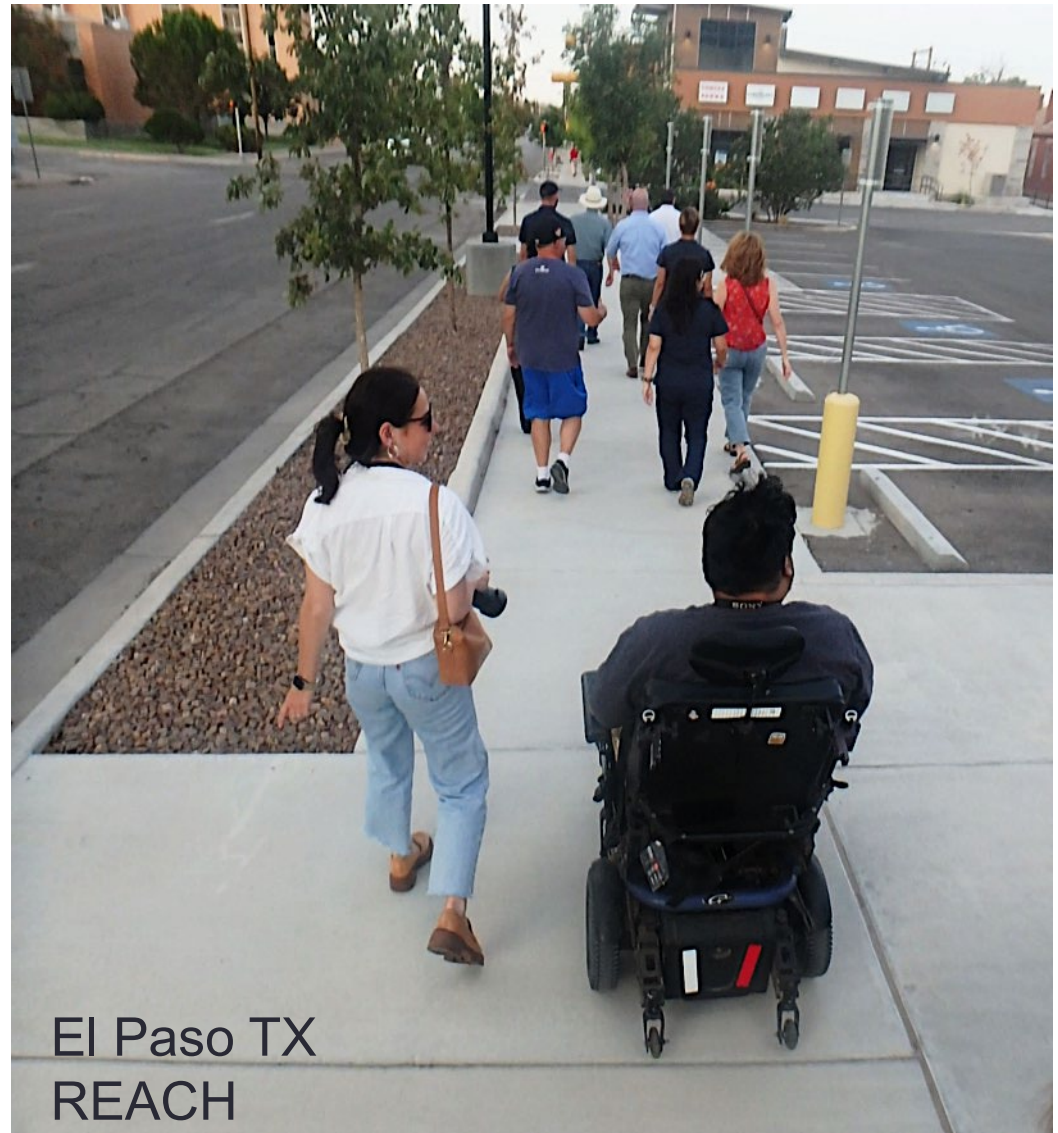


# CD4PA Community Design for Physical Activity: **Active Transportation**



El Paso TX  
REACH

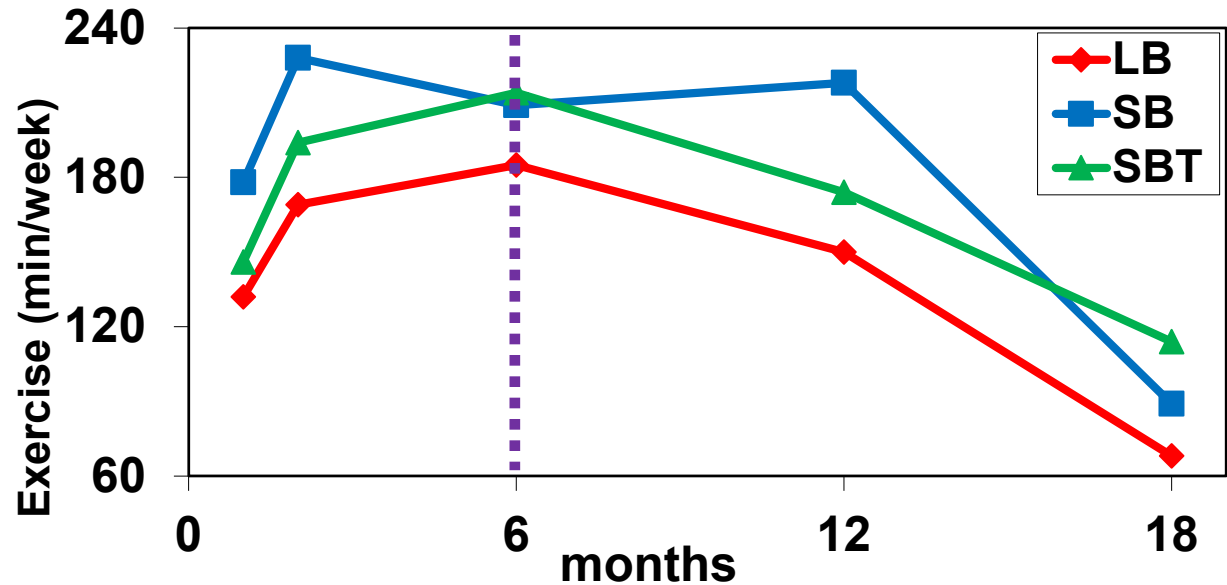
Mark Fenton  
Tufts University  
rmfenton777@gmail.com

## Thought Quiz:

If you could ask only one question of a person and from their answer make an educated guess as to whether they meet PA guidelines, what would you ask?

