

# **Approaches to Measuring Obesity- related Public Policies for Use in Quantitative Evaluations:**

## ***Examples from State and Local Policy Environments***

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- Brief overview of public policy strategies for addressing the obesity epidemic
- Factors to consider when evaluating public policies
- School district-level policy evaluation examples
- State level policy evaluation example
- Local level policy evaluation example
- Parting words

# **POLICY STRATEGIES TO ADDRESS THE OBESITY EPIDEMIC**

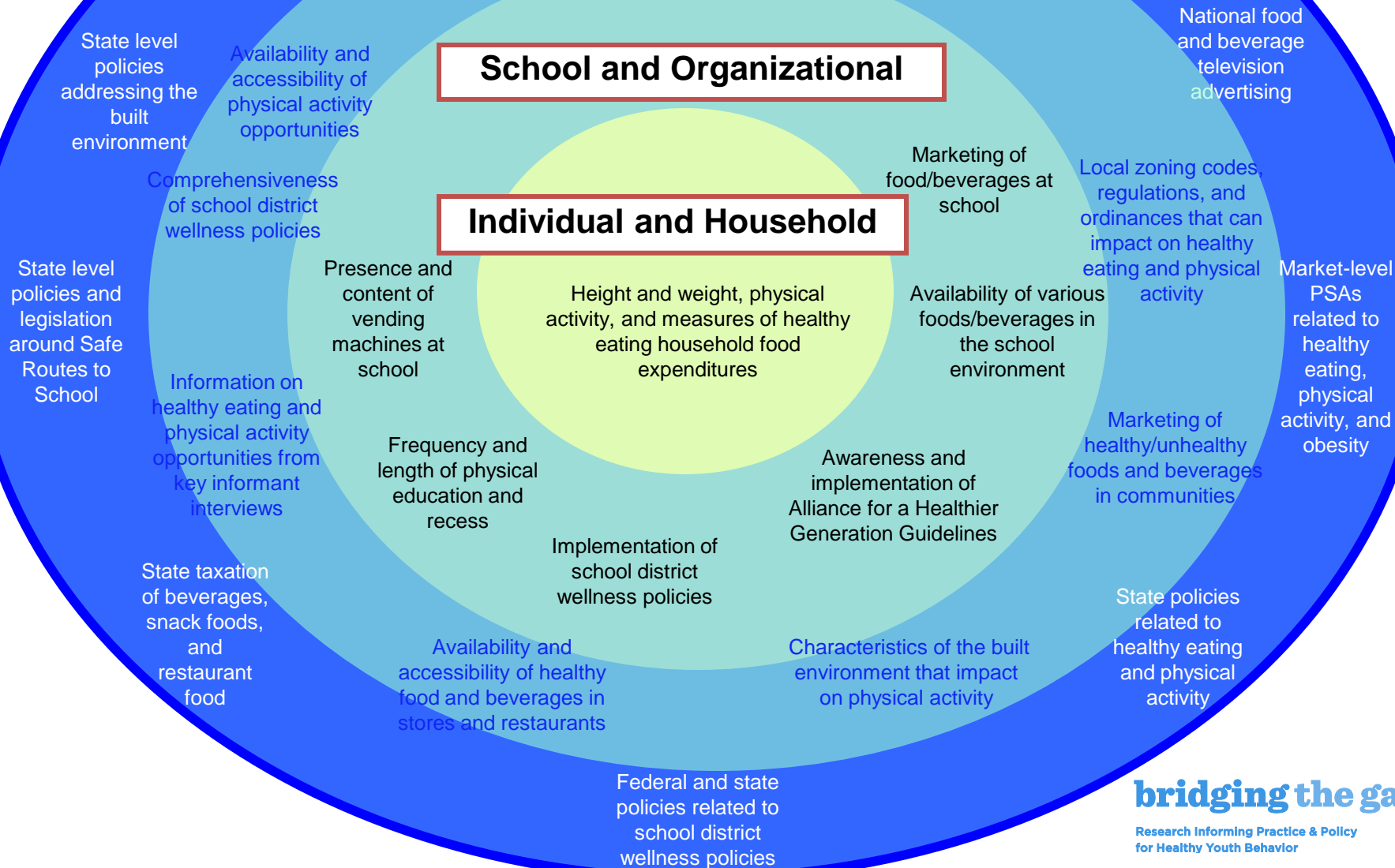
# Obesity Policy/Environmental Strategies

