

# **bridging the gap**

Research Informing Policies & Practices  
for Healthy Youth

## S501: Local Policies and Healthy Living Environments: Evidence from the Bridging the Gap Research Program

American Planning Association 2013 National Planning Conference  
April 14, 2013

# Session Learning Objectives

1. Describe the extent to which local land use policies affect the food environment and built environment. Examine if certain types of food outlets are likely to be addressed in codes or certain types of communities.
2. Examine socio-economic disparities related to access to physical activity opportunities and park amenities. Examine the extent to which living in more walkable communities is associated with reduced prevalence of adolescent obesity.

# Today's Session

- **Brief** overview of Bridging the Gap and the Community Observation Measures Project (BTG-COMP)
- Four research presentations:
  - Emily Thrun, MUPP: “Using Local Land Use Policies to Facilitate Physical Activity and Healthy Food Access”
  - Christopher Quinn: “The Landscape of Local and Regional Public Parks in the U.S.”
  - Jamie Chriqui, PhD: “How Zoning and Land Use Laws Influence Community Walkability and Healthy Food Access”
  - Sandy Slater, PhD: “Walkable Communities and Adolescent Weight”

# Bridging the Gap

An Overview

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# Bridging the Gap is.....

- A collaborative effort to assess the impacts of policies, programs & other environmental factors on the health behaviors of children and adolescents
- An RWJF initiative begun in 1997
  - Initial focus on youth alcohol, tobacco and other drug use
  - Adapted in 2003 to focus on both sides of the energy equation---diet and physical activity---and weight outcomes
    - RWJF BTG obesity-related commitment to date: \$26.8 million
- Leverages the ongoing NIDA-funded Monitoring the Future study

YES!

Youth,  
Education,  
& Society

University of Michigan  
Lloyd Johnston, Project Director  
Institute for Social Research

Monitoring the Future  
(MTF)

Youth, Education and  
Society (YES!)

University of Illinois at Chicago  
Frank Chaloupka, Project Director  
Health Policy Center

ImpacTeen

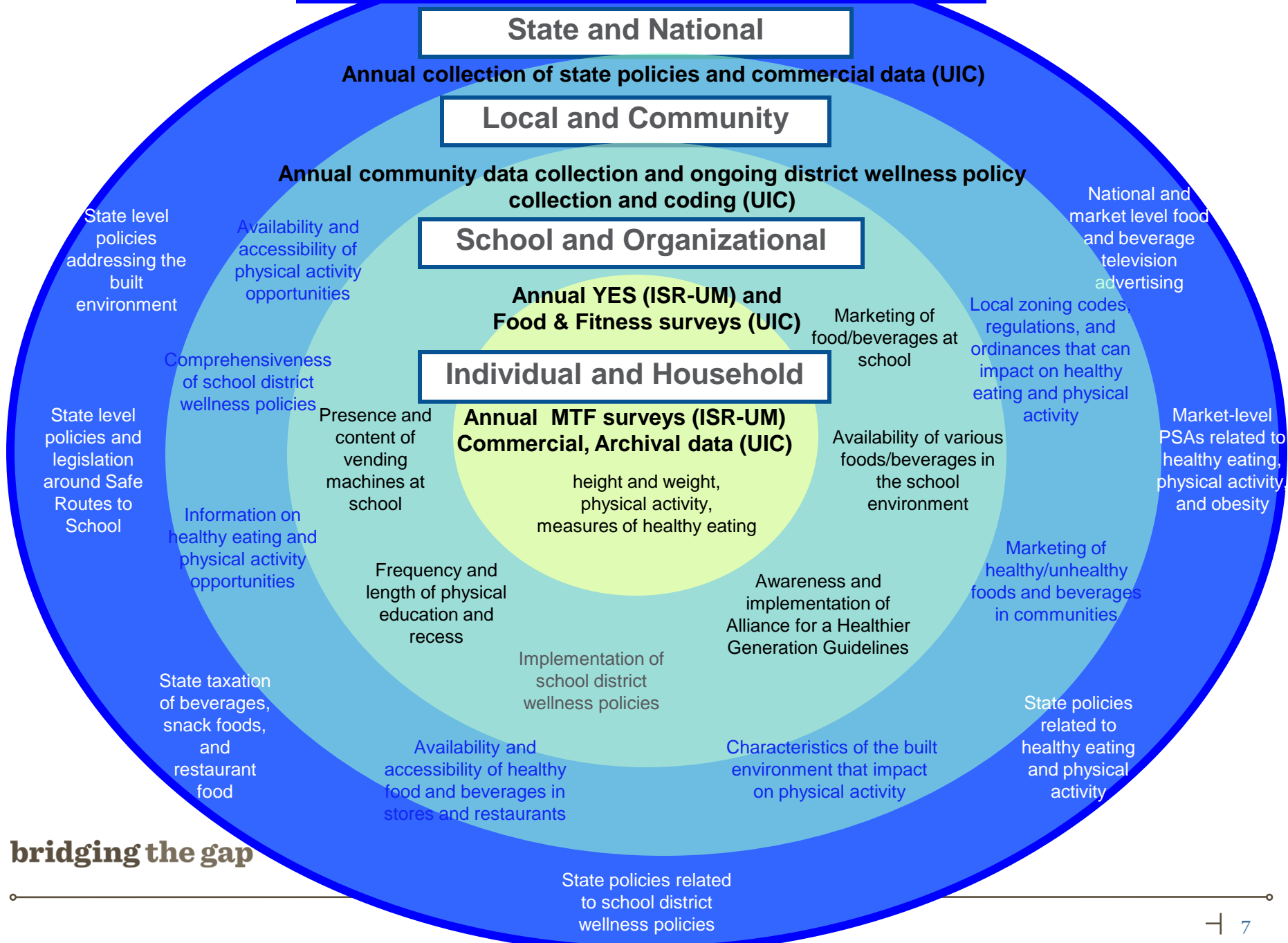
Food & Fitness



*A Policy Research Partnership  
for Healthier Youth Behavior*

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# Bridging the Gap - Obesity



## National Policy and Environment

Ongoing monitoring of relevant federal policy changes  
Analyses of trends in TV food and beverage advertising

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## State Policy

Annual updating of database of state-level obesity-related laws in all **50 states and in Washington DC**

## Community Environment

Community Obesity Measures Project (COMP) - observational data collection in food stores, fast food restaurants, parks, physical activity facilities, and on street segments in **150+ communities** surrounding MTF schools

## Local Policy

Collection and coding of local ordinances, zoning codes, master plans, and School District Wellness Policies in **150+ communities** surrounding MTF schools

## School District Policy

Collection and coding of Wellness Policies from **600 school districts**

## School Environment

YES! survey of school administrators in **200 MTF schools**

## School Environment

YES! survey of administrators in **600 public middle and high schools**

## School Environment

Food & Fitness survey of administrators in **1,000 public elementary schools**

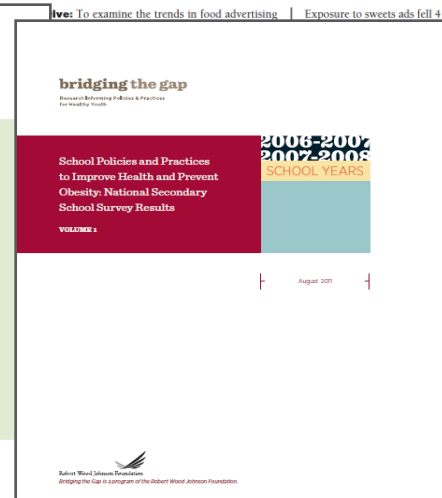
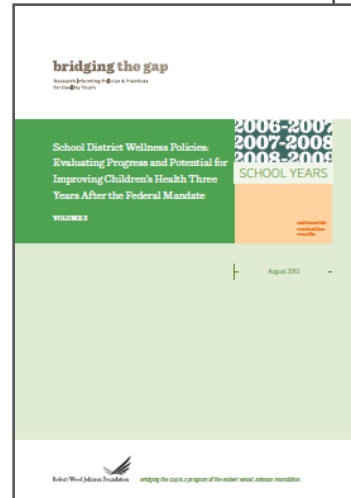
## Individual Behaviors/Outcomes

NIDA-funded MTF survey of **50,000 students** in 420 middle and high schools



# Bridging the Gap products include...

- Research briefs
- Monographs
- Peer reviewed journal articles
- Book chapters
- Presentations
- Public-use databases
- Data collection tools/methods
- Testimony
- Web site

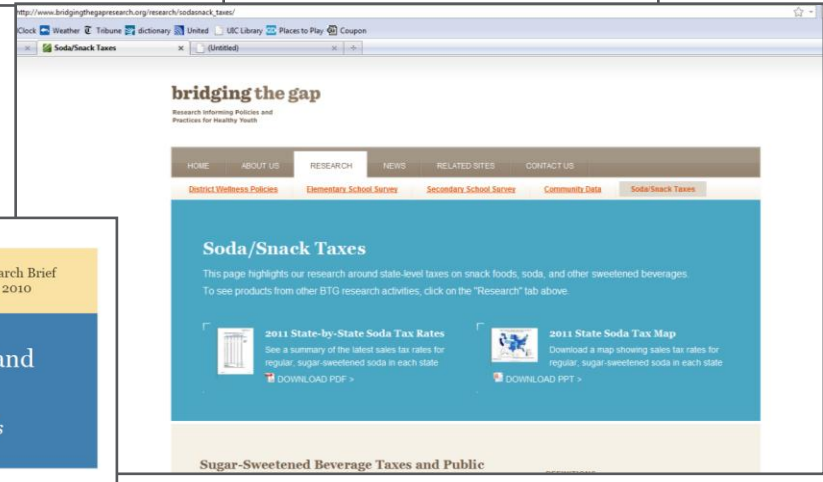


Objective: To examine the trends in food advertising | Exposure to sweets ads fell 41%, 29.3%, and 12.1%, and 12- to 17-year-olds about 27% to 30% across initial decreases in ex-

posedly advertised sugars and regular soft drinks, by 4.7%, 12.2%, and 5.6 to 11, and 12 to 17 03 and 2007. The racial sing grew between 2003 food ads.

