risk for CVD, diabetes, osteoporosis, obesity, dementia in old age, clinical depression, a growing list of cancers . . .



**This counts!**

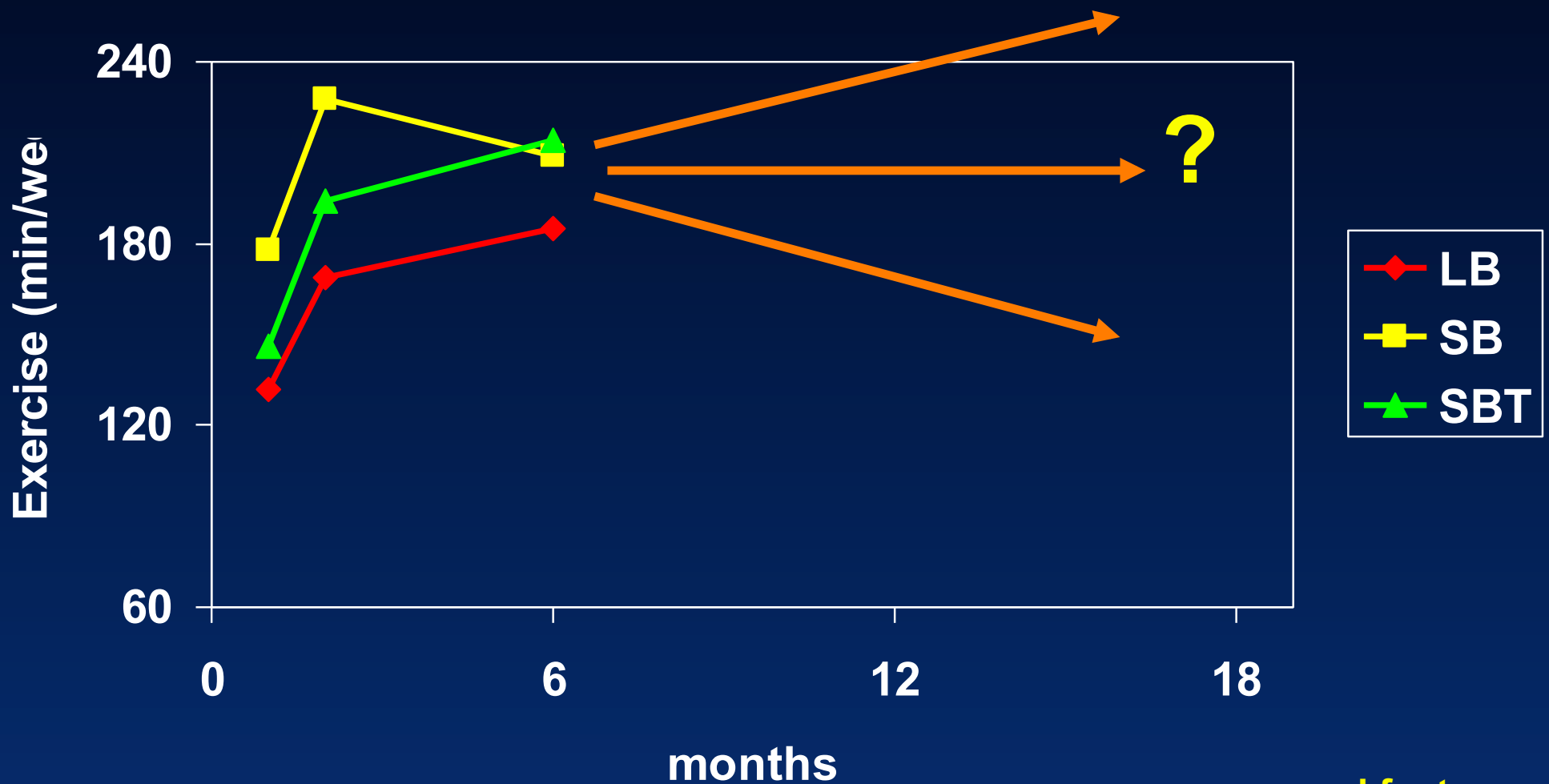
# Leisure Time Physical Activity in the US

