



UNIVERSITY OF NEBRASKA AT OMAHA

THE DEMOGRAPHIC FOUNDATION OF EDUCATION IN THE GREAT PLAINS

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School Consolidation in the Great Plains

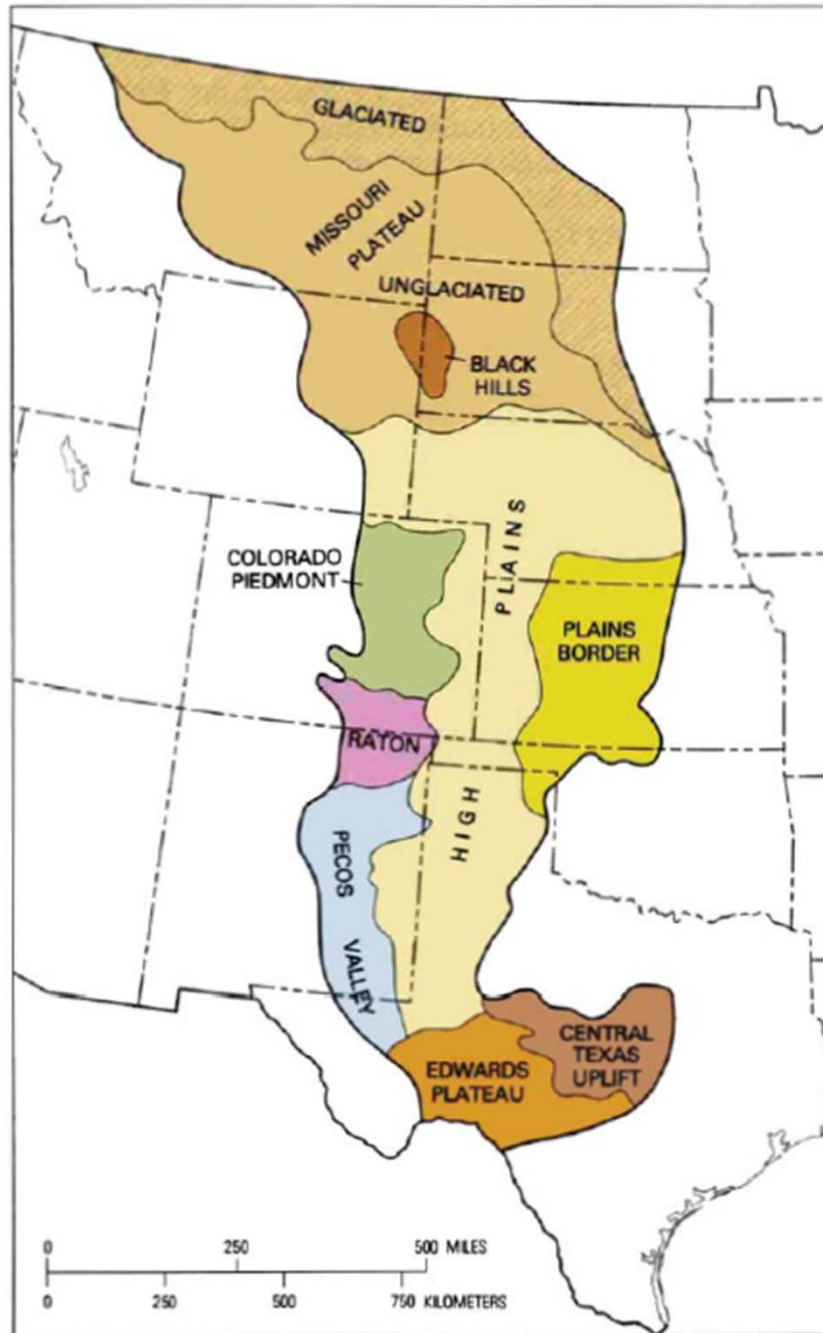
2013 Symposium, April 6 – Kearney, NE



What is the “Great Plains”?