Changes have oc- food advertising. Con- sive exposure along with to further assess self-

64(9):794-802



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For more information: [www.bridgingthegapresearch.org](http://www.bridgingthegapresearch.org)

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Enter keywords SEARCH

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**District Wellness Policy Report**  
Landmark study reveals majority of district wellness policies fail to provide healthy school environment for kids.

# Evaluating school district wellness policies

**Gap**  
nationally recognized research program. Our goal is tanding of how policies and environmental factors btivy and obesity among youth, as well as youth

**New Products**  
**Major New Study Reveals Strengths and Weaknesses of School District Wellness Policies**  
*Local Wellness Policies: Assessing School District Strategies for Improving Children's Health: School Years 2006-07 and 2007-08* is the most comprehensive ongoing analysis of the federally-mandated district wellness policies.

**Report**  
*Local Wellness Policies: Assessing School District Strategies for Improving Children's Health: School Years 2006-07 and 2007-08.* More information

**Executive Summary**  
Major findings from *Local Wellness Policies: Assessing School District Strategies for Improving Children's Health: School Years 2006-07 and 2007-08.* More information

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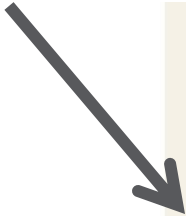
Robert Wood Johnson Foundation  
A program of the Robert Wood Johnson Foundation. MORE INFO >

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# Bridging the Gap: Community Obesity Measures Project

BTG-COMP

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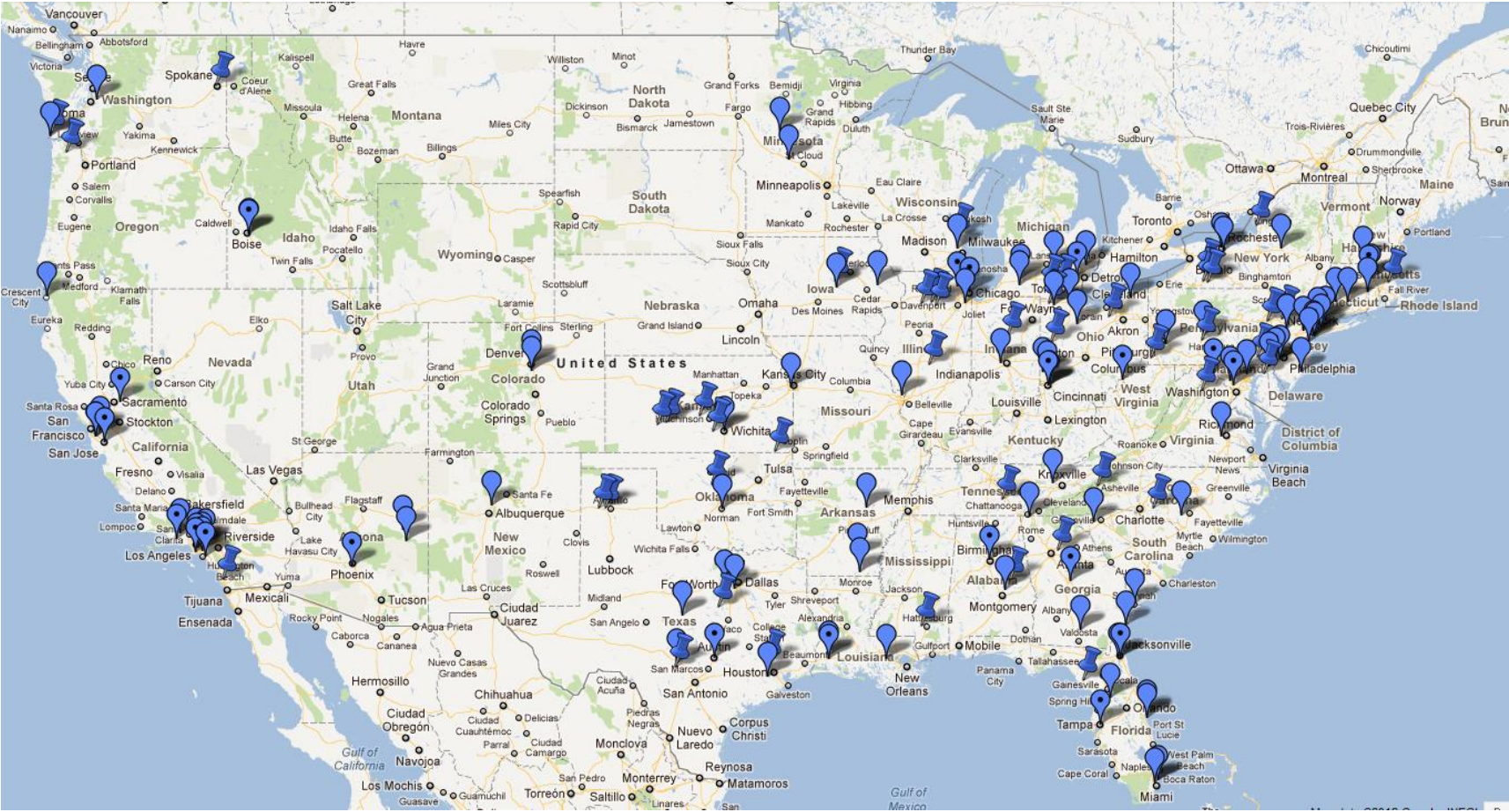


# BTG-COMP

Study Design

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# 2012 BTG-COMP sites

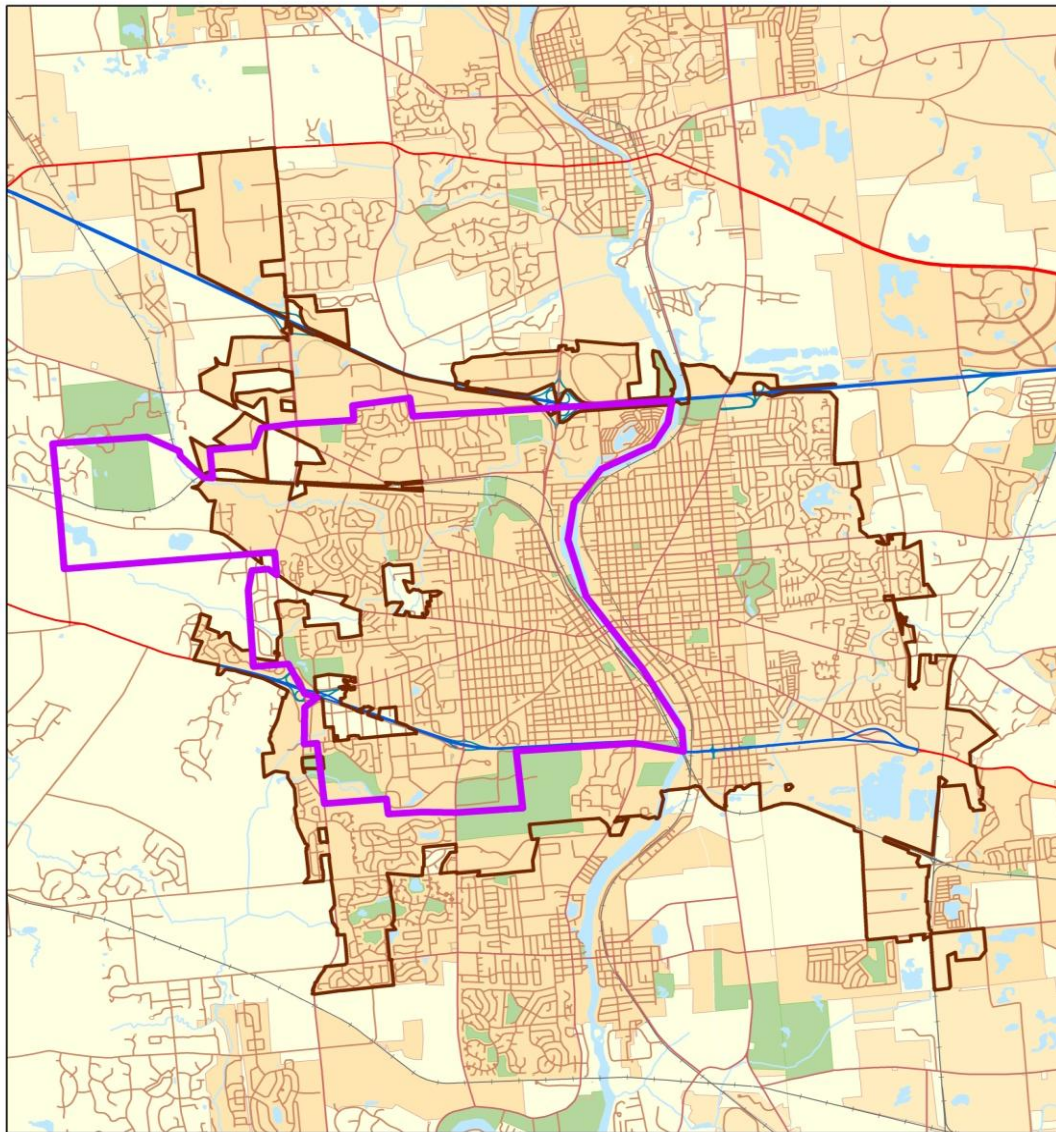


# BTG-COMP Community Definition

- School Enrollment Zone
  - 2<sup>nd</sup> year Monitoring the Future public middle and high schools
    - 2008 Focus Groups confirmed adolescents stay pretty close to school and home to eat and exercise
- May be multiple policy jurisdictions surrounding the school enrollment zone