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



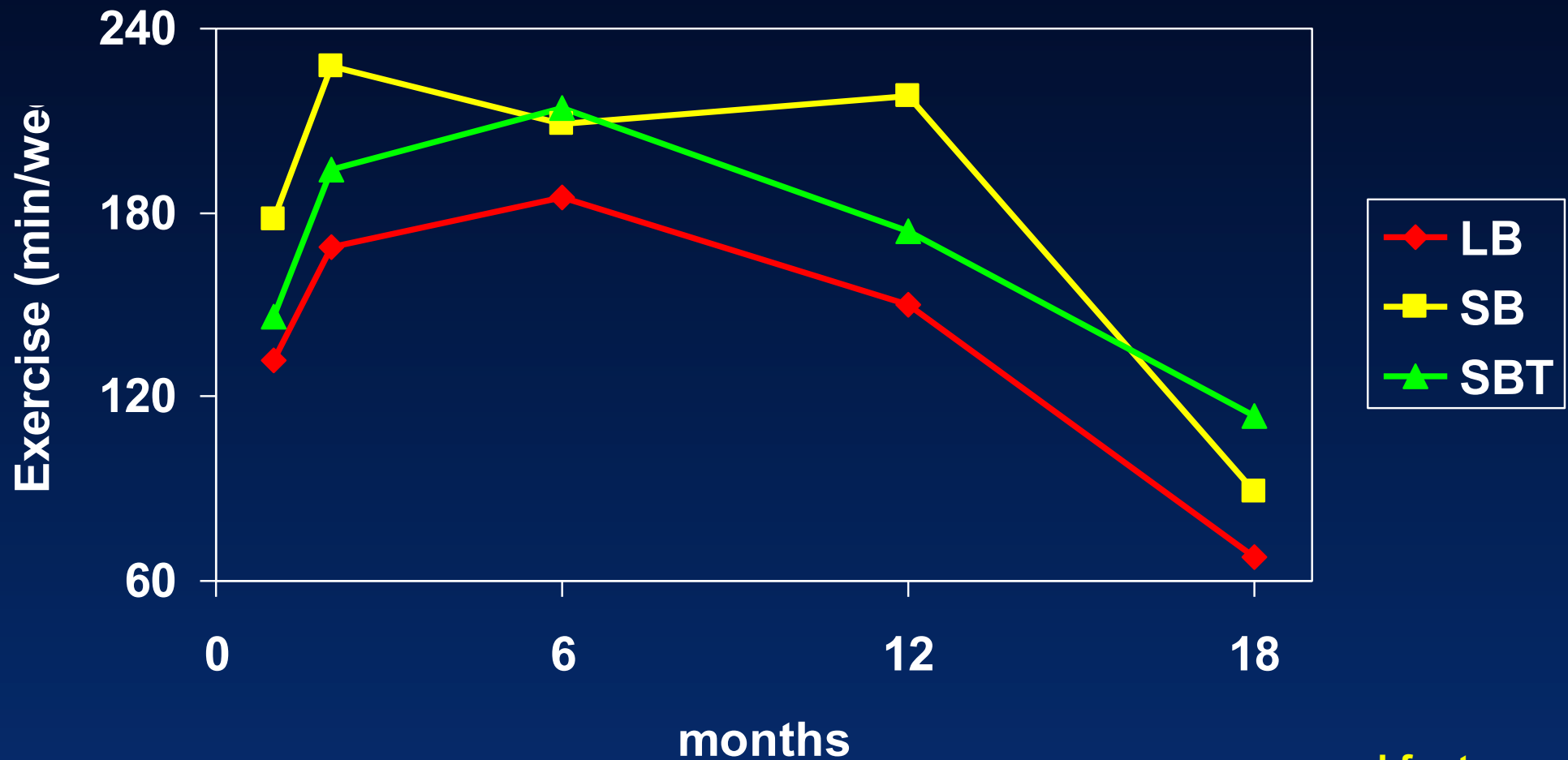
# Exercise Participation

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



# Exercise Participation

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



## **A realization:**

Simply telling 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**

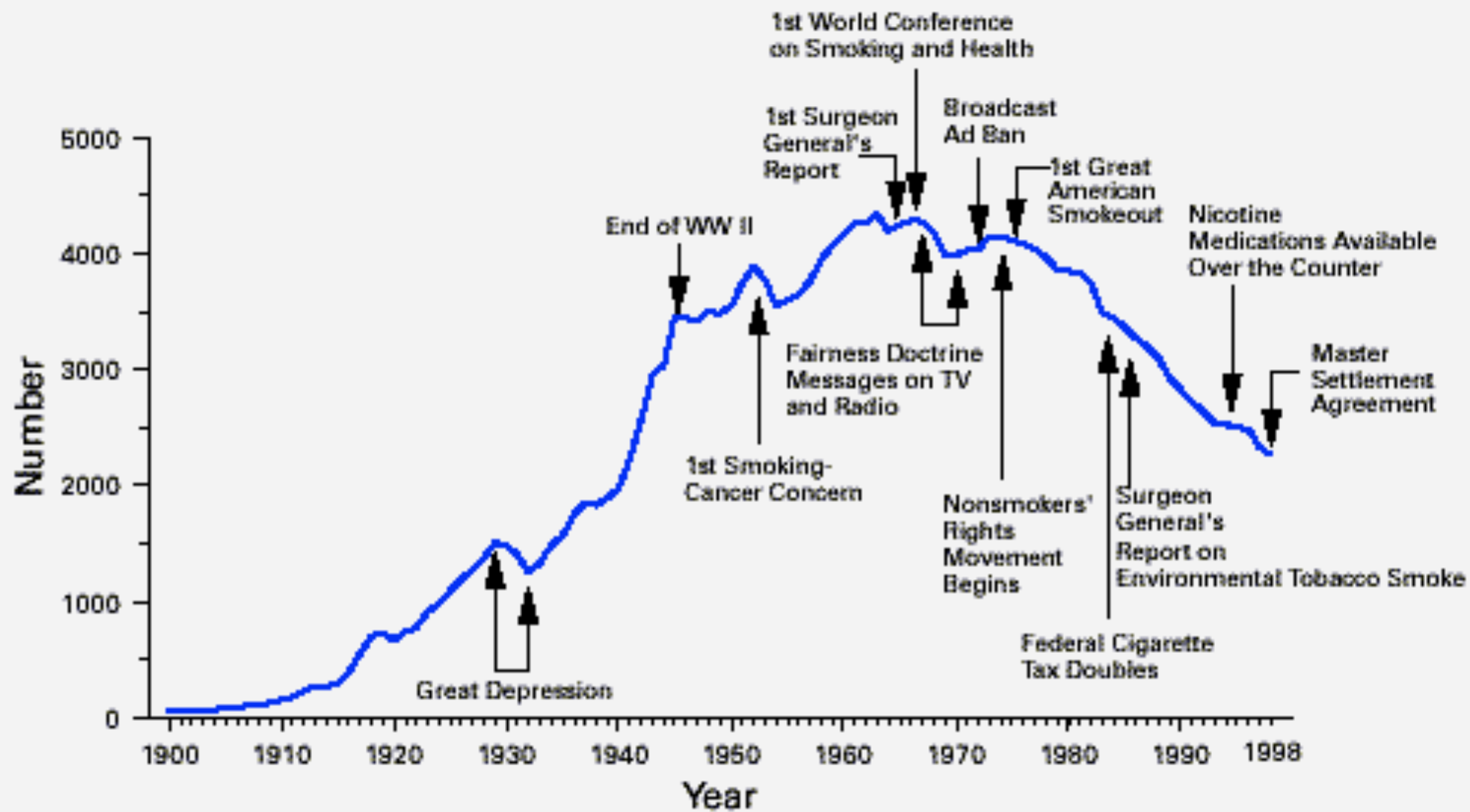
**Haiti**



**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.



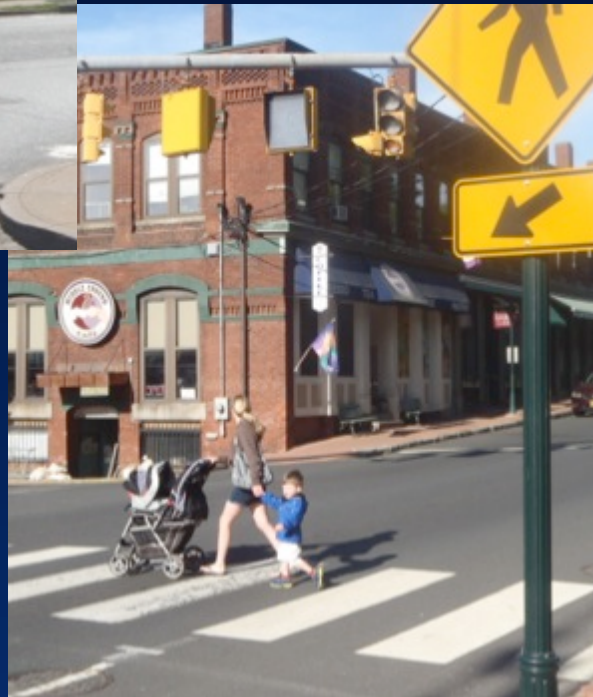
**Necessary and  
important,  
but not enough. >**



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

Windham

Stafford



Vernon



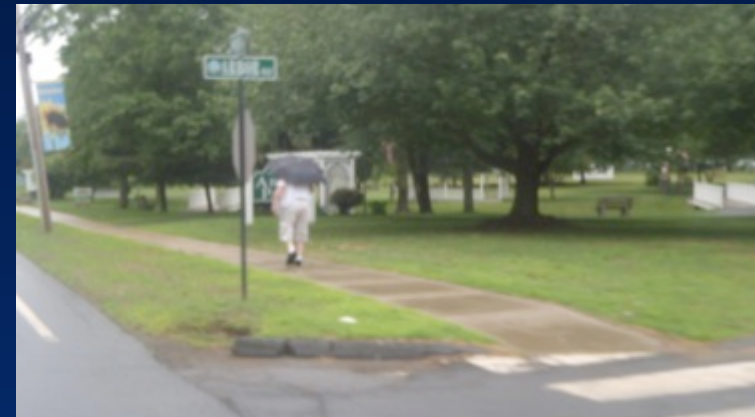
**If we build it, will  
they come?**

# Four elements for activity:

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



Frank



[www.thecommunityguide.org](http://www.thecommunityguide.org)

CDC Guide to Community Preventive Services

[www.markfenton.com](http://www.markfenton.com)

# 1. Land use.

Live, work, shop, play, learn, pray.

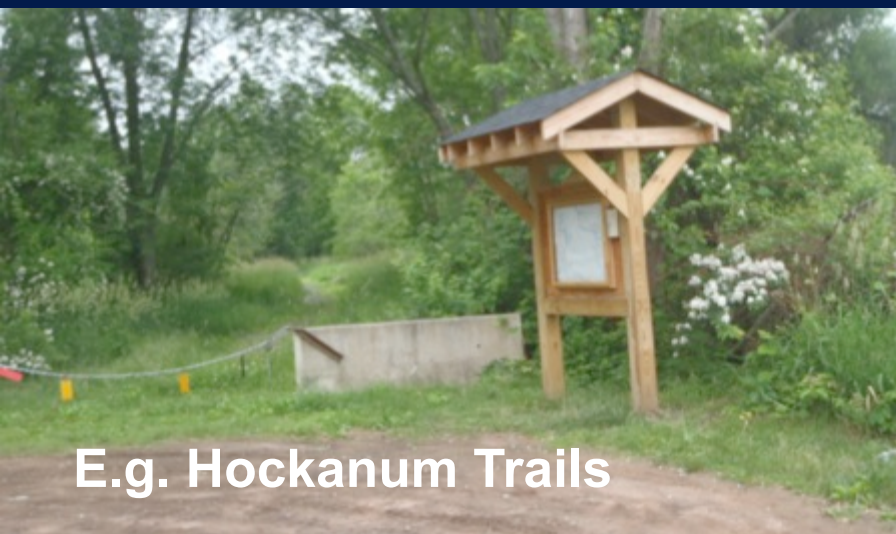


E.g. post office,  
grocery, schools



Essentials . . .

