

Engineering Active Transportation Back Into SC Communities: From Pilots- to-Policy.



**Walk Audit,
Inman SC**



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**My admittedly
unique
perspective . . .**



Thought Quiz: Youthful recollections

Recall some of your earliest fond recollections of being physically active as a young child (i.e. not HS sports).



When you were young, did you . . .



OR



- Play, explore outdoors without adult supervision?
- Walk or bike to school, a park, a friend's, downtown?
- Play games with no formal uniform, umpire, or referee?
- Spend time with kids of different ages, both boys and girls?
- Play in water: ocean, lake, river, pond, creek, pool, fire hydrant?
- Have a wheeled vehicle: bike, scooter, big wheel, skateboard, skates?
- Do stuff you could not have gotten away with if adults *were* present?

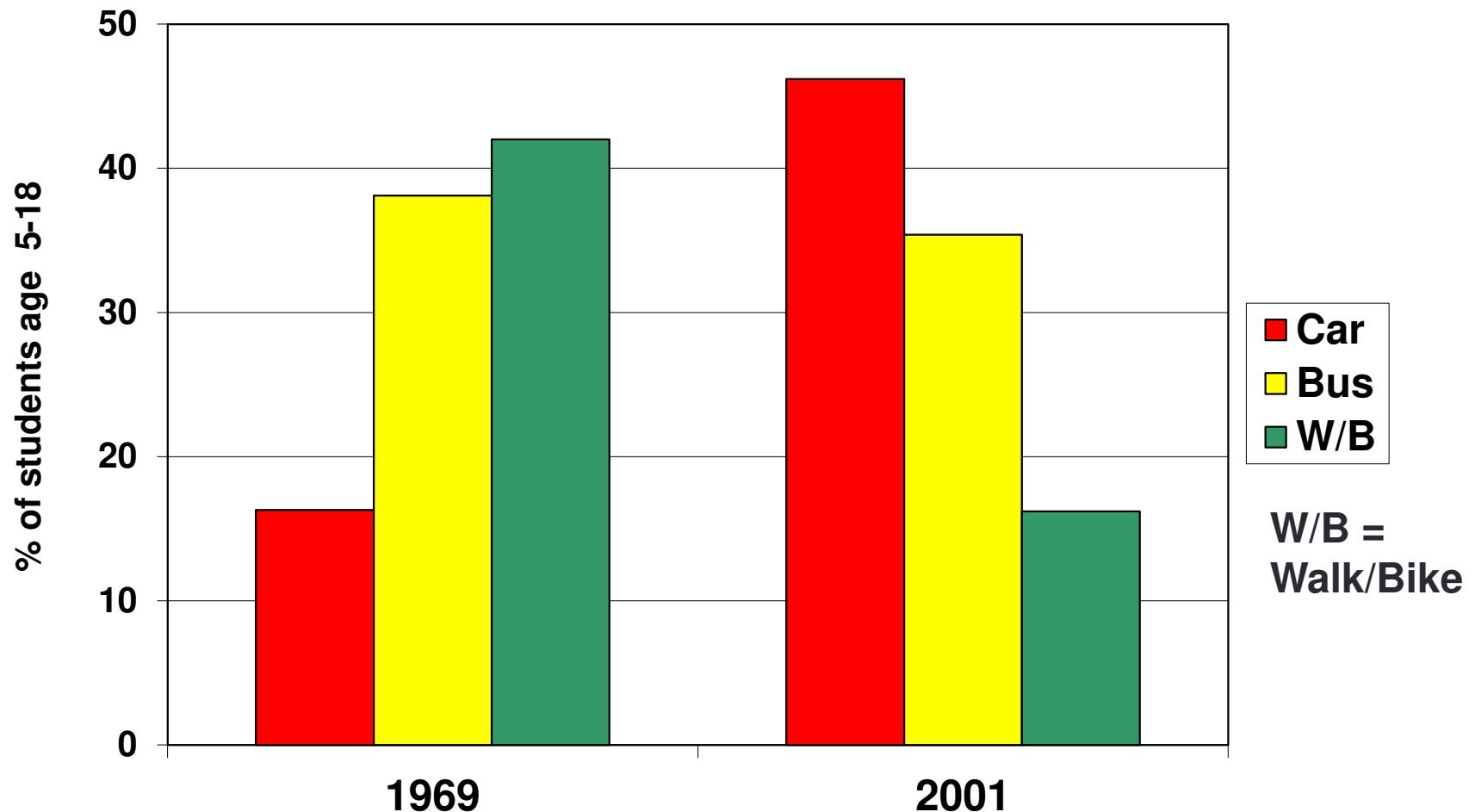


1. Were you a “free range kid?”
2. Do you think most children today are?
3. Do you think it’s good for them?

Scituate MA

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

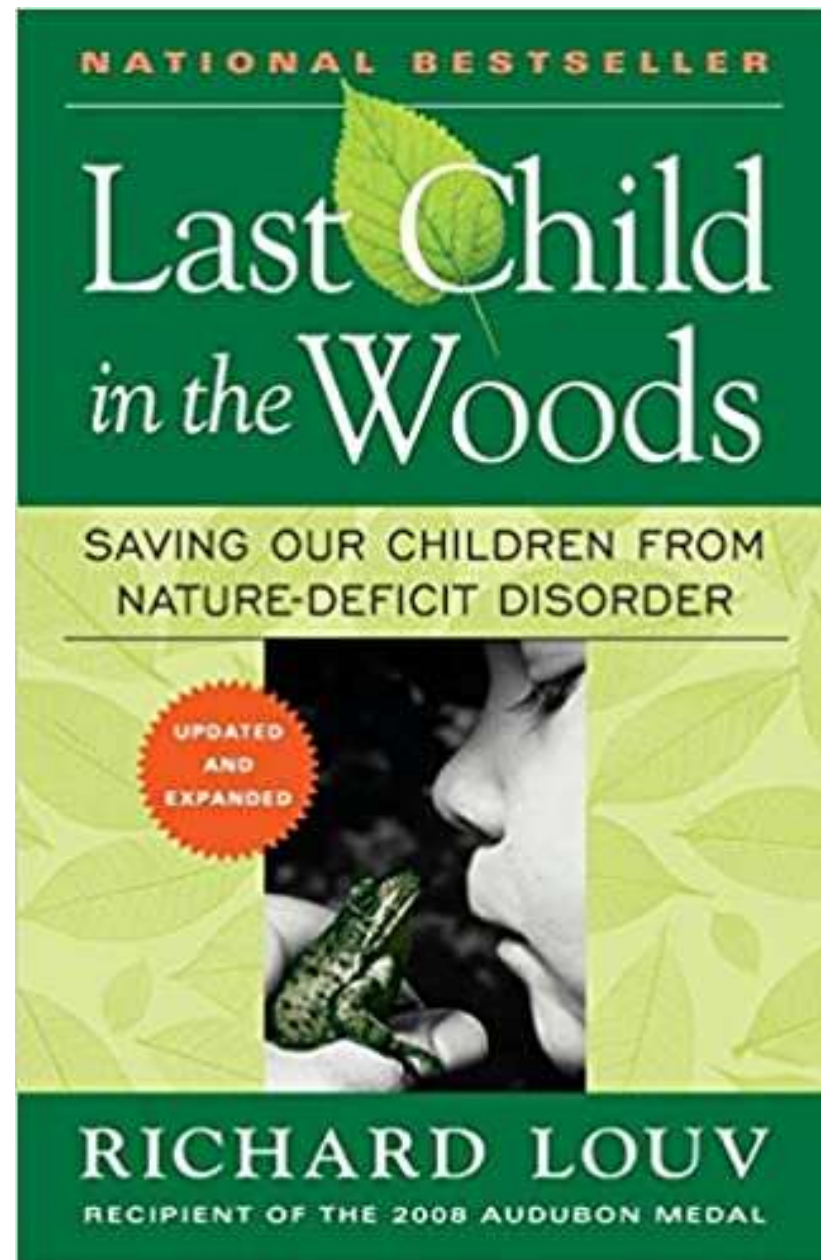


CDC, National Center for Health Statistics. *National Health Examination Surveys (NHANES) 1963–2006.*

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



Lenore Skenazy
www.freerangekids.com



The real
risk . . .



