

Components of Change in the Great Plains

Components of Change. Population change is a function of three major processes; births, deaths, and migration. An area is viewed as naturally growing (referred to as natural increase) if the number of births exceeds the number of deaths. Similarly, an area can grow if the number of people moving in exceeds the number of people moving out (measured by net-migration). The combination of these events will determine population change.

In the Great Plains, most of the population change is due to net-migration. However, decades of out-migration of young adults have dramatically altered the age structure within the region and greatly increased the number of counties with natural decline. This poses serious ramifications for future population change in the region.

Highlights

- Figure 4. The number of naturally declining counties (i.e., those with more deaths than births) has dramatically increased in the Great Plains, nearly tripling since 1980. The vast majority of these naturally declining counties are in the region's eastern states.
- Figure 5-6. Most of the population loss in the Great Plains can be attributed to out-migration. The greatest concentrations of net out-migration counties are located in the central and northern part of the region. Data reveal that many of these counties have sustained continuous years of net-loss.
- Table 9-10. Between 1980 and 1999, 223 or 22% of the region's 1,009 counties naturally declined; 58% of these counties were rural. Half of the counties in the region had net out-migration between 1990 and 1999. Fewer than one in four metropolitan counties had net out-migration during this time period while nearly two-thirds of the rural counties sustained net out-migration. Only one of the 142 metropolitan counties had natural decline during the past two decades.
- Figure 7. Ironically, the highest concentrations of non-movers tend to be in the very areas where net-migration losses are the greatest. This apparent contradiction is largely due to low population density (i.e., percent change is magnified in areas with a small population base).
- Figure 8-9. The proportion of movers who leave their state is much higher in the region's western counties. In contrast, inter-state movement is most pronounced in the eastern counties of the Great Plains.