Compact neighborhoods  
& shared open space.



E.g. Hockanum Trails

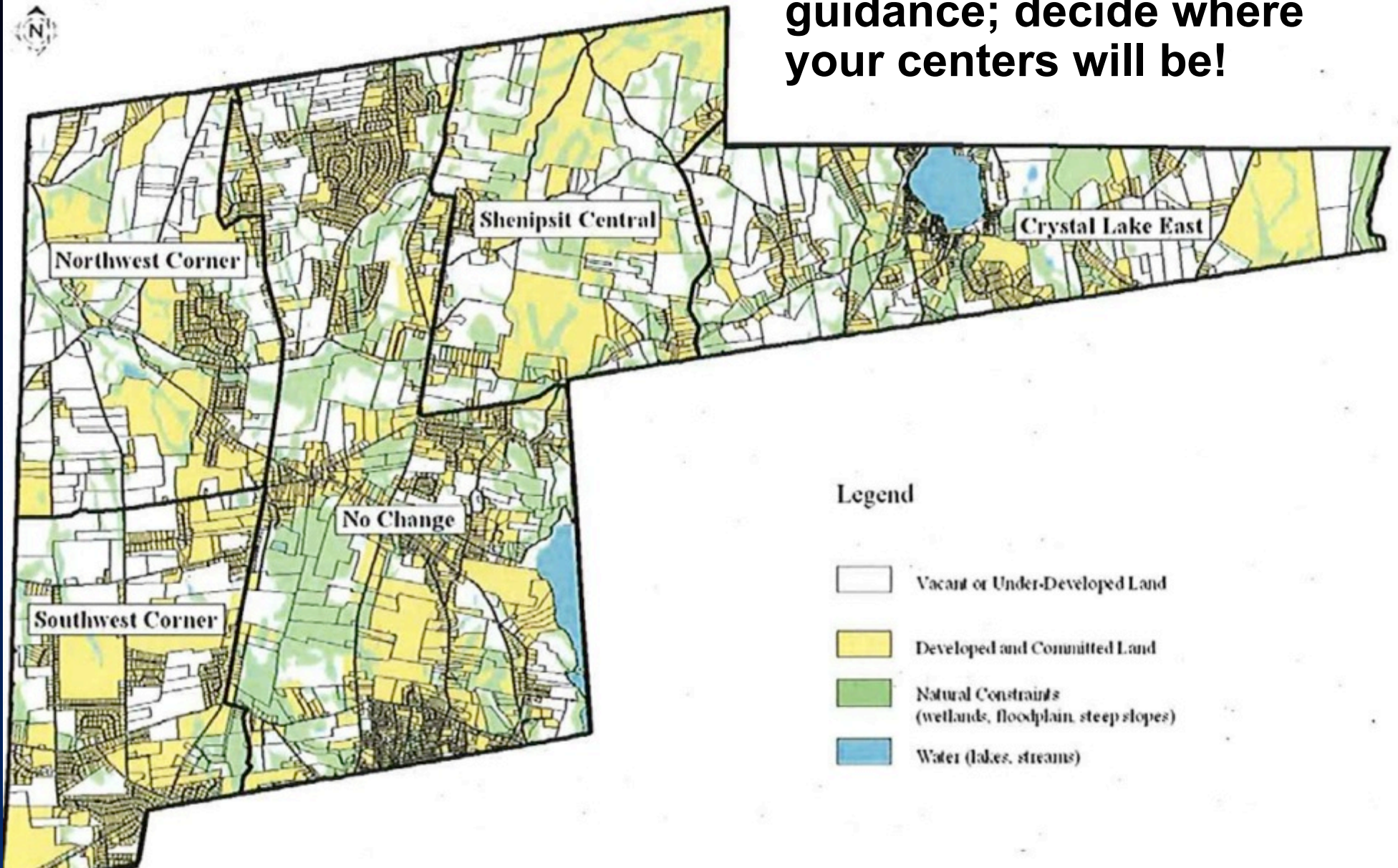
Housing  
above,  
retail  
below.



[www.markfenton.com](http://www.markfenton.com)

## Buildout Study Map

**Sprawl continues w/out guidance; decide where your centers will be!**



## 2. Network is more complete with:



- Presence of sidewalks, bike lanes, pathways.
- Shorter blocks, links between cul-de-sacs.
- Access to trail, park
- Reliable *transit*.





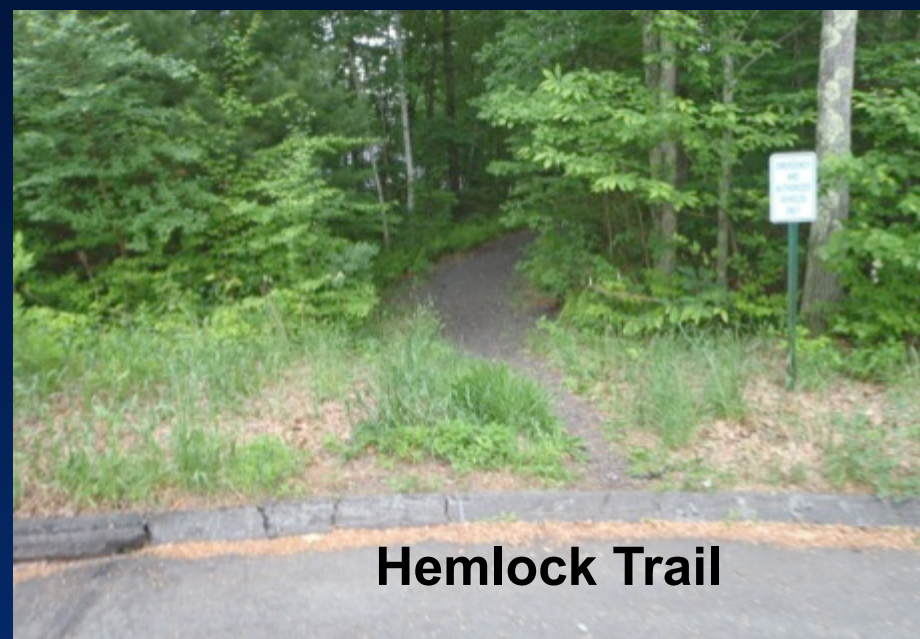
**Crystal Ridge Dr.**



**Azalea will connect to Ladd Rd.**



**No connections to Tolland . . .**



**Hemlock Trail**

# Bicycle network options:





# 3. Site Design:



Vernon

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



## Possible incentives:

- Decrease, share parking; include bike requirement.
- Build-to, not set-back requirements.
- 2<sup>nd</sup> story office, residential
- Expedite permits.