Pilots-to-Policy:

1. The health call for “stickier” communities.
2. Big policy goals.
3. Making the “economic argument.”
4. I2Audits to engage; demos to build support.
5. Where to focus?
6. Your call to action.



1. We should be physically active.



Adults > 30 min/day; Youth > 60 min/day



This counts!

But mostly we are not.



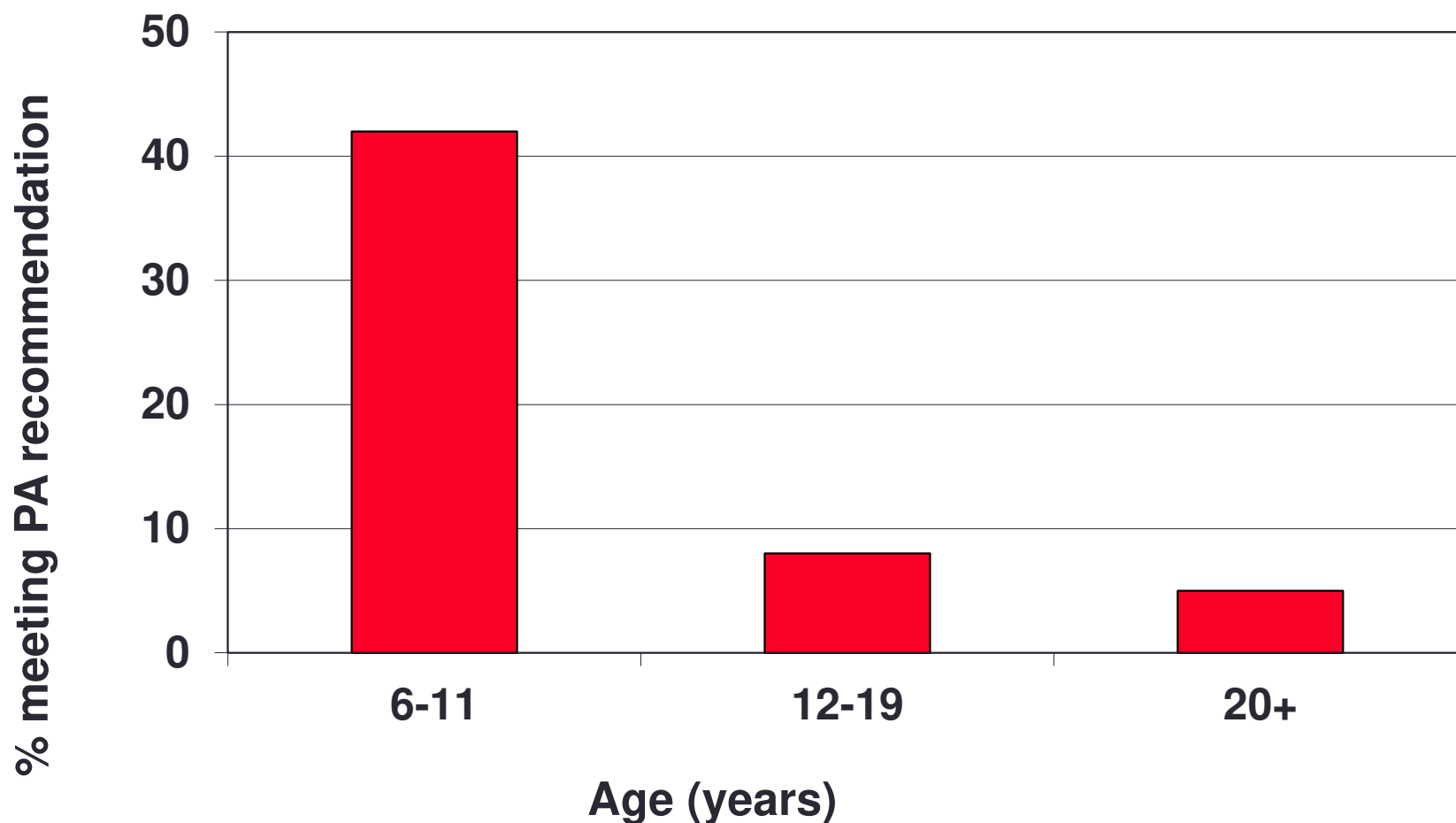
Pine Street Elem.
traffic, Spartanburg



Commute traffic,
everywhere

Physical Activity in the US Measured by Accelerometer

Troiano et.al., *Med Sci Sports & Ex*, 40(1), 2008.



Education &
encouragement
is not enough.



AARP health walk



E.g. walk to school day.

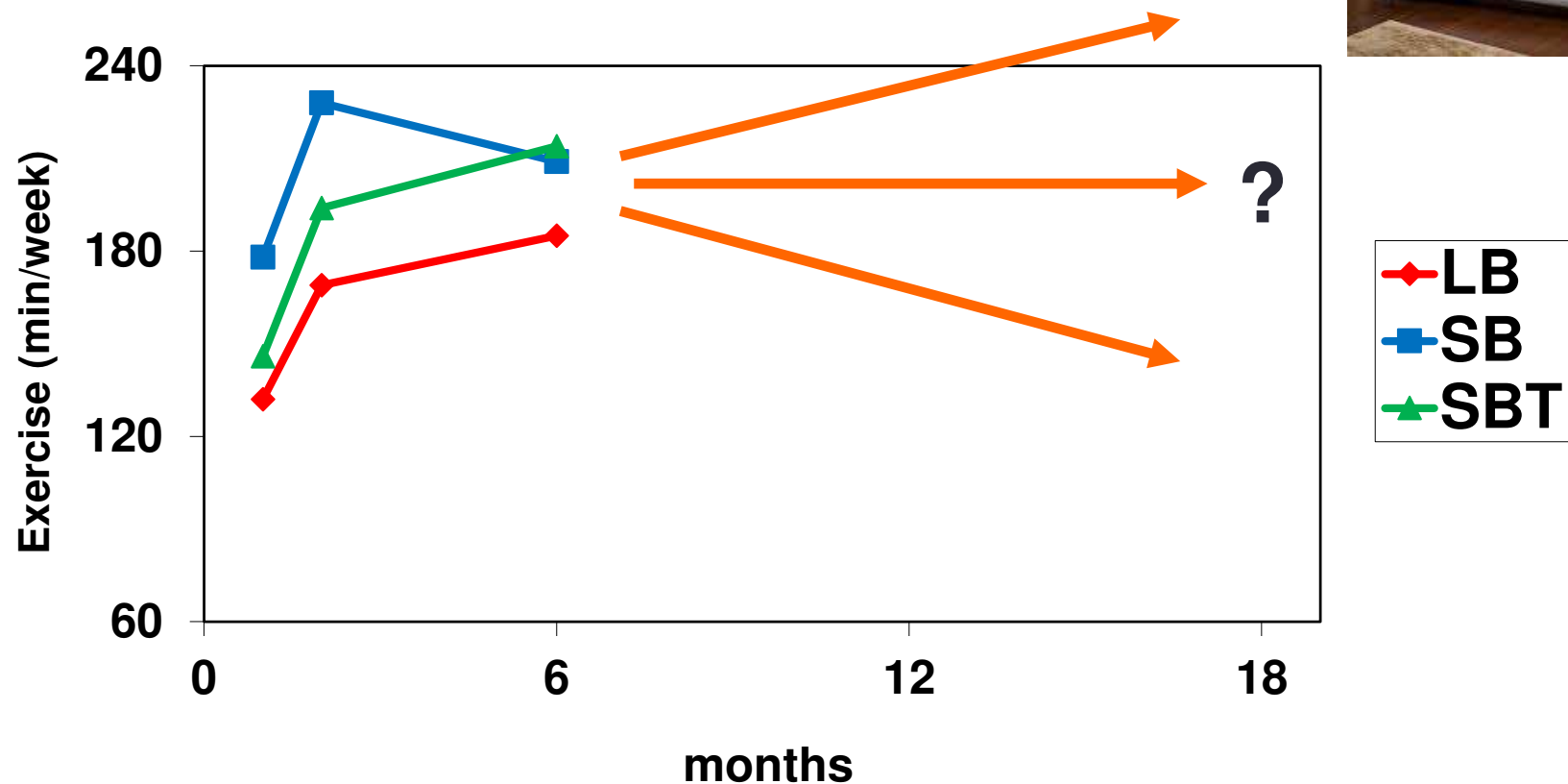


E.g. bike to work week.