Figure 4. Natural Change for the Great Plains States by County: 1980 to 1999

Source: U.S. Census Bureau, Population Estimates Branch

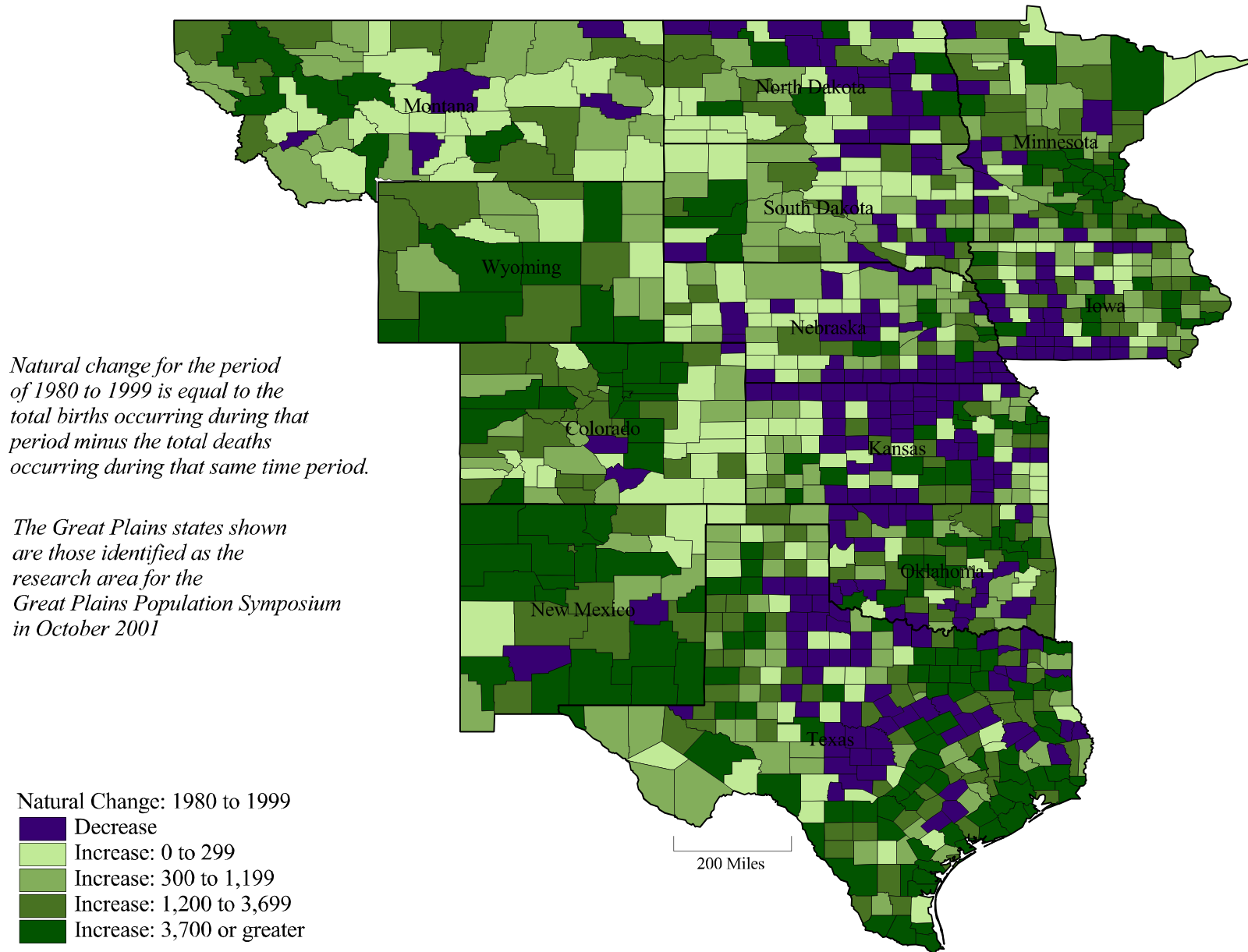


Figure 5. Net Migration for the Great Plains States by County: 1990 to 1999