Neenah WI



Appleton WI

**Elected, appointed officials & staff must have support if they are to act courageously!**

**MEADOWVIEW**  
PLAZA

<b>ECHN</b> Medical Offices	<b>ECHN</b> Medical Offices
<b>CHINA EAGLE</b> CHINESE RESTAURANT	<b>ELLINGTON DENTAL ASSOCIATES, P.C.</b>
<b>PIZZA</b> BECOME A COOK	<b>NAIL SPA</b>
<b>verizon</b> WIRELESS	<b>COUNSELING</b>
<b>ELLINGTON CENTER LIQUORS</b>	<b>AMERICAN KARAOKE</b>
	<b>SWISS CLEANERS</b>

**SUBWAY**



## 4. Safe access.

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



Median islands



Curb extensions

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

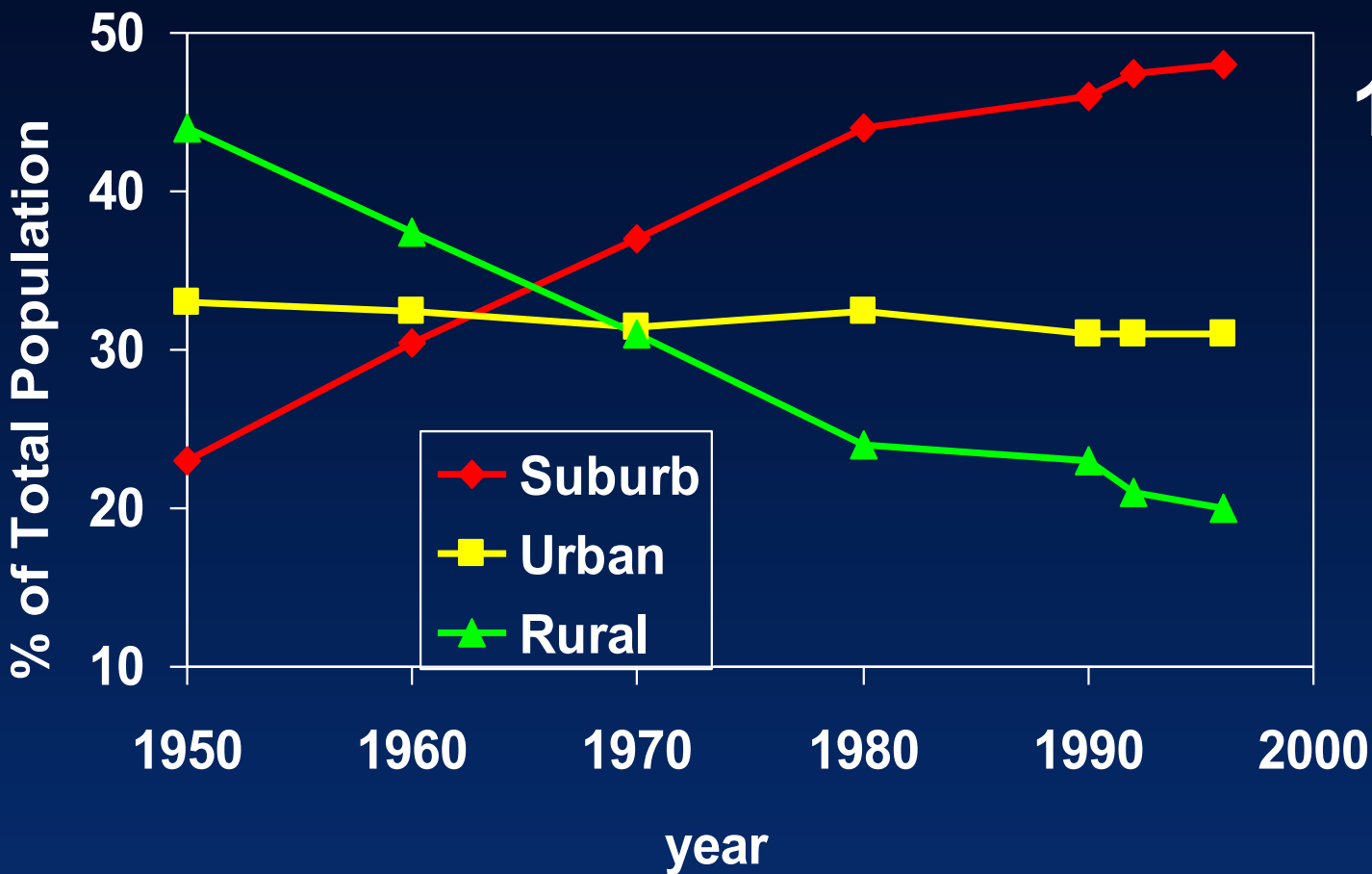
[www.markfenton.com](http://www.markfenton.com)

# “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!*



# Four Elements of Healthy Community Design:



[www.activelivingresearch.org](http://www.activelivingresearch.org)

[www.markfenton.com](http://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)\*

Ridgeview Dr.



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

\*[www.ceosforcities.org/work/walkingthewalk](http://www.ceosforcities.org/work/walkingthewalk)  
[www.walkscore.com](http://www.walkscore.com)

# Where are your best scores?

Near the Middle School



walkscore = 47

Lower Butcher Road = 33

[www.walkscore.com](http://www.walkscore.com)

Crystal Lake



walkscore = 10



Rts 30 & 140

# ***On Common Ground***, Nat'l Assoc. of Realtors Summer 2010; [www.realtor.org](http://www.realtor.org)

## **The Next Generation of Home Buyers:**

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



# Smart Growth & Economic Success

[www.epa.gov/smartgrowth/economic\\_success.htm](http://www.epa.gov/smartgrowth/economic_success.htm)

Dec. 2012



December 2012  
[www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth)



SMART GROWTH AND ECONOMIC SUCCESS:  
BENEFITS FOR REAL ESTATE DEVELOPERS, INVESTORS,  
BUSINESSES, AND LOCAL GOVERNMENTS

Office of Sustainable Communities  
Smart Growth Program

Benefits to developers,  
realtors, investors, local  
governments . . .

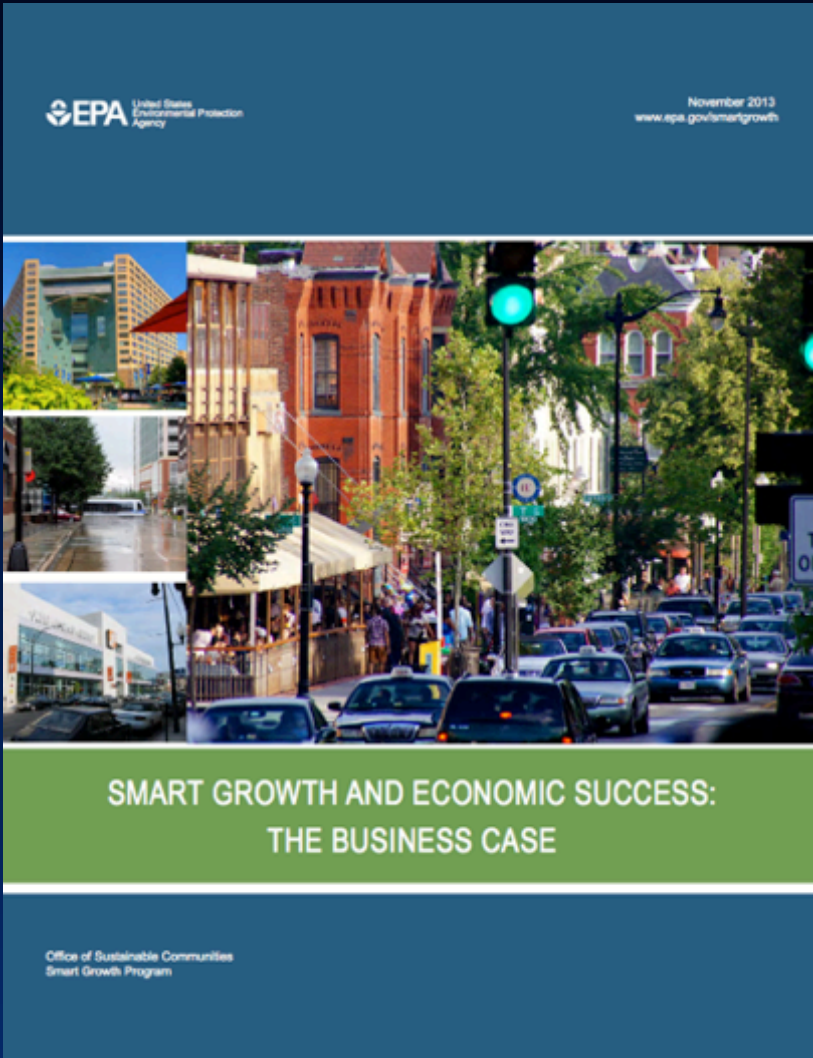
- Less infrastructure in compact development.
- Walkability premium.
- Flexibility & choice.