Exercise Participation

Effect of Short Bouts, Home Treadmills

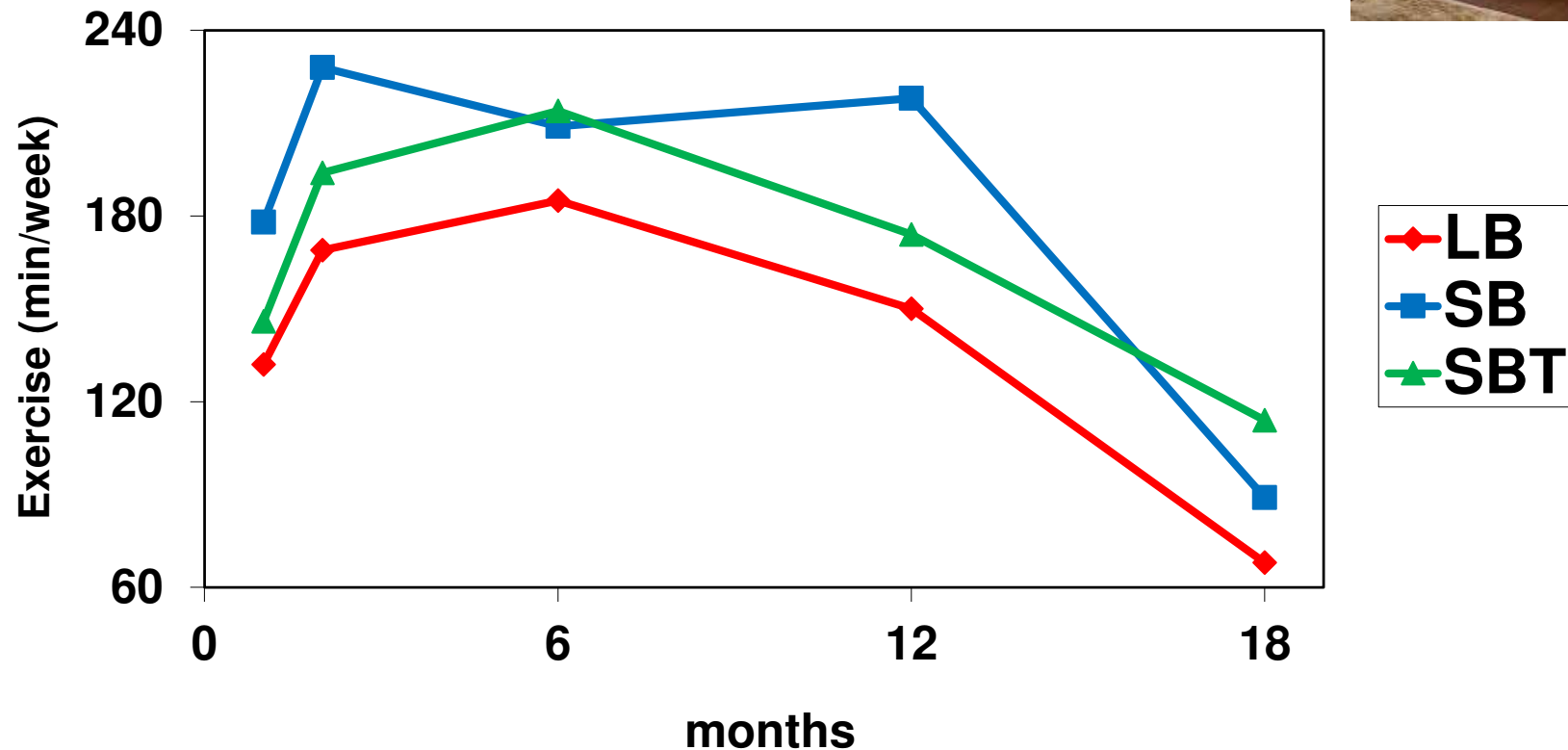
Jakicic et.al., *J. Amer. Med. Assoc.*, 282, 16



Exercise Participation

Effect of Short Bouts, Home Treadmills

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



Social Ecology

Physical Activity & Behavioral Medicine, Sallis & Owe.



Individual



Group

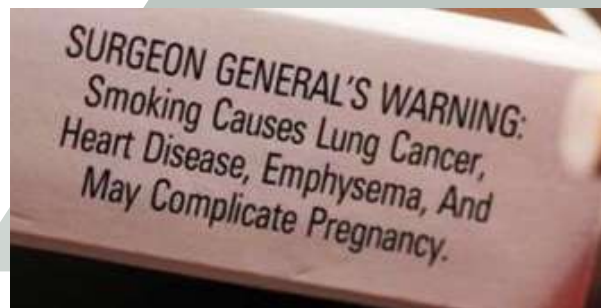


Institutional

Community



Policy



Social Ecology



Individual

Physical Activity & Behavioral Medicine, Sallis & Owen.

Group



Institutional



Community



Policy



Physically Active Routes to Everyday Destinations



- Walkable, Livable Communities.
- Safe Routes to School (Parks, etc.).
- Age-Friendly Comm. (AARP, WHO)
- Sustainability, Smart Growth.
- Transit Oriented Development.
- Vision Zero; “Twenty is Plenty”



i. Destinations nearby: Live, work, shop, play, & learn.



ii. Network of facilities for walking, bicycling & transit use:



- Sidewalks, multi-use trails, bicycle lanes & pathways.
- Affordable, frequent *transit*.



iii. Functional & inviting.

Where would you
be more likely to
shop on foot
and/or by bike?



iii. Functional & inviting.



iv. Safety & access.



For the nerds (like me) who want to go to the source . . .

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

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FAHA, Chair
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Margo Pedroso
James F. Sallis, PhD
Laurie P. Whitsel, PhD,
FAHA
On behalf of the
American Heart
Association Advocacy
Coordinating Committee

Policy change



Infrastructure improvements



More walking, bicycling, transit



Population health improvements

Circulation. 2020; Volume 142, Issue 11: e167–e183

2. So how can **you** help to change this?

- Convene **inclusive, interdisciplinary** working group; identify champion(s).
- Get out & move; **lead I2Audits**.
- **Try stuff**: Low cost pop-ups & quick build demonstrations.
- Target **POLICY** change:
 - Complete Streets
 - Healthy Zoning.
 - Transportation Trails.



Complete Streets policy.

Consider all users; of all ages, backgrounds, & abilities; using all modes (walk, bike, transit, car); all of the time.



“Armadillos”



**SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DEPARTMENTAL DIRECTIVES**

Directive Number: 28

Date: February 4, 2021

Subject: Complete Streets

Referrals: SCDOT Roadway Design Manual

Purpose: Establish Guidelines for Inclusion of Multimodal Accommodations (Walking, Bicycling, and Transit) in Projects Undertaken on the State-Owned Highway System

This Directive serves as the foundation for the South Carolina Department of Transportation (Department) to implement a complete streets policy that requires and encourages a safe, comfortable, integrated transportation network for all users, regardless of age, ability, income, ethnicity, or mode of transportation. This Directive will initiate change with numerous other sources of information within the Department to ensure our approach to providing complete streets is integrated into our practices and procedures. This Directive supersedes all other Department guidance that conflicts with the information in this Directive.

spatsmpo.com/247/SCDOT-Complete-Streets

Complete Streets – SC DOT Policy

- Adopted Feb. 2021
- Construct & maintain facilities for all modes: walk, bike, transit, motor vehicles, freight.
- Urges consideration of land uses in planning.
- Allows reference to NACTO, FHWA, NCHRP...
- Creation of a Complete Streets Council.

When and how do you engage SC DOT on a project to assure that **Complete Streets principles are applied?**

As early as possible; as part of a plan!