## Exercise Participation: Effect of Short Bouts, Home Treadmills

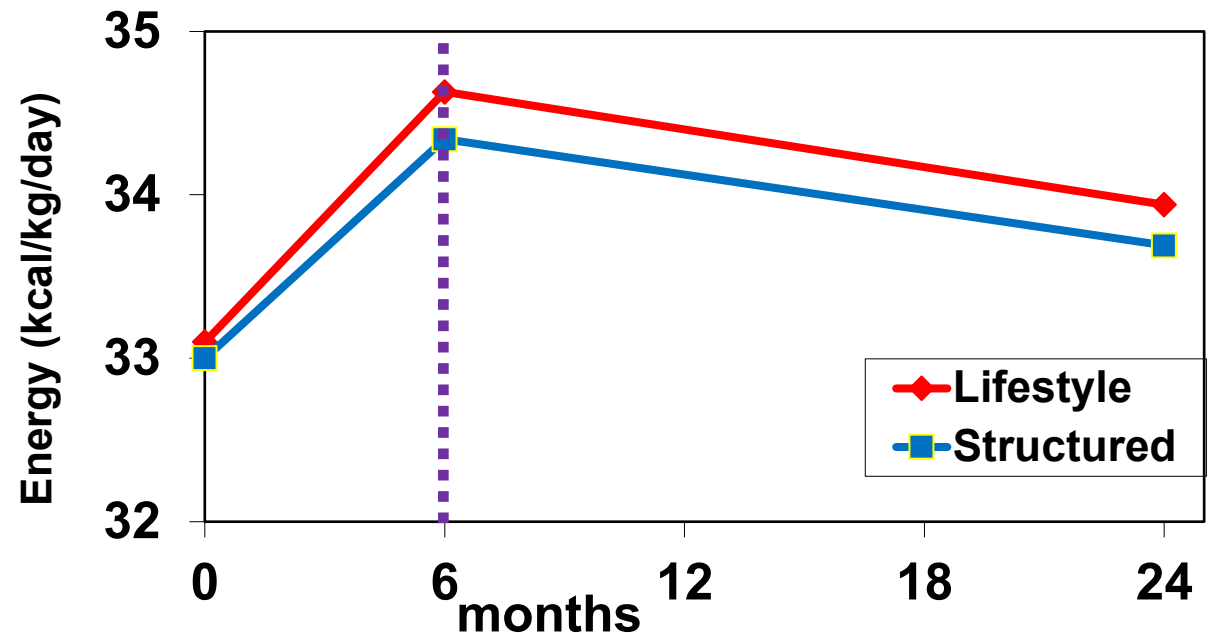
Jakicic et.al., *J. Amer. Med. Assoc.*, 282, 16



(6-month programs)

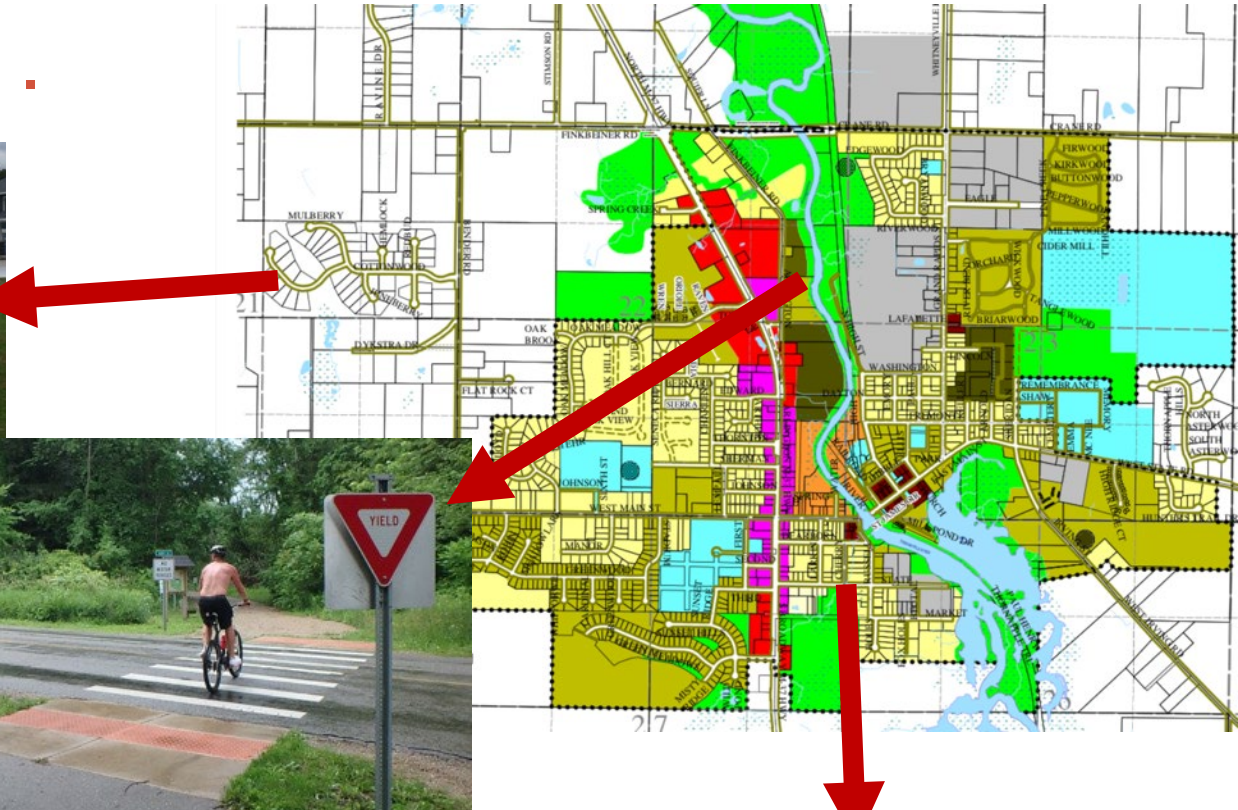
## Energy Expenditure Lifestyle vs. Structured Activity

Dunn et.al., *J. Amer. Medical Assoc.*, 281, 4





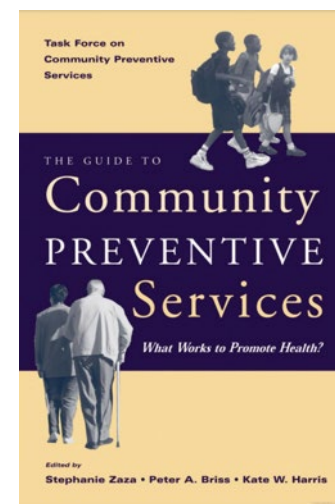
# Home address . . .



# Policy, Systems, & Environmental (PSE) Influences on Physical Activity.

Physical Activity: Built Environment Approaches  
Combining Transportation System Interventions  
with Land Use and Environmental Design.

(*Community Guide to Preventive Services*,  
systematic review, 2016, [thecommunityguide.org](http://thecommunityguide.org)).



## Transportation:

- Street connectivity
- Sidewalk & trail infrastructure
- Bicycle infrastructure
- Transit access & facilities

## Land use:

- Mixed land use to increase diversity & proximity of destinations; live, work, shop, play, learn, pray.
- Access to parks, recreation.



# Elements supporting active transportation . . .



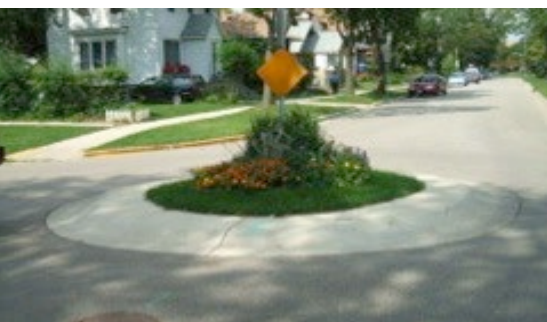
Land Use Mix



Network



Safety & Access



Site Design



# Policy, Systems & Environmental (PSE) Influences on Physical Activity.

## Impacts at three levels:

### Macro

Where things are.



