



County Health Rankings

Mobilizing Action Toward Community Health

2010

Minnesota



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

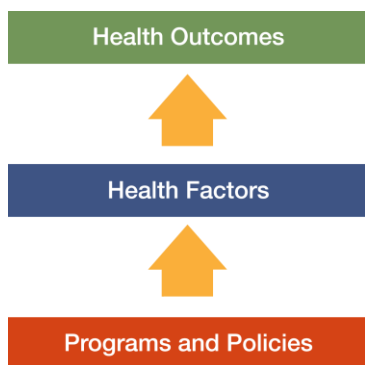
Introduction

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 2010 *County Health Rankings*, a collection of 50 reports that reflect the overall health of counties in every state across the country. For the first time, 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 will allow them 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.



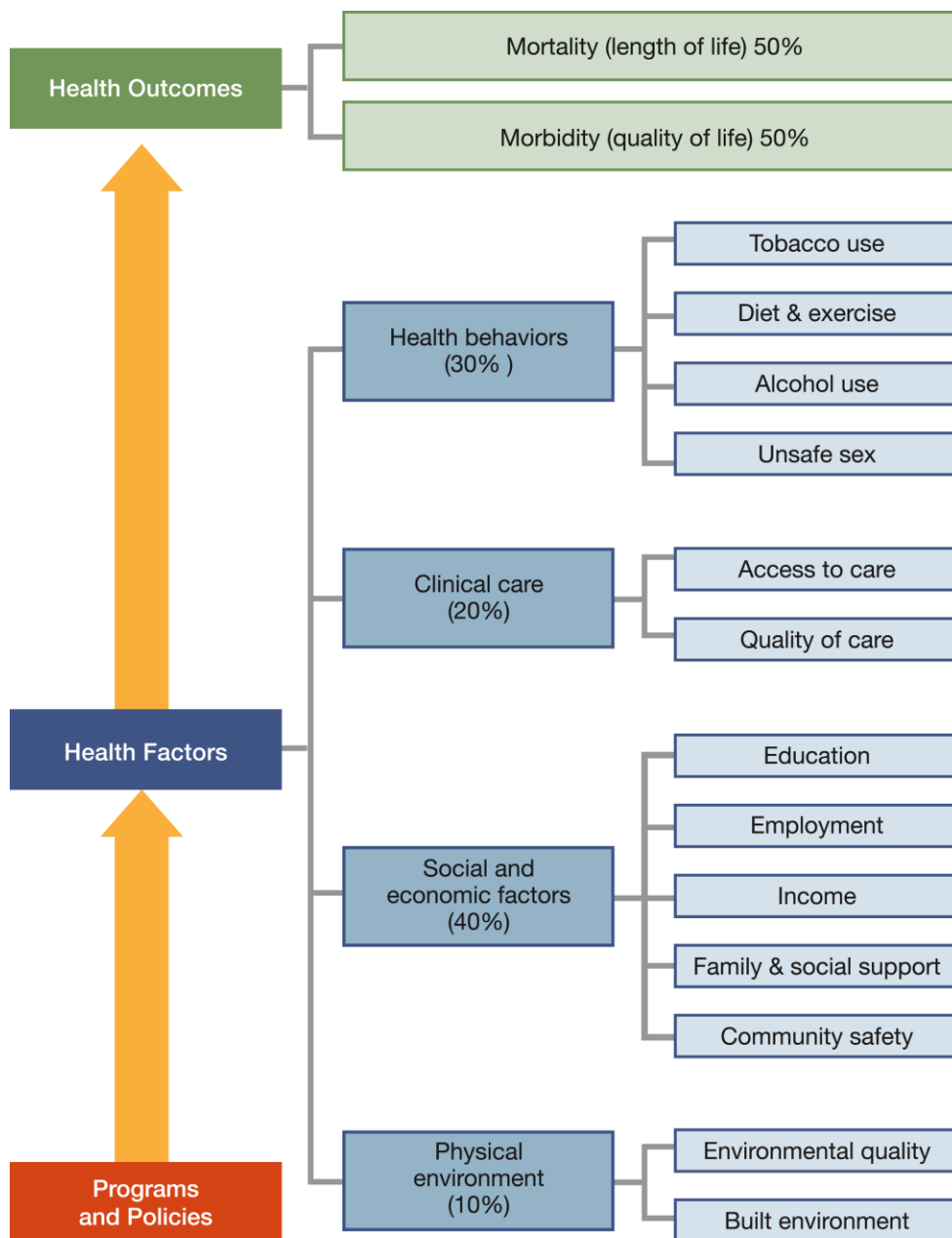
Institute of Medicine, 2002

To compile the *Rankings*, we built on our prior work in Wisconsin, worked closely with staff from the Centers for Disease Control and Prevention and Dartmouth College, and obtained input from a team of expert advisors. 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 the choice of measures, see www.countyhealthrankings.org.

