



County Health Rankings

Mobilizing Action Toward Community Health

2011

Tennessee



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

Introduction

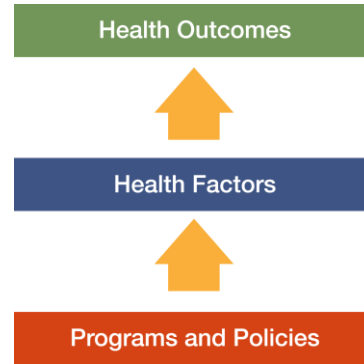
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities with ample park and recreation space are more likely to exercise, which reduces heart disease risk. People who live in communities with smoke-free laws are less likely to smoke or to be exposed to second-hand smoke, which reduces lung cancer risk.

The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute are pleased to present the 2011 *County Health Rankings*, a collection of 50 reports that reflect the overall health of counties in every state across the country. For the second year in a row, counties can get a snapshot of how healthy their residents are by comparing their overall health and the factors that influence their health with other counties in their state. This allows communities to see county-to-county where they are doing well and where they need to improve.

Everyone has a stake in community health. We all need to work together to find solutions. The *County Health Rankings* serve as both a call to action and a needed tool in this effort.

All of the *County Health Rankings* are based upon this model of population health improvement:



In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. These health factors and their outcomes may also be affected by community-based programs and policies designed to alter their distribution in the community. Counties can improve health outcomes by addressing all health factors with effective, evidence-based programs and policies.

To compile the *Rankings*, we built on our prior work in Wisconsin, obtained input from a team of expert advisors, and worked closely with staff from the National Center for Health Statistics. Together we selected a number of population health measures based on scientific relevance, importance, and availability of data at the county level.

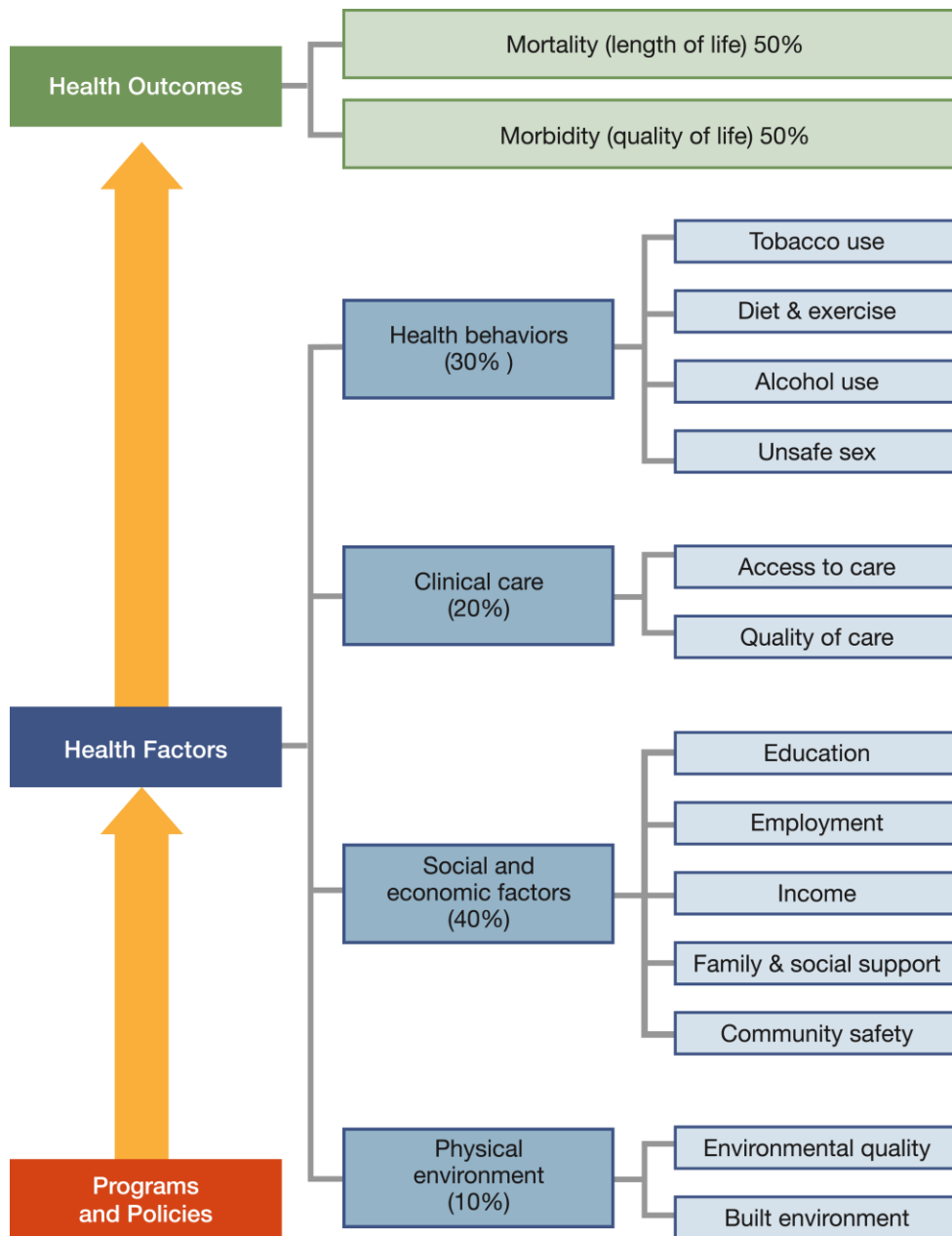
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see www.countyhealthrankings.org