### Meso

Connecting networks.



### Micro

Design details.



# Pilots to Policy Approach:

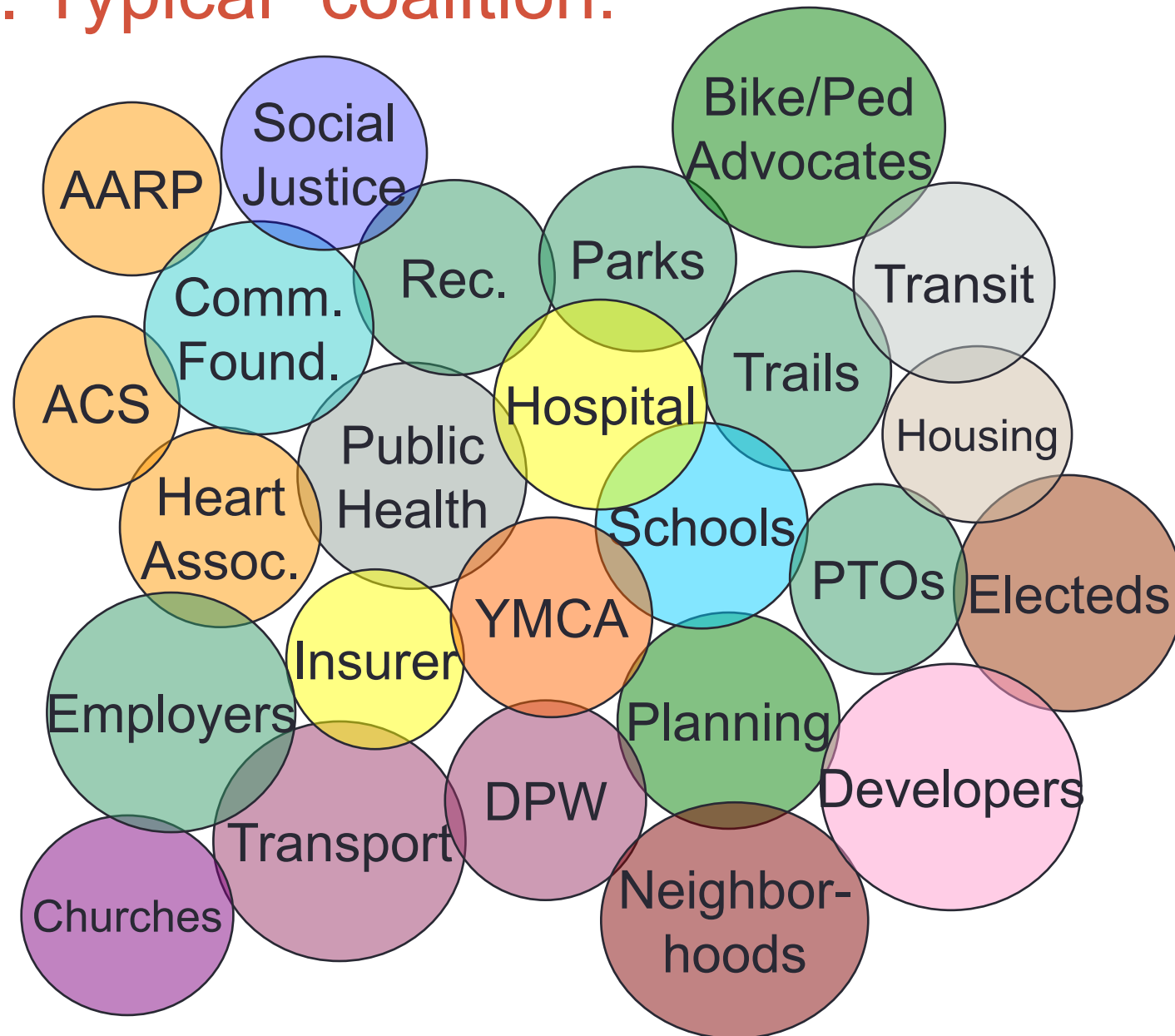
1. **Interdisciplinary** partners (recruit with economics).
2. Truly **inclusive engagement** (get out there).
3. **3P planning** for action: Process, Project, Policy.
4. Goal: **Policy change!**
5. Accelerate action with pop-ups & **quick builds**.
6. **Evaluating** impacts to drive **policy** & systems change!