The Rankings

This report ranks Minnesota 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.

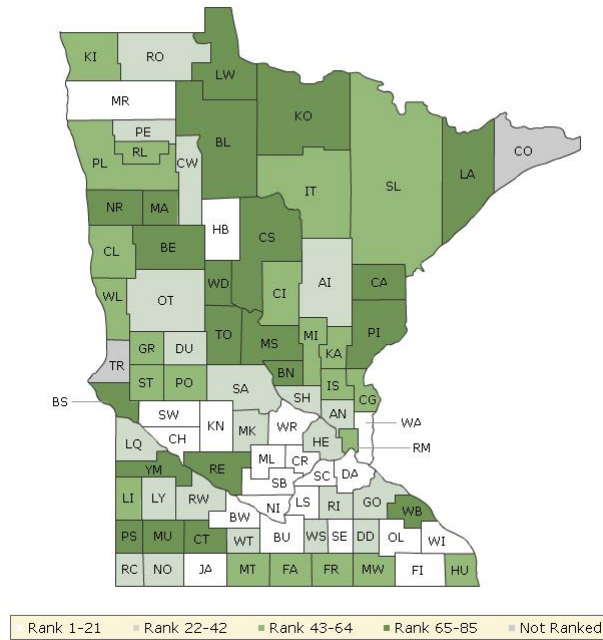


County Health Rankings model ©2010 UWPHI

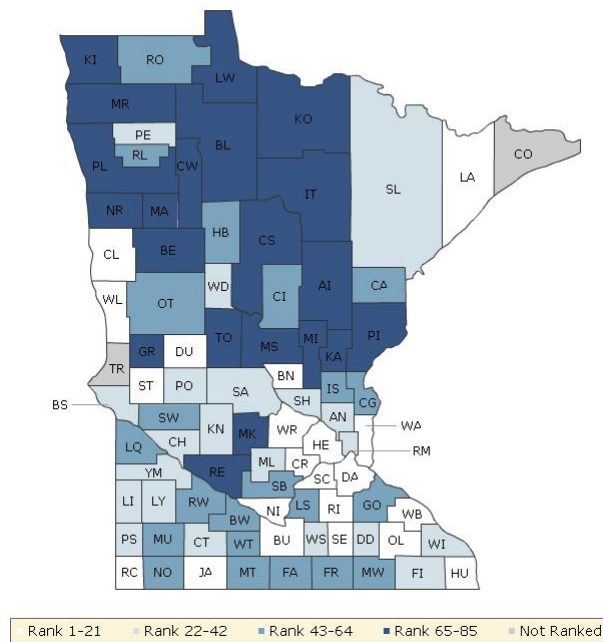
The maps on this page display Minnesota's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health 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	Jackson	1	Olmsted
2	Scott	2	Dakota
3	Steele	3	Washington
4	Carver	4	Carver
5	Marshall	5	Hennepin
6	McLeod	6	Nicollet
7	Washington	7	Scott
8	Sibley	8	Houston
9	Olmsted	9	Rice
10	Winona	10	Clay
11	Chippewa	11	Wilkin
12	Swift	12	Steele
13	Le Sueur	13	Rock
14	Brown	14	Wabasha
15	Kandiyohi	15	Jackson
16	Fillmore	16	Lake
17	Wright	17	Wright
18	Blue Earth	18	Douglas
19	Nicollet	19	Blue Earth
20	Hubbard	20	Benton
21	Dakota	21	Stevens
22	Stearns	22	Sherburne
23	Rice	23	Pipestone
24	Douglas	24	Waseca
25	Aitkin	25	Chippewa
26	Anoka	26	Cottonwood
27	Meeker	27	Winona
28	Lac qui Parle	28	Dodge
29	Dodge	29	Lyon
30	Waseca	30	McLeod
31	Nobles	31	Stearns
32	Otter Tail	32	Ramsey
33	Watonwan	33	Lincoln
34	Sherburne	34	Pennington
35	Redwood	35	Kandiyohi
36	Rock	36	Wadena
37	Lyon	37	Fillmore
38	Goodhue	38	St. Louis
39	Pennington	39	Pope
40	Clearwater	40	Big Stone