## State and National

## Local and Community

## School and Organizational

## Individual and Household



# Factors to Consider When Evaluating Public Policies for Use in Assessing their Impact-1

1. Underlying evaluation/research/surveillance purpose
  - Examples:
    - What is the impact of a certain state/community policy on community-level behavior change?
    - How responsive have districts been to a federal mandate?
2. Study scope
  - Sample size (# districts, communities, states, etc.)
  - Resources (time, \$, staffing, expertise)
3. Type of data seeking
  - Quantitative or qualitative
4. Role of policy in study design
  - Type of variable: dependent, independent, control
5. Policy complexity
6. Policy jurisdiction
  - Federal, state, local, district
7. Type of Law
  - Statutory, Administrative, Case Law

# Factors to Consider When Evaluating Public Policies for Use in Assessing their Impact-2

## 8. Policy Type

- Enacted vs. pending
- Codified vs. legislation/individual rules/regulations
- Dealing with repealers and vetos

## 9. Periodicity

- Reference date(s) for your policy data
- Annual time points, time-series measures

## 10. Policy source availability

- Challenges with historical policy collection

## 10. Policy data collection approach

- Primary legal/policy collection
- Survey

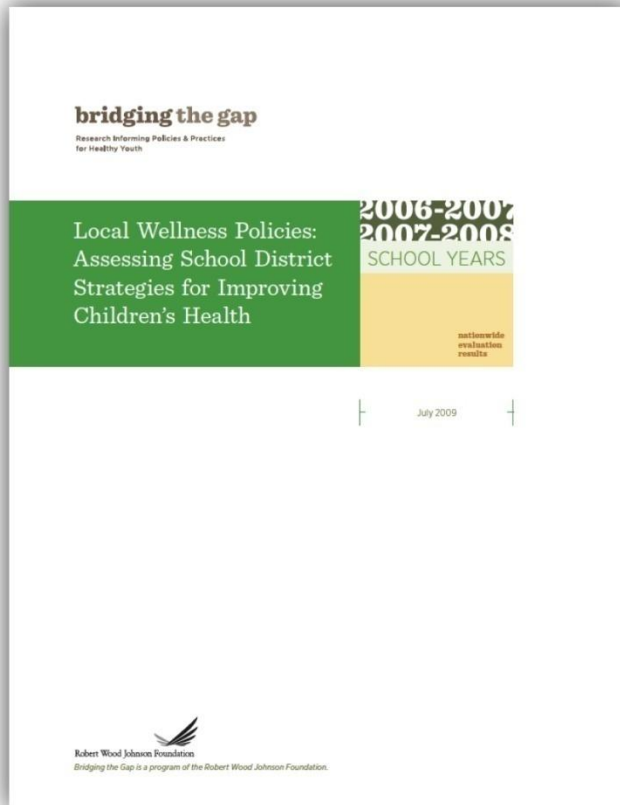
# A few suggestions for systematically evaluating public policies

- Consistency, consistency, consistency
- Coding instruments/tools
- Documentation
  - Decision rules/protocols
    - Dealing with the 'grey' areas of policies
- Trained coders
- Reliability coding
- Linking with outcome data to assess whether the policy measurement tool(s) is working the way intended