The Rankings

This report ranks Tennessee counties according to their summary measures of **health outcomes** and **health factors**, as well as the components used to create each summary measure. The figure below depicts the structure of the *Rankings* model. Counties receive a rank for each population health component; those having high ranks (e.g., 1 or 2) are estimated to be the “healthiest.”

Our summary **health outcomes** rankings are based on an equal weighting of mortality and morbidity measures. The summary **health factors** rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental. The weights for the factors (shown in parentheses in the figure) are based upon a review of the literature and expert input, but represent just one way of combining these factors.

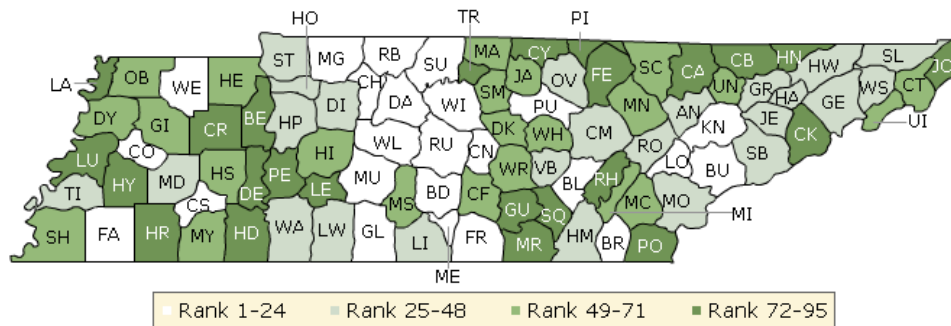


County Health Rankings model ©2010 UWPHI

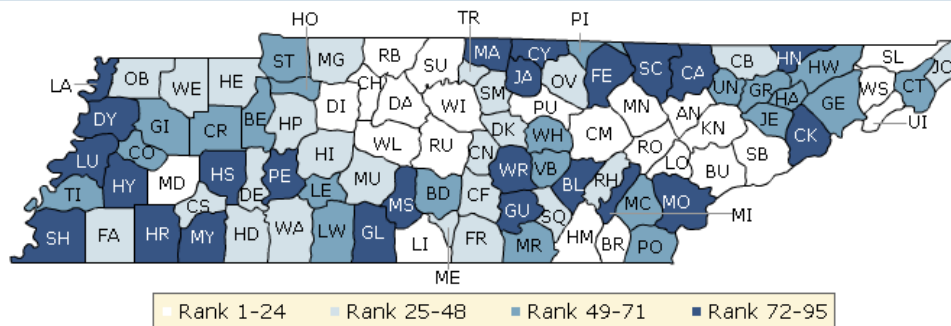
The maps on this page display Tennessee's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

Maps help locate the healthiest and least healthy counties in the state. The health factors map appears similar to the health outcomes map, showing how health factors and health outcomes are closely related.