	# Communities	# Policy Jurisdictions
2010	154	360
2011	157	378
2012	160	~420

- Environmental observations in food stores, tobacco stores, fast food restaurants, parks, physical activity facilities, school grounds and on streets



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# Characteristics of the 2010 Sites

Variable	Categories			
Census Region	Northeast	South	Midwest	West
	19.4%	32.8%	27.1%	20.7%
Racial/Ethnic Composition	≥ 66% White	≥ 50% Black	≥ 50% Hispanic	Other make-up
	70.3%	4.0%	6.6%	19.1%
Urbanization	Urban	Suburban	Rural	
	20.6%	33.6%	45.8%	
Variable	Mean (Std Error)	Median	Minimum	Maximum
Median Household Income	\$59,161 (2231)	\$54,780	\$15,432	\$194,295
Population density (per sq. mile)	2366.54 (438.32)	320	1.93	67949.00



# BTG-COMP: Types of Environments Being Observed

- Fast Food Restaurants
- Food Stores
- Food Policy Environment
- Parks
  - Survey of Park and Rec Departments
- Physical Activity Facilities
  - Survey of Instructional “Schools”
- School Grounds
- Streets
- Policy for the Built Environment



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## Using Local Land Use Policies to Facilitate Physical Activity and Healthy Food Access

American Planning Association 2013 National Planning Conference

April 24<sup>th</sup>, 2013

Function code: S501

Emily Thrun, MUPP

# Objectives

- Describe the prevalence of active living-oriented requirements included in local governments' policies and plans and the extent to which food outlets are permitted in local ordinances.
- Examine the socio-demographic characteristics associated with such policy/plan provisions.

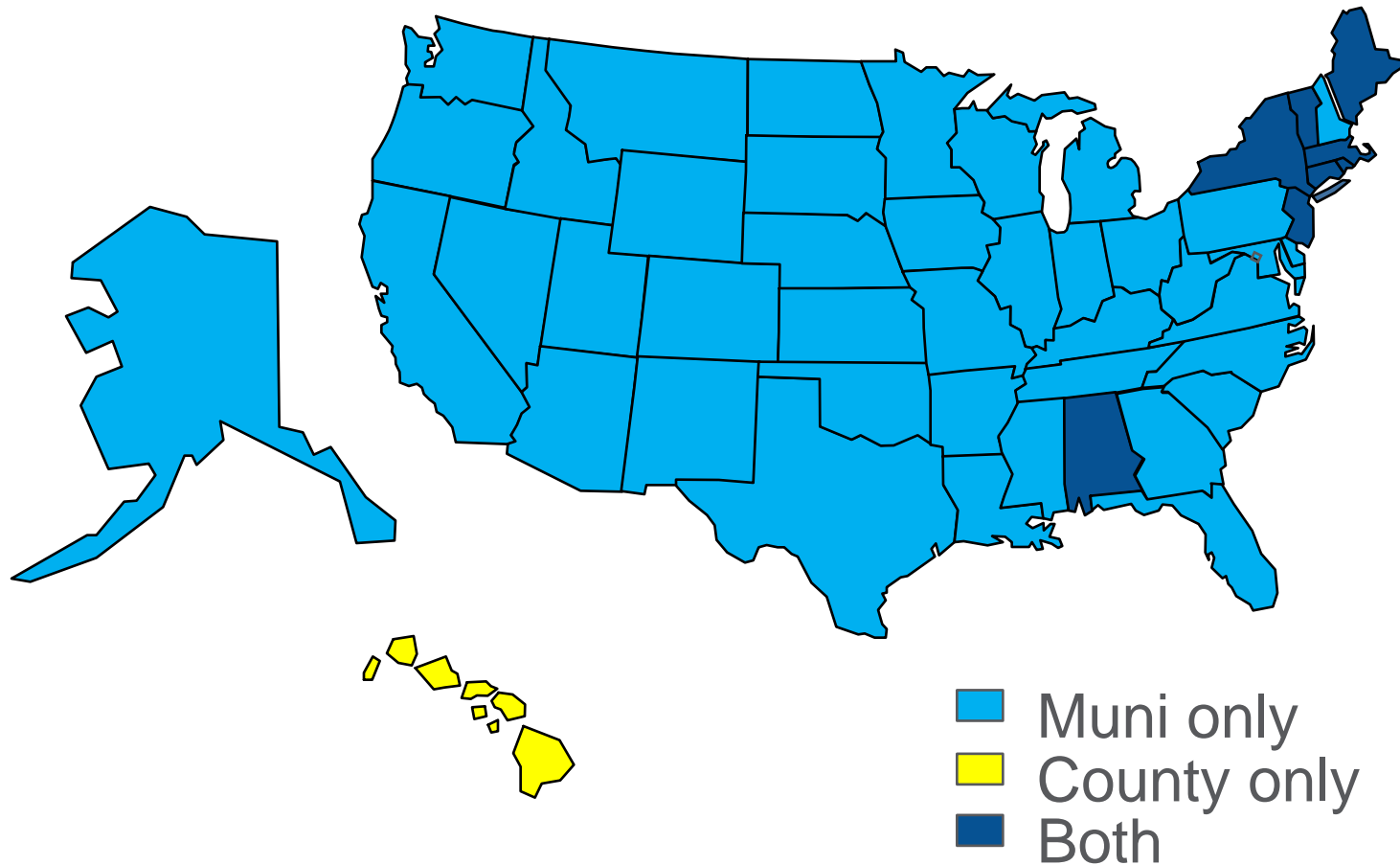


Source: [www.pedbikeimages.org](http://www.pedbikeimages.org) / Dan Burden

# Zoning and its Relationship to Public Health

- Zoning, subdivision regulation, and building codes are exercises of the states' police powers under the 10<sup>th</sup> Amendment
- Zoning authority granted to county and municipal governments by states to promote the health, safety, morals, and general welfare of their citizenry
- Traditional, Euclidian zoning establishes land use zones/districts based on use and density
  - The protection of public health lies at the heart of zoning –zoning offers a regulatory scheme to address public health problems caused by urbanization<sup>1</sup>

# State-Delegated Zoning Authority to Counties and Municipalities



## Long-range Plans

- Majority of states with enabling legislation for plans, the plan lacks the force of law and is merely a suggestion in land use planning.
- However, in some states plans are becoming legally binding documents.<sup>2</sup>
- Plans can be implemented through zoning changes.

# Zoning and Land Use Laws as Strategies to Support Healthy Food Access and Active Living-oriented Environments

- Modify zoning/land use laws to include requirements for structural improvements to increase opportunities for physical activity.
  - New Urbanist, SmartCodes, form-based codes, zoning code reforms
- Modify zoning/land use laws to permit a variety of food outlets to increase healthy food access (e.g. grocery stores, supermarkets, farmer's markets, community gardens, fruit and vegetable stands or carts)

# Study Methods

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## Methods

### Policy Collection and Coding

- Policies and plans were collected in 2010 from local governments (132 counties and 228 municipalities) surrounding 154 secondary schools nationwide (aka, “secondary school catchments”).
- Items collected included:
  - Zoning Ordinances
  - Subdivision Regulations
  - General Ordinances
  - Master/Comprehensive/General Plans
- Policies were reviewed and double-coded by two Master’s level researchers to identify requirements for provisions that would facilitate physical activity and identify permitted food outlets using detailed coding protocols developed following the pilot study.