Weslaco TX

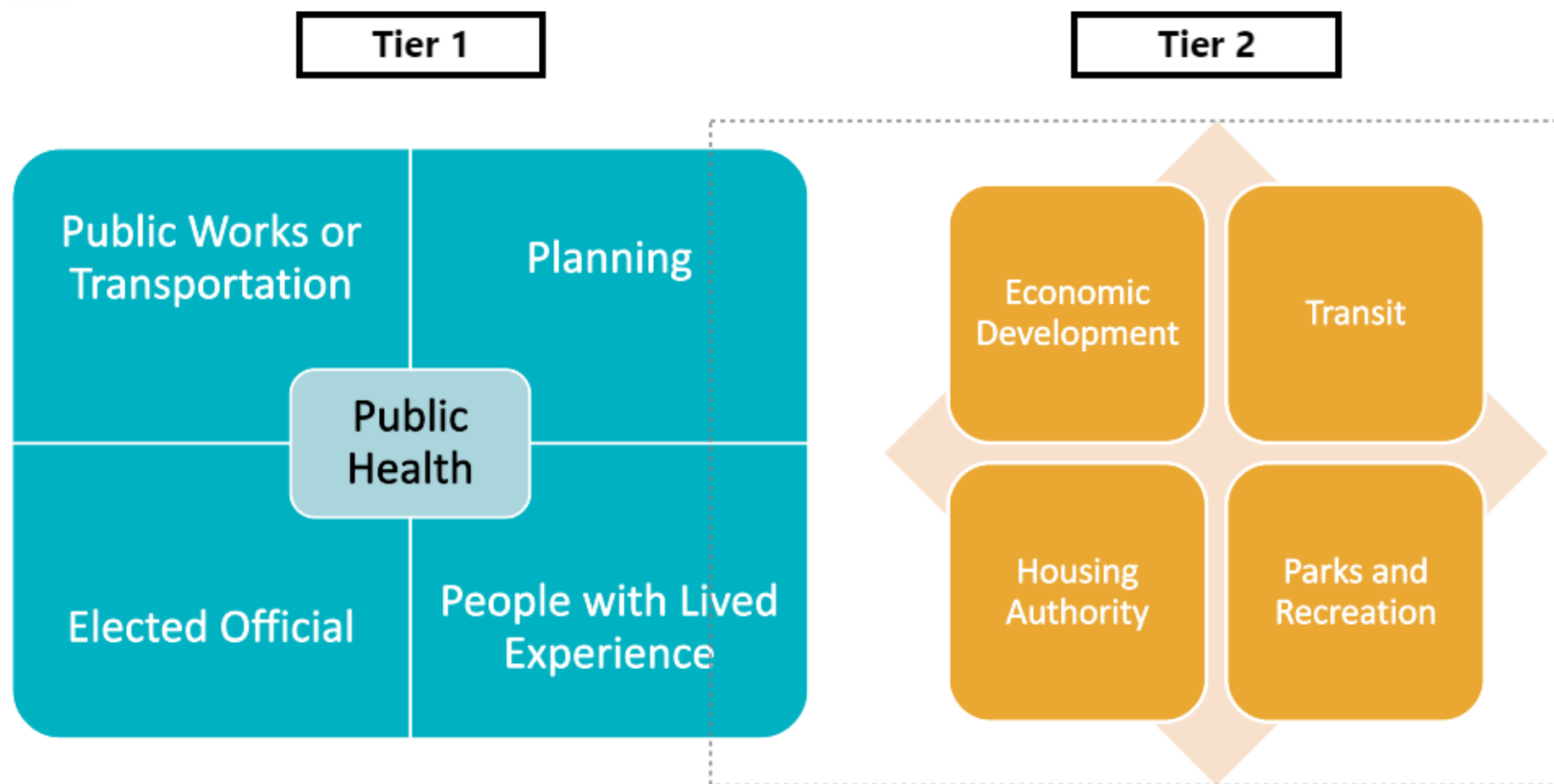


# 1. Typical “coalition:”



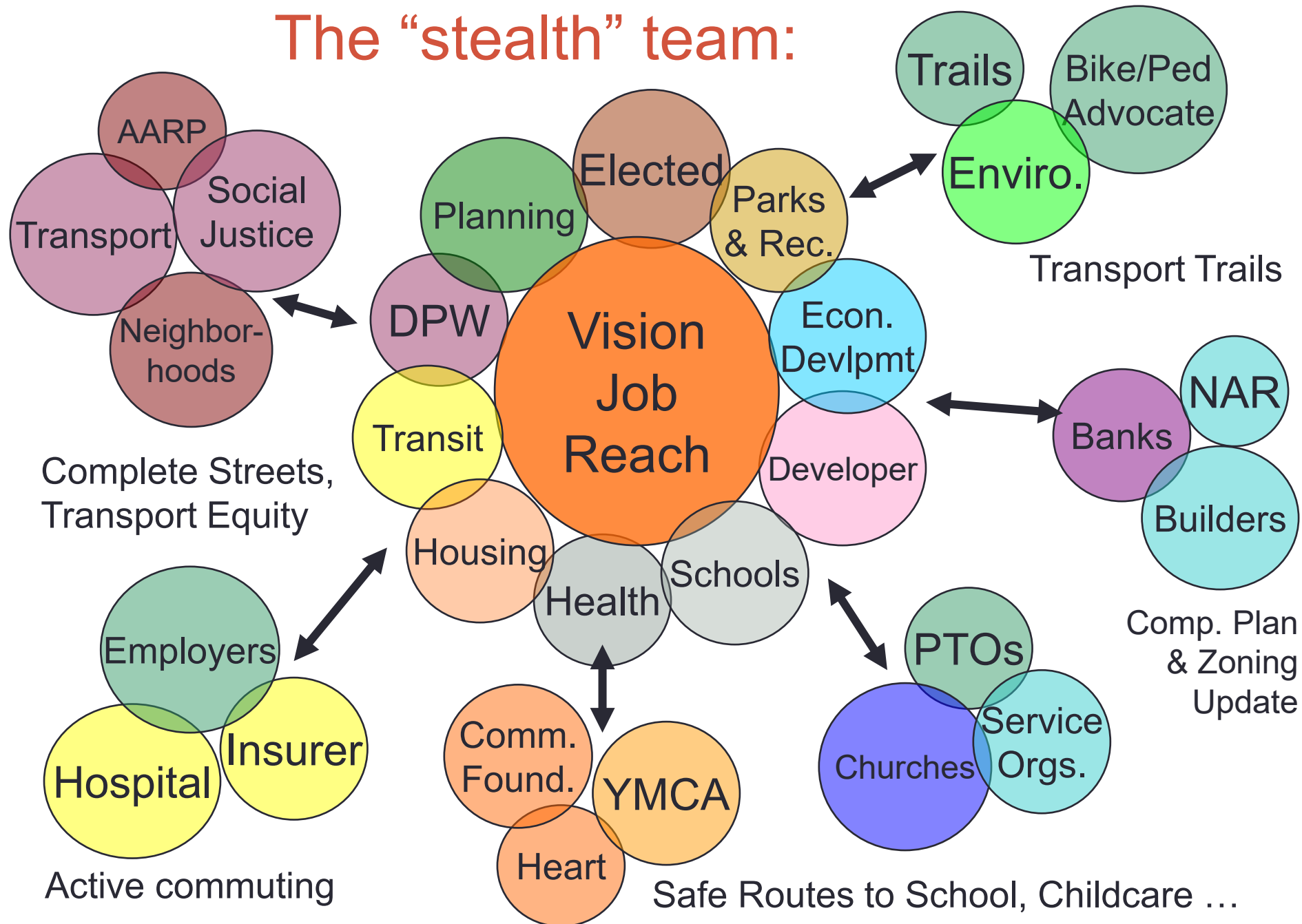
# Not just the “usual suspects.”

## Priority sectors to engage:





# The “stealth” team:



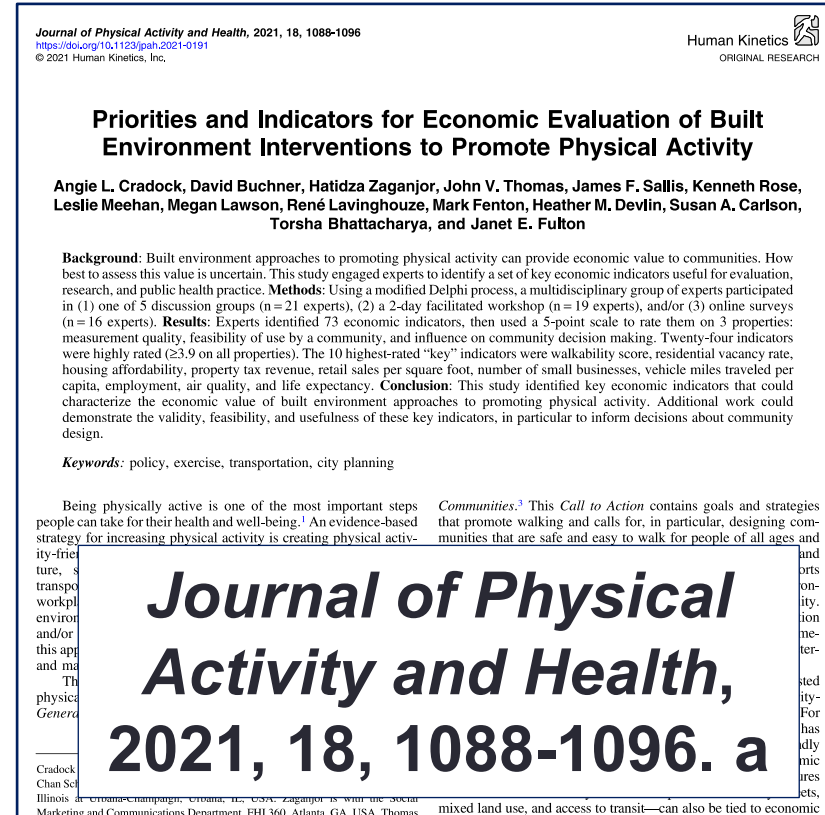
# Recruit partners with economic evidence.