E.g. Bike Boulevards



DECEMBER 2016

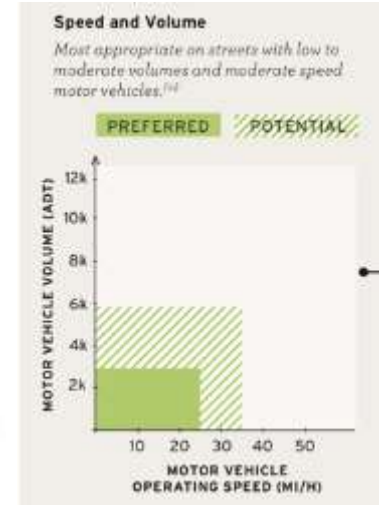
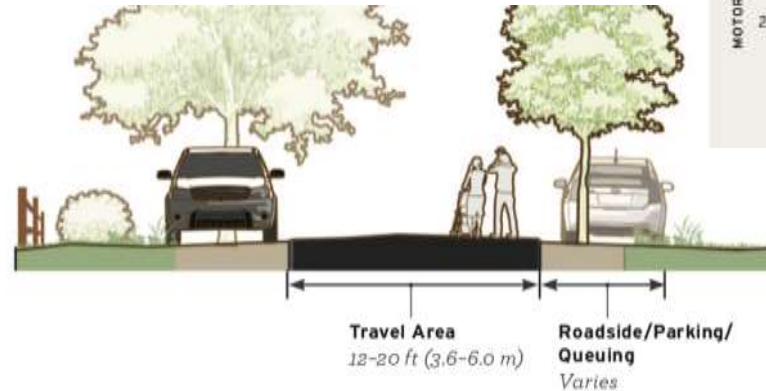
Small Town and Rural Multimodal Networks

ruralsdesignguide.com



U.S. Department of Transportation
Federal Highway Administration

FHWA



Planning, Zoning, Subdivision Regulations



- Narrower streets, sidewalks both sides, links to trail systems (existing and planned).
- Variety of services; shared open space.
- Mix housing types, sizes, and incomes.

Yes, even in small,
rural communities...



Trail Network Policies

- Develop a vision & long-term plan.
- Focus on functional links, to key destinations.
- Utilize all corridors: rail, utility, water-fronts, roadways.
- Vary trail type by use and location.





How much set-back is needed to make pedestrians comfortable?

(“Here comes the math”)



Preferred sidewalk setback:



Even a bike lane
adds a buffer.

1.0 Fenton minimum

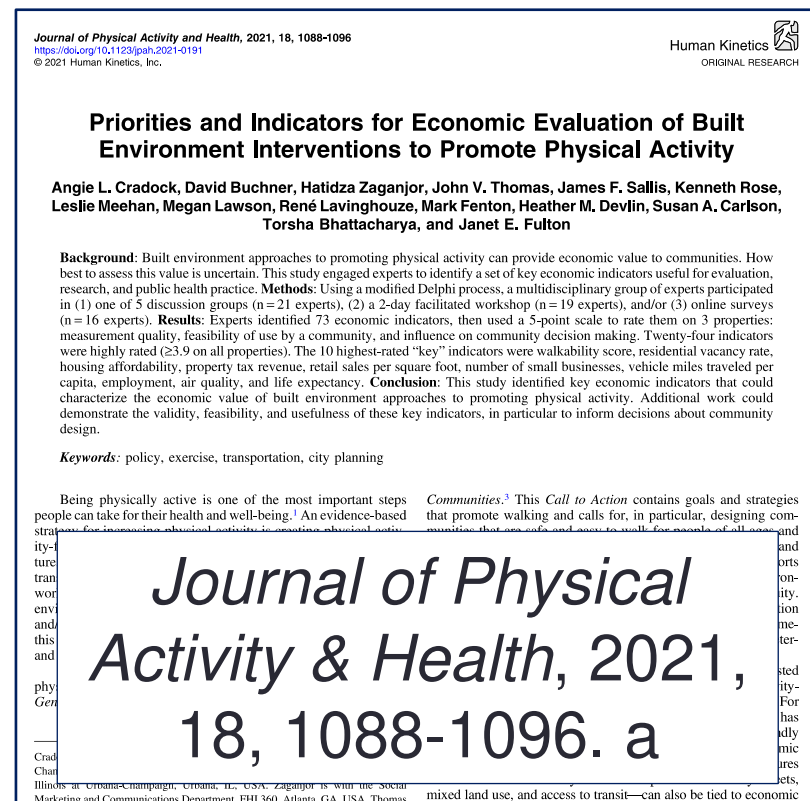
3. Supportive policies and environments for active transportation yield *economic benefits* . . .

Environmental health

1. Greater walkability & 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 & tax revenues.
7. More affordable housing opportunities.
8. Increased retail sales.



Social health & welfare

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

Healthy design = triple bottom line:



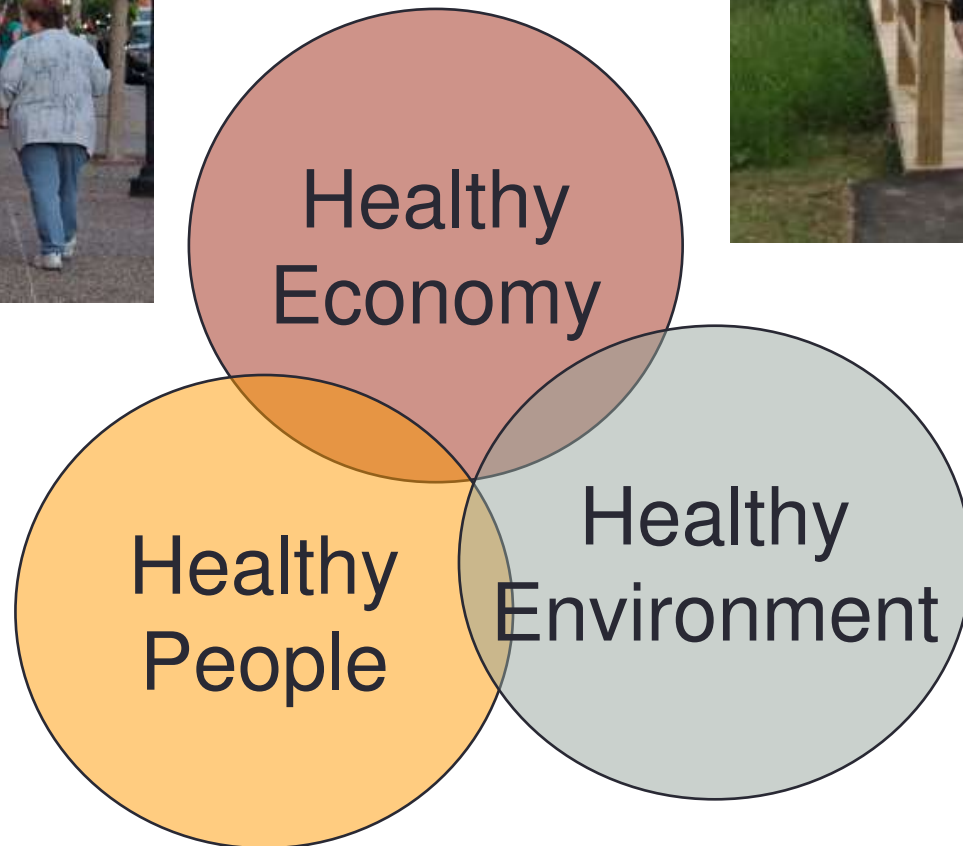
Prosperity



Planet



People



E.g. Success Story: Sulphur Springs, TX



- Inclusive planning.
- Parking converted to a community square.
- Restored one-way to two-way streets.

Sulphur Springs TX

- Implemented
**Complete
Streets!**



E.g. Economic Success: Sulphur Springs, TX



Business district goes from
80% vacancy to **80% occupancy.**

Making the Business Case for Activity-Friendly Places

HOW LOCAL LEADERS CAN CREATE VIBRANT PLACES THAT WORK FOR EVERYONE

Measurable benefits of activity-friendly settings

Which lead to economic benefits like:			Which contribute to:
<ul style="list-style-type: none"> Greater walkability Better air quality Fewer vehicle miles traveled 	<ul style="list-style-type: none"> More small business development Balanced vacancy rates Increased property values and tax revenues 	<ul style="list-style-type: none"> Higher retail sales Higher employment rates The possibility of more affordable housing 	<ul style="list-style-type: none"> Longer and healthier lives

NCCOR sponsored a panel of experts who identified potential economic factors that may change with efforts to support more activity-friendly communities. Among these, the following benefits rose to the top!