HEALTH OUTCOMES



HEALTH FACTORS



Summary Health Outcomes & Health Factors Rankings

Counties receive two summary ranks:

- Health Outcomes
- Health Factors

Each of these ranks represents a weighted summary of a number of measures.

Health outcomes represent how healthy a county is while health factors are what influences the health of the county.

Rank	Health Outcomes	Rank	Health Factors
1	Williamson	1	Williamson
2	Sumner	2	Washington
3	Rutherford	3	Knox
4	Moore	4	Rutherford
5	Blount	5	Sullivan
6	Wilson	6	Sumner
7	Putnam	7	Putnam
8	Knox	8	Roane
9	Robertson	9	Anderson
10	Montgomery	10	Hamilton
11	Franklin	11	Bradley
12	Cannon	12	Cheatham
13	Davidson	13	Wilson
14	Chester	14	Blount
15	Loudon	15	Cumberland
16	Maury	16	Unicoi
17	Bradley	17	Lincoln
18	Fayette	18	Loudon
19	Weakley	19	Davidson
20	Giles	20	Madison
21	Cheatham	21	Robertson
22	Crockett	22	Morgan
23	Bedford	23	Sevier
24	Bledsoe	24	Dickson
25	Hamilton	25	Humphreys
26	Sevier	26	Weakley
27	Grainger	27	Overton
28	Jefferson	28	Moore
29	Lincoln	29	Coffee
30	Van Buren	30	Franklin
31	Dickson	31	Hardin
32	Hawkins	32	Obion
33	Washington	33	Fayette
34	Lawrence	34	Cannon
35	Stewart	35	Wayne
36	Greene	36	Chester
37	Wayne	37	Claiborne
38	Sullivan	38	Maury
39	Tipton	39	Rhea
40	Humphreys	40	Smith
41	Monroe	41	Trousdale
42	Cumberland	42	Johnson
43	Houston	43	Decatur
44	Madison	44	Henry
45	Roane	45	Sequatchie

Rank	Health Outcomes	Rank	Health Factors
46	Anderson	46	Montgomery
47	Overton	47	Hickman
48	Hamblen	48	DeKalb
49	White	49	McMinn
50	Coffee	50	Union
51	Obion	51	Hawkins
52	Smith	52	Carter
53	McMinn	53	Bedford
54	Carter	54	Jefferson
55	Unicoi	55	Grainger
56	Warren	56	Lawrence
57	Macon	57	Pickett
58	Shelby	58	Stewart
59	Scott	59	Marion
60	Gibson	60	Houston
61	Marshall	61	White
62	Morgan	62	Crockett
63	McNairy	63	Benton
64	DeKalb	64	Greene
65	Henderson	65	Carroll
66	Jackson	66	Lewis
67	Meigs	67	Van Buren
68	Union	68	Hamblen
69	Hickman	69	Tipton
70	Henry	70	Polk
71	Dyer	71	Gibson
72	Pickett	72	Macon
73	Claiborne	73	McNairy
74	Sequatchie	74	Warren
75	Perry	75	Marshall
76	Lauderdale	76	Giles
77	Haywood	77	Meigs
78	Hardin	78	Monroe
79	Johnson	79	Bledsoe
80	Hancock	80	Jackson
81	Polk	81	Hancock
82	Lake	82	Campbell
83	Marion	83	Shelby
84	Clay	84	Cocke
85	Trousdale	85	Clay
86	Decatur	86	Henderson
87	Rhea	87	Grundy
88	Cocke	88	Fentress
89	Carroll	89	Scott
90	Hardeman	90	Dyer
91	Lewis	91	Lake
92	Campbell	92	Hardeman
93	Fentress	93	Perry
94	Grundy	94	Haywood
95	Benton	95	Lauderdale

Health Outcomes Rankings

The summary health outcomes ranking is based on measures of mortality and morbidity. Each county's ranks for mortality and morbidity are displayed here. The mortality rank, representing length of life, is based on a measure of premature death: the years of potential life lost prior to age 75.