# SCHOOL DISTRICT LEVEL POLICY EVALUATION EXAMPLE



# Local Wellness Policies— Nationwide Evaluation

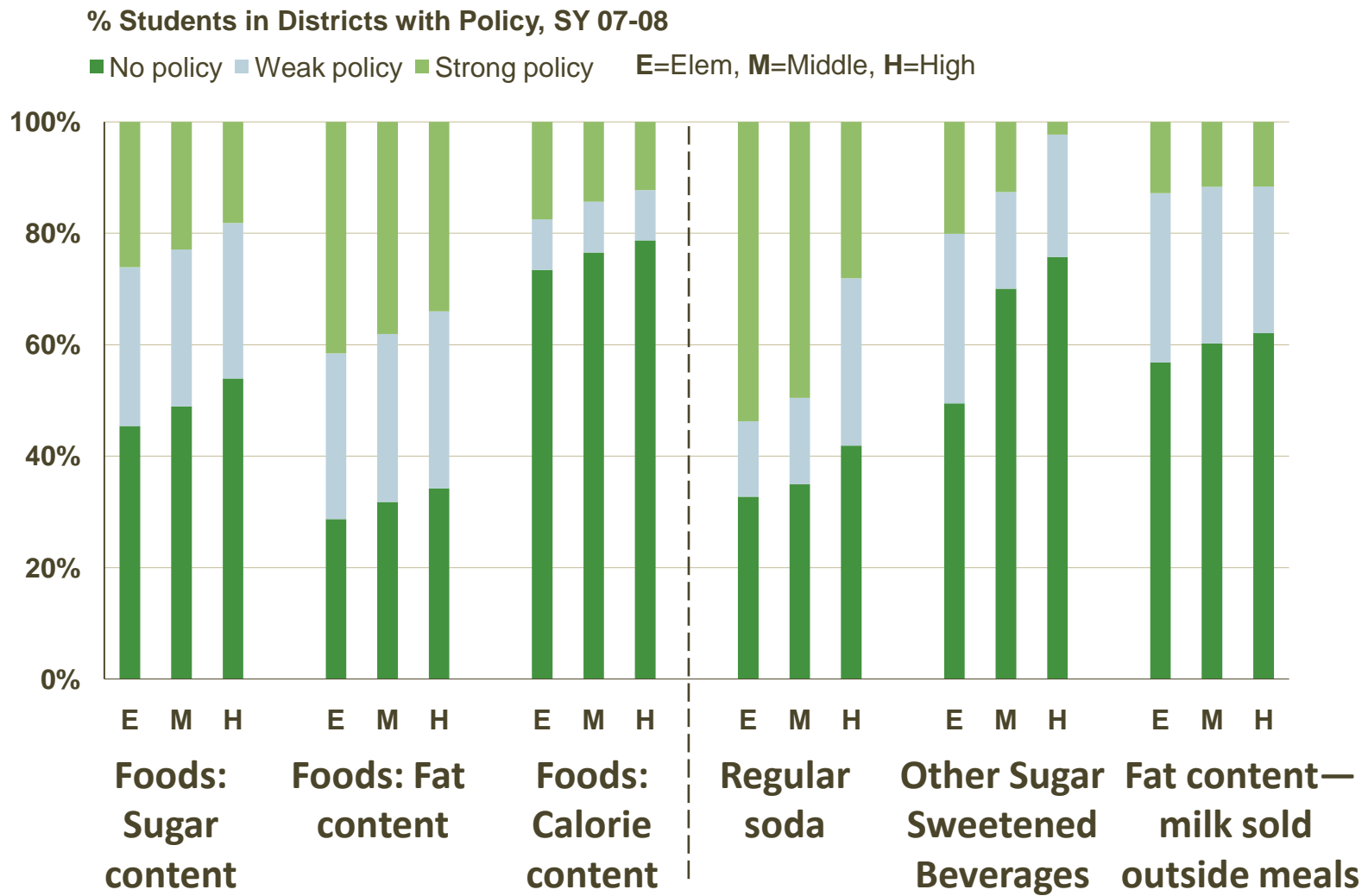


- Local Wellness Policies: Assessing School District Strategies for Improving Children’s Health. School Years 2006-07 and 2007-08.
- Executive Summary, Monograph and backup data available at:
- [www.bridgingthegapresearch.org](http://www.bridgingthegapresearch.org)