Activity-friendly places help meet many local community needs

Activity-friendly places³

- Fewer vehicle miles traveled
- Less traffic congestion
- Better infrastructure design

Lead to:

- Cleaner air
- Less noise
- Better ability to handle extreme weather⁴

HEALTHY ENVIRONMENTS

- Safe, accessible places
- Mix of everyday destinations
- Access to transit and trails
- Affordable housing

Lead to:

- More robust retail activity
- More jobs
- Increased tax revenue⁵

HEALTHY ECONOMIES

- Safe, convenient, appealing choices

Lead to:

- Healthier people today, tomorrow, and years from now
- Lower health care costs in the long run⁶

HEALTHY PEOPLE

Popular approaches communities use to create activity-friendly places

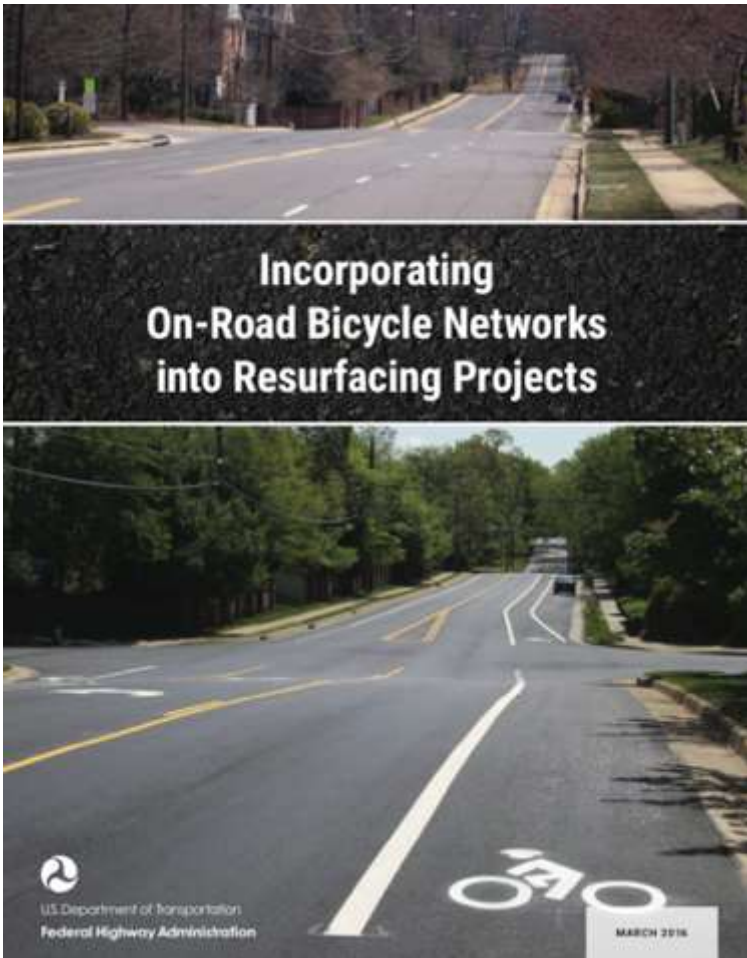
TRANSPORTATION <ul style="list-style-type: none"> Support policies such as Complete Streets to ensure every road is safe. Use rail, utility, and waterfront corridors to 	HOUSING AND DEVELOPMENT <ul style="list-style-type: none"> Create affordable, diverse, and accessible housing near jobs, essential services, and transit routes. 	COMMUNITY ENGAGEMENT <ul style="list-style-type: none"> Require broad input to develop a community vision and comprehensive plan to guide healthier designs and
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Make 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/

Cheapest? Routine Accommodation



[fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/resurfacing_workbook.pdf](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/resurfacing_workbook.pdf)

4. I2Audits to engage; pop-ups & quick-builds to demonstrate.





I2Audit: Inclusive, Interdisciplinary Walk/Move Audit.



Bike audits.



Transit audits.

Ask for a **0-10 score** on the four elements:

1. **Land use mix:** Different destinations in proximity?
2. **Network of facilities:** Quality & connectivity?
3. **Functional, inviting:** Rewards peds, bike, transit?
4. **Safety & access:** ADA design, all users, all abilities?



COVID-inspired efforts to create safer shared spaces.



Tar paper crosswalks



Main St. example: Pop-up curb extensions



Enosburg Falls, VT

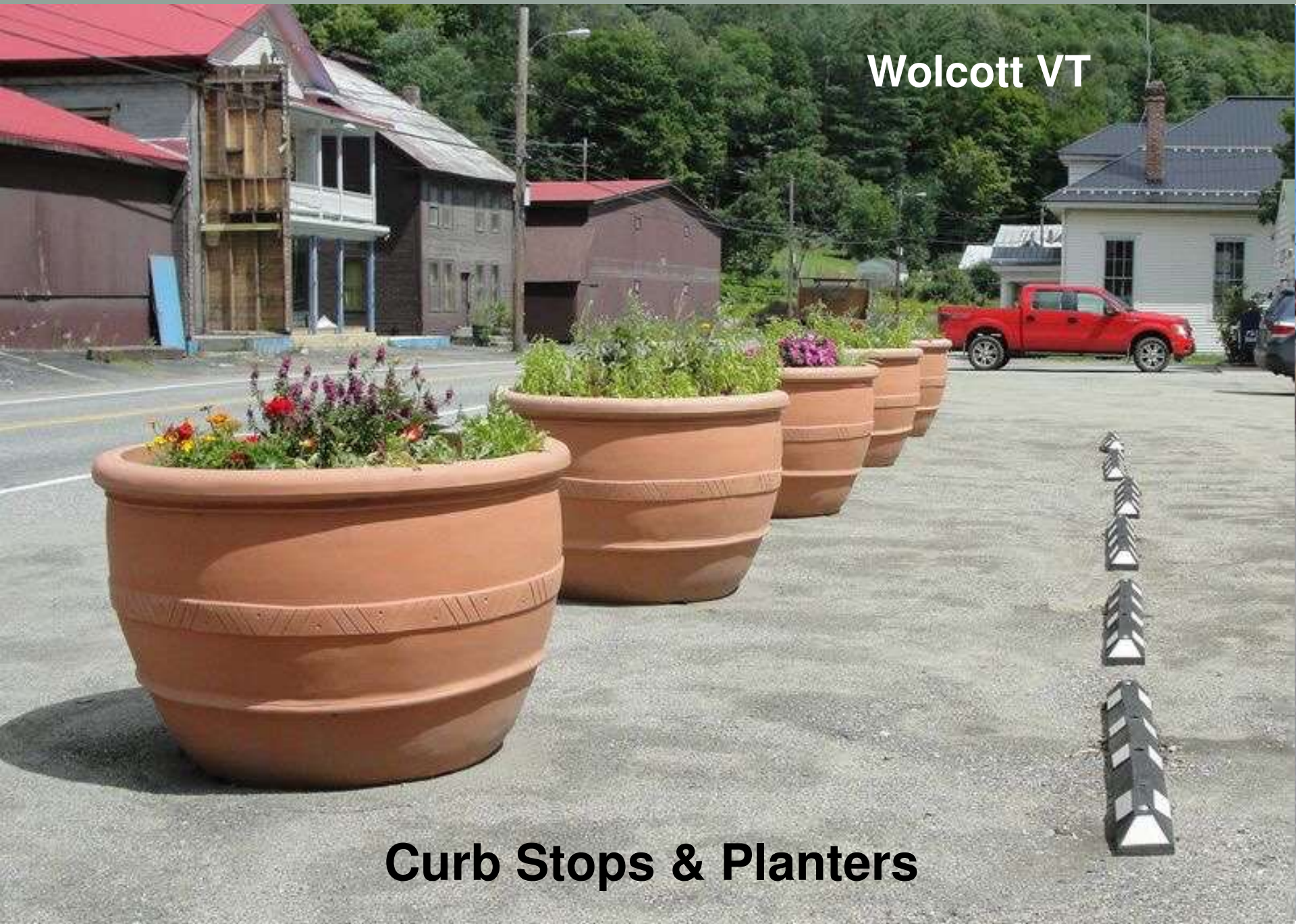






- **“It will slow traffic.”**
- **“It will make pedestrians trying to cross more visible.”**
- **“Drivers who can’t handle it shouldn’t be driving.”**