## Environmental Health:

1. Greater walk- & bike-ability.
2. Better air quality.
3. Fewer vehicle miles traveled.

## Economic Activity:

4. More small business development.
5. Lower vacancy rates.
6. Increased property values and tax revenues.
7. More affordable housing opportunities.
8. Increased retail sales.



## Social Health and Welfare:

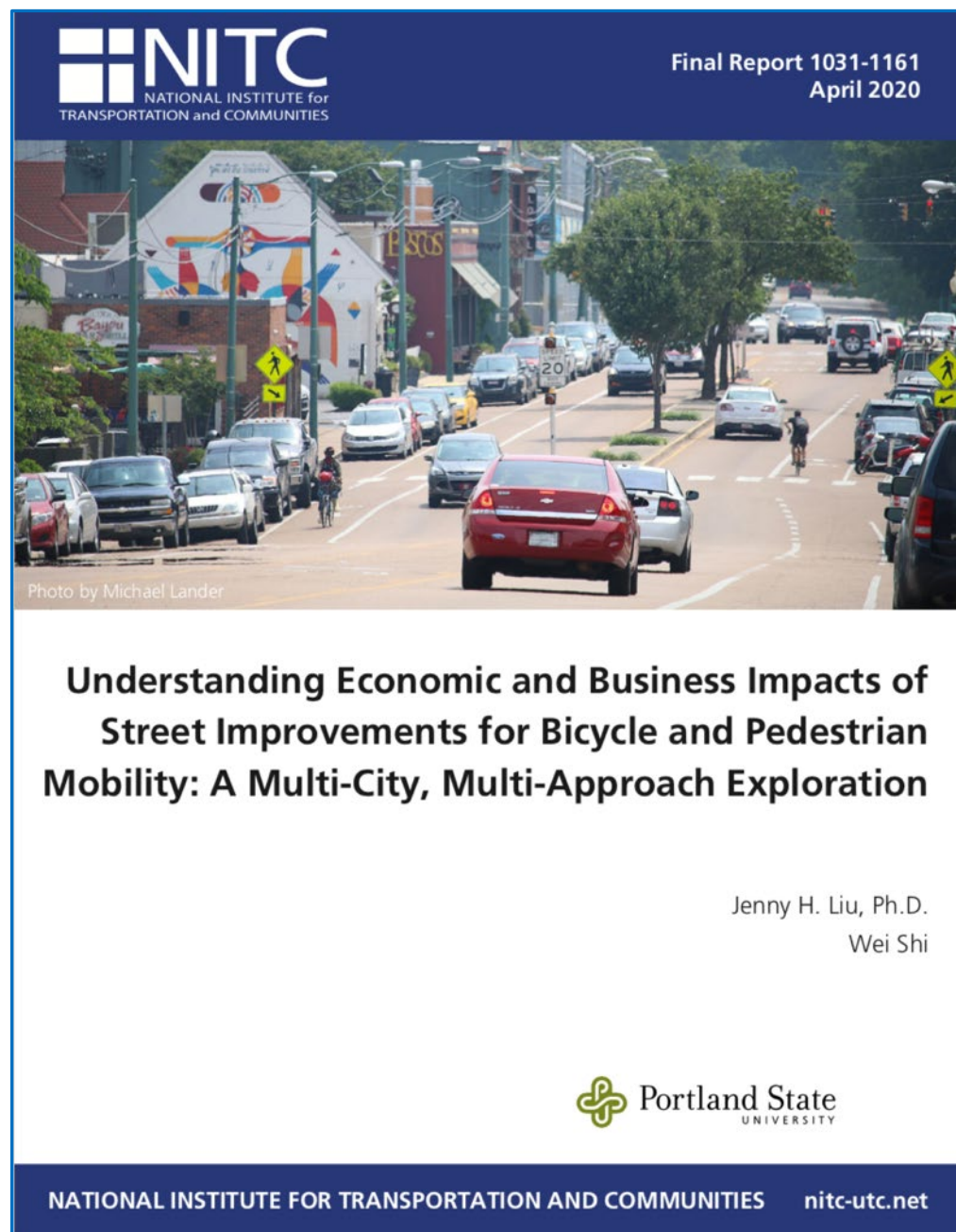
9. Higher employment rates.
10. Longer and healthier lives.



# Trends following Complete Streets improvements:

- Increases in retail sales.
- Increases in food retail & employment.

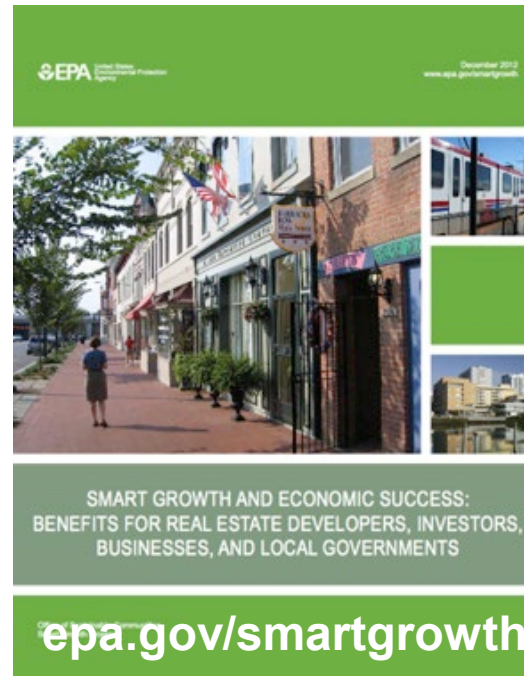
(Memphis, San Francisco, Minneapolis, Seattle, Indianapolis, Portland.)