The morbidity rank is based on measures that represent health-related quality of life and birth outcomes. We combine four morbidity measures: self-reported fair or poor health, poor physical health days, poor mental health days, and the percent of births with low birthweight.

Rank	Mortality	Morbidity
1	Williamson	Williamson
2	Moore	Robertson
3	Rutherford	Franklin
4	Sumner	Putnam
5	Wilson	Blount
6	Blount	Sumner
7	Knox	Rutherford
8	Chester	Maury
9	Montgomery	Cannon
10	Hamilton	Davidson
11	Putnam	Jefferson
12	Bledsoe	Knox
13	Weakley	Montgomery
14	Cannon	Loudon
15	Bradley	Bedford
16	Davidson	Fayette
17	Stewart	Smith
18	Humphreys	Perry
19	Fayette	Cheatham
20	Robertson	Giles
21	Lincoln	DeKalb
22	Loudon	Wayne
23	Cumberland	Crockett
24	Giles	Bradley
25	Franklin	Van Buren
26	Cheatham	Unicoi
27	Maury	Lawrence
28	Grainger	Overton
29	Crockett	Houston
30	White	Sevier
31	Tipton	Coffee
32	Carter	Jackson
33	Hamblen	Weakley
34	Hawkins	Hancock
35	Washington	Decatur
36	Dickson	McNairy
37	Greene	Henderson
38	Madison	Wilson
39	Sevier	Chester
40	Roane	Dickson
41	Bedford	Clay
42	Sullivan	Scott
43	Monroe	Monroe
44	Van Buren	Greene
45	McMinn	Sullivan

Rank	Mortality	Morbidity
46	Anderson	Washington
47	Lawrence	Hawkins
48	Sequatchie	Gibson
49	Obion	Grainger
50	Warren	Meigs
51	Wayne	Shelby
52	Jefferson	Henry
53	Macon	Anderson
54	Union	Marshall
55	Houston	Macon
56	Morgan	Madison
57	Marshall	Obion
58	Shelby	Bledsoe
59	Marion	Trousdale
60	Hickman	Morgan
61	Overton	Lincoln
62	Coffee	Carroll
63	Lake	Tipton
64	Claiborne	Hardin
65	Gibson	Roane
66	Lauderdale	McMinn
67	Scott	Warren
68	Hardeman	Hamilton
69	Unicoi	Dyer
70	Smith	Stewart
71	Pickett	Pickett
72	Dyer	Cumberland
73	McNairy	Humphreys
74	Johnson	Hamblen
75	Campbell	Polk
76	Haywood	Haywood
77	Meigs	Moore
78	Henry	Fentress
79	DeKalb	White
80	Henderson	Hickman
81	Polk	Claiborne
82	Jackson	Carter
83	Cocke	Union
84	Rhea	Johnson
85	Lewis	Lauderdale
86	Hardin	Rhea
87	Perry	Cocke
88	Trousdale	Lewis
89	Hancock	Benton
90	Carroll	Sequatchie
91	Clay	Grundy
92	Grundy	Lake
93	Decatur	Marion
94	Fentress	Campbell
95	Benton	Hardeman

Health Factors Rankings

The summary health factors ranking is based on four factors: health behaviors, clinical care, social and economic, and physical environment factors. In turn, each of these factors is based on several measures. Health behaviors include measures of smoking, diet and exercise, alcohol use, and risky sex behavior. Clinical

care includes measures of access to care and quality of care. Social and economic factors include measures of education, employment, income, family and social support, and community safety. The physical environment includes measures of environmental quality and the built environment.