Wolcott VT



Curb Stops & Planters



“Food Park” McAllen, TX



Community garden & festival area
Salt Lake City, UT

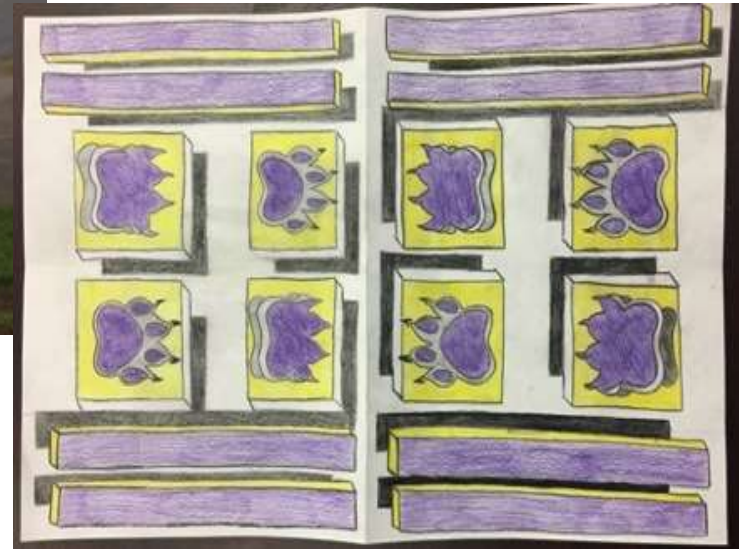




Weslaco TX

FCS students Working on
Wellness (WOW) audit.

What they requested:





The success was *not* just the paint!

America Walks



EXAMPLES OF PAST FUNDED PROJECTS

Previous America Walks' Community Change Grantees



EXAMPLES OF FUNDED COMMUNITY CHANGE GRANTS

From photos top to bottom, left to right:

1. Shinnecock Indian Nation Church Street Crosswalk Project
2. Verde's Latina Led Community Foot Patrol/Walking Group
3. Mathews Cultural Arts District Crosswalk Mural
4. Shoals Walk Across Alabama 10-Week Walking Challenge
5. Walking Program in the Jackson Medical Mall
6. Camden Salvation Army Kroc Center Walking School Bus After-School Program
7. Cupertino Safe Routes Student Led Walk/Bike Pop-Up
8. Camden Salvation Army Kroc Center Walking School Bus Cleanup Program

americawalks.org/community-change-grants/

AARP Livable Communities



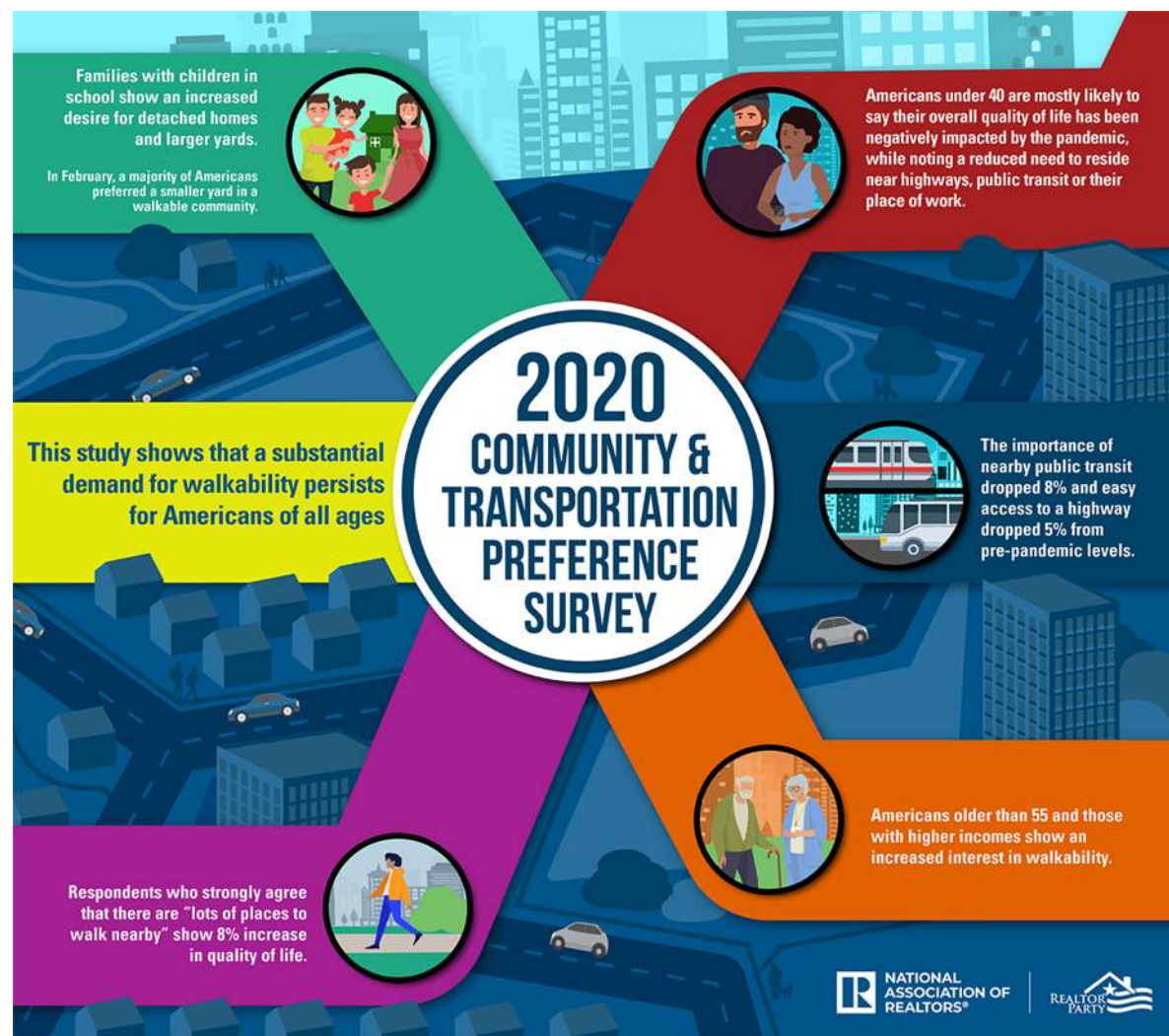
www.aarp.org/livable-communities/
www.aarp.org/livable-communities/community-challenge/

National Association of Realtors



Annual surveys exploring home-buyers' preferences show a growing desire for **walkable, livable communities**.

National Association of Realtors **Smart Growth Grants** are designed to support local community change efforts.