Census publications show it to be a contiguous 10 state region from Montana and N. Dakota on the Canadian border to New Mexico and Texas on the Mexican border.

Nebraska has a relatively high portion of its territory in the “Great Plains”.

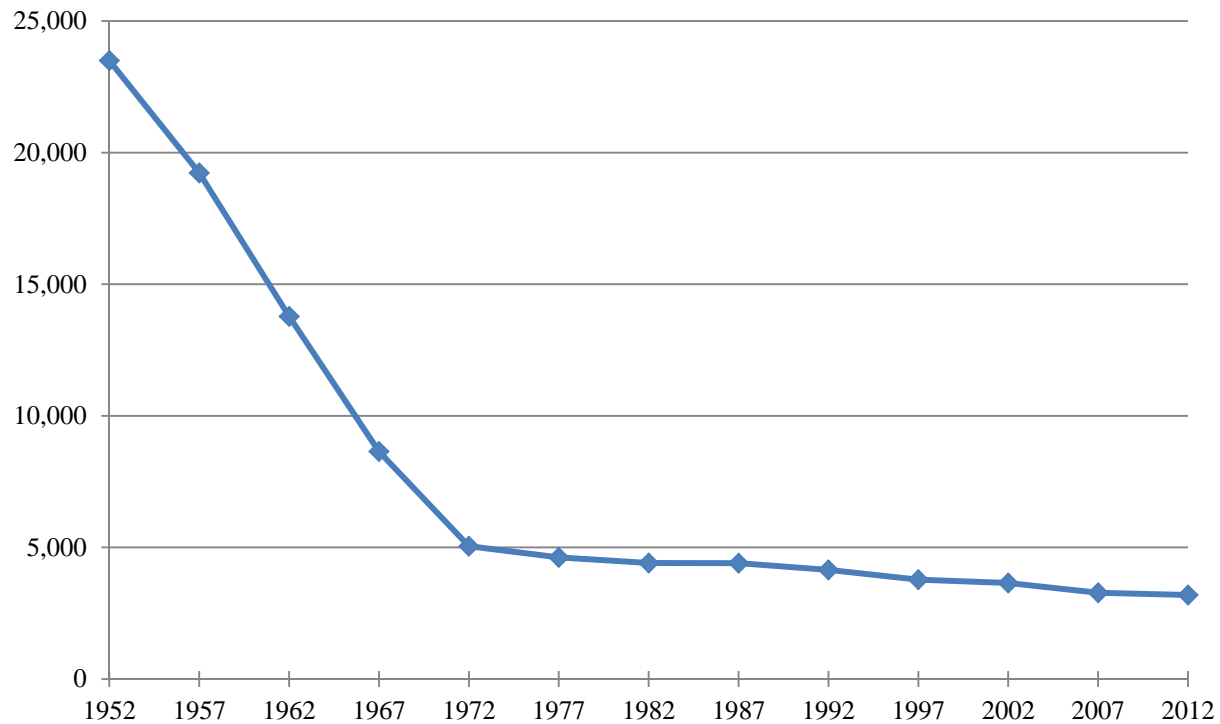


Source: Trimble, D., U.S. Geological Survey, Geological Survey Bulletin 1493, 1980.



The number of school districts in the 10-State Great Plains declined sharply from 1952 to 1972, and have continued to fall but more gradually since

SCHOOL DISTRICTS IN THE GREAT PLAINS:
1952 TO 2012 CENSUS OF GOVERNMENTS





While each Great Plains state had a sizeable decline in school districts from 1952-1972, Nebraska has had the largest decline from both 1972-1992 and 1992-2012

Number of School Districts in Great Plains States: 1952, 1972, 1992, and 2012 with Percent Changes