Rank	Health Outcomes	Rank	Health Factors
41	Roseau	41	Yellow Medicine
42	Hennepin	42	Anoka
43	Mower	43	Le Sueur
44	Lincoln	44	Redwood
45	Stevens	45	Swift
46	Faribault	46	Brown
47	Pope	47	Carlton
48	Wilkin	48	Chisago
49	Red Lake	49	Lac qui Parle
50	Isanti	50	Faribault
51	Grant	51	Mower
52	Houston	52	Roseau
53	Crow Wing	53	Martin
54	Chisago	54	Red Lake
55	Polk	55	Otter Tail
56	Itasca	56	Goodhue
57	Mille Lacs	57	Sibley
58	Kittson	58	Isanti
59	Clay	59	Watonwan
60	Ramsey	60	Crow Wing
61	Freeborn	61	Murray
62	Kanabec	62	Nobles
63	St. Louis	63	Hubbard
64	Martin	64	Freeborn
65	Benton	65	Itasca
66	Todd	66	Renville
67	Carlton	67	Grant
68	Norman	68	Morrison
69	Renville	69	Kittson
70	Lake of the Woods	70	Meeker
71	Wabasha	71	Norman
72	Cottonwood	72	Marshall
73	Koochiching	73	Polk
74	Big Stone	74	Lake of the Woods
75	Pipestone	75	Koochiching
76	Becker	76	Aitkin
77	Yellow Medicine	77	Kanabec
78	Pine	78	Becker
79	Murray	79	Pine
80	Morrison	80	Todd
81	Cass	81	Mille Lacs
82	Wadena	82	Mahnomen
83	Mahnomen	83	Clearwater
84	Beltrami	84	Cass
85	Lake	85	Beltrami

Not Ranked: Cook, Traverse

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	Rank	Morbidity
1	Carver	1	Lac qui Parle
2	Jackson	2	Swift
3	Steele	3	Scott
4	Marshall	4	Clearwater
5	Scott	5	Winona
6	Washington	6	McLeod
7	Chippewa	7	Mahnomen
8	Sibley	8	Aitkin
9	Dakota	9	Kandiyohi
10	Rice	10	Meeker
11	Le Sueur	11	Fillmore
12	Nobles	12	Jackson
13	Stearns	13	Brown
14	Nicollet	14	Olmsted
15	Olmsted	15	Redwood
16	McLeod	16	Mille Lacs
17	Anoka	17	Sibley
18	Blue Earth	18	Steele
19	Wright	19	Hubbard
20	Isanti	20	Douglas
21	Sherburne	21	Norman
22	Brown	22	Le Sueur
23	Winona	23	Wright
24	Kandiyohi	24	Washington
25	Hubbard	25	Marshall
26	Mower	26	Chippewa
27	Wabasha	27	Blue Earth
28	Fillmore	28	Lyon
29	Swift	29	Lincoln
30	Hennepin	30	Pope
31	Watonwan	31	Dodge
32	Faribault	32	Nicollet
33	Otter Tail	33	Carver
34	Waseca	34	Waseca
35	Dodge	35	Polk
36	Goodhue	36	Otter Tail
37	Rock	37	Koochiching
38	Douglas	38	Roseau
39	Pennington	39	Dakota
40	Roseau	40	Pennington