# The economic pull of “healthy” designs:



1. Market demand



2. Retail performance

4. Quantifiable health benefits!



3. Developer interest



5. Environmental health & safety.





## Resources for making the economic case.

1. Two-page fact sheet
2. On-line library of resources
3. Discussion guide.
4. Customizable PowerPoint presentation

[nccor.org/nccor-tools/create-thriving-activity-friendly-communities/](http://nccor.org/nccor-tools/create-thriving-activity-friendly-communities/)

## *Journal of Urban Health* (2023) 100:151-180

**Table 1** Typology of displacement prevention and mitigation strategies

Category	Definition	Examples
1. Preservation	Preserve existing affordable rental units	<ul style="list-style-type: none"> <li>• Right to purchase laws</li> <li>• Demolition control</li> </ul>
2. Protection	Help long-time residents who wish to stay in the neighborhood	<ul style="list-style-type: none"> <li>• Employer assisted housing</li> <li>• Rent skewing</li> </ul>
3. Inclusion	Ensure that a share of new development is affordable	<ul style="list-style-type: none"> <li>• Inclusionary zoning policy</li> <li>• Density bonuses</li> </ul>
4. Revenue generation	Harness growth to expand financial resources for affordable housing	<ul style="list-style-type: none"> <li>• Tax Increment Financing (TIF)</li> <li>• Housing trust funds</li> </ul>
5. Incentives/disincentives	Create incentives for developers of affordable housing, and/or discourage developers from increasing rents	<ul style="list-style-type: none"> <li>• Anti-speculation taxes</li> <li>• Impact fees</li> </ul>
6. Property acquisition	Facilitate acquiring sites for affordable housing	<ul style="list-style-type: none"> <li>• Expropriation</li> <li>• Community land trusts</li> </ul>
7. Stabilization	Stabilizing long time/historical residents by securing long-term housing	<ul style="list-style-type: none"> <li>• Individual development accounts</li> <li>• Down payment assistance</li> </ul>
8. Community engagement/education	Educate and engage with community members on factors related to affordable housing and displacement	<ul style="list-style-type: none"> <li>• Coalition building</li> <li>• Awareness campaigns</li> </ul>
9. Cross-cutting	Overarching thematic approaches related to displacement or affordable housing	<ul style="list-style-type: none"> <li>• Health in all policies</li> <li>• Community planning</li> </ul>

## 2. Engaging the real experts.

### Inclusive Interdisciplinary Walk/Move Audits: I2Audits.

- Go to real community destinations (walk, bike, transit).
- Move with people who live & work there daily.
- Inclusive across age, race, income, ability & disability
- **Shared discovery & solutions**; *not* “expert answers.”

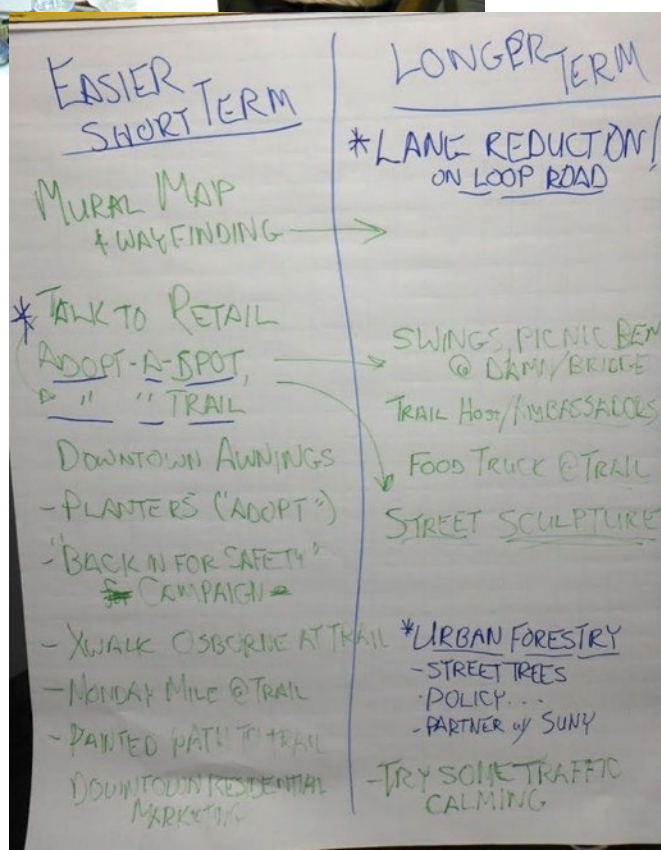






## 3 Ps capture I2Audit participant input & ideas:

- **Process:** Events, education, awareness, plans, demonstrations.
- **Projects:** Improve the infrastructure for walking, bicycling, & transit.
- **Policies:** Ordinances, practices, procedures to support active transportation.



# 3. Three Ps for change:



**Process**



**Physical Projects**



**Policies**

**Laws, Rules, Practices**



## 4. Policies that support “physically active routes to everyday destinations”

- i. Complete Streets, Vision Zero.
- ii. Healthy planning & zoning.
- iii. Transportation trail networks & requirements.
- iv. Transit- & bicycle-friendly infrastructure & practices. (TDM: Transportation Demand Management).
- v. Accessible, affordable, & diverse housing policies.

### Circulation

#### AHA POLICY STATEMENT

#### Creating Built Environments That Expand Active Transportation and Active Living Across the United States

A Policy Statement From the American Heart Association

**ABSTRACT:** Physical activity is vital for the health and well-being of youth and adults, although the prevalence of physical activity continues to be low. Promoting active transportation or human-powered transportation through policy, systems, and environmental change is one of the leading evidence-based strategies to increase physical activity regardless of age, income, racial/ethnic background, ability, or disability. Initiatives often require coordination across federal, state, and local agencies. To maximize the effectiveness of all types of interventions, it is imperative to establish strong and broad partnerships across professional disciplines, community members, and advocacy groups. Health organizations can play important roles in facilitating these partnerships. This policy statement provides recommendations and resources that can improve transportation systems, enhance land use design, and provide education to support policies and environments to promote active travel. The American Heart Association supports safe, equitable active transportation policies in communities across the country that incorporate consistent implementation evaluation. Ultimately, to promote large increases in active transportation, policies

Deborah R. Young, PhD,  
FAHA, Chair  
Angie L. Craddock, ScD  
Amy A. Eyster, PhD  
Mark Fenton, MS  
Margo Pedrosa  
James F. Sallis, PhD  
Laurie P. Whitsel, PhD,  
FAHA  
On behalf of the  
American Heart  
Association Advocacy  
Coordinating Committee

- **Macro:** Land use.
- **Meso:** Connecting networks.
- **Micro:** Functional design details.



## 5. Goal: Pilots-to-Policy Approach:

### E.g. Complete Streets:

All users of all ages, races, incomes, abilities & disabilities; using all modes; considered in all roadway maintenance & construction.





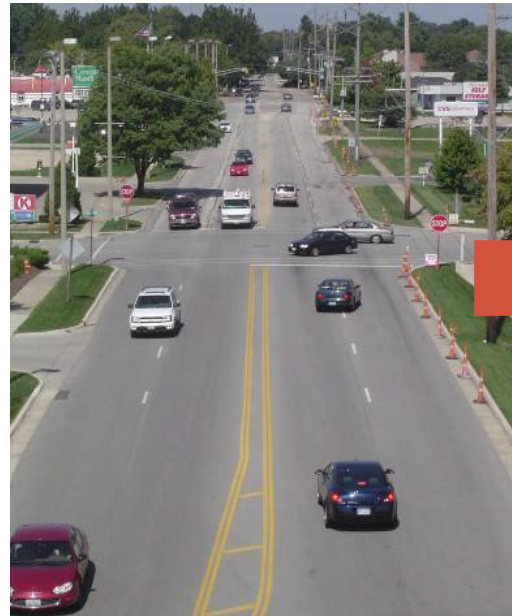
# Healthy design tools.