State	Number of School Districts				Percent Change			2012 as a % of 1952
	1952	1972	1992	2012	1952-1972	1972-1992	1992-2012	
United States	67,346	15,781	14,422	12,884	-76.6%	-8.6%	-10.7%	19.1%
Great Plains States	23,496	5,049	4,148	3,194	-78.5%	-17.8%	-23.0%	13.6%
Colorado	1,352	188	180	180	-86.1%	-4.3%	0.0%	13.3%
Kansas	3,984	331	324	306	-91.7%	-2.1%	-5.6%	7.7%
Montana	1,287	552	537	321	-57.1%	-2.7%	-40.2%	24.9%
Nebraska	6,392	1,374	797	272	-78.5%	-42.0%	-65.9%	4.3%
New Mexico	106	89	94	96	-16.0%	5.6%	2.1%	90.6%
North Dakota	2,079	386	275	183	-81.4%	-28.8%	-33.5%	8.8%
Oklahoma	2,100	657	605	550	-68.7%	-7.9%	-9.1%	26.2%
South Dakota	3,399	228	180	152	-93.3%	-21.1%	-15.6%	4.5%
Texas	2,479	1,174	1,100	1,079	-52.6%	-6.3%	-1.9%	43.5%
Wyoming	318	70	56	55	-78.0%	-20.0%	-1.8%	17.3%

Source: U.S. Census Bureau, 2012 and prior Census of Governments