Source: U.S. Census Bureau, Population Estimates Branch

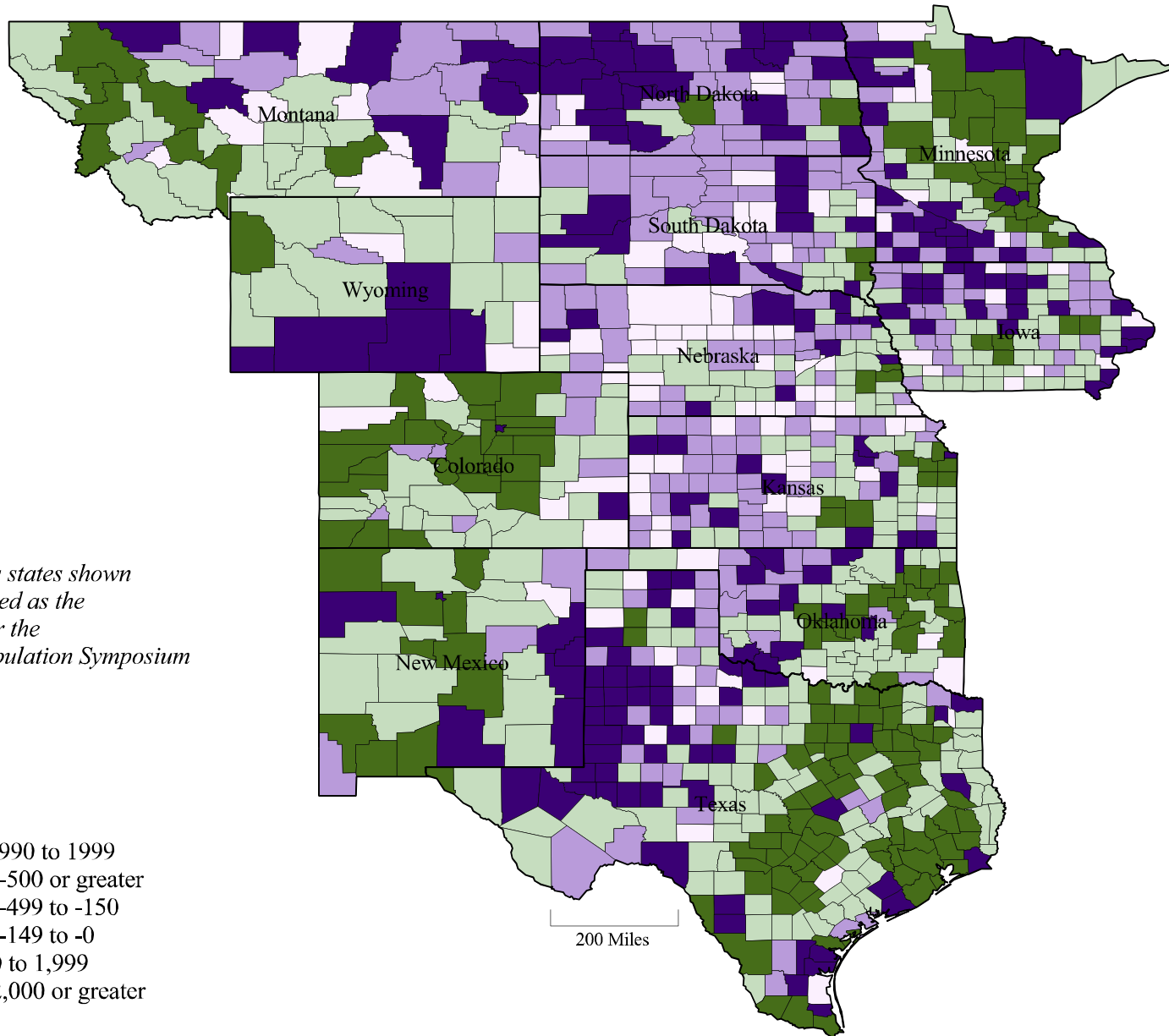


Figure 6. Domestic Migration Patterns in the Great Plains States by County: 1993-94 to 1998-99