- Ongoing nationwide evaluation of school district wellness policies required as of 1<sup>st</sup> day 2006-07 school year under P.L. 108-265, Section 204
  - Nationally representative sample of 579 and 641 school districts, respectively, for school years 06-07 and 07-08
  - Coding nearly completed for SY 08-09 and collection underway for SY 09-10
- Primary policy collection and analysis, included wellness policy and all associated regulations/guidelines/procedures
  - Also included cross-referenced policies/models/embedded state laws

- Policies coded by grade level using adaptation of Schwartz et al. (JADA, 2009) scheme
  - Focus on required wellness policy elements:
    - Goals for nutrition education
    - School meal requirements
    - Competitive food guidelines
    - Goals for physical activity
    - Implementation plans
  - Also included provisions for physical education
- Policies evaluated using an ordinal coding scheme:
  - 0: No policy/provision
  - 1: Weak policy/provision (should, encourage, may, try, attempt)
  - 2: Strong policy/provision (must, shall, require)
- Data presented weighted to %age of students nationwide in districts with given policy provision

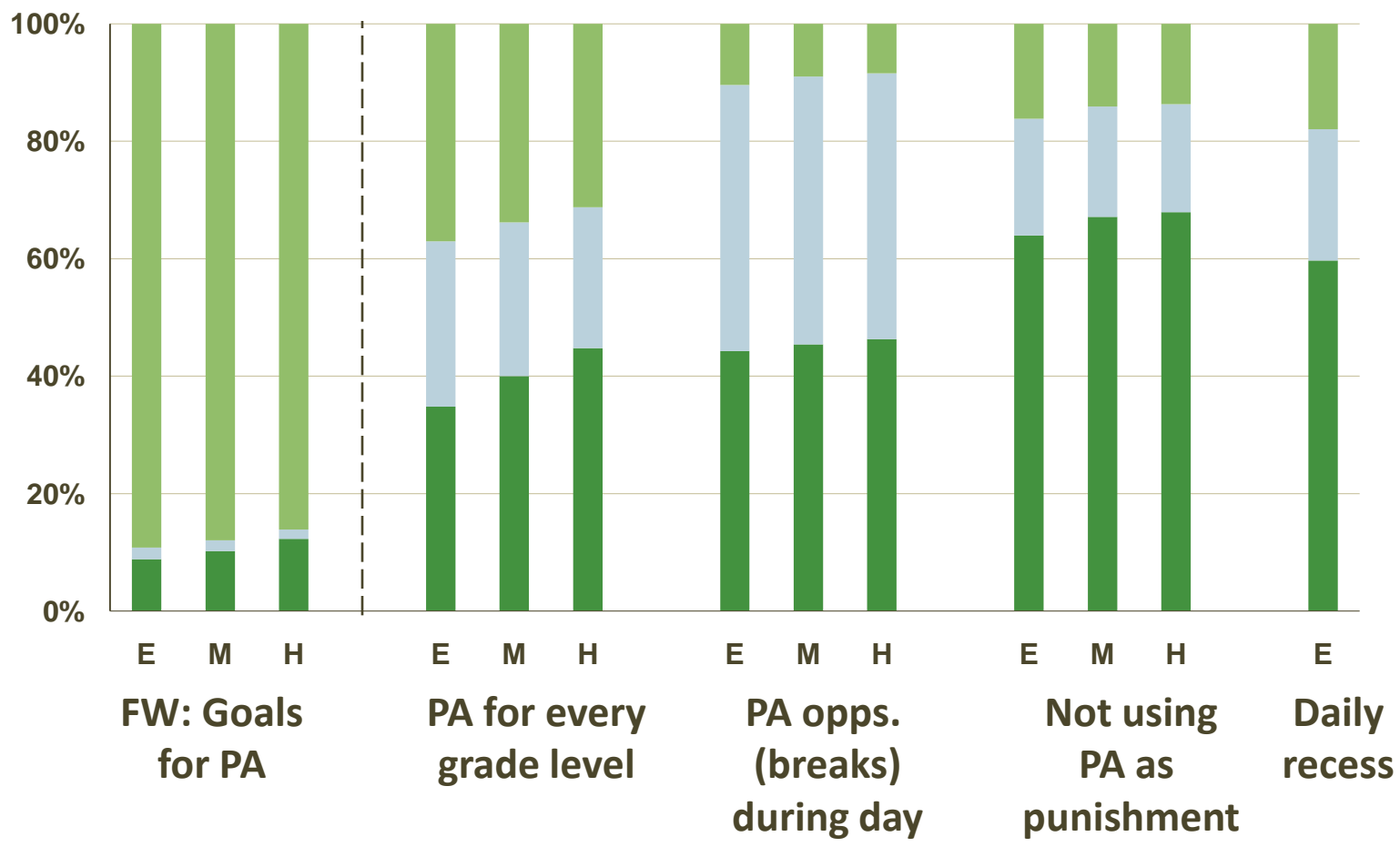
# Wellness Policy Coding Example: Competitive Food Content Restrictions