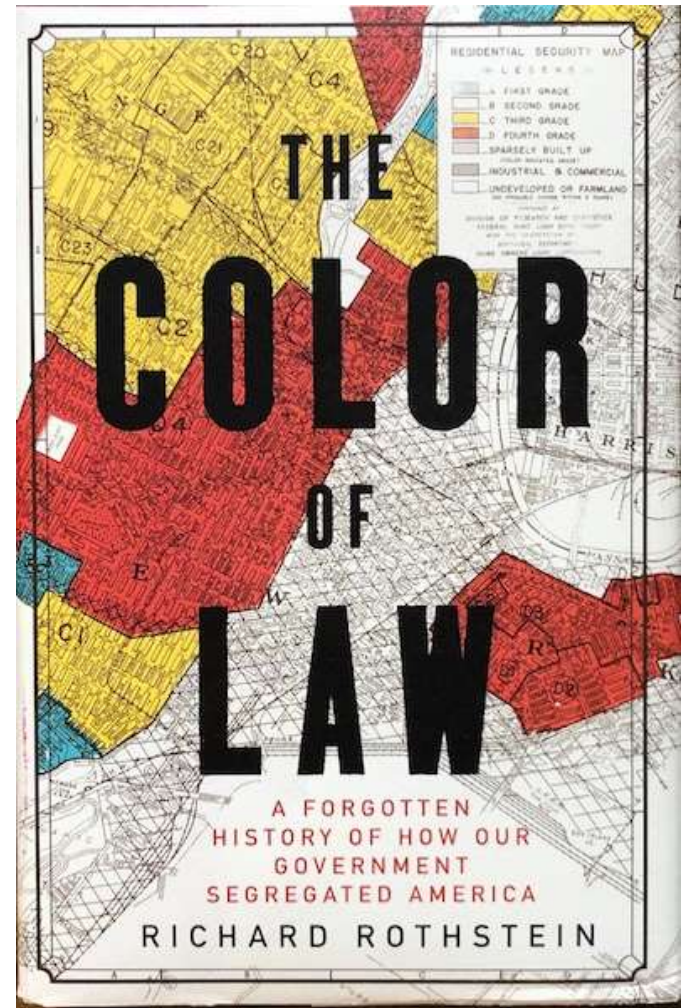


realtorparty.realtor/community-outreach/smart-growth

5. Where to focus our efforts?

Wherever there are:

- High rates of poverty.
- High rates of chronic disease risk.
- Low rates of car ownership/high rates of transit dependence.

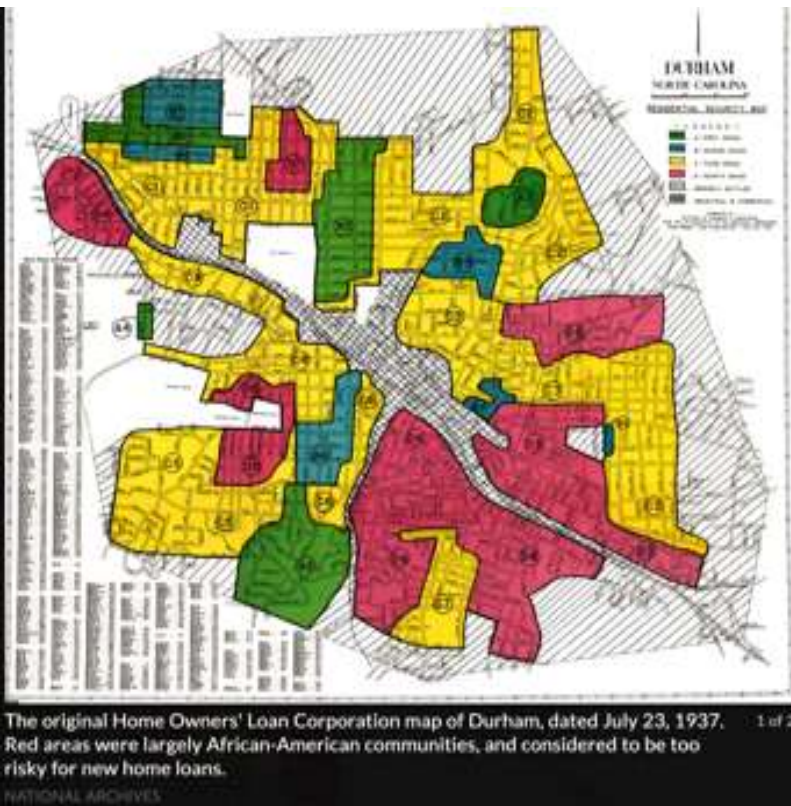


Richard Rothstein, *The Color of Law; A Forgotten History of How Our Government Segregated America*. Livernight Pub. 2017.

The Impact of Covid-19 on Minority Communities

Interview w/ Dr. Michelle Evans, Nat'l Inst. of Health; www.nejm.org

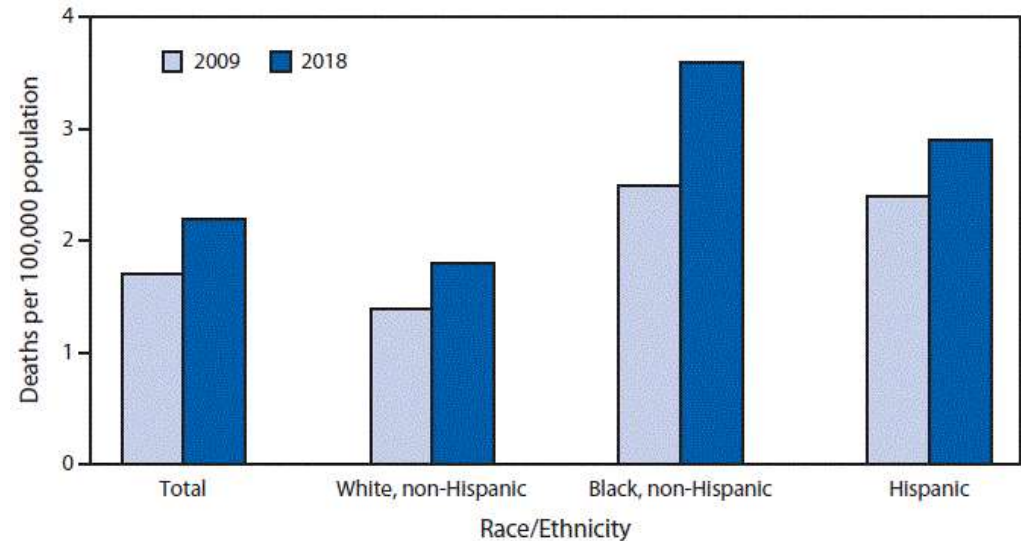
Red-Lining in Home Mortgages (Home Ownership Loan Corp.)



De facto school
segregation.

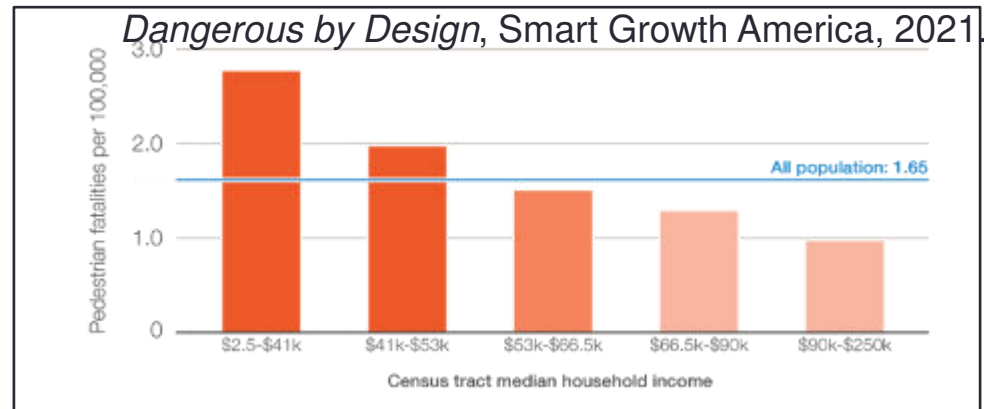
Pedestrian Deaths by Race

Age-Adjusted Pedestrian Death Rates. MMWR 2020:69:1434.