Source: Internal Revenue Service, Sample Flow Files

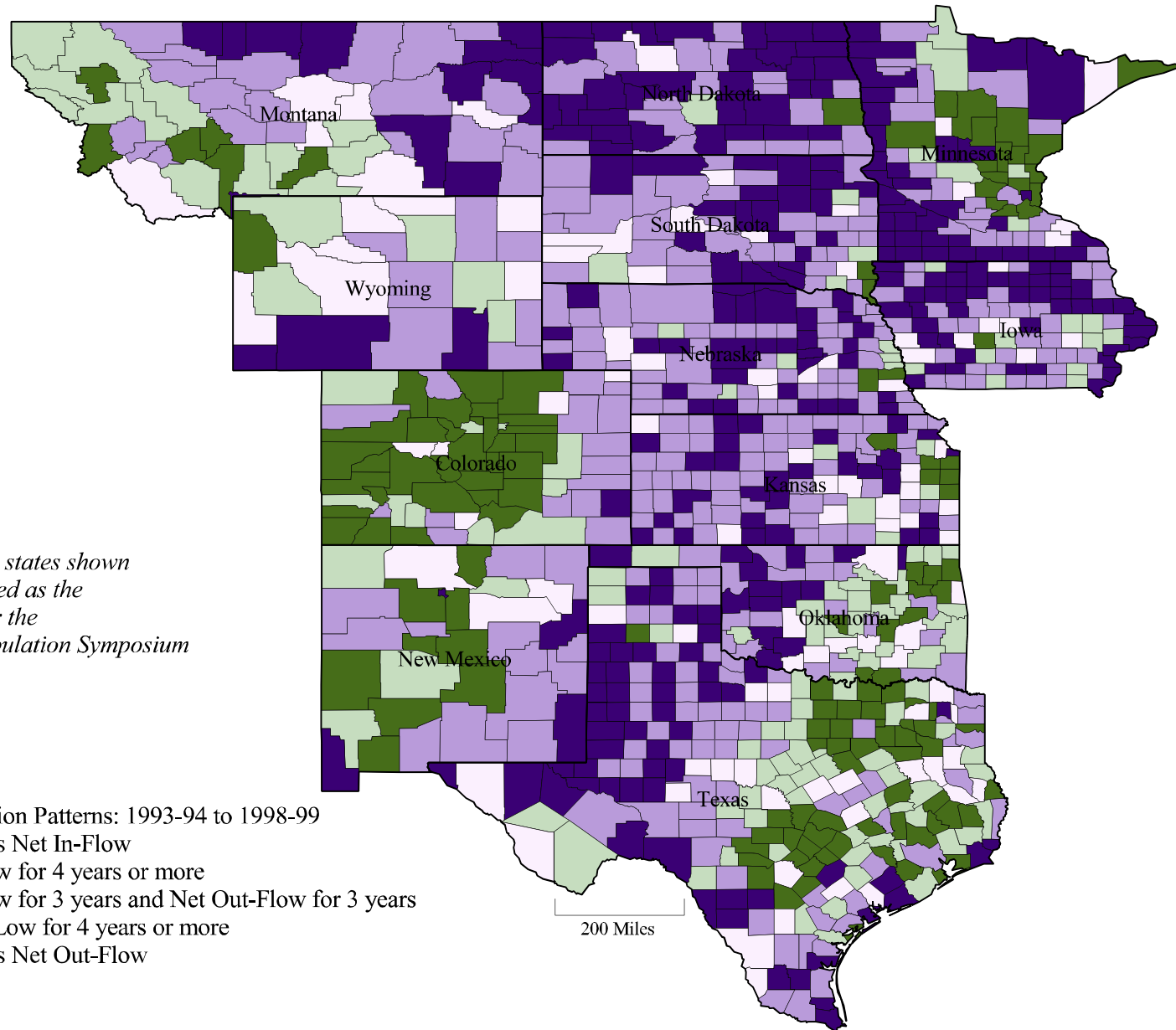


Table 9. Components of Change in the Great Plains by Metropolitan and Non-Metropolitan Status: 1980 to 1990

Note: Metropolitan Status was determined using the 1993 Beale Codes provided by the United States Department of Agriculture, Economic Research Service. For purposes of this study, the Great Plains is defined as all counties in Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. Data reflect the actual number and percent of counties.

Source: U.S. Census Bureau, Population Estimates Branch

1980 to 1990 Components of Change	Total Counties	Metropolitan Counties		Non-Metropolitan Counties							
				Total		Urban population 20,000 or more		Urban population 2,500 to 19,999		Rural population less than 2,500	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Population:											
Increase	373	123	86.6	250	28.8	34	51.5	151	34.1	65	18.2
Decrease	636	19	13.4	617	71.2	32	48.5	292	65.9	293	81.8
No Change	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1,009	142	100.0	867	100.0	66	100.0	443	100.0	358	100.0
Natural Change (Births - Deaths):											
Increase	879	142	100.0	737	85.0	66	100.0	393	88.7	278	77.7
Decrease	128	0	0.0	128	14.8	0	0.0	50	11.3	78	21.8
No Change	2	0	0.0	2	0.2	0	0.0	0	0.0	2	0.6
Total	1,009	142	100.0	867	100.0	66	100.0	443	100.0	358	100.0
Net-Migration:											
Increase	230	86	60.6	144	16.6	12	18.2	87	19.6	45	12.6
Decrease	779	56	39.4	723	83.4	54	81.8	356	80.4	313	87.4
No Change	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1,009	142	100.0	867	100.0	66	100.0	443	100.0	358	100.0

Table 10. Components of Change in the Great Plains by Metropolitan and Non-Metropolitan Status: 1990 to 1999

Note: Metropolitan Status was determined using the 1993 Beale Codes provided by the United States Department of Agriculture, Economic Research Service. For purposes of this study, the Great Plains is defined as all counties in Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. Data reflect the actual number and percent of counties.

Source: U.S. Census Bureau, Population Estimates Branch

1990 to 1999 Components of Change	Total Counties	Metropolitan Counties		Non-Metropolitan Counties							
				Total		Urban population 20,000 or more		Urban population 2,500 to 19,999		Rural population less than 2,500	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Population:											
Increase	578	136	95.8	442	51.0	44	66.7	276	62.3	122	34.1
Decrease	431	6	4.2	425	49.0	22	33.3	167	37.7	236	65.9
No Change	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1,009	142	100.0	867	100.0	66	100.0	443	100.0	358	100.0
Natural Change (Births - Deaths):											
Increase	651	141	99.3	510	58.8	63	95.5	293	66.1	154	43.0
Decrease	356	1	0.7	355	40.9	3	4.5	150	33.9	202	56.4
No Change	2	0	0.0	2	0.2	0	0.0	0	0.0	2	0.6
Total	1,009	142	100.0	867	100.0	66	100.0	443	100.0	358	100.0
Net-Migration:											
Increase	495	109	76.8	386	44.5	23	34.8	239	54.0	124	34.6
Decrease	512	33	23.2	479	55.2	43	65.2	204	46.1	232	64.8
No Change	2	0	0.0	2	0.2	0	0.0	0	0.0	2	0.6
Total	1,009	142	100.0	867	100.0	66	100.0	443	100.0	358	100.0

Figure 7. Non-Movers in the Great Plains States by County: 1996-97 to 1998-99 Three Year Average

Source: Internal Revenue Service, Sample Flow Files. Description: Tax return filers who did not move in filing year as a percent of total tax returns.