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
1	Williamson	1	Washington	1	Williamson	1	Houston
2	Wayne	2	Sullivan	2	Wilson	2	Williamson
3	Knox	3	Williamson	3	Rutherford	3	Sequatchie
4	Bradley	4	Madison	4	Sumner	4	Gibson
5	Cumberland	5	Hamilton	5	Knox	5	Roane
6	Hamilton	6	Anderson	6	Blount	6	Coffee
7	Putnam	7	Knox	7	Washington	7	Humphreys
8	Hardin	8	Davidson	8	Cheatham	8	Macon
9	Sumner	9	Blount	9	Lincoln	9	Wilson
10	Unicoi	10	Johnson	10	Montgomery	10	Hardin
11	Sevier	11	Morgan	11	Putnam	11	Obion
12	Roane	12	Roane	12	Loudon	12	Crockett
13	Rutherford	13	Gibson	13	Sullivan	13	Lewis
14	Washington	14	Hawkins	14	Robertson	13	Perry
15	Davidson	15	Shelby	15	Humphreys	13	Pickett
16	Overton	16	Dyer	16	Dickson	16	Decatur
17	Anderson	17	McMinn	17	Fayette	17	Chester
18	Union	18	Rhea	18	Moore	18	Cocke
19	Lewis	19	Cocke	19	Trousdale	19	Cumberland
20	Claiborne	20	Maury	20	Roane	20	Lawrence
21	Moore	21	Loudon	21	Franklin	21	DeKalb
22	Cheatham	22	Henry	22	Anderson	22	Washington
23	Weakley	23	Claiborne	23	Coffee	23	Bledsoe
24	Smith	24	Greene	24	Hamilton	24	Dickson
25	Grainger	25	Sumner	25	Bradley	24	Giles
26	Hickman	26	Campbell	26	Davidson	26	Maury
27	Madison	27	Lincoln	27	Unicoi	27	Trousdale
28	Robertson	28	Unicoi	28	Sevier	28	Fayette
29	Cannon	29	Bradley	29	Stewart	29	Grundy
30	Johnson	30	Obion	30	Obion	30	Putnam
31	Morgan	31	Franklin	31	Chester	31	Campbell
32	Sullivan	32	Putnam	32	Weakley	32	Fentress
33	Grundy	33	Giles	33	Morgan	32	Johnson
34	Decatur	34	Jefferson	34	Cannon	34	Monroe
35	Loudon	35	Meigs	35	Tipton	35	Marion
36	DeKalb	36	Hardin	36	Jefferson	36	Sullivan
37	Rhea	37	Rutherford	37	Bedford	37	Cannon
38	Blount	38	Monroe	38	Smith	37	Carter
39	Hancock	39	Haywood	39	Maury	39	Benton
40	Pickett	40	Lawrence	40	Overton	40	Lincoln
41	McMinn	41	Cumberland	41	Carter	41	Tipton
42	Bedford	42	Dickson	42	Crockett	42	Lauderdale
43	Henry	43	Hardeman	43	Cumberland	43	Haywood
44	Van Buren	44	Carter	44	Union	44	Cheatham
45	Scott	45	Carroll	45	Macon	45	Anderson