# Built Environment Local Zoning/Policy Audit Form

<b>BTG-COMP - BUILT ENVIRONMENT LOCAL ZONING/POLICY AUDIT FORM</b>	<b>2010</b>	Observation ID
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D. MARKERS OF WALKABILITY												
ZONE/DISTRICT	√ if Zone/ District Present (from C1)	D1. Walking/biking/ pedestrian provisions (oriented to active-living)			D2. Strength of walkability marker relative to district/zone				D3. Crosswalks			
		YES	NO	NA	REQ	ENC	NO	NA	REQ	ENC	NO	NA
a. Commercial		1	0	8	2	1	0	8	2	1	0	8
b. Downtown district		1	0	8	2	1	0	8	2	1	0	8
c. Forest (preserve)												
d. Mixed-use												
e. New urbanist dev./district												
f. Open space												
g. Park district												
h. Pedestrian-oriented development												
i. Pedestrian-oriented district												
j. Planned unit development (PUD)												
k. Public/civic/gvt/ use districts												
l. Recreation												
m. Residential												
n. Schools/education districts												
o. Shopping district (see protocol)												
p. Transect zones/districts												
q. Tradl. neighborhood dev. (TND)												
r. Transit-oriented dev. (TOD)												
s. Part of form-based code												
t. Part of overall zoning code												
u. Part of SmartCode												
v. Part of subdivision ord./code												
w. Part of unified development code												
x. Part of design manual												

<b>BTG-COMP - BUILT ENVIRONMENT LOCAL ZONING/POLICY AUDIT FORM</b>	<b>2010</b>	Observation ID
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H. BICYCLE/TRAIL-RELATED ITEMS													
ZONE/DISTRICT	√ if Zone/ District Present (from C1)	H1. BICYCLE LANES				H2. BICYCLE PARKING FACILITIES				H3. BIKE/PEDESTRIAN-RELATED TRAILS/PATHS/GREENWAYS			
		REQ	ENC	NO	NA	REQ	ENC	NO	NA	REQ	ENC	NO	NA
a. Commercial		2	1	0	8	2	1	0	8	2	1	0	8
b. Downtown district		2	1	0	8	2	1	0	8	2	1	0	8
c. Forest (preserve)		2	1	0	8	2	1	0	8	2	1	0	8
d. Mixed-use		2	1	0	8	2	1	0	8	2	1	0	8
e. New urbanist dev./district		2	1	0	8	2	1	0	8	2	1	0	8
f. Open space		2	1	0	8	2	1	0	8	2	1	0	8
g. Park district		2	1	0	8	2	1	0	8	2	1	0	8
h. Pedestrian-oriented development		2	1	0	8	2	1	0	8	2	1	0	8
i. Pedestrian-oriented district		2	1	0	8	2	1	0	8	2	1	0	8
j. Planned unit development (PUD)		2	1	0	8	2	1	0	8	2	1	0	8
k. Public/civic/gvt/ use districts		2	1	0	8	2	1	0	8	2	1	0	8
l. Recreation		2	1	0	8	2	1	0	8	2	1	0	8
m. Residential		2	1	0	8	2	1	0	8	2	1	0	8
n. Schools/education districts		2	1	0	8	2	1	0	8	2	1	0	8
o. Shopping district (see protocol)		2	1	0	8	2	1	0	8	2	1	0	8
p. Transect zones/districts		2	1	0	8	2	1	0	8	2	1	0	8
q. Tradl. neighborhood dev. (TND)		2	1	0	8	2	1	0	8	2	1	0	8
r. Transit-oriented dev. (TOD)		2	1	0	8	2	1	0	8	2	1	0	8
s. Part of form-based code		2	1	0	8	2	1	0	8	2	1	0	8
t. Part of overall zoning code		2	1	0	8	2	1	0	8	2	1	0	8
u. Part of SmartCode		2	1	0	8	2	1	0	8	2	1	0	8
v. Part of subdivision ord./code		2	1	0	8	2	1	0	8	2	1	0	8
w. Part of unified development code		2	1	0	8	2	1	0	8	2	1	0	8
x. Part of design manual		2	1	0	8	2	1	0	8	2	1	0	8

REQ=Require ENC=Encourage NO=Not addressed/no provision NA=Not applicable, no district/zone

REQ=Require ENC=Encourage NO=Not addressed/r

D4. Terms used to define “walkability” marker:

D5. Terms used to define “street furniture” marker:

Both the policy and plan instrument evaluated the presence of items related to walkability (sidewalks, trails, bike lanes, bike parking, etc.). These are a few pages from The BTG-COMP Built Environment Policy Assessment Tool. It examines items across 20 different zones/districts (e.g. residential, commercial, mixed use, etc.) and the strength of those markers.

# Built Environment Master Plan Audit Form

BTG-COMP - BUILT ENVIRONMENT MASTER PLAN AUDIT FORM 2010

Observation ID \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_

## F. MARKERS OF ACTIVE RECREATION

Topic/Element	√ if Topic Present (from B1)	F1. Markers of Active Recreation (e.g., recreational activity, playgrounds, exercise, fitness, etc.)			F2. Strength of Active Recreation Marker			
		YES	NO	NA	REQ	ENC	NO	NA
a. Bicycle/Bicycling		1	0	8	2	1	0	8
b. Built Environment		1	0	8	2	1	0	8

- c. Conservation/Natural Resources (only code if covers trails, parks, open space, etc.)
- d. Cultural Issues
- e. Design
- f. Economic Development
- g. Facilities
- h. Health/Wellness
- i. Housing
- j. Implementation
- k. Introduction
- l. Landscaping
- m. Land Use
- n. Open Space
- o. Parks/Recreation
- p. Pedestrian
- q. Schools/Education
- r. Trails
- s. Transportation/Circulation
- t. Other (Specify \_\_\_\_\_)

REQ=Require ENC=Encourage

### F3. Terms used to determine "ac

BTG-COMP - BUILT ENVIRONMENT MASTER PLAN AUDIT FORM 2010

Observation ID \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_

## G. MARKERS OF PASSIVE RECREATION

Topic/Element	√ if Topic Present (from B1)	G1. Markers of Passive Recreation (e.g., provisions for open space, green space, parks, etc., that are not activity-oriented)			G2. Strength of Passive Recreation Marker				NOTES on Parts F & G
		YES	NO	NA	REQ	ENC	NO	NA	
a. Bicycle/Bicycling		1	0	8	2	1	0	8	
b. Built Environment		1	0	8	2	1	0	8	
c. Conservation/Natural Resources (only code if covers trails, parks, open space, etc.)		1	0	8	2	1	0	8	
d. Cultural Issues		1	0	8	2	1	0	8	
e. Design		1	0	8	2	1	0	8	
f. Economic Development		1	0	8	2	1	0	8	
g. Facilities		1	0	8	2	1	0	8	
h. Health/Wellness		1	0	8	2	1	0	8	
i. Housing		1	0	8	2	1	0	8	
j. Implementation		1	0	8	2	1	0	8	
k. Introduction		1	0	8	2	1	0	8	
l. Landscaping		1	0	8	2	1	0	8	
m. Land Use		1	0	8	2	1	0	8	
n. Open Space		1	0	8	2	1	0	8	
o. Parks/Recreation		1	0	8	2	1	0	8	
p. Pedestrian		1	0	8	2	1	0	8	
q. Schools/Education		1	0	8	2	1	0	8	
r. Trails		1	0	8	2	1	0	8	
s. Transportation/Circulation		1	0	8	2	1	0	8	
t. Other (Specify _____)		1	0	8	2	1	0	8	

REQ=Require ENC=Encourage

NO=Not addressed/no provision

NA=Not applicable, no plan/district/zone

Both the policy and plan instrument evaluated the presence of items related to active/passive recreation (playgrounds, sports fields, parks, open space, etc.). These are pages a few pages from The BTG-COMP Built Environment Master Plan Assessment Tool. It examines provisions across 20 different elements included in plans (e.g. land use, parks and recreation, transportation, etc.).

# Food Code/Policy Audit Form

BTG-COMP • FOOD CODE/POLICY AUDIT FORM

2010

Site ID \_\_\_\_\_

Observation ID \_\_\_\_\_

ZONE/DISTRICT	√ if Zone/ District Present (from BE Form)	C. Access to Healthy Foods												Notes on Ca. Farmer's/Seasonal Markets:
		C1. Item Addressed			C2. Permitted Use			C3. Conditional Use			C4. Prohibited Use			
		Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	

a. Farmer's/Seasonal Markets		
1) Commercial		1
2) Downtown district		1
3) Mixed-use		1
4) New urbanist		1
5) Ped.-oriented dev.		1
6) Ped.-oriented district		1
7) Planned unit dev. (PUD)		1
8) Public/civic/gvt/ use		1
9) Recreation		1
10) Residential		1
11) School/ed. districts		1
12) Shopping district		1
13) Transect zones/districts		1
14) Tradl. neighborhood dev. (TND)		1
15) Transit-oriented dev. (TOD)		1
16) Applies to all districts/zones		1

b. Green/Fresh F&V Carts		
1) Commercial		1
2) Downtown district		1
3) Mixed-use		1
4) New urbanist		1
5) Ped.-oriented dev.		1
6) Ped.-oriented district		1
7) Planned unit dev. (PUD)		1
8) Public/civic/gvt/ use		1
9) Recreation		1
10) Residential		1
11) School/ed. districts		1
12) Shopping district		1
13) Transect zones/districts		1
14) Tradl. neighborhood dev. (TND)		1
15) Transit-oriented dev. (TOD)		1
16) Applies to all districts/zones		1

Final 12/10/10

BTG-COMP • FOOD CODE/POLICY AUDIT FORM

2010

Site ID \_\_\_\_\_

Observation ID \_\_\_\_\_

Date: \_\_\_/\_\_\_/2010 State: \_\_\_\_\_ Community: \_\_\_\_\_ State FIPS: \_\_\_\_\_ County FIPS: \_\_\_\_\_ Place FIPS: \_\_\_\_\_

Policy Document Name: \_\_\_\_\_

Community Type of Government (select all that apply):  
 Region 1 Other (specify) 5  
 County 2 Specify: \_\_\_\_\_  
 Municipality 3  
 CDP 4

Policy Source (select all that apply):  
 On-line code publisher 1 Other (specify) 6  
 Other code publisher 2 Specify \_\_\_\_\_  
 Community web site 3 No policy (verified) 7  
 Planning/Zoning office web site 4 Missing (non-responder) 9  
 Community mail 5