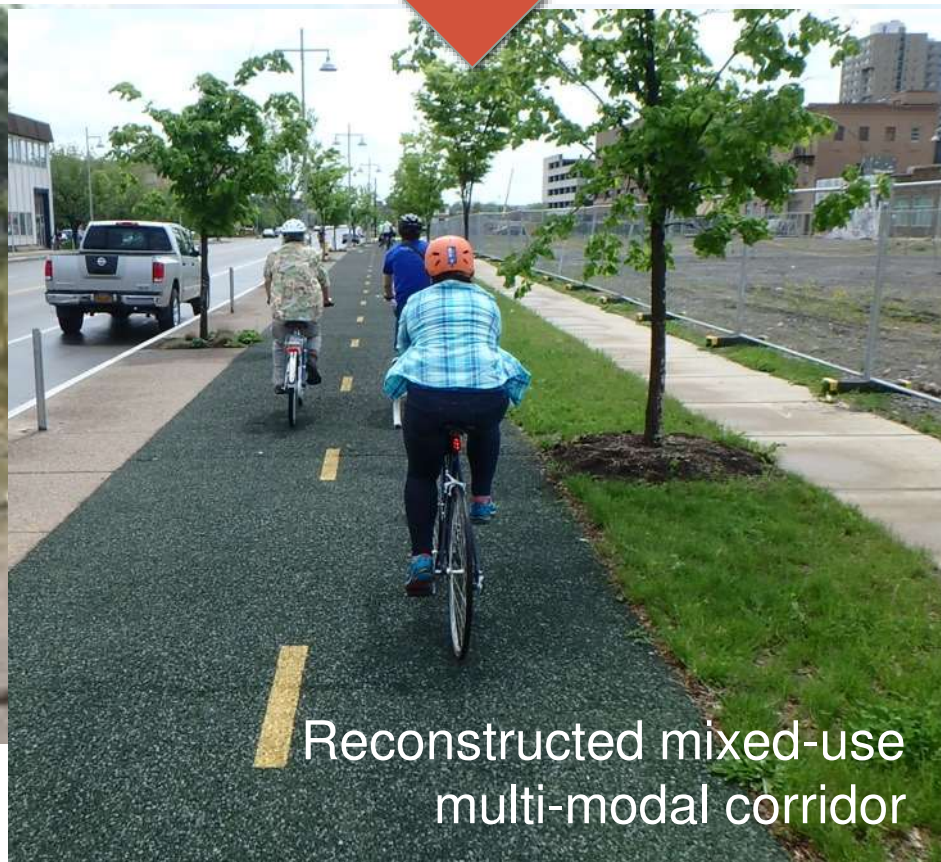


Pedestrian deaths by income.

Dangerous by Design, Smart Growth America, 2021.



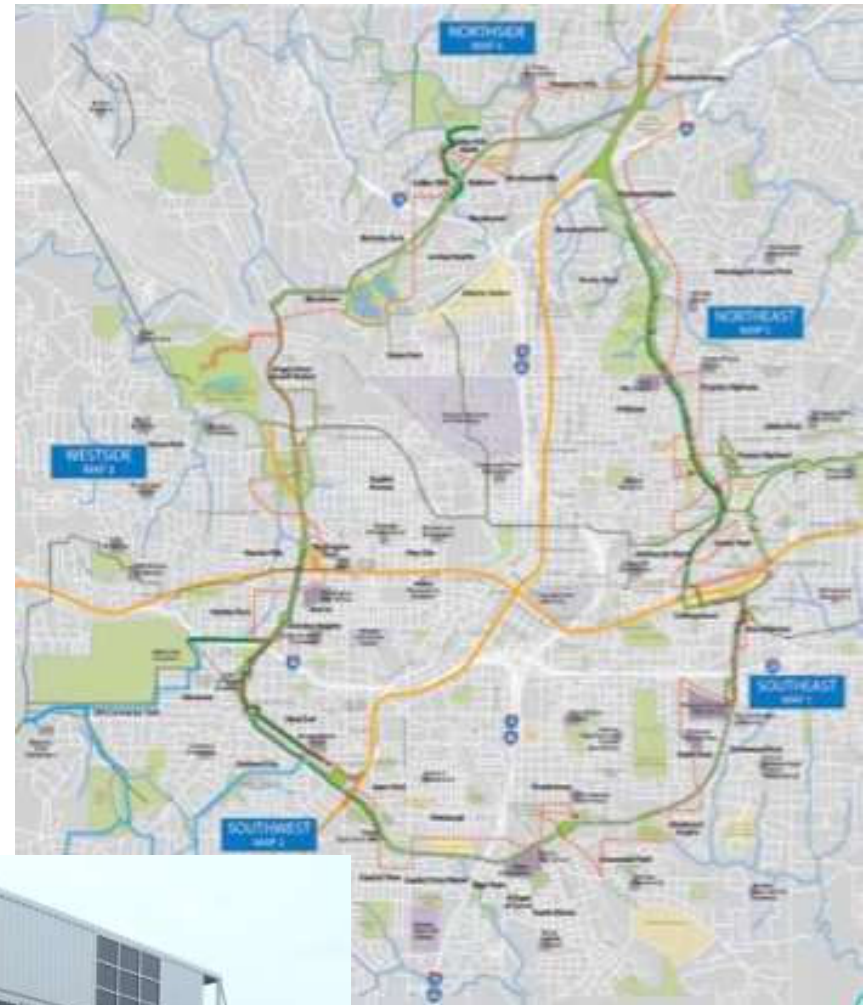
Inner
Loop
2004



Reconstructed mixed-use
multi-modal corridor



Atlanta's BeltLine Trail



Healthy Community Design, Anti-displacement, and Equity Strategies in the USA: A Scoping Review

Natalicio Serrano^{1b} · Lindsey Realmuto · Kaitlin A. Graff · Jana A. Hirsch · Lauri Andress · Mojgan Sami · Ken Rose · Akimi Smith · Katherine Irani · Jean McMahon · Heather M. Devlin

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

Policies Can **Anticipate and Reduce** Gentrification, Displacement, and support Housing Diversity. E.g., ...

- Inclusionary zoning (required affordable %); bonuses
- Mix of rental and ownership
- Mix styles and sizes; townhomes, row houses, cottage clusters, mini-homes; shared housing
- Accessory dwelling units (e.g., garden & garage apartments)
- *Missing Middle* choices
- First right of refusal for tenants

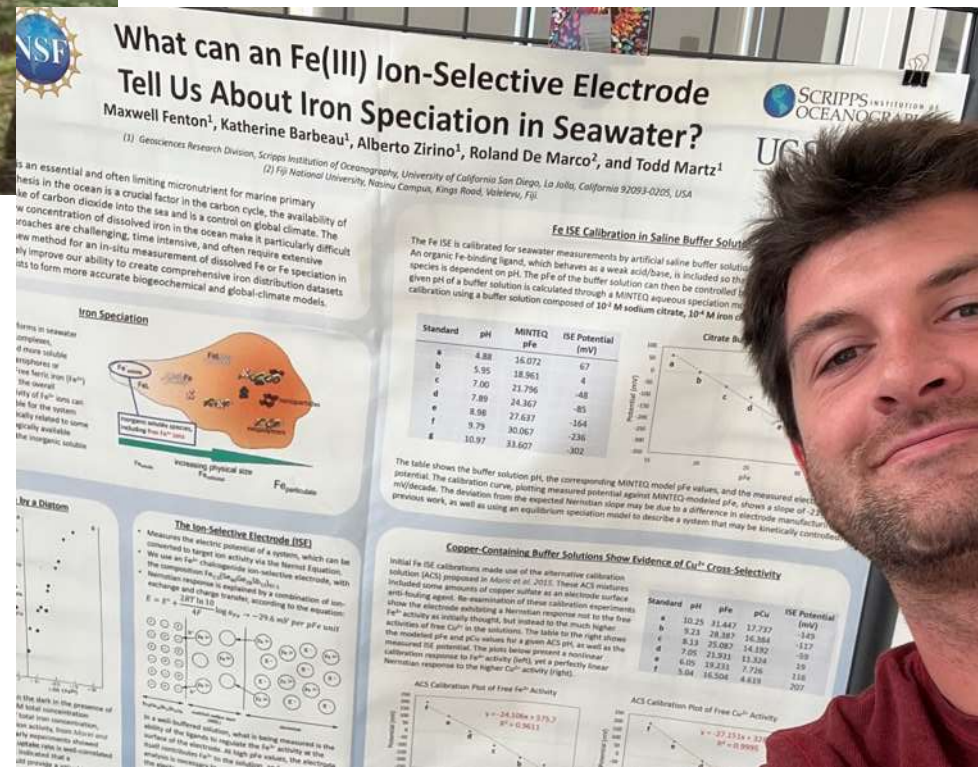


6. Your call to action . . .

- **Speak up:** Recommend, promote Active Transportation; pitch all the benefits; *make the economic case* to community & leaders.
- **Step up:** Be a role model; walk a child to school, bike for errands, take transit to work; Convene an AT work group; *host I2Audits*.
- **Act up:** Engage peer agencies professionals, local leaders; *develop pop-up demos*; evaluate & *advocate for policy change* (Complete Streets, Transportation Trails, Mixed-Use Zoning, Equitable housing & transit policies).



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