[www.markfenton.com](http://www.markfenton.com)

# Smart Growth: The Business Case

[www.epa.gov/smartgrowth/economic\\_success.htm](http://www.epa.gov/smartgrowth/economic_success.htm)

Nov. 2013



**Beneficial to:**

- **Creative economy, productivity, innovation.**
- **Competitive for hiring & retaining employees.**
- **Strong retail sales; transport choice.**

[www.markfenton.com](http://www.markfenton.com)

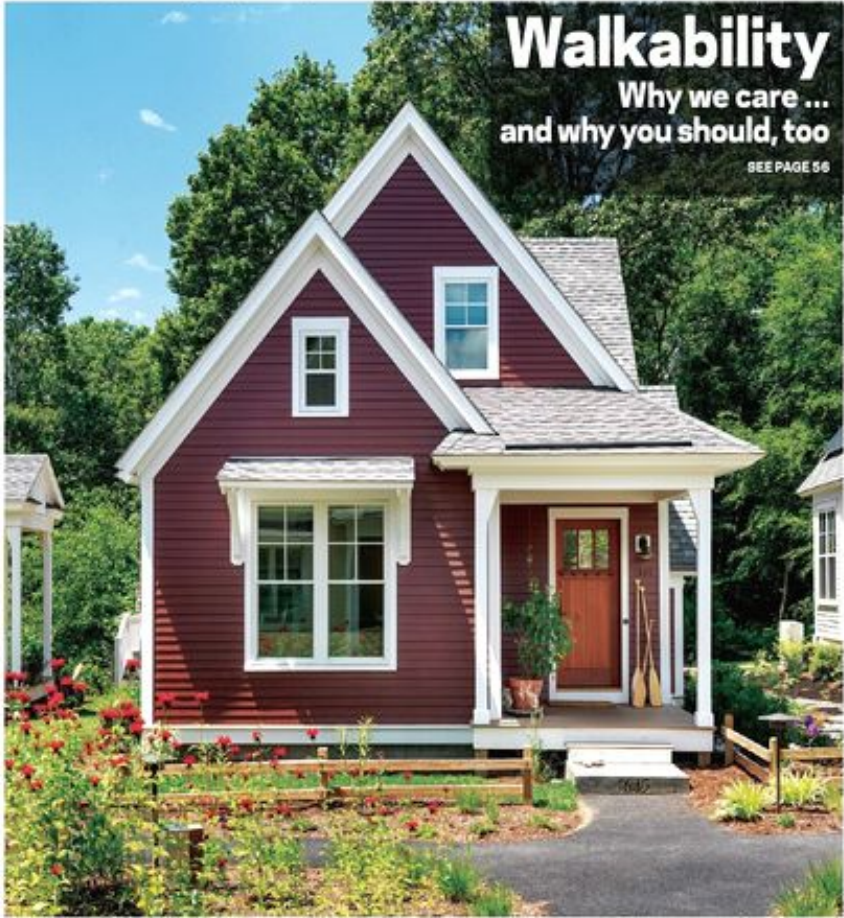
SMART BUILDING STARTS HERE

THE MAGAZINE  
OF THE NATIONAL ASSOCIATION  
OF HOME BUILDERS

# Builder

**Walkability**  
Why we care ...  
and why you should, too

SEE PAGE 56



MARCH 2014 WWW.BUILDERONLINE.COM

## Walkability. Why we care & why you should too!

Builder Magazine,  
Mar. 2014

- Consumer desire
- Flexibility in design
- Lower development costs . . .

# Healthy design yields a triple bottom line . . .



**Planet**



**Prosperity**



**People**



# So how to get there?



Stafford



Vernon

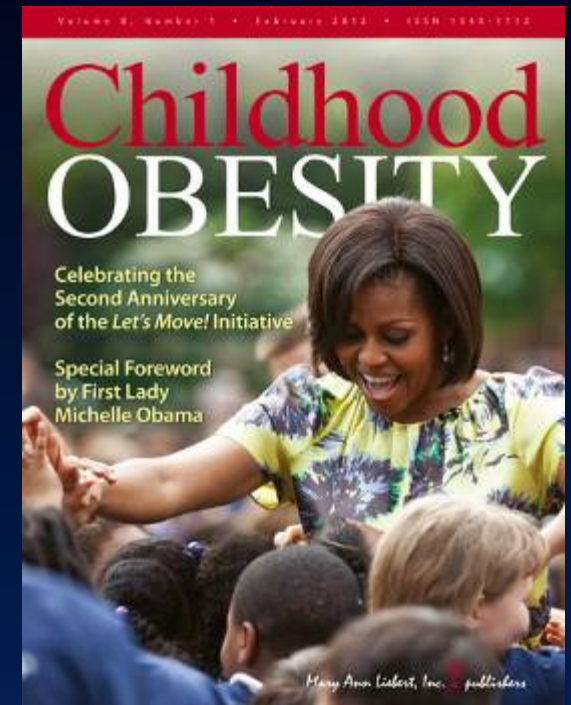


Enfield

# The evolving physical activity playbook:

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

- Master planning & **zoning ordinance** updates for mixed use, open space conservation.
- **Complete streets** guidelines & routine practice.
- Transportation **trail networks**.
- Bicycle & transit infrastructure & incentives; Transportation Demand Management (**TDM**).
- **Safe Routes to School**, schools as healthy community centers.



# Build a compact, focused, interdisciplinary leadership team targeting healthy design:

- Education, schools
- Planning & Zoning
- Engineering, DPW
- Parks, Recreation
- Public Health & Safety
- Historical preservation
- Social justice & equity
- Chamber of Commerce
- Developers, Lenders, Realtors
- Neighborhood Assoc., Church & Service Groups
- Environment, Conservation