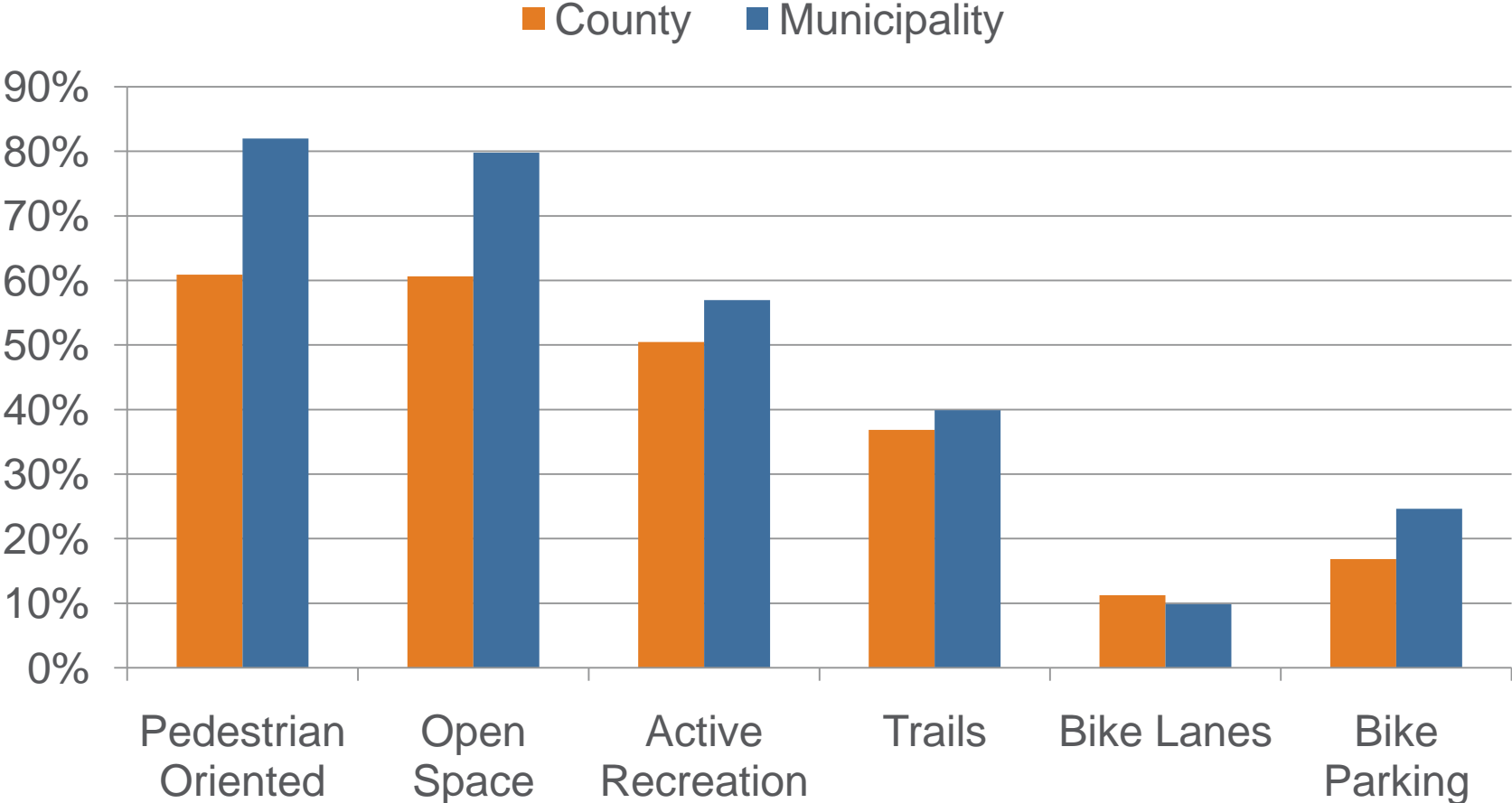
Total Coding Time (in hours/minutes): \_\_\_\_\_ Hrs : \_\_\_\_\_ Mins Coder ID: \_\_\_\_\_

ZONE/DISTRICT	√ if Zone/ District Present from BE Form	A. FOOD STORE PROVISIONS																							
		A1. Store Type Addressed			A2. Permitted Use			A3. Conditional Use			A4. Prohibited Use			A5. Fresh F&V Options Req.			A6. Candy Product Placement			A7. Outward facing labels for poor nutrient foods			A8. Contiguous floor space for products meeting certain nutritional reqs.		
		Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA
<b>a. Supermarkets</b>																									
1) Commercial		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
2) Downtown district		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
3) Mixed-use		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
4) New urbanist dev./district		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
5) Pedestrian-oriented development		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
6) Pedestrian-oriented district		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
7) Planned unit development (PUD)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
8) Public/civic/gvt/ use districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
9) Recreation		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
10) Residential		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
11) Schools/education districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
12) Shopping district (see protocol)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
13) Transect zones/districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
14) Tradl. neighborhood dev. (TND)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
15) Transit-oriented dev. (TOD)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
16) Applies to all zones/districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
<b>b. Grocery Stores</b>																									
1) Commercial		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
2) Downtown district		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
3) Mixed-use		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
4) New urbanist dev./district		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
5) Pedestrian-oriented development		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
6) Pedestrian-oriented district		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
7) Planned unit development (PUD)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
8) Public/civic/gvt/ use districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
9) Recreation		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
10) Residential		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
11) Schools/education districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
12) Shopping district (see protocol)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
13) Transect zones/districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
14) Tradl. neighborhood dev. (TND)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
15) Transit-oriented dev. (TOD)		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8
16) Applies to all zones/districts		1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8	1	0	8

The food policy instrument evaluated the extent to which food outlets are permitted in ordinances. These are a few pages from The BTG-COMP Food Code/Policy Audit Form. It examines food outlet uses (e.g. supermarkets, grocery stores, convenience stores, general retail stores, fast-food restaurants, formula restaurants, farmer's markets, fruit and vegetable carts, mobile food vendors, urban agriculture or community gardens, and produce stands) across 20 different zones/districts.

# Active Living-oriented Policy and Plan Provisions

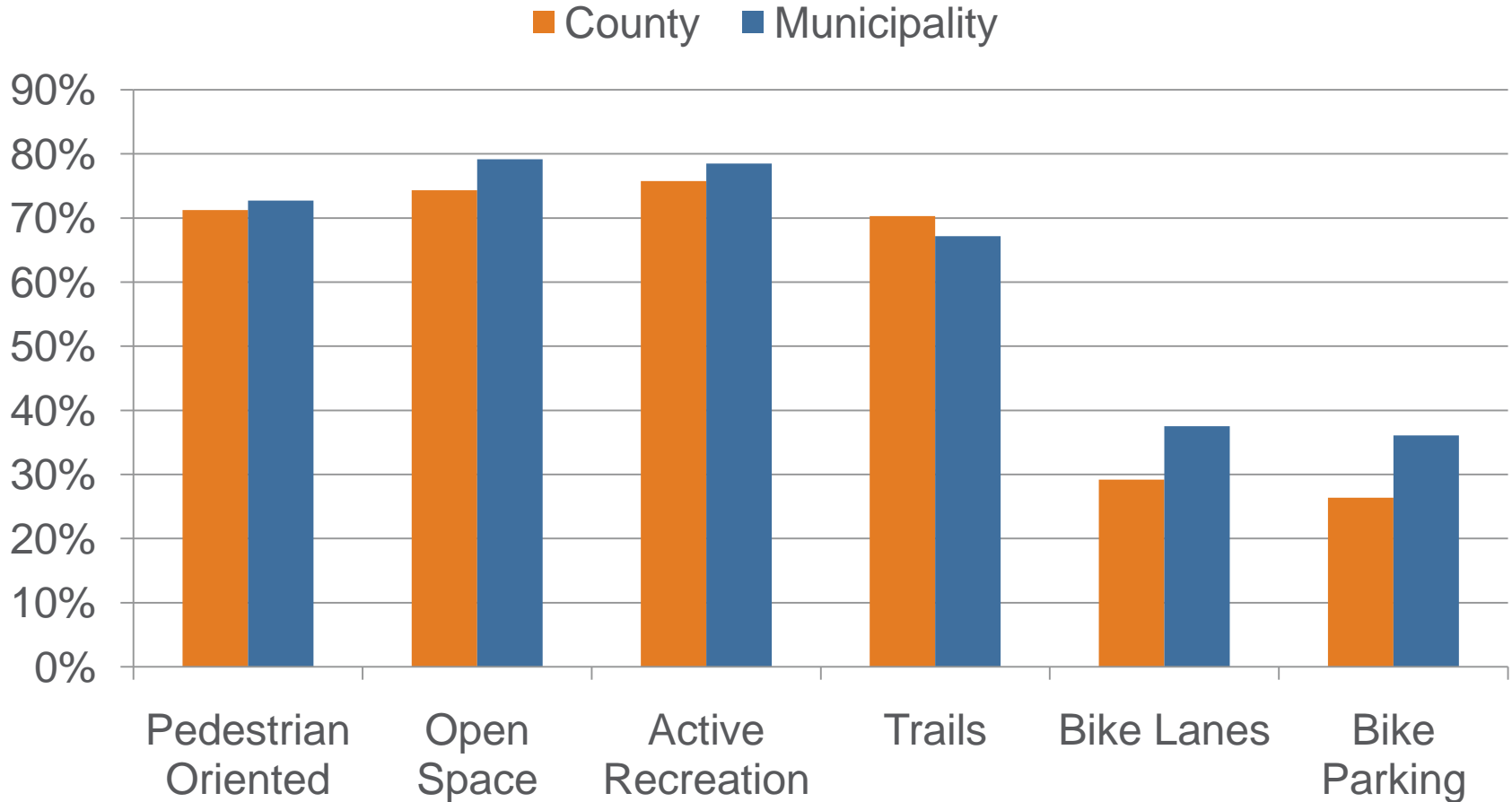
# Active Living Oriented Zoning Requirements by Jurisdiction