## Lane reductions

## ("Road diet")



Curb extensions



Median islands

## Roundabouts & mini-circles





## Lower-cost “quick builds.”



Planter & post **curb extension**.



Paint & delineator **bike lane**.



Paint & post **median island**.



Paint & sign **mini-circle**.



Billings MT



2016



## Wolcott VT



**Curb stops & planters**

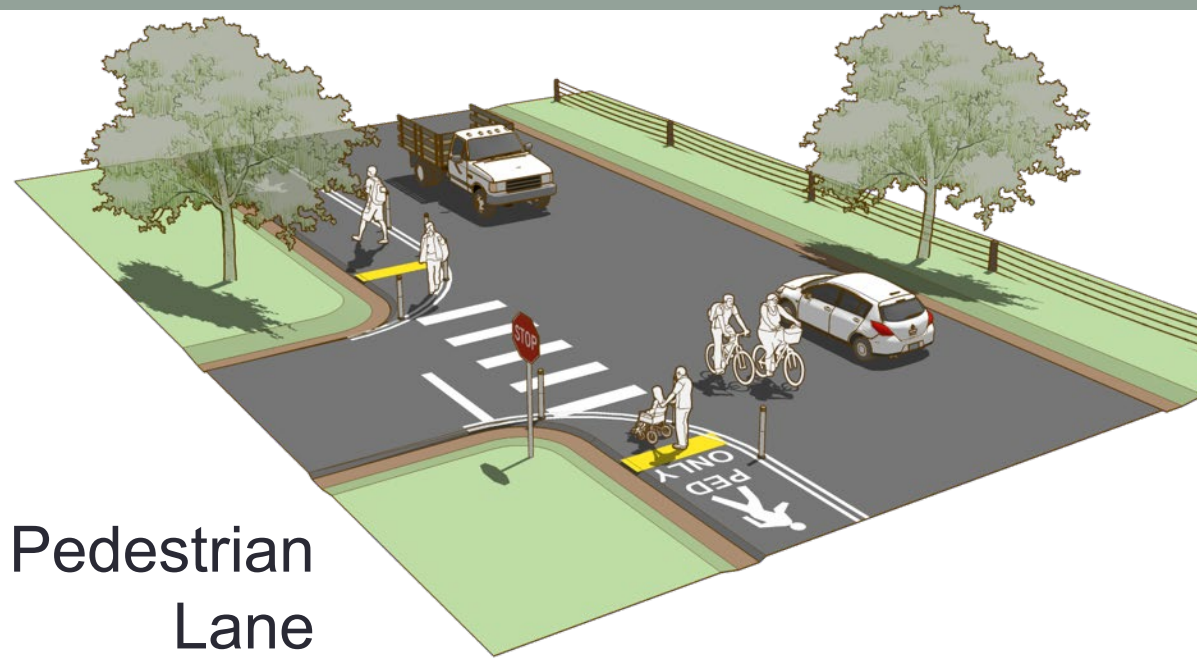
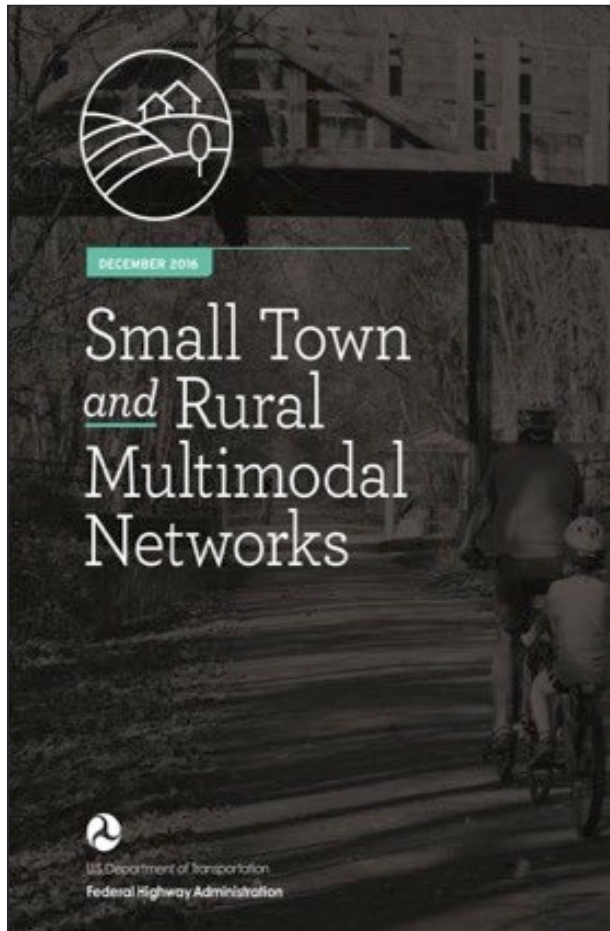


“Quick build” helped engage an El Paso business.





# Resources



[ruraldesignguide.com](http://ruraldesignguide.com)



# Accessible rural retail . . .







“Food Park” McAllen, TX

Festival Area Salt Lake City, UT





## 6. Collect objective data.

E.g. Peoria IL pop-up bike lanes.  
Before & after data gathered by students



Observers: Marcia & E.A. Date: Mon 4/13  
Weather: \_\_\_\_\_ Times of observation: \_\_\_\_\_

Vehicle Counts – Broadway & Thorn, Hastings MI

	All Vehicles except ...	Tractor Trailer Trucks
Northbound Broadway thru intersection		
Southbound Broadway, thru intersection		
Southbound Broadway, right turn to Tyden Park		
Southbound Broadway, Left turn onto Thorn		
Westbound Thorn, right turn onto North Broadway		