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
46	Jackson	46	McNairy	46	Hickman	46	Franklin
47	Humphreys	47	Chester	47	McNairy	47	Rutherford
48	Fentress	48	Van Buren	48	Wayne	48	Overton
49	Meigs	49	Weakley	49	Madison	49	Greene
50	Houston	50	Overton	50	Decatur	50	Bradley
51	Fayette	51	Hancock	51	Hawkins	51	Claiborne
52	Clay	52	Wilson	52	Grainger	51	Marshall
53	Polk	53	Hamblen	53	Clay	53	Rhea
54	Dickson	54	Coffee	54	Gibson	54	White
55	Hawkins	55	Sequatchie	55	Marion	55	Scott
56	Benton	56	Marshall	56	Houston	55	Wayne
57	Stewart	57	Polk	57	McMinn	57	Bedford
58	Trousdale	58	DeKalb	58	Sequatchie	58	McNairy
59	Sequatchie	59	Marion	59	Carroll	59	Weakley
60	Perry	60	Robertson	60	Hamblen	60	Moore
61	Lincoln	61	Cheatham	61	Rhea	60	Van Buren
62	Bledsoe	62	White	62	Henry	62	Henry
63	White	63	Sevier	63	Greene	63	Warren
64	Lawrence	64	Benton	64	Lawrence	64	Clay
65	Chester	65	Henderson	65	White	64	Grainger
66	Hamblen	66	Tipton	66	Dyer	64	Hancock
67	Obion	67	Pickett	67	DeKalb	64	Hickman
68	Warren	68	Lake	68	Polk	64	Lake
69	Franklin	69	Lauderdale	69	Henderson	69	Henderson
70	Coffee	70	Warren	70	Benton	70	Jefferson
71	Maury	71	Scott	71	Claiborne	71	Carroll
72	Crockett	72	Decatur	72	Warren	72	Hardeman
73	Wilson	73	Hickman	73	Marshall	73	Morgan
74	Campbell	74	Bledsoe	74	Giles	73	Stewart
75	Montgomery	75	Smith	75	Pickett	75	Jackson
76	Marion	76	Humphreys	76	Hardin	75	Unicoi
77	Shelby	77	Grundy	77	Johnson	77	Smith
78	Carter	78	Cannon	78	Monroe	78	Madison
79	Macon	79	Jackson	79	Hardeman	79	Robertson
80	Carroll	80	Union	80	Van Buren	80	Sevier
81	Marshall	81	Fayette	81	Jackson	81	Hawkins
82	Jefferson	82	Montgomery	82	Lewis	82	Hamblen
83	Greene	83	Grainger	83	Bledsoe	83	Polk
84	Monroe	84	Bedford	84	Meigs	84	Sumner
85	Cocke	85	Lewis	85	Shelby	85	Union
86	McNairy	86	Crockett	86	Cocke	86	Knox
87	Giles	87	Moore	87	Lake	87	Loudon
88	Henderson	88	Fentress	88	Campbell	88	Meigs
89	Lake	89	Macon	89	Fentress	89	McMinn
90	Tipton	90	Trousdale	90	Hancock	90	Dyer
91	Gibson	91	Wayne	91	Perry	91	Hamilton
92	Haywood	92	Stewart	92	Scott	92	Davidson
93	Dyer	93	Houston	93	Haywood	93	Montgomery
94	Hardeman	94	Perry	94	Grundy	94	Shelby
95	Lauderdale	95	Clay	95	Lauderdale	95	Blount

2011 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
HEALTH OUTCOMES			
Mortality	Premature death	National Center for Health Statistics	2005-2007
Morbidity	Poor or fair health	Behavioral Risk Factor Surveillance System	2003-2009
	Poor physical health days	Behavioral Risk Factor Surveillance System	2003-2009
	Poor mental health days	Behavioral Risk Factor Surveillance System	2003-2009
	Low birthweight	National Center for Health Statistics	2001-2007
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco	Adult smoking	Behavioral Risk Factor Surveillance System	2003-2009
Diet and Exercise	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2008
Alcohol Use	Excessive drinking	Behavioral Risk Factor Surveillance System	2003-2009
	Motor vehicle crash death rate	National Center for Health Statistics	2001-2007
High Risk Sexual Behavior	Sexually transmitted infections	National Center for Hepatitis, HIV, STD and TB Prevention	2008
	Teen birth rate	National Center for Health Statistics	2001-2007
CLINICAL CARE			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2007
	Primary care providers	Health Resources & Services Administration	2008
Quality of Care	Preventable hospital stays	Medicare/Dartmouth Institute	2006-2007
	Diabetic screening	Medicare/Dartmouth Institute	2006-2007
	Mammography screening	Medicare/Dartmouth Institute	2006-2007
SOCIOECONOMIC FACTORS			
Education	High school graduation	National Center for Education Statistics ¹	2006-2007
	Some college	American Community Survey	2005-2009
Employment	Unemployment	Bureau of Labor Statistics	2009
Income	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2008
Family and Social Support	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2009
	Single-parent households	American Community Survey	2005-2009
Community Safety	Violent crime ²	Uniform Crime Reporting, Federal Bureau of Investigation	2006-2008
PHYSICAL ENVIRONMENT			
Air Quality³	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2006
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2006
Built Environment	Access to healthy foods	Census Zip Code Business Patterns	2008
	Access to recreational facilities	Census County Business Patterns	2008

¹ State data sources for KY, NH, NC, PA, SC, and UT (2008-2009).

² Homicide rate (2001-2007) from National Center for Health Statistics for AK, AZ, AR, CO, CT, GA, ID, IN, IA, KS, KY, LA, MN, MS, MT, NE, NH, NM, NC, ND, OH, SD, UT, and WV. State data source for IL.

³ Not available for AK and HI.

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