Nebraska had a relatively high proportion of its counties lose population during the 2000s, and many lost 10%+ of their population

Counties Losing Population and Losing 10 Percent or More of their Population, 2000 to 2010: U.S. and Plains States

Source: CPH-T-1, 2010 Census Tables, U.S. Census Bureau (released 9-27-2011)

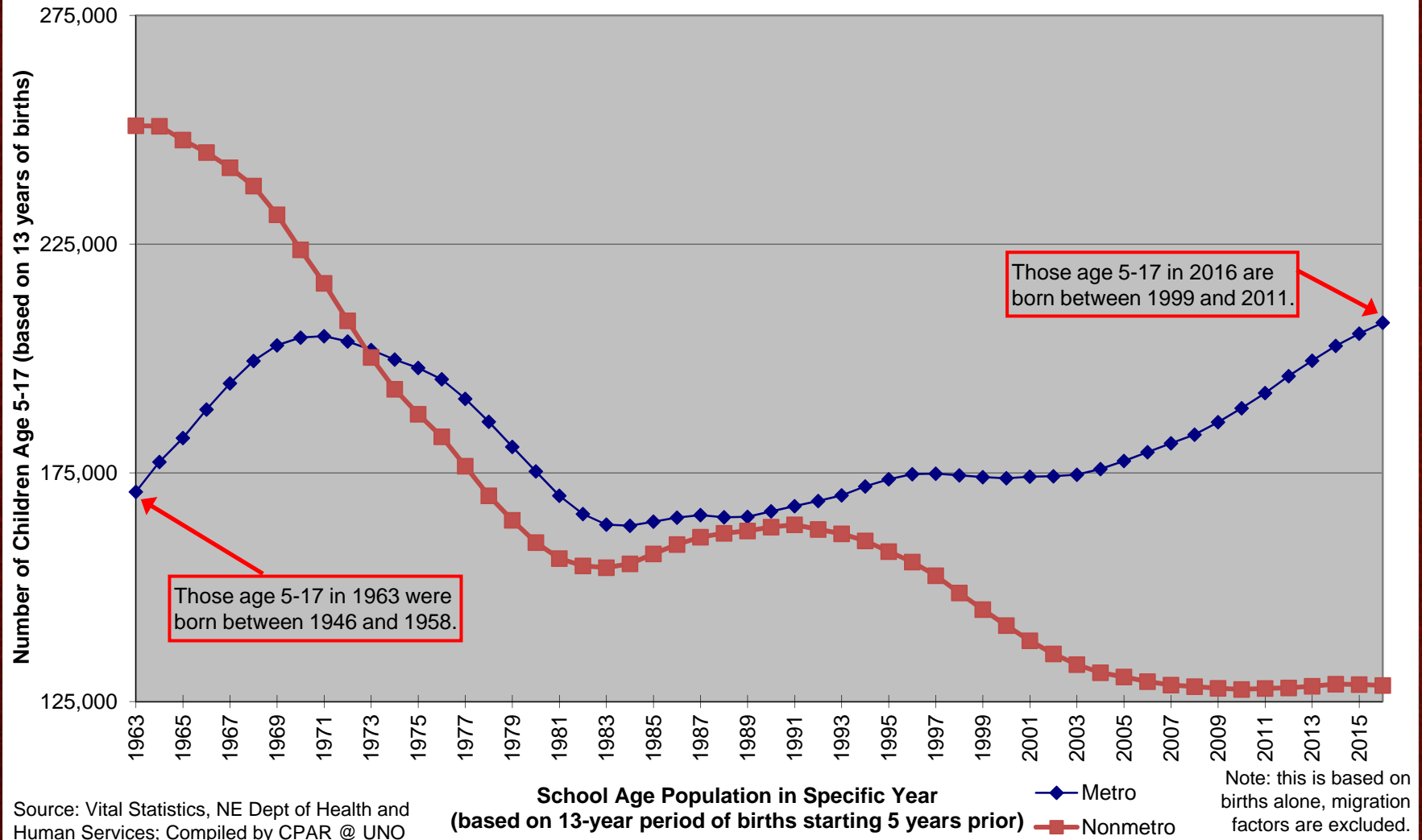
Area	Number of Counties*	Counties having population loss in 2000s	Percent of counties having loss	Counties losing 10% or more in 2000s	Percent of counties losing 10% of population
U.S.	3,137	1,095	34.9%	217	6.9%
Colorado*	63	17	27.0%	9	14.3%
Kansas	105	77	73.3%	23	21.9%
Montana	56	28	50.0%	7	12.5%
Nebraska	93	69	74.2%	23	24.7%
New Mexico	33	14	42.4%	3	9.1%
N. Dakota	53	42	79.2%	23	43.4%
Oklahoma	77	23	29.9%	4	5.2%
S. Dakota	66	41	62.1%	19	28.8%
Texas	254	79	31.1%	22	8.7%
Wyoming	23	2	8.7%	0	0.0%
Plains states	823	392	47.6%	133	16.2%