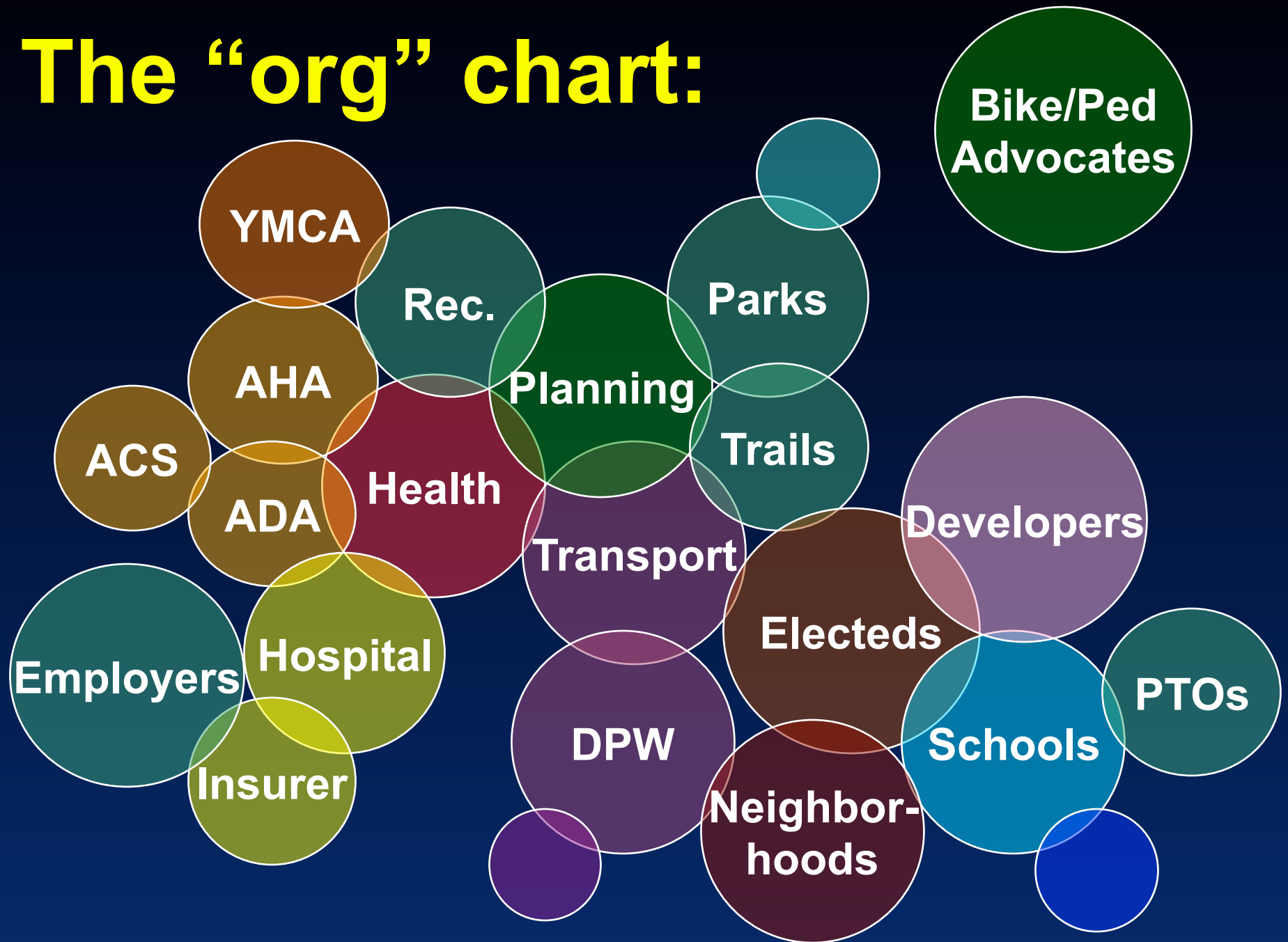


## Policy information:

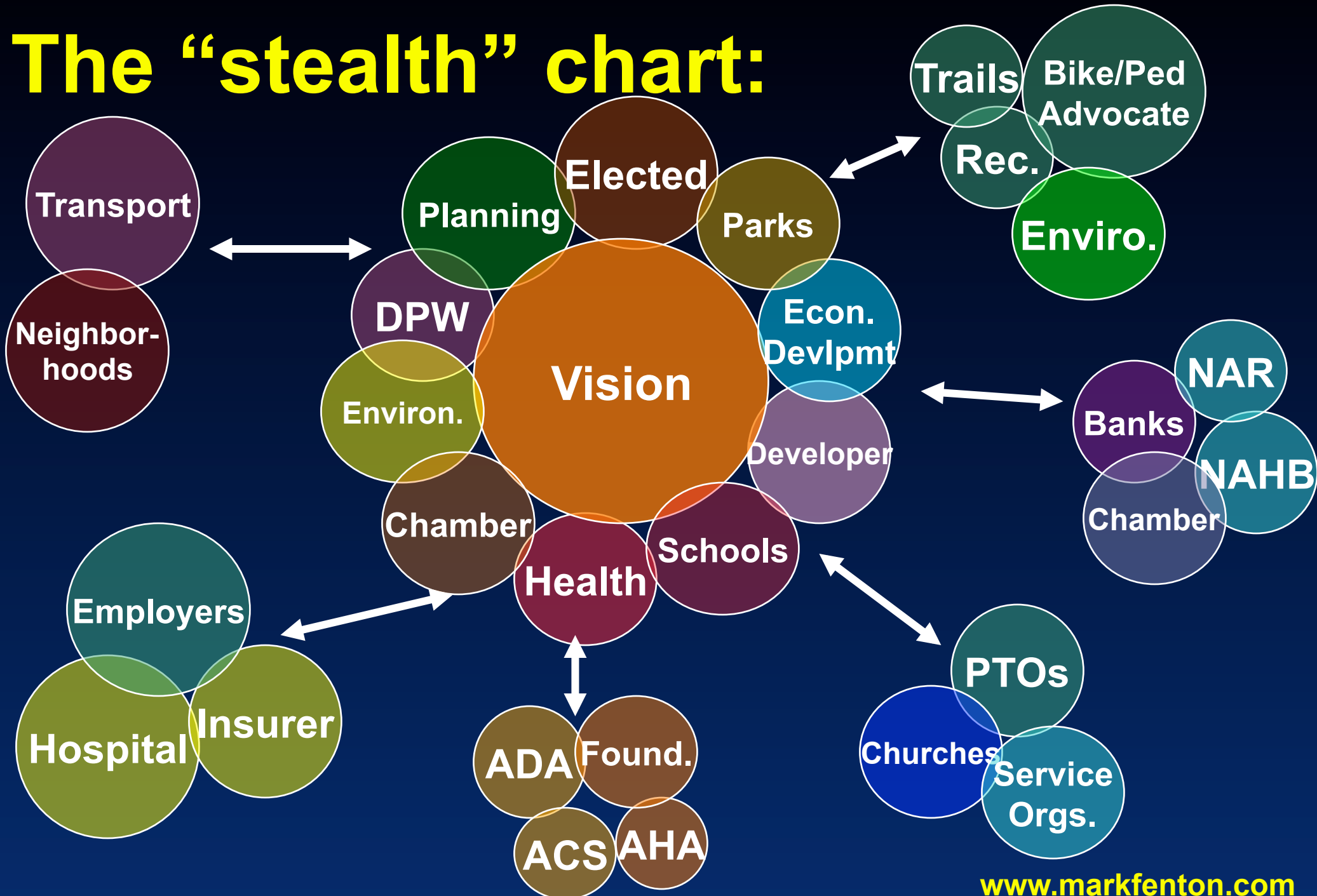
[www.lgc.org](http://www.lgc.org)

[www.vtppi.org](http://www.vtppi.org)