N=95 counties, 197 municipalities nationwide

**bridging the gap**

# Active Living Oriented Planning Requirements by Jurisdiction

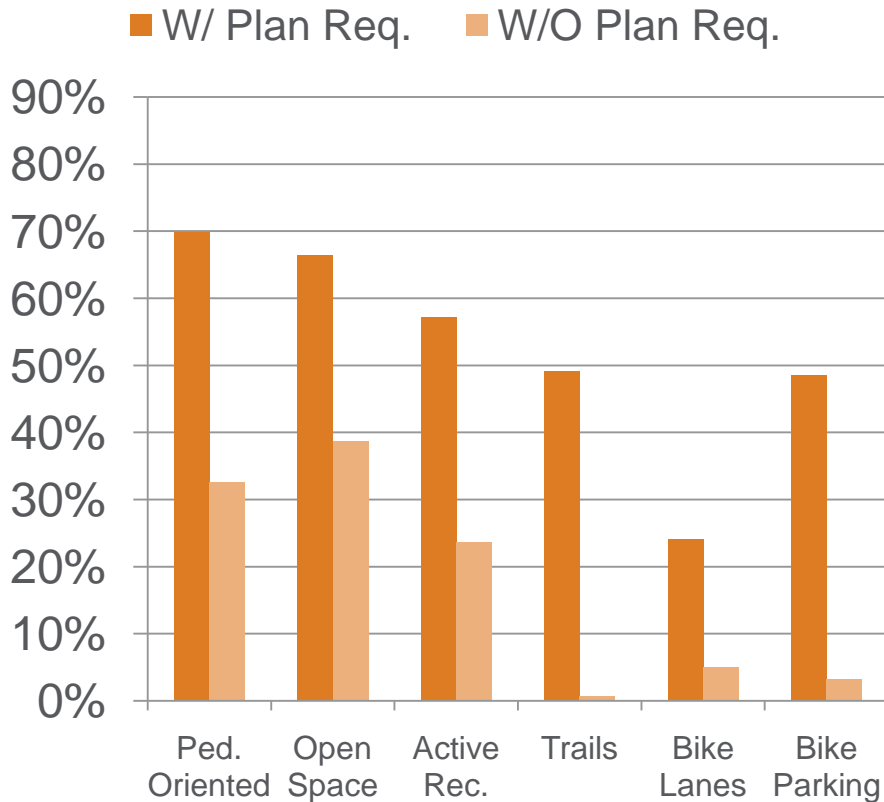


N=95 counties, 193 municipalities nationwide

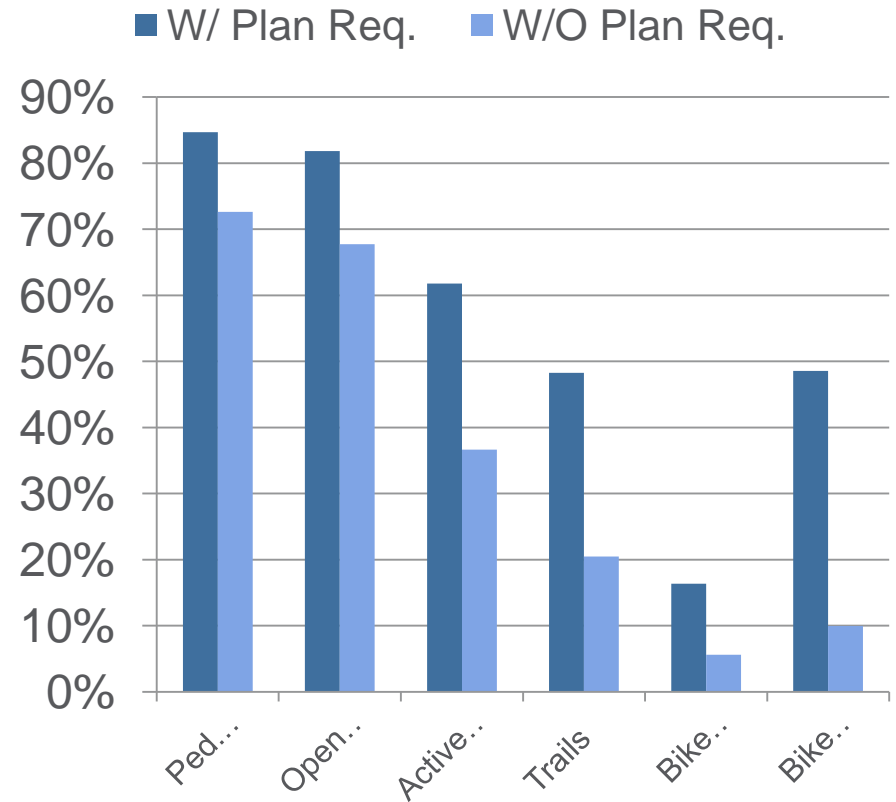
**bridging the gap**

# Zoning Requirements by Master Plan Requirement and Jurisdiction

## County Level



## Municipality Level



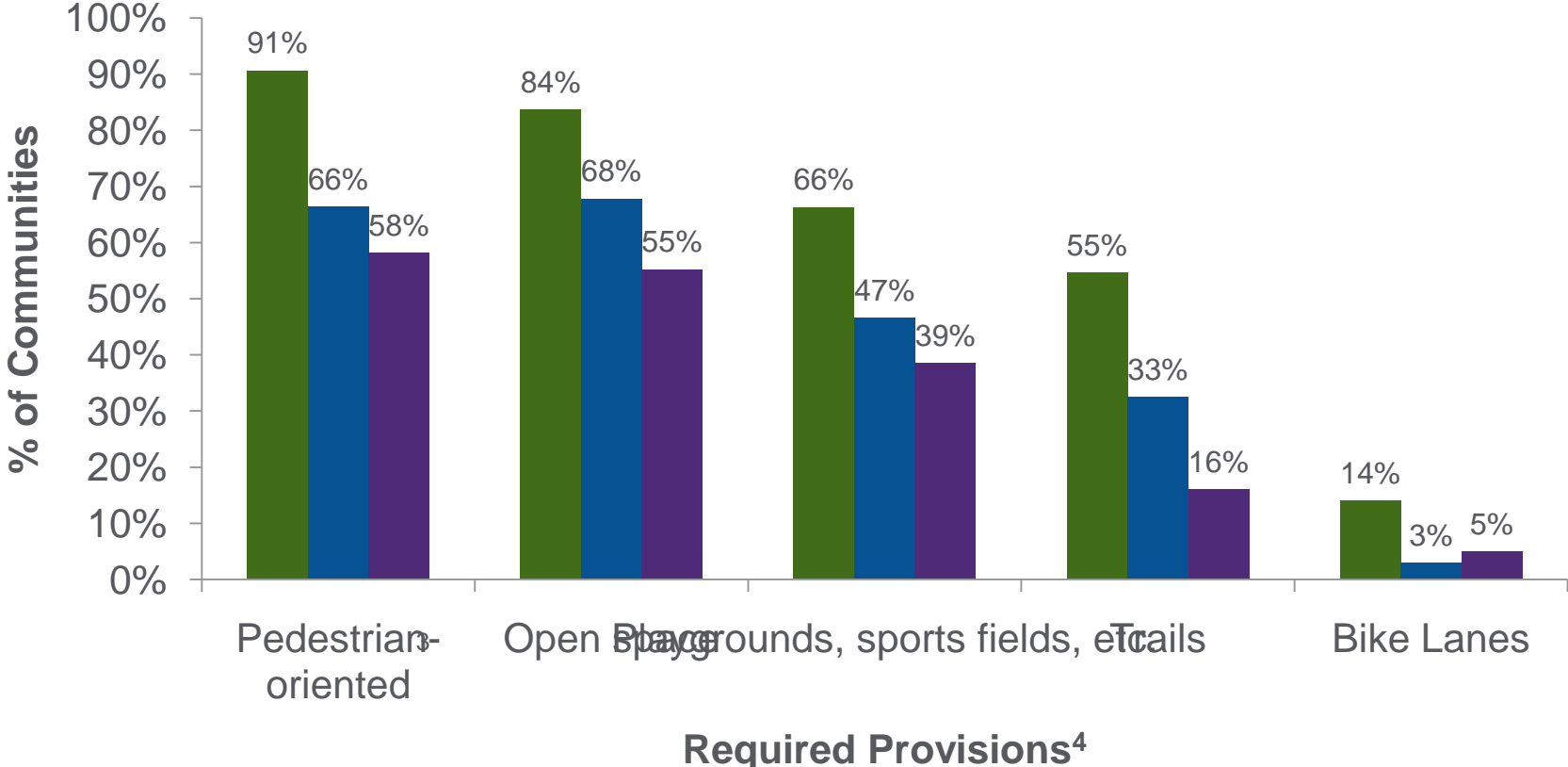
**bridging the gap**

N=95 counties, 193 municipalities nationwide



# Requirements for Provisions that Promote Physical Activity in Community Zoning/ Land Use Laws<sup>1</sup> Vary by Community Income<sup>2</sup>