Rank	Mortality	Rank	Morbidity
41	Chisago	41	Watonwan
42	Freeborn	42	Rock
43	Martin	43	Stevens
44	Lyon	44	Big Stone
45	Crow Wing	45	Beltrami
46	Grant	46	St. Louis
46	Kittson	47	Goodhue
46	Lake of the Woods	48	Itasca
46	Red Lake	49	Wilkin
46	Stevens	50	Stearns
46	Wilkin	51	Houston
52	Benton	52	Red Lake
53	Clay	53	Sherburne
54	Ramsey	54	Rice
55	Houston	55	Pine
56	Redwood	56	Anoka
57	Meeker	57	Todd
58	Aitkin	58	Becker
59	Lincoln	59	Cass
60	Carlton	60	Grant
61	Pope	61	Kanabec
62	Morrison	62	Hennepin
63	Kanabec	63	Crow Wing
64	Itasca	64	Murray
65	Renville	65	Ramsey
66	Polk	66	Clay
67	St. Louis	67	Faribault
68	Clearwater	68	Chisago
69	Todd	69	Nobles
70	Cottonwood	70	Kittson
71	Pipestone	71	Wadena
72	Yellow Medicine	72	Mower
73	Mille Lacs	73	Pipestone
74	Lac qui Parle	74	Cottonwood
75	Becker	75	Freeborn
76	Murray	76	Yellow Medicine
77	Norman	77	Renville
78	Pine	78	Carlton
79	Koochiching	79	Benton
80	Lake	80	Martin
81	Big Stone	81	Lake
82	Wadena	82	Isanti
83	Cass	83	Lake of the Woods
84	Beltrami	84	Morrison
85	Mahnomen	85	Wabasha

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	Clinical Care	Social & Economic Factors	Physical Environment
1	Hennepin	Olmsted	Carver	Marshall
2	Stevens	Washington	Scott	Wadena
3	Dakota	Hennepin	Washington	Kanabec
4	Wadena	Ramsey	Nicollet	Chippewa
5	Olmsted	Rock	Lyon	Wilkin
6	Rice	Dakota	Dakota	Hubbard
7	Benton	Pennington	Olmsted	Steele
8	Fillmore	Kandiyohi	Sherburne	Houston
9	Nicollet	Carver	Wright	Otter Tail
10	Pope	St. Louis	Houston	Todd
11	St. Louis	Redwood	Rock	Pine
12	Wabasha	Houston	Rice	Pope
13	Douglas	Steele	Blue Earth	Cass
14	Washington	Brown	Dodge	Clearwater
15	McLeod	Waseca	Wilkin	Dakota
16	Ramsey	Douglas	Jackson	Polk
17	Clay	Clay	Winona	Pennington
18	Aitkin	Anoka	Clay	Isanti
19	Stearns	Wilkin	Steele	Brown
20	Faribault	Nicollet	Wabasha	Roseau
21	Houston	Goodhue	Stevens	Aitkin
22	Red Lake	Cottonwood	Pipestone	Lincoln
23	Carver	Wadena	Lake	Cottonwood
24	Scott	Itasca	Swift	Clay
25	Jackson	Hubbard	Roseau	Mahnomen
26	Lac qui Parle	Big Stone	Chippewa	Lake
27	Lincoln	Blue Earth	Brown	Morrison
28	Grant	Lake	Anoka	Sibley
29	Steele	Becker	Waseca	Meeker
30	Lake	Chisago	Yellow Medicine	McLeod
31	Wright	Martin	Lincoln	Hennepin
32	Le Sueur	Chippewa	Cottonwood	Ramsey
33	Koochiching	Freeborn	Goodhue	Carlton
34	Mower	Stearns	Murray	Dodge
35	Pipestone	Pipestone	Lac qui Parle	Benton
36	Wilkin	Wabasha	Chisago	Lac qui Parle
37	Pennington	Jackson	Benton	Beltrami
38	Big Stone	Scott	Meeker	Kandiyohi
39	Marshall	Sherburne	Sibley	Douglas
40	Winona	Nobles	Douglas	Chisago

Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
41	Redwood	Wright	Stearns	Pipestone
42	Crow Wing	Carlton	Le Sueur	Sherburne
43	Rock	McLeod	Pope	Le Sueur
44	Watsonwan	Rice	Renville	Becker
45	Murray	Yellow Medicine	Big Stone	Nicollet
46	Waseca	Morrison	Freeborn	Grant
47	Sibley	Meeker	Isanti	Itasca
48	Yellow Medicine	Kanabec	Martin	Blue Earth
49	Cottonwood	Lyon	McLeod	Norman
50	Hubbard	Swift	Kittson	Stearns
51	Clearwater	Le Sueur	Fillmore	Waseca
52	Lake of the Woods	Dodge	Faribault	Stevens
53	Kandiyohi	Winona	Carlton	Lyon
54	Carlton	Isanti	Kandiyohi	Mower
55	Nobles	Mahnomen	Watsonwan	Scott
56	Blue Earth	Beltrami	Mower	Jackson
57	Dodge	Mille Lacs	Red Lake	Fillmore
58	Kanabec	Mower	Otter Tail	Goodhue
59	Norman	Crow Wing	Redwood	Big Stone
60	Chippewa	Benton	Lake of the Woods	Martin
61	Kittson	Otter Tail	Grant	Winona
62	Swift	Koochiching	Hennepin	Red Lake
63	Sherburne	Polk	Pennington	Koochiching
64	Pine	Lincoln	Nobles	Mille Lacs
65	Roseau	Renville	Polk	Olmsted
66	Otter Tail	Fillmore	Crow Wing	Washington
67	Anoka	Faribault	Norman	Carver
68	Renville	Pine	Morrison	Crow Wing
69	Mille Lacs	Watsonwan	St. Louis	Redwood
70	Martin	Red Lake	Marshall	Faribault
71	Itasca	Norman	Ramsey	Wabasha
72	Chisago	Roseau	Itasca	Watsonwan
73	Lyon	Kittson	Becker	Yellow Medicine
74	Todd	Pope	Todd	Kittson
75	Mahnomen	Todd	Hubbard	Rice
76	Morrison	Lac qui Parle	Wadena	Rock
77	Isanti	Cass	Aitkin	Freeborn
78	Polk	Sibley	Mille Lacs	Swift
79	Freeborn	Murray	Koochiching	Lake of the Woods
80	Cass	Aitkin	Pine	Wright
81	Goodhue	Stevens	Kanabec	St. Louis
82	Brown	Marshall	Mahnomen	Murray
83	Becker	Grant	Beltrami	Renville
84	Meeker	Clearwater	Cass	Nobles
85	Beltrami	Lake of the Woods	Clearwater	Anoka

2010 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	2004-2006
Morbidity	Poor or fair health	Behavioral Risk Factor Surveillance System	2002-2008
	Poor physical health days	Behavioral Risk Factor Surveillance System	2002-2008
	Poor mental health days	Behavioral Risk Factor Surveillance System	2002-2008
	Low birthweight	National Center for Health Statistics	2000-2006
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco	Adult smoking	Behavioral Risk Factor Surveillance System	2002-2008
Diet and Exercise	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2006-2008
Alcohol Use	Binge drinking	Behavioral Risk Factor Surveillance System	2002-2008
	Motor vehicle crash death rate	National Center for Health Statistics	2000-2006
High Risk Sexual Behavior	Chlamydia rate	National Center for Health Statistics	2007
	Teen birth rate	National Center for Health Statistics	2000-2006
CLINICAL CARE			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2005
	Primary care provider rate	Health Resources & Services Administration	2006
Quality of Care	Preventable hospital stays	Medicare/Dartmouth Institute	2005-2006
	Diabetic screening	Medicare/Dartmouth Institute	2003-2006
	Hospice use	Medicare/Dartmouth Institute	2001-2005
SOCIOECONOMIC FACTORS			
Education	High school graduation	National Center for Education Statistics ¹	2005-2006
	College degrees	U.S. Census/American Community Survey	2000/2005-2007
Employment	Unemployment	Bureau of Labor Statistics	2008
Income	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2007
	Income inequality	U.S. Census/American Community Survey ²	2000/2005-2007
Family and Social Support	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2008
	Single-parent households	U.S. Census/American Community Survey	2000/2005-2007
Community Safety	Violent crime ³	Uniform Crime Reporting, Federal Bureau of Investigation	2005-2007
PHYSICAL ENVIRONMENT			
Air Quality ⁴	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2005
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2005
Built Environment	Access to healthy foods	Census Zip Code Business Patterns	2006
	Liquor store density	Census County Business Patterns	2006

¹ State data sources for KY, NH, NC, PA, SC, and UT (2007-2008).

² Income inequality estimates for 2000 were calculated by Mark L. Burkey, North Carolina Agricultural & Technical State University, www.ncat.edu/~burkeym/Gini.htm.

³ Homicide rate (2000-2006) 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.

⁴ Not available for AK and HI.

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