# The “org” chart:



# The "stealth" chart:



# To be on the stealth leadership team people must:

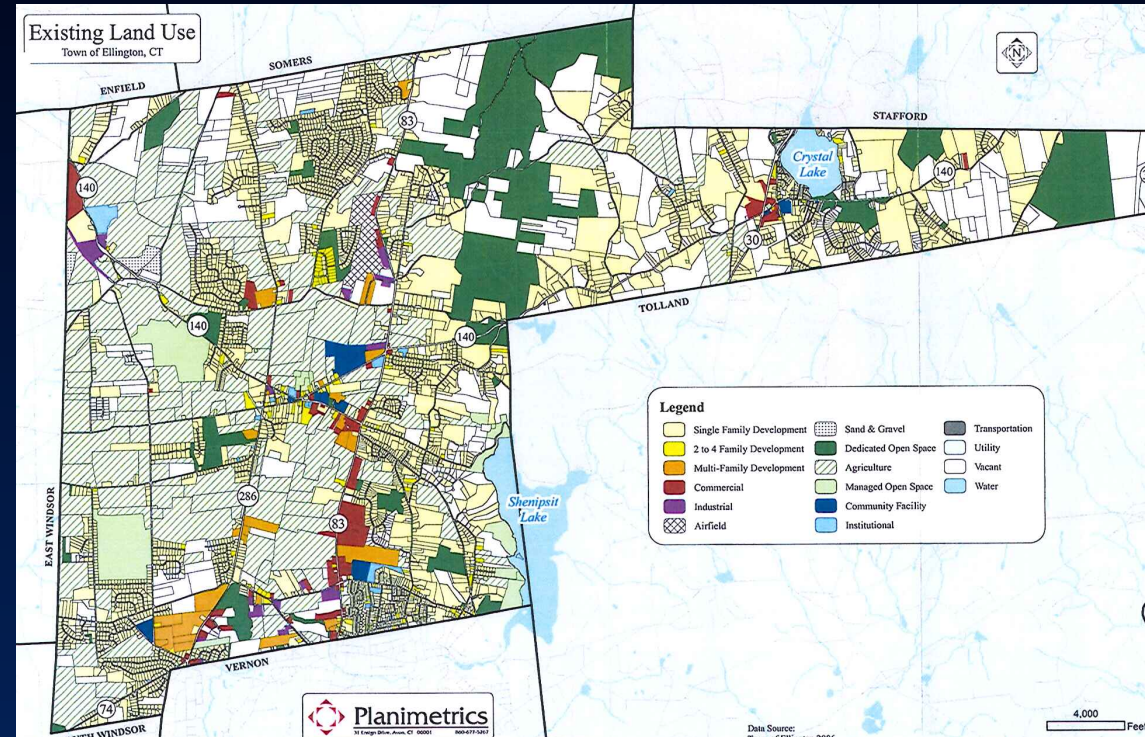
- Fully embrace the **vision** of active, healthy community design.
- Be able to spend time on this as part of **job responsibilities**; not just volunteers.
- Have **community influence** and be able to **reach** critical partners.



# 1. Make zoning & permits reflect your plan.

## 2008/14 POCD

- Maintain community character while allowing growth.
- Preserve open space & farmland.
- Protect natural resources; plants, animals, water.
- Provide diverse housing choices, not just high cost single family homes.





## Putting Smart Growth to Work in Rural Communities



# Putting Smart Growth to Work in Rural Communities

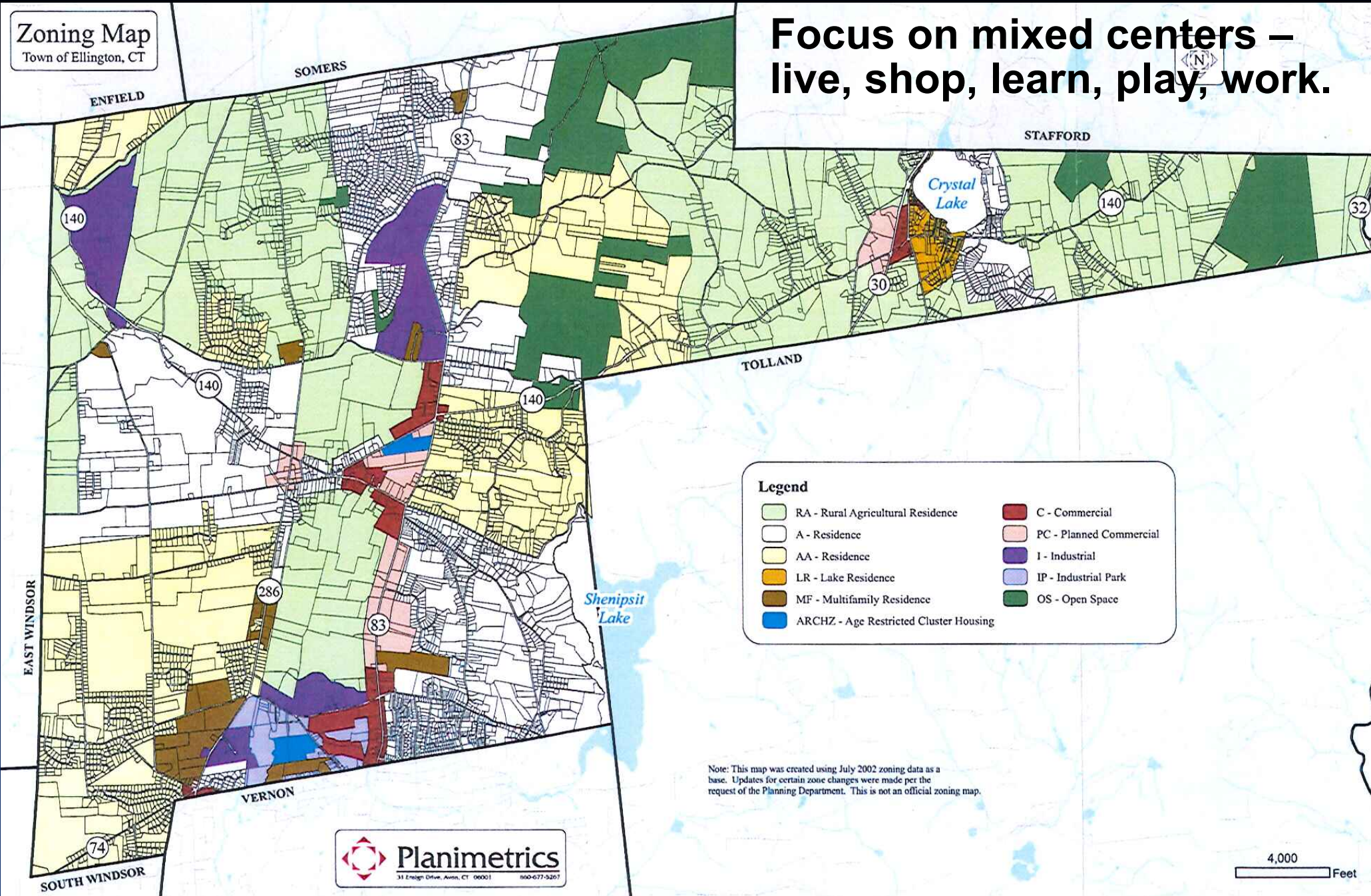
[www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth)

- Support the rural landscape
  - Economic dev., land protection
- Help existing places, downtowns thrive
  - Infrastructure, transport
- Create great new places
  - Designate growth areas
  - Near mixed use!



**Zoning Map**  
Town of Ellington, CT

**Focus on mixed centers –  
live, shop, learn, play, work.**



**Legend**

RA - Rural Agricultural Residence	C - Commercial
A - Residence	PC - Planned Commercial
AA - Residence	I - Industrial
LR - Lake Residence	IP - Industrial Park
MF - Multifamily Residence	OS - Open Space
ARCHZ - Age Restricted Cluster Housing	

Note: This map was created using July 2002 zoning data as a base. Updates for certain zone changes were made per the request of the Planning Department. This is not an official zoning map.

**Planimetrics**  
31 Ensign Drive, Avon, CT 06001 860-677-9267

4,000 Feet

# 1. Make zoning reflect your plan.

- More 'village' residential; help people live near where they work, shop, go to school.
- Compact, walkable, mixed offerings.





**Bluffton, SC**



**Rosemont, MN**



# Purchase & Transfer of Development Rights



[www.serconline.org/tdr/stateactivity.html](http://www.serconline.org/tdr/stateactivity.html)



[www.markfenton.com](http://www.markfenton.com)

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

Mitigation = bike & pedestrian facilities; think network, rather than just on site.