■ Higher-Income ■ Middle-Income ■ Lower-Income

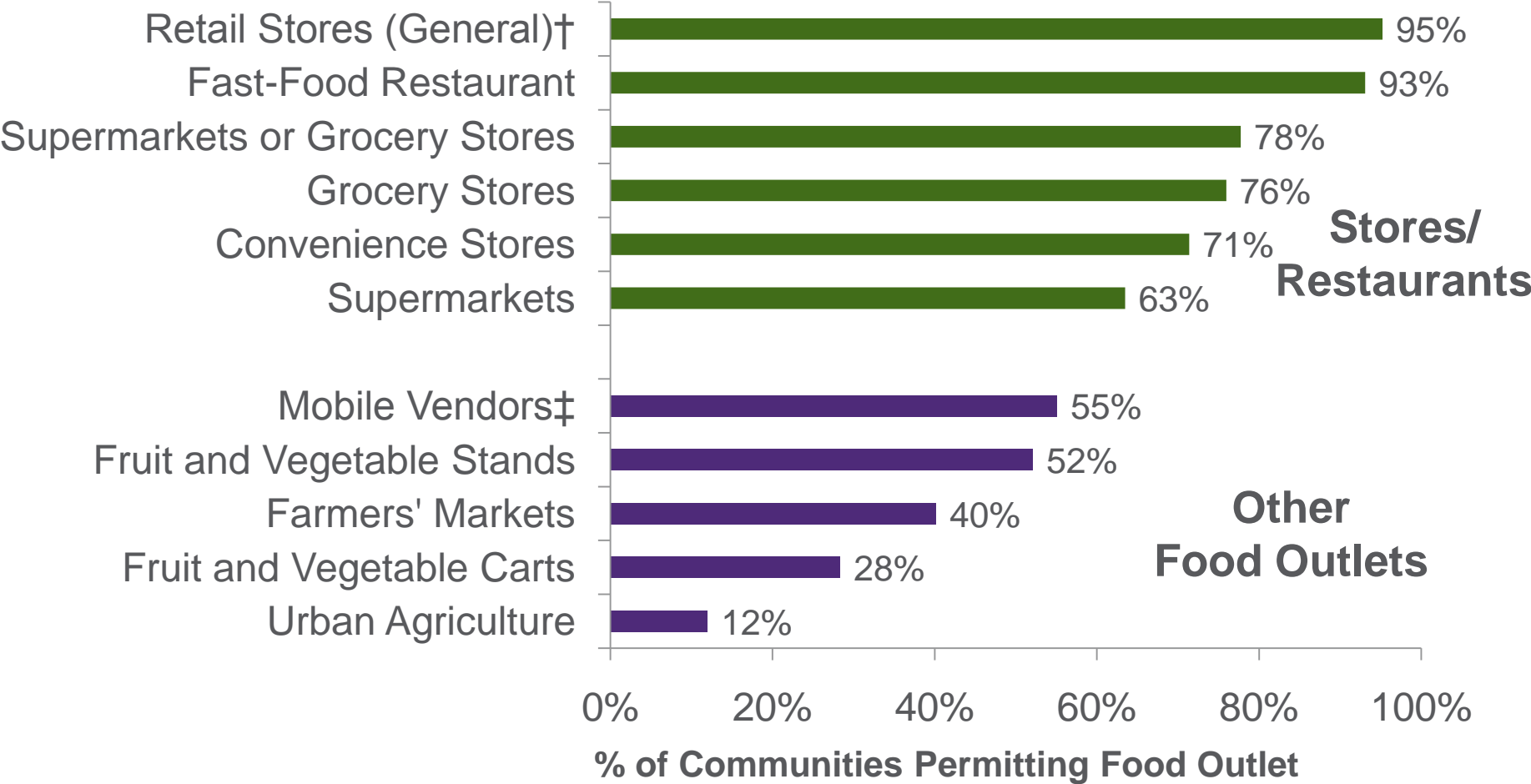


<sup>1</sup>Includes zoning ordinances and subdivision regulations.  
<sup>2</sup>Communities are grouped in tertiles based on the median household income of the community. One-third of communities were grouped in each of three categories: lower-, middle- and higher-income.  
<sup>3</sup> Pedestrian-oriented provisions require sidewalks, crosswalks, paths or other features that would facilitate pedestrian access.  
<sup>4</sup>With the exception of bike lanes, required provisions were significantly lower (at p<.05 or lower) for lower-and middle-income communities than higher-income communities. For bike lanes, only middle-income communities were significantly lower (p<.05) than higher-income communities.

# Food Outlet Policy Provisions

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# Percentage of Municipalities Permitting\* Food Outlets in Their Zoning Codes, 2010

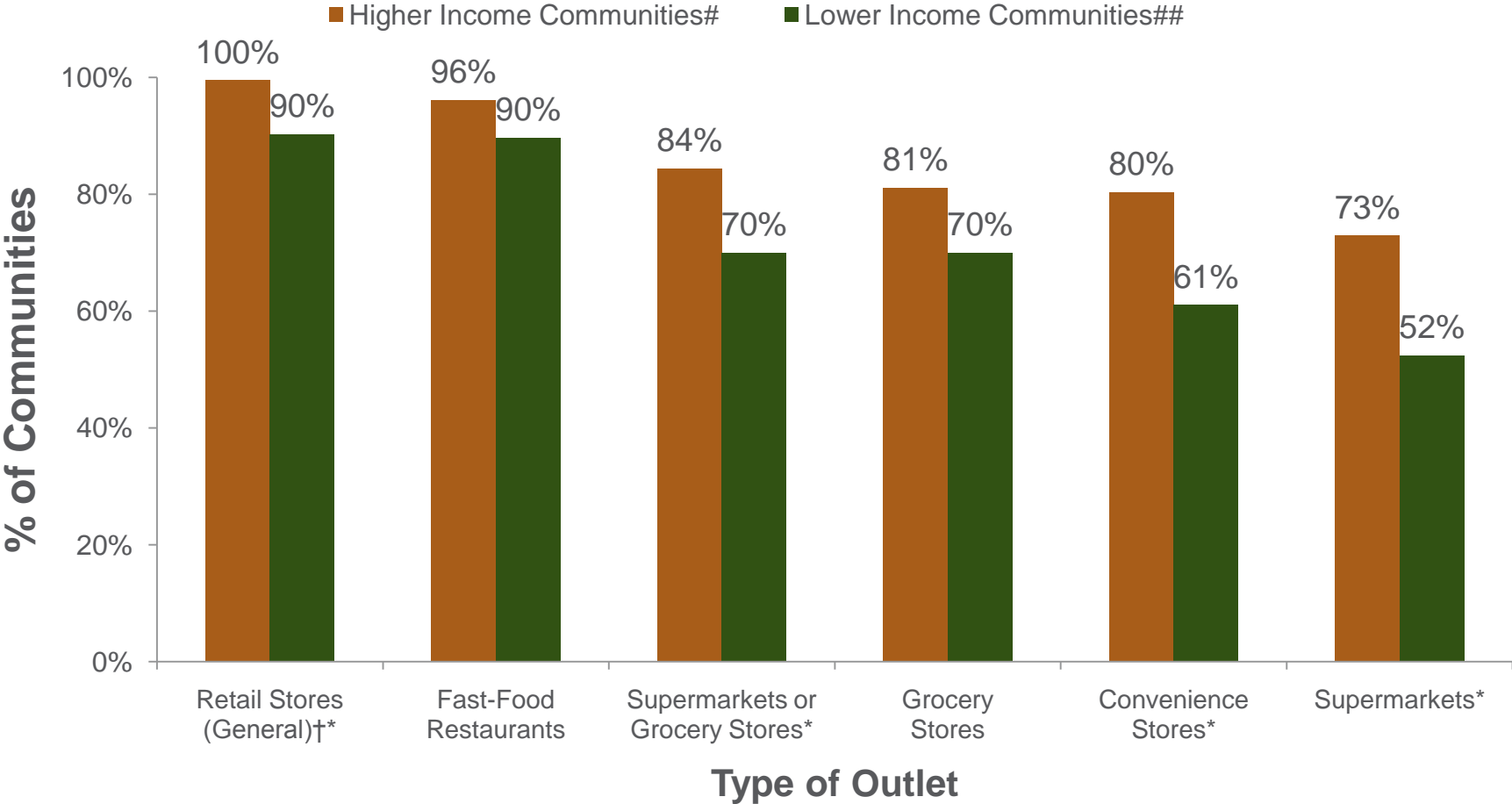


N=175 communities nationwide

\*For this analysis, “permitted use” includes permitted and/or conditional uses.