* The United States had 3,143 counties in 2010, but 6 counties including Broomfield in Colorado did not exist in both 2000 and 2010, so they were excluded from this analysis.



Shifts in school-age population between metro/nonmetro areas

School Age (K-12) Population based on 13-Year Periods of Births to Residents of Metro and Nonmetro Nebraska Counties (Based on Births between 1946 and 2011)



Source: Vital Statistics, NE Dept of Health and Human Services; Compiled by CPAR @ UNO



Nebraska nonmetro fertility rates trail those in metro areas, which is unusual among Plains states; births to unmarried mothers are similar among NE metro & nonmetro areas

Fertility Rates and Births to Unmarried Mothers: U.S. and Great Plains States with Metro and Nonmetro Differences

Source: S1301 and B13002, 2007-2011 American Community Survey, U.S. Census Bureau

Note: A higher birthrate but low percentage of birth to unmarried mothers is typically desired. Thus, better state rankings are closer to 1 while lower rankings are closer to 51.

Area	Fertility Rate per 1,000 Women Aged 15-50						Percent of Births to Unmarried Mothers					
	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro
U.S.	56.3	n/a	56.0	58.0	2.0	103.6	34.5	n/a	33.8	38.1	4.3	112.7
Colorado	57.6	25	57.8	56.7	-1.1	98.1	27.1	4	27.4	24.6	-2.8	89.8
Kansas	64.1	6	62.8	67.3	4.5	107.1	30.8	16	29.1	34.7	5.6	119.2
Montana	58.8	19	54.6	61.3	6.7	112.2	31.3	17	30.7	31.7	1.0	103.3
Nebraska	64.3	5	67.0	59.8	-7.2	89.2	29.2	7	29.1	29.6	0.5	101.7
New Mexico	62.3	9	61.2	64.6	3.4	105.6	45.4	48	42.6	51.2	8.6	120.2
N. Dakota	60.8	11	58.8	63.1	4.3	107.3	30.5	11	26.8	34.5	7.7	128.7
Oklahoma	60.4	14	60.9	59.5	-1.4	97.7	35.2	32	33.4	38.9	5.5	116.5
S. Dakota	63.8	7	62.6	65.0	2.4	103.8	35.8	34	35.5	36.1	0.6	101.7
Texas	64.6	4	64.3	67.2	2.9	104.5	34.1	25	33.5	38.4	4.9	114.6
Wyoming	58.3	21	47.8	62.8	15.0	131.4	32.1	20	39.6	29.6	-10.0	74.7
Plains states	61.5	12.1	59.8	62.7	2.9	105.7	33.2	21.4	32.8	34.9	2.2	107.0



OTHER METRO VS. NONMETRO DIFFERENCES



Nebraska has relatively high differences for median age and the percent of the population aged 65+ between metro and nonmetro areas

Median Age and Percent of Population Aged 65 Years and Older: U.S. and Great Plains States with Metro and Nonmetro Differences

Source: DP-1 SF1, 2010 Census, U.S. Census Bureau

Note: A younger age structure is typically desired. Thus, better state rankings are closer to 1 while lower rankings are closer to 51.

Area	Median Age (years)						Percent of Population Aged 65 or Older					
	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro
U.S.	37.2	n/a	36.6	40.3	3.7	110.1	13.0	n/a	12.4	16.1	3.7	129.8
Colorado	36.1	12	35.6	39.5	3.9	111.0	10.9	5	10.5	13.6	3.1	129.5
Kansas	36.0	10	34.8	39.1	4.3	112.4	13.2	20	11.6	16.7	5.1	144.0
Montana	39.8	44	37.5	41.2	3.7	109.9	14.8	46	13.7	15.1	1.4	110.2
Nebraska	36.2	13	33.6	40.5	6.9	120.5	13.5	25	10.8	17.4	6.6	161.1
New Mexico	36.7	17	36.2	37.6	1.4	103.9	13.2	21	12.5	14.7	2.2	117.6
N. Dakota	37.0	20	33.0	41.5	8.5	125.8	14.5	44	11.2	17.6	6.4	157.1
Oklahoma	36.2	13	35.3	38.2	2.9	108.2	13.5	26	12.2	15.8	3.6	129.5
S. Dakota	36.9	19	35.4	38.6	3.2	109.0	14.3	39	12.0	16.3	4.3	135.8
Texas	33.6	2	33.0	38.6	5.6	117.0	10.3	3	9.6	16.0	6.4	166.7
Wyoming	36.8	18	36.9	36.8	-0.1	99.7	12.4	14	12.5	12.4	-0.1	99.2
Plains states	36.5	16.8	35.1	39.2	4.0	111.7	13.1	24.3	11.7	15.6	3.9	135.1



Each Plains State saw declines in White non-Hispanic children but sizeable gains among minority children during the 2000s; Nebraska changes differed among White non-Hispanics but not among minorities when comparing metro vs. nonmetro

Population Change for Those Under Age 18 along with Changes for the White non Hispanic and Minority Population, 2000 to 2010: U.S. and Plains States

Sources: Tables P012 and P012I SF1 Census 2000; Tables P12 and P12I SF1 Census 2010, U.S. Census Bureau