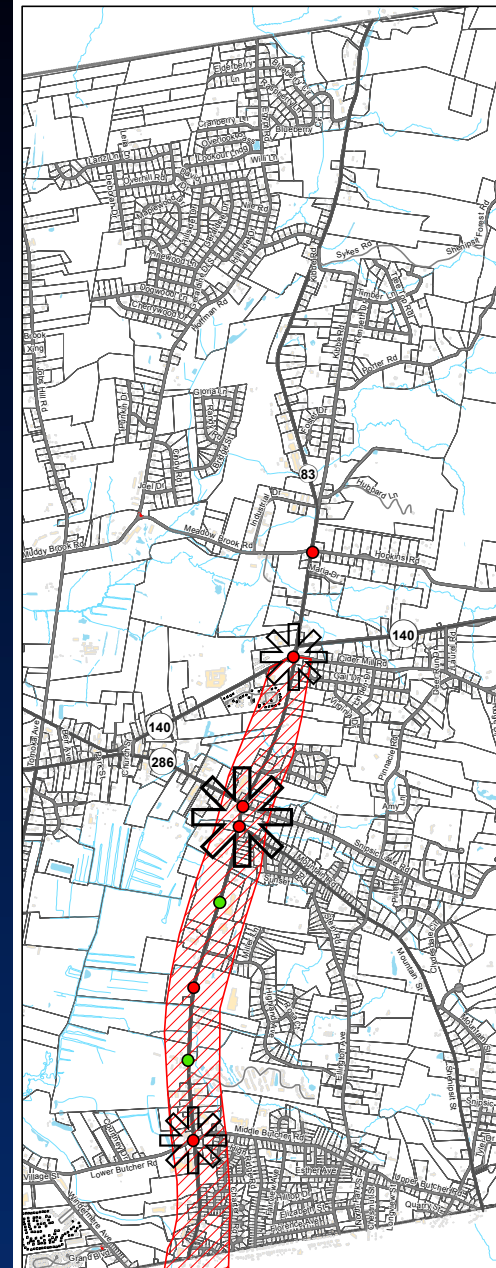


# ELLINGTON

## Route 83 Corridor Study



Planning and Zoning Commission



### Ellington, C Transportatio

- Existing Signals
- Possible Future Traffic Signals (If Needed)
- ✱ Intersection Issues
- ▨ Segment Issues

0 1,750 3,500

## 2. Build Complete Streets into ordinance:

- Pedestrians, bicyclists, transit riders, & drivers of all ages & abilities considered in every road project (new, repair, maintenance).
- Inventory and complete the sidewalk network!



Require on all property frontages

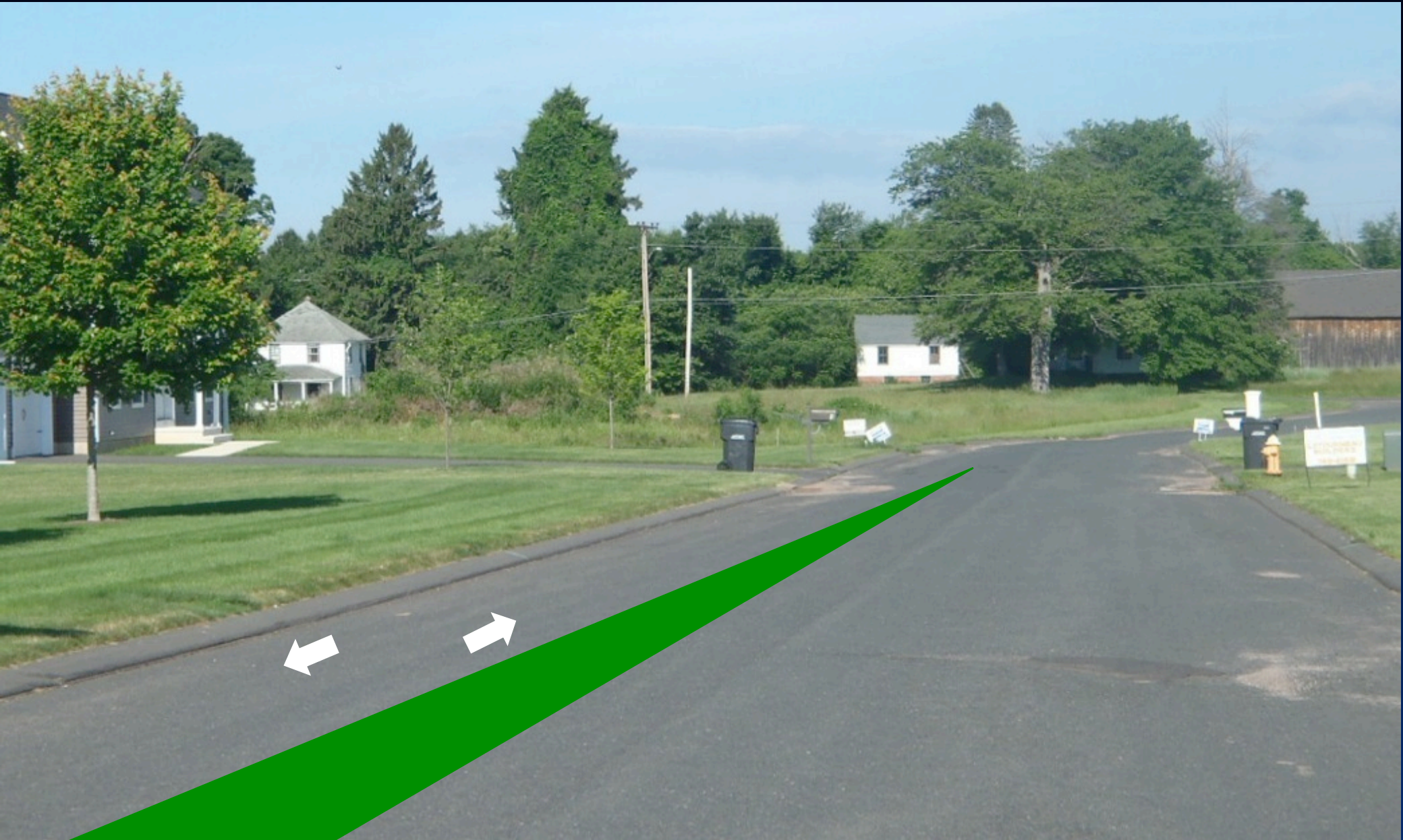
# An approach to CS implementation:

- i. Passage of a council resolution or executive order. (*Whereas . . . Be it resolved . . .*)
- ii. Begin with demonstration projects.





# What about wide subdivision roads?



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

Set priorities:

- **Ling** to transport network (sidewalks, bike lanes).
- Key on **destinations** (schools, shopping, parks & open space, senior housing, etc.)
- Connect to **regional trail network.**



# Eventually access to all schools, parks, trails



## 4. Become a bike-friendly community.

- Develop a plan for bike lanes on wide streets.
- Bike racks downtown & at destinations: schools, village, parks, retail.
- Maps, way-finding signs.
- Bike sharing; start w/ targeted locations, then build from there.

[www.bikeleague.org](http://www.bikeleague.org)  
[www.altaplanning.com](http://www.altaplanning.com)



# A culture of bicycling



E.g. Brockport, NY

**E.g.** Bike share for students; local businesses; town employees.



E.g. Salem, MA

# 5. Comprehensive Safe Routes to School approach.

- **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](http://www.saferoutesinfo.org)



[www.markfenton.com](http://www.markfenton.com)

# SRTS approach.



Columbia, MO



**Biggie: 5 min. safety delay on cars at dismissal!**



[www.saferoutesinfo.com](http://www.saferoutesinfo.com)

[www.markfenton.com](http://www.markfenton.com)

## 5 ideas to start on tomorrow:

- Inventory & complete the **sidewalk network**. **NO** waivers for **sidewalks** in subdivisions, frontage.
- Boards to pass **Complete Streets** resolutions.
- Identify community **centers (nodes)**; update zoning ordinance to encourage **compact, mixed use** villages.
- Accelerate **farmland, open space protection**. (transfer development rights; buy/lease back.)
- Include state of the art **site design in 83 plan**.



# Why care about active 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.
- **Air quality**, commute times, traffic congestion.
- 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**