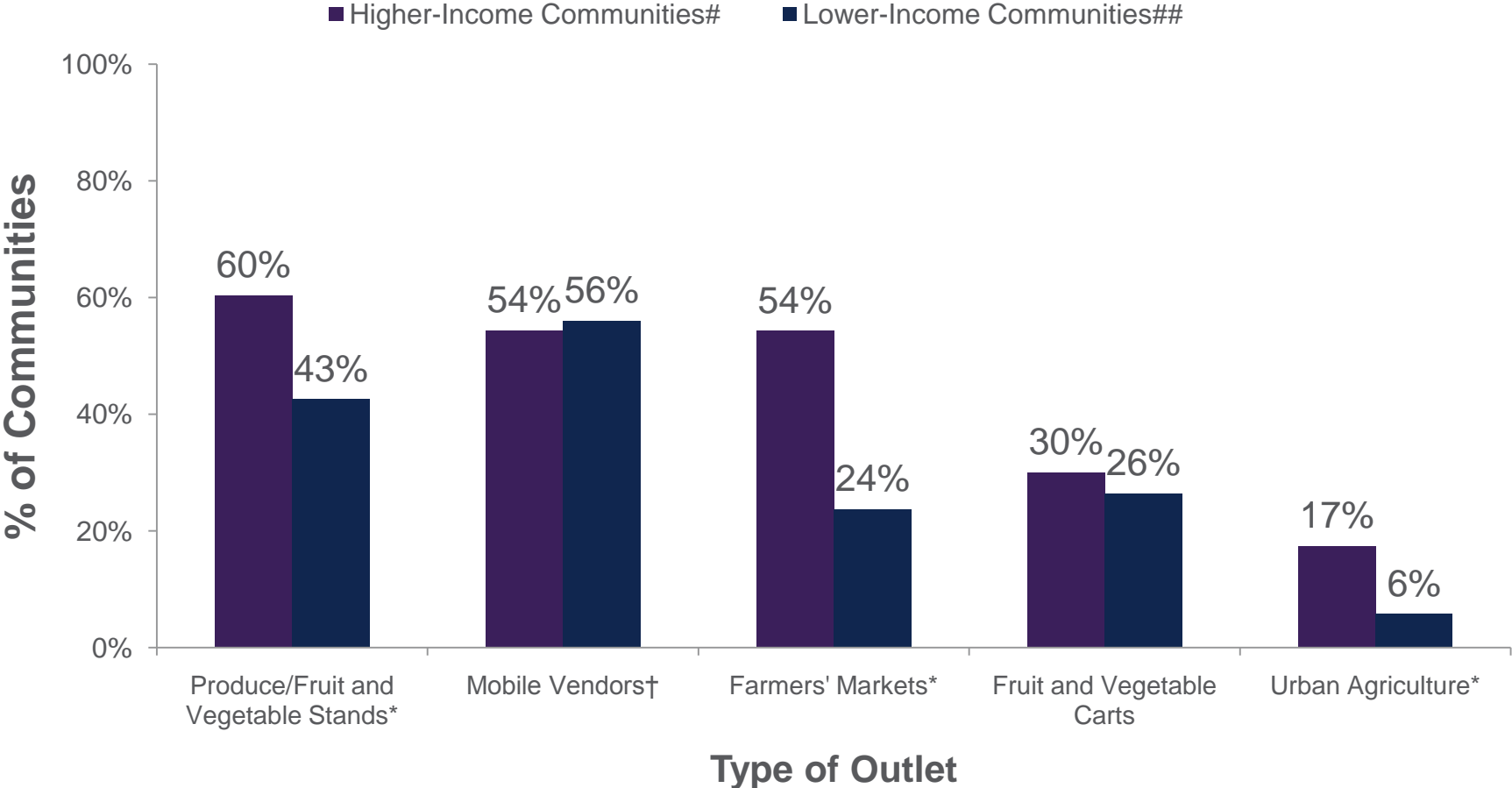
†Retail stores include big box and warehouse stores. ‡Mobile vendors include food trucks.

# Prevalence of Store and Fast-Food Restaurant Permitted Uses by Community Income, 2010



N=175 communities surrounding a national sample of public middle and high schools.  
 #Communities in the top one-half of median household income in the sample.  
 ## Communities in the lower one-half of median household income in the sample.  
 †Retail store include big box and warehouse stores.  
 \*Difference in permitted use by income status was significantly different at  $p \leq .05$ .

# Prevalence of Mobile Vending and Fruit and Vegetable Outlet Permitted Uses by Community Income, 2010



N=175 communities surrounding a national sample of public secondary schools.  
 #Communities in the top one-half of median household income in the sample.  
 ## Communities in the lower one-half of median household income in the sample.  
 †Mobile vendors includes food trucks.  
 \*Difference in permitted use by income status was significantly different at  $p \leq .05$ .

# Conclusion

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## Conclusion

- Local government active-living zoning requirements are more likely at the municipal than the county level and they are most likely to require pedestrian-oriented infrastructure, open space, and active recreation areas.
- Active-living planning requirements do tend to be implemented through the zoning code.
- Lower- and middle-income communities are less likely than higher-income communities to require pedestrian-friendly improvements, active recreation areas, open space, trails and bike lanes in their local land use laws.
- Local zoning ordinances were more likely to allow supermarkets, grocery stores, convenience stores, fast-food restaurants and retail stores than alternative outlets, such as farmers' markets or fruit and vegetable carts.
- Permitted uses for food stores and other food outlets varied by the median household income of the community.

# Policy Implications

## Local governments can:

- Modify/create plans to address future development that promotes physical activity and can be implemented through changes to zoning/land use laws.
- Modify zoning/land use laws to include requirements for structural improvements to increase opportunities for physical activity.
- Modify zoning/land use laws to permit a variety of food outlets to increase healthy food access (e.g. grocery stores, supermarkets, farmer's markets, community gardens, fruit and vegetable stands or carts)



Source: [www.pedbikeimages.org/](http://www.pedbikeimages.org/) Dan Burden



# Resources/Contacts

## bridging the gap

Research Informing Policies & Practices  
for Healthy Youth

Research Brief  
March 2012

### Using Local Land Use Laws to Facilitate Physical Activity

*Local zoning and land use laws specify allowable uses of land within a community to help guide new development and protect community resources. The laws may specify requirements for structural improvements, such as adding or maintaining sidewalks, bike lanes, or open space, that affect residents' ability to be physically active.*

*This brief examines the extent to which local land use laws require structural improvements that facilitate physical activity. It also examines whether such requirements vary based on community income. The data was collected in 2010 from 264 communities across the United States.*

- Policy requirements for open space and pedestrian-friendly improvements, such as sidewalks and crosswalks, are more common than requirements for trails, bike lanes, or active recreation areas, such as playgrounds and sports fields.
- Lower- and middle-income communities are less likely than higher-income communities to require pedestrian-friendly improvements, active recreation areas, open space, trails and bike lanes in their local land use laws.

#### Introduction

The *Physical Activity Guidelines for Americans* recommend that children and adolescents participate in at least 60 minutes of daily physical activity to prevent and/or reduce obesity.<sup>1</sup> However, many families live in neighborhoods that inhibit physical activity. In communities across the country, many streets are designed for cars and are unsafe for pedestrians and bicyclists because they lack sidewalks, safe crossings or bike lanes. Research shows that children who live in neighborhoods that lack sidewalks, paths, parks, playgrounds or other amenities that support physical activity are more likely to be obese or overweight.<sup>2</sup>

The Task Force on Community Preventive Services recommends using community and street-scale design and land use policies to promote physical activity.<sup>3</sup> Local governments can use their zoning and subdivision authority to facilitate walking, bicycling and other opportunities for physical activity. Through its zoning powers, a local government can regulate the location of park and recreation facilities, trails and other facilities that promote physical activity; regulate land use patterns (e.g., open space zones); and specify infrastructure requirements, such as sidewalks and open space. Subdivision regulations control the division of land for development purposes. They include design standards for the layout of lots, streets and other public

BTG Research Brief – Using Local Land Use Laws to Facilitate Physical Activity | [www.bridgingthegapresearch.org](http://www.bridgingthegapresearch.org)

## bridging the gap

Research Informing Policies & Practices  
for Healthy Youth

Research Brief  
April 2012

### Zoning for Healthy Food Access Varies by Community Income

*Zoning and land use laws allow or prohibit different types of food outlets, such as supermarkets, farmers' markets, fast-food restaurants and convenience stores, in a community. As such, these laws affect people's access to healthy affordable foods.*

*This brief examines the extent to which local zoning ordinances allow food outlets within a community and whether the zoning provisions vary based on community income. The data were collected in 2010 from 175 communities from across the United States.*

- Zoning for fast-food restaurants, convenience stores, supermarkets and grocery stores was more prevalent than zoning for farmers' markets and fruit and vegetable stands.
- Lower-income communities were less likely to specifically permit non-store food outlets, such as farmers' markets or community gardens, in their zoning ordinances than were higher-income communities.

#### Introduction

A healthy diet—one that includes a variety of fruits and vegetables, whole grains and lower-fat dairy products and a limited intake of added sugars and solid fats—helps to reduce the risk of obesity and chronic disease.<sup>1</sup> Yet, many families do not have access to healthy affordable foods in their neighborhoods.

This is especially true in lower-income communities where convenience stores and fast-food restaurants are widespread but supermarkets and farmers' markets are scarce.<sup>2</sup>

Local governments can use their zoning authority to help encourage the development of supermarkets and other outlets that sell nutritious, affordable foods within a community. They may, for example, explicitly allow supermarkets and grocery stores; allow use of land or permits for farmers' markets or community gardens;<sup>3</sup> or explicitly prohibit fast-food restaurants within certain areas.<sup>4</sup> Explicitly including permitted uses for supermarkets and other healthy food outlets in local zoning regulations and ordinances removes administrative barriers to establishing their use. If a zoning ordinance is silent on a specific type of use or needs to be amended, property owners who wish to request a variance to the ordinance face a long burdensome process.<sup>5,6</sup>

BTG Research Brief – Zoning for Healthy Food Access Varies by Community Income | [www.bridgingthegapresearch.org](http://www.bridgingthegapresearch.org)

For more information, visit : <http://www.bridgingthegapresearch.org/>

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- (2) Juergensmeyer J.C., Roberts, T.E. (1986). *Land Use Planning and Development Regulation Law*. St. Paul, MN: Thomson/West 2007.