Student data sheet

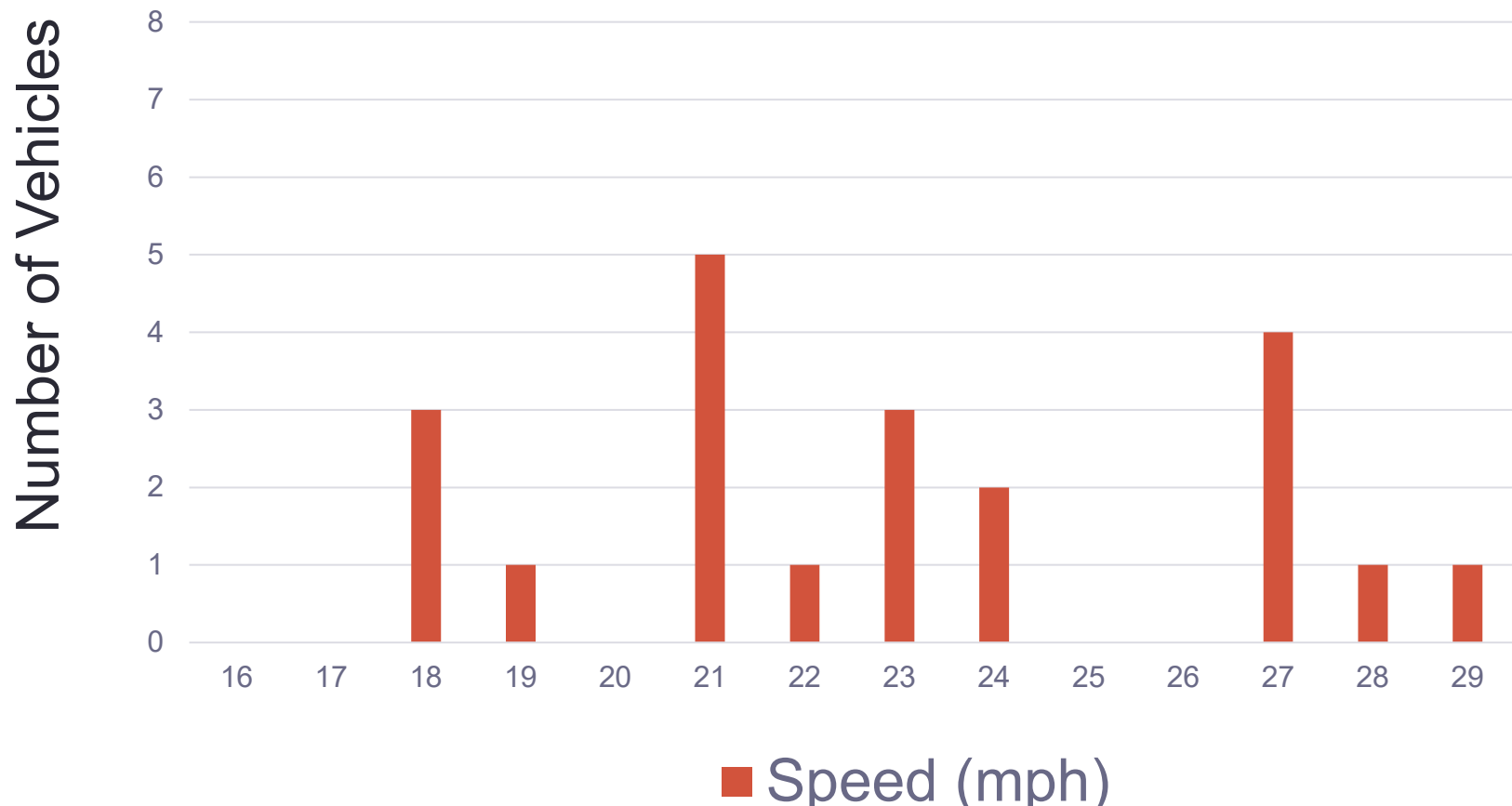


YMCA Teen Reach Students



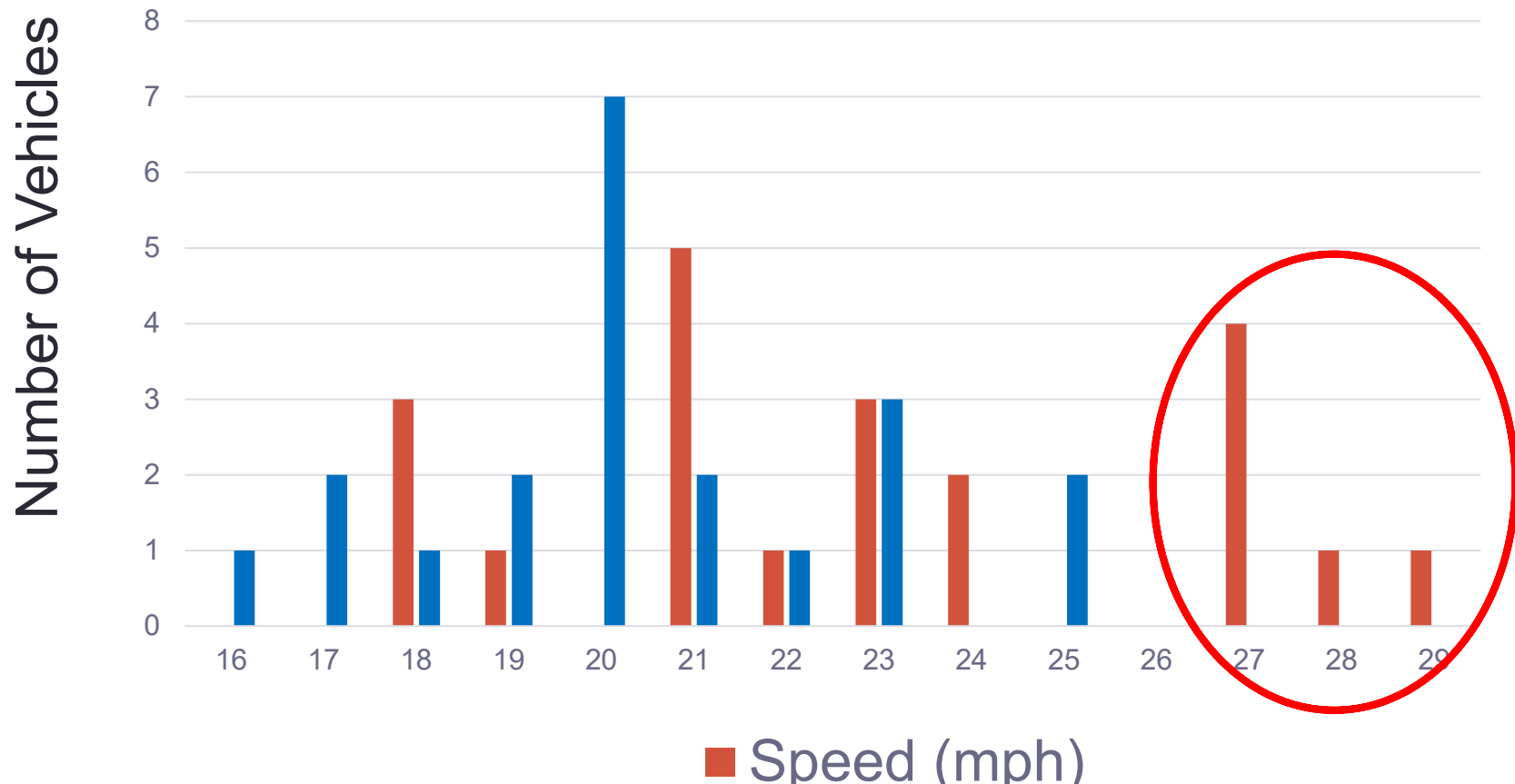
# Histogram of vehicles at each speed . . .

Average speed before = 22.8 mph



# Histogram of vehicles at each speed . . .

Average speed before = 22.8 mph  
Average speed during demo = 20 mph





# Summary:

1. **Interdisciplinary** partners (recruit with economics).
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Olshansky et.al.  
“A Potential Decline in  
Life Expectancy . . .”  
*New Eng. J. of Med.*,  
March 17, 2005

Woolf et.al.,  
“Life Expectancy & Mortality  
Rates in the US, 1959-2017”  
*J. of Amer. Med. Assoc.*,  
Nov. 26, 2019

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