Area	Under 18 Population 2000	Under 18 Population 2010	Percent Change	White non Hispanic Under 18: 2000	White non Hispanic Under 18: 2010	Percent Change	Minority Population Under 18: 2000	Minority Population Under 18: 2010	Percent Change	Minority Percent <18: 2000	Minority Percent <18: 2010	Change
U.S.	72,293,812	74,181,467	2.6%	44,027,087	39,716,562	-9.8%	28,266,725	34,464,905	21.9%	39.1%	46.5%	7.4
Colorado	1,100,795	1,225,609	11.3%	729,020	710,280	-2.6%	371,775	515,329	38.6%	33.8%	42.0%	8.3
Kansas	712,993	726,939	2.0%	549,117	498,360	-9.2%	163,876	228,579	39.5%	23.0%	31.4%	8.5
Montana	230,062	223,563	-2.8%	193,123	179,440	-7.1%	36,939	44,123	19.4%	16.1%	19.7%	3.7
Nebraska	450,242	459,221	2.0%	368,126	332,797	-9.6%	82,116	126,424	54.0%	18.2%	27.5%	9.3
New Mexico	508,574	518,672	2.0%	165,301	135,962	-17.7%	343,273	382,710	11.5%	67.5%	73.8%	6.3
N. Dakota	160,849	149,871	-6.8%	139,319	122,321	-12.2%	21,530	27,550	28.0%	13.4%	18.4%	5.0
Oklahoma	892,360	929,666	4.2%	576,731	519,877	-9.9%	315,629	409,789	29.8%	35.4%	44.1%	8.7
S. Dakota	202,649	202,797	0.1%	163,354	152,433	-6.7%	39,295	50,364	28.2%	19.4%	24.8%	5.4
Texas	5,886,759	6,865,824	16.6%	2,507,147	2,322,661	-7.4%	3,379,612	4,543,163	34.4%	57.4%	66.2%	8.8
Wyoming	128,873	135,402	5.1%	109,175	107,344	-1.7%	19,698	28,058	42.4%	15.3%	20.7%	5.4
Plains states	10,274,156	11,437,564	11.3%	5,500,413	5,081,475	-7.6%	4,773,743	6,356,089	33.1%	46.5%	55.6%	9.1
NE metro	248,823	275,018	10.5%	192,716	188,813	-2.0%	56,107	86,205	53.6%	22.5%	31.3%	8.8
NE nonmetro	201,419	184,203	-8.5%	175,410	143,984	-17.9%	26,009	40,219	54.6%	12.9%	21.8%	8.9



Nebraska has the largest gap in attainment of Higher Education between metro and nonmetro areas

Percentage of High School or More and Bachelor's Degree or More Educational Attainment for the Population Age 25 or Older: U.S. and Great Plains States with Metro and Nonmetro Differences

Source: S1501, 2007-2011 American Community Survey, U.S. Census Bureau

Note: High educational attainment is typically desired. Thus, better state rankings are closer to 1 while lower rankings are closer to 51.

Area	High School or More for Age 25+						Bachelor's Degree or More for Age 25+					
	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro
U.S.	85.4	n/a	85.9	83.0	-2.9	96.6	28.2	n/a	30.3	17.7	-12.6	58.4
Colorado	89.7	16	90.1	87.4	-2.7	97.0	36.3	3	37.7	28.2	-9.5	74.8
Kansas	89.5	17	91.0	86.5	-4.5	95.1	29.7	16	34.5	19.9	-14.6	57.7
Montana	91.4	3	92.0	91.1	-0.9	99.0	28.2	20	30.5	26.9	-3.6	88.2
Nebraska	90.3	9	91.4	88.8	-2.6	97.2	27.8	22	34.3	19.3	-15.0	56.3
New Mexico	83.1	43	84.6	79.9	-4.7	94.4	25.4	34	28.8	18.8	-10.0	65.3
N. Dakota	90.0	12	93.0	87.4	-5.6	94.0	26.5	27	33.4	20.7	-12.7	62.0
Oklahoma	85.9	33	87.3	83.3	-4.0	95.4	23.0	43	25.8	18.2	-7.6	70.5
S. Dakota	89.8	14	91.7	88.1	-3.6	96.1	25.8	33	28.8	23.4	-5.4	81.3
Texas	80.4	50	81.0	76.5	-4.5	94.4	26.1	30	27.6	15.4	-12.2	55.8
Wyoming	91.9	1	92.1	91.8	-0.3	99.7	24.2	40	23.1	24.7	1.6	106.9
Plains states	88.2	19.8	89.4	86.1	-3.3	96.2	27.3	26.8	30.5	21.6	-8.9	71.9