# Wellness Policy Coding Example: Physical Activity (PA) Policies are Relatively Weak

**% Students in Districts with Policy, SY 07-08**

■ No policy   ■ Weak policy   ■ Strong policy   E=Elem, M=Middle, H=High



# STATE LEVEL POLICY EVALUATION EXAMPLE

## Methods

- Data Source: State Laws
  - Statutory (legislative) and administrative (regulatory) laws effective as of September 2007 were examined using the Lexis-Nexis state legal databases for each of the 50 states and the District of Columbia to determine the presence and extent of FTSP-related provisions.
- State Law Evaluation Topics (and coding levels: 0=no, 1=sugg., 2=req.)
  - Establishment of FTSP\* (yes/no)
  - Initiatives to source locally grown F&V in schools\* (0/1/2)
  - Funding/grants for FTSP (0/1/2; \$)
  - FTSP includes nutrition education (0/1/2)
  - Training for food service personnel (0/1/2)
  - Establishment of FTS council (0/1/2)
  - Establishment of contact person b/w DOE and DOA (0/1/2)
  - TA to districts to establish FTSP\* (0/1/2)
  - Requirement of district to report to state on FTSP (0/1/2)
  - State Evaluation and reporting on FTSP (0/1/2) \*Focus at the state level

# Coding Example: State FTS Laws

Topic	Number of States with Provision (N=14 states with FTS-related laws)		
	0=Not mentioned	1=Suggested	2=Required
Other state F&V initiative (not FTS)	7	5	2
Funding/incentives to support FTS programs	6	5	3
FTS includes nutrition education	10	2	2
Training for food svc on local sourcing	10	2	2
FTS council established	12	1	1
TA to districts to implement FTS	7	2	5
Requires district reporting to state	14	0	0
State evaluation and reporting on FTS	11	0	3



# LOCAL POLICY EVALUATION EXAMPLE

## Example from the Bridging the Gap Study

- Component of the Bridging the Gap nationwide evaluation of the relationship between state laws, local policies, community environments, school practices and secondary school student attitudes, behaviors and weight outcomes
- Types of policies being collected
  - State laws, plans
  - County/municipal codes, ordinances, and non-codified (executive) policies
- Policies related to the built environment and food environment
- Advisory panel for developing policy evaluation tools