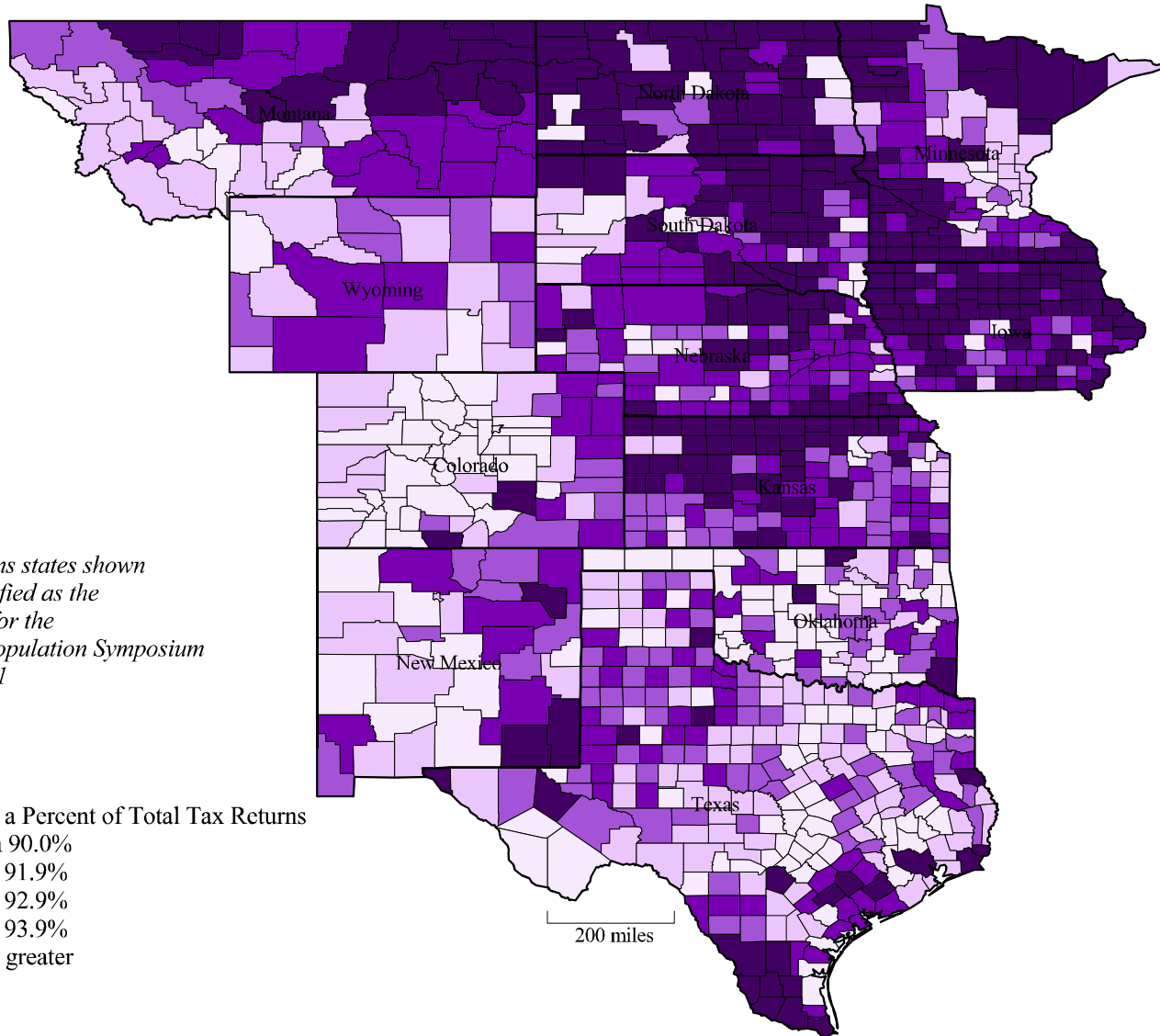


Figure 8. Domestic Movement to a Different State for the Great Plains States by County: 1996-97 to 1998-99 Three Year Average

Source: Internal Revenue Service, Sample Flow Files. Description: Tax return filers who moved to a different state in filing year as a percent of total domestic out-flow.