Poverty rates are higher in nonmetro parts of Nebraska, but the difference is relatively low compared to other Plains States

Poverty Rates for All Persons and Children Under 18 Years Old: U.S. and Great Plains States with Metro and Nonmetro Differences

Source: S1701, 2007-2011 American Community Survey, U.S. Census Bureau

Note: Low levels of poverty are typically desired. Thus, better state rankings are closer to 1 while lower rankings are closer to 51.

Area	Poverty Rate among All Persons						Poverty Rate among Children < 18 years old					
	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro	Area total	Rank	Metro	Non-metro	Nonmetro less Metro	Nonmetro % of metro
U.S.	14.3	n/a	13.8	17.0	3.2	123.2	20.0	n/a	19.2	24.0	4.8	125.0
Colorado	12.5	19	12.4	13.3	0.9	107.3	16.6	18	16.4	17.8	1.4	108.5
Kansas	12.6	20	12.1	13.9	1.8	114.9	16.8	20	15.7	19.2	3.5	122.3
Montana	14.6	32	13.9	15.0	1.1	107.9	19.4	28	16.8	20.8	4.0	123.8
Nebraska	12.0	16	11.9	12.2	0.3	102.5	16.1	15	15.9	16.4	0.5	103.1
New Mexico	19.0	50	18.1	20.7	2.6	114.4	27.0	49	25.9	29.3	3.4	113.1
N. Dakota	12.3	17	12.4	12.1	-0.3	97.6	14.4	13	12.1	16.6	4.5	137.2
Oklahoma	16.3	39	15.0	18.5	3.5	123.3	22.9	40	21.5	25.7	4.2	119.5
S. Dakota	13.8	26	10.2	16.8	6.6	164.7	17.8	23	13.3	21.6	8.3	162.4
Texas	17.0	43	16.8	19.0	2.2	113.1	24.3	43	24.0	27.4	3.4	114.2
Wyoming	10.1	6	8.9	10.7	1.8	120.2	13.4	7	12.1	13.9	1.8	114.9
Plains states	14.0	26.8	13.2	15.2	2.1	116.6	18.9	25.6	17.4	20.9	3.5	121.9



NOTES

- New 2013 metro definitions based off 2010 Census results and 2006-10 ACS commuting patterns were released in March.
 - Nebraska now has a Grand Island metro area; other states surely had changes as well.
 - The metro definitions used in this study were those in place prior to this major revamp of county-based classifications.
- With an increasing number of inter-racial and multi-racial families, changes in number of White non-Hispanic children can be a bit “unfair”.
 - Children of couples where one parent is White and the other is minority, are typically considered minority.
 - The typical racial classification approach is then understating White children to a certain degree.



IMPLICATIONS

- Nonmetropolitan areas are likely to see continued population loss.
 - Deaths exceed births in about half of Nebraska's counties; most counties have net outmigration.
 - Often it is the “best and brightest” who move away (for college). What incentives exist for them to return??
 - Beyond a smaller school-aged population, this leads to an older population with fewer direct connections to schools.
 - Schools are social and economic anchors to rural communities – consolidation can be painful.
- Population loss can be a vicious downward spiral.
 - The impacts are being seen in differences between metro & nonmetro areas on many socio-economic variables.
 - Results from our analysis challenge findings from some prior research.
- Nebraska, while a typical plains state, seems to be often having extreme changes in comparison to other states.
 - How do we best maximize our successes and address our challenges? How can data best guide decision making?



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