# Local Zoning Code Example: Markers of Walkability— in development

MARKERS OF WALKABILITY	Design standards/ guidelines specifically address pedestrian access, bicycles/lanes, trails, street connectivity, etc.			Walking/ biking/ pedestrian provisions (oriented to active-living)			Strength of walkability marker relative to district/zone				Terms used to determine “walkability” (e.g., pedestrian, pedestrian/street furniture, bicycle, etc.)
	District/Zone/Type of Development	YES	NO	Not Appl.	YES	NO	Not Appl.	REQ.	ENCR.	Not Addr.	
a. Transect zones/districts	1	0	8	1	0	8	2	1	0	8	
a. Public/civic/gvt. use districts	1	0	8	1	0	8	2	1	0	8	
a. Schools/education districts	1	0	8	1	0	8	2	1	0	8	
a. Park district	1	0	8	1	0	8	2	1	0	8	
a. Forest (preserve) district	1	0	8	1	0	8	2	1	0	8	
a. Open space	1	0	8	1	0	8	2	1	0	8	
a. Recreation	1	0	8	1	0	8	2	1	0	8	
a. Residential	1	0	8	1	0	8	2	1	0	8	
a. Commercial	1	0	8	1	0	8	2	1	0	8	
a. Mixed-use	1	0	8	1	0	8	2	1	0	8	
a. Pedestrian-oriented district	1	0	8	1	0	8	2	1	0	8	
a. Pedestrian-oriented dev. (POD)	1	0	8	1	0	8	2	1	0	8	
a. Planned unit dev. (PUD)	1	0	8	1	0	8	2	1	0	8	
a. Tradl. neighborhood dev. (TND)	1	0	8	1	0	8	2	1	0	8	
a. Transit-oriented dev. (TOD)	1	0	8	1	0	8	2	1	0	8	
a. New urbanism dev./dist.	1	0	8	1	0	8	2	1	0	8	
a. Downtown district (see protocol)	1	0	8	1	0	8	2	1	0	8	
a. Shopping district (see protocol)	1	0	8	1	0	8	2	1	0	8	

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# BTG Local Zoning Markers of Walkability

## Pilot Coding Example

MARKERS OF WALKABILITY	Design standards add. walkability	Walking/ biking/ Ped. provisions (oriented to active-living)		Strength of walkability 5marker relative to district/zone			Terms used to determine "walkability" (e.g., pedestrian, pedestrian/street furniture, bicycle, etc.)
		# YES	# YES	# NO	# REQ.	# ENCR.	
<b>District/Zone/Type of Development</b>							
a. Transect zones/districts	1	1	0	1	0	0	Filled in for each community, as appropriate
a. Public/civic/gvt. use districts	10	2	8	1	1	8	
a. Schools/education districts	2	0	2	0	0	2	
a. Park district	4	2	2	1	1	2	
a. Forest (preserve) district	4	0	4	0	0	4	
a. Open space	30	9	21	4	6	20	
a. Recreation	9	2	7	1	1	7	
a. Residential	40	1	39	0	1	39	
a. Commercial	39	4	35	4	1	34	
a. Mixed-use	18	10	8	6	5	7	
a. Pedestrian-oriented district	1	0	1	0	0	1	
a. Pedestrian-oriented dev. (POD)	4	4	0	1	3	0	
a. Planned unit dev. (PUD)	29	9	20	6	4	19	
a. Tradl. neighborhood dev. (TND)	6	4	2	4	1	1	
a. Transit-oriented dev. (TOD)	3	2	1	2	0	1	
a. New urbanism dev./dist.	1	1	0	0	1	0	
a. Downtown district (see protocol)	7	7	0	5	2	0	
a. Shopping district (see protocol)	8	8	0	2	6	0	

N=53 communities

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- Policies are complex
- Policies can be quantified beyond simple yes/no measures
- Multiple sub-scales/measures can be combined to form policy indices
- The nature of the policy evaluation will rest largely on the nature of the study question and research design
- Systematic approaches to policy evaluation are essential
- Have fun!!!!

For more information:

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

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

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