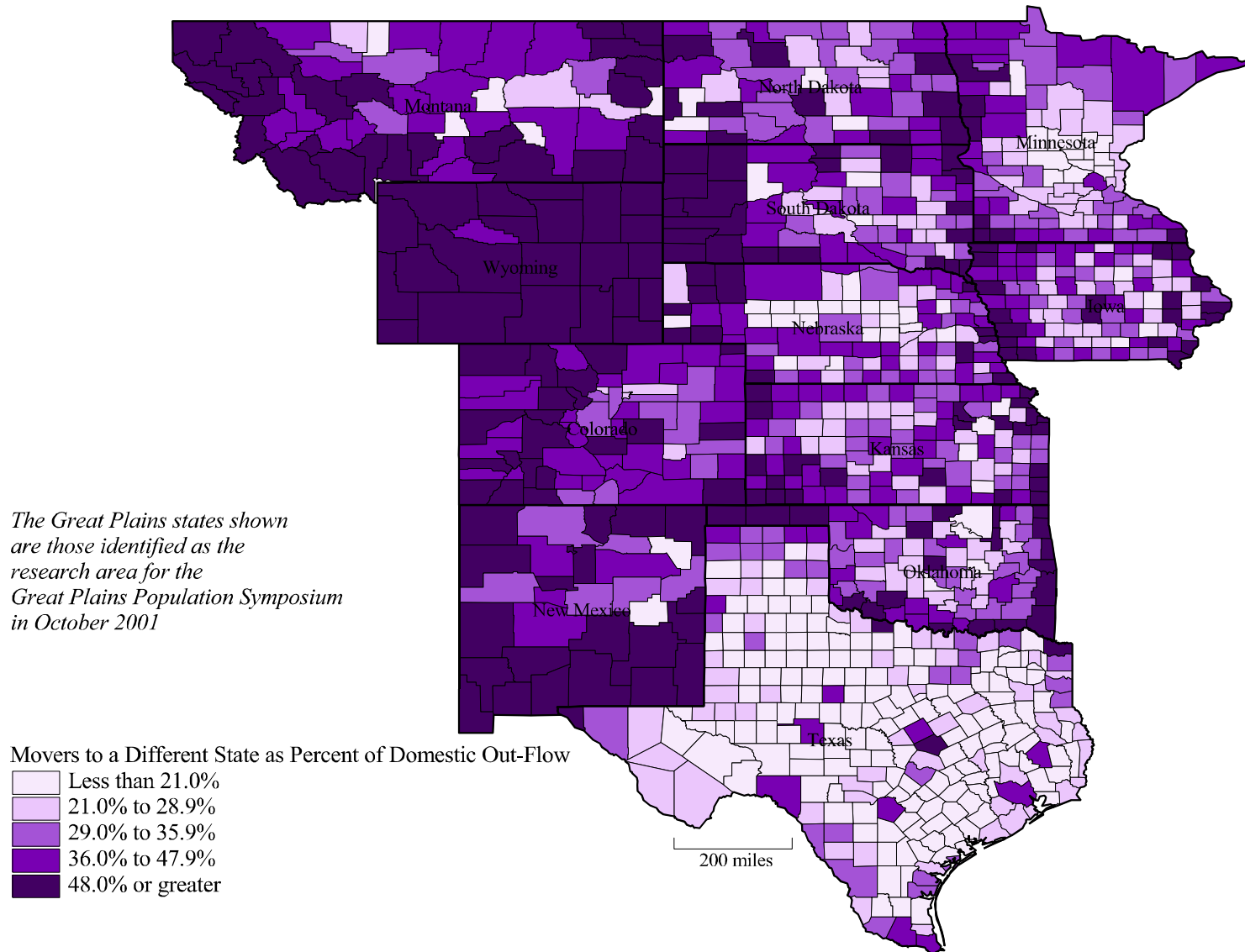
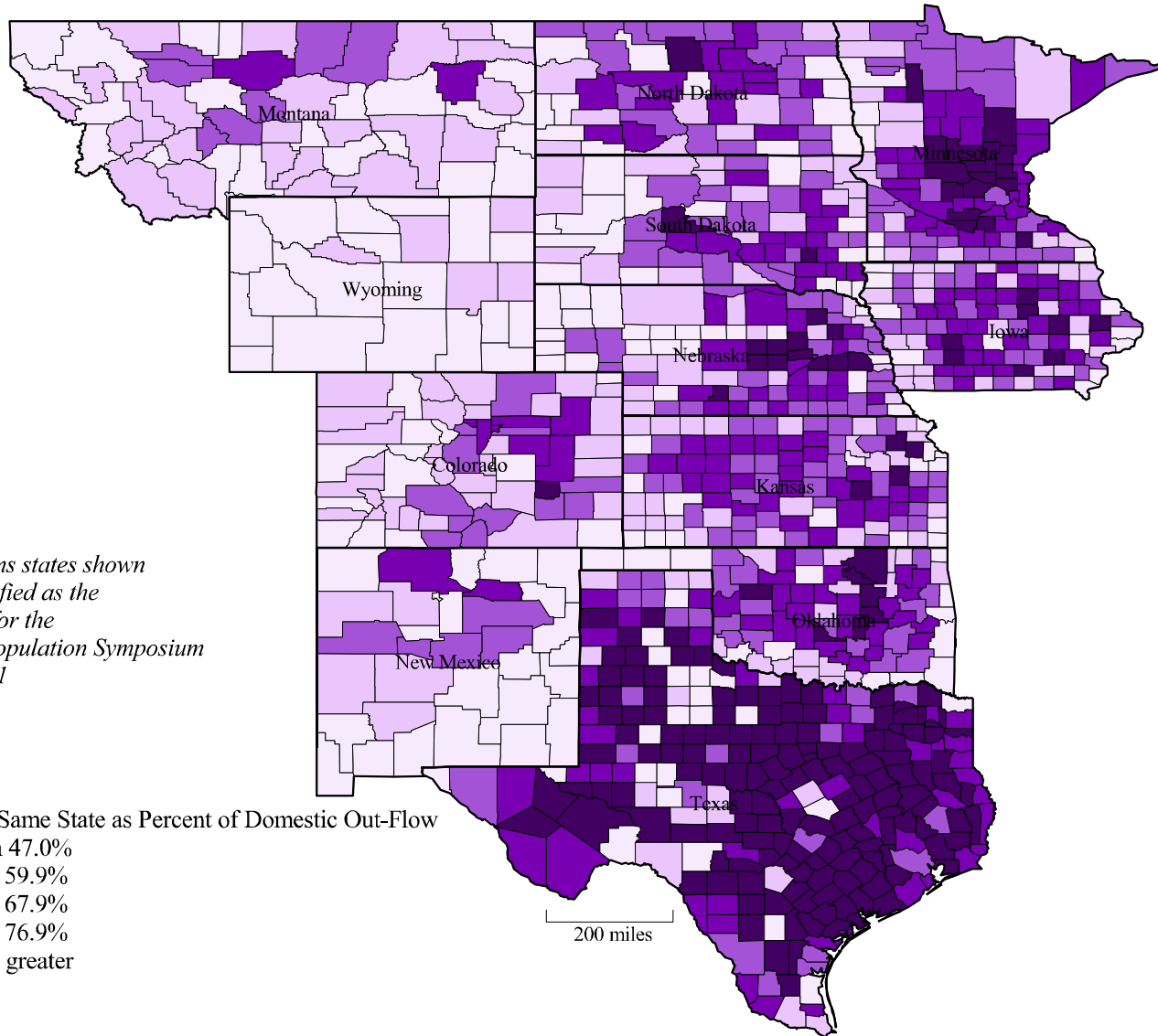


Figure 9. Domestic Movement within the Same State for the Great Plains States by County: 1996-97 to 1998-99 Three Year Average

Source: Internal Revenue Service, Sample Flow Files. Description: Tax return filers who moved within the same state in filing year as a percent of total domestic out-flow.



The Great Plains states shown are those identified as the research area for the Great Plains Population Symposium in October 2001

Movers within Same State as Percent of Domestic Out-Flow

- Less than 47.0%
- 47.0% to 59.9%
- 60.0% to 67.9%
- 68.0% to 76.9%
- 77.0% or greater

200 miles