

POPULATION NOTES

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Young College Graduates Leave Rural Minnesota

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Minnesota's college-educated young adults leave most regions of Minnesota and move to growing metropolitan counties or to other states, data from the 1990 census show. Counties with colleges or universities play an important part in this process, bringing in young adults after high school and eventually losing them after they complete their educations.

The 1990 census county-to-county migration file shows some evidence to support the theory of the so-called "brain drain" from rural Minnesota. Many people have suggested that rural and nonmetropolitan areas suffer because their most educated young people move to the Twin Cities or other states. The term "brain drain" may be imprecise, since people are not necessarily smarter or more capable just because they have more formal education. However, continued loss of the most educated population clearly could affect the competitiveness of a region's labor force.

The state as a whole had a slight net in-migration of college graduates age 20 to 29. Minnesota had a net gain of college graduates from its immediate neighbors but a net loss to places outside the Midwest. Migrants who lived in foreign countries in 1985 played an important role in the net gain of young college graduates. (Foreign-origin migrants include foreign-born people as well as U.S. citizens who were living abroad in 1985.) When foreign-origin migrants are excluded, the number of college graduates who arrived in and left Minnesota was about the same.

Minnesota also gained a substantial number of young high school dropouts between 1985 and 1990. The largest net gains came from the Sun Belt, foreign countries and Midwestern states beyond Minnesota's four bordering states. Excluding foreign-origin migrants, there was still a substantial net gain of high school dropouts.

The Drain at a Glance...

- Between 1985 and 1990, most areas of Minnesota had a substantial net out-migration of college graduates in their 20s.
- Growing metropolitan counties experienced a net in-migration of 20- to 29-year-old college graduates, with the gains coming from other states and countries as well as other parts of Minnesota.
- Overall, Minnesota had a net in-migration of 20- to 29-year-olds, with the greatest net gains at opposite ends of the educational attainment spectrum: among high school dropouts and college graduates.
- Minnesota had a net gain of young college graduates from neighboring states but a net loss to regions outside the Midwest.
- The college-graduate population has become more concentrated in growing metropolitan counties since 1970.

Young Adults More Likely to Move

This edition of *Population Notes* focuses on the migration of young adults age 20 to 29. People in this age bracket have often completed their formal education and started their careers. The decisions people make in their 20s have a large impact on their futures. Imagine two young women originally from rural Pipestone County. Each leaves Pipestone County to attend college; after graduation one returns to Pipestone County, while the other takes a job in the Twin Cities. Where are the two women likely to be living five or 10 years later? Their futures will be influenced strongly by the decisions they make on where to live and work immediately after college. Each year the returnee stays in



Pipestone County increases the odds she will stay permanently. With each year the other woman does not return to Pipestone County, the odds grow that she has left for good.

People are more likely to move when they are in their late teens and 20s than at any other age. Of Minnesotans age 20 to 29, only 24 percent lived in the same house in 1990 as they did in 1985. College graduates are the most mobile and the most likely to move long distances. About 86 percent of Minnesota college graduates in their 20s had moved between 1985 and 1990, and 29 percent came from another state or a foreign country. College attendance tends to promote mobility: young people often leave home to attend college, and college graduates may look for jobs all over the United States. High school graduates tend to stay within a more local job market.

For this analysis, the state was divided into six regions or groups of counties: agricultural, miscellaneous southern, college, retirement, growing metropolitan and miscellaneous northern. These categories are described in more detail at the end of the report.

College Graduates Move to Growing Metropolitan Counties

The group of growing metropolitan counties was the only one that had a net in-migration of 20- to 29-year-old college graduates. (The growing metropolitan counties category includes Olmsted and Benton counties as well as the counties in the Minneapolis-St. Paul area.) Growing metropolitan counties were highly attractive to young college graduates from elsewhere in Minnesota: almost five times as many young graduates moved to them from other parts of Minnesota as went in the opposite direction.

Though many college graduates in their 20s who moved to the growing metropolitan counties came from elsewhere in Minnesota, a large majority came from other states and foreign countries. In-migrants from other states or countries accounted for two-thirds of the young college graduates who moved to the growing metropolitan counties. About 3,100 of the 33,000 young college graduates moving to the growing metropolitan region were from outside the United States. Of the young college graduates who left the growing metropolitan counties, 86 percent moved out of Minnesota. In all, these counties had a net gain of approximately 25,000 college graduates in their 20s. About half of this net gain was attributable to in-migration from other states and foreign countries and about half to in-migration from elsewhere in Minnesota.

The other five groups of counties all had substantial rates of net out-migration for young college graduates. The greatest volume and highest rate of net out-migration occurred in college counties, reflecting the departure of recent graduates. Out-migration of young college graduates was also high in agricultural, retirement, and miscellaneous northern and southern groups of counties.

State Gains Young College Graduates from Neighboring States

Thanks to the migration of young college graduates to the growing metropolitan counties, Minnesota as a whole experienced a net in-migration of young college graduates in the last half of the 1980s. The largest net gains were from adjacent states, with Wisconsin and Iowa ranking first and second, respectively. The exchange pattern with nonadjacent states was less advantageous to Minnesota. There were large net losses of college graduates to the Sun Belt and other areas outside the Midwest. California was the largest single

NET MIGRANTS AND NET MIGRATION RATE OF 20- TO -29 YEAR OLDS, BY EDUCATION, 1985 TO 1990

Type of County	High School Dropouts	Per 100 Average Population in	High School Graduates	Per 100 Average Population in	Some College	Per 100 Average Population in	College Graduates	Per 100 Average Population in
		Education Group		Education Group		Education Group		Education Group
Agricultural	61	1.8	1,920	-11.2	-10,763	-53.0	-2,430	-53.1
Miscellaneous southern	354	13.8	-264	-1.9	-4,197	-27.1	-1,123	-29.2
College	-6	0.0	264	1.4	16,074	43.7	-13,667	-106.2
Retirement	-89	-3.8	-746	-9.0	-3,397	-39.5	-582	-33.1
Growing metropolitan	4,181	13.7	7,765	6.9	8,490	5.0	24,841	28.7
Miscellaneous northern	78	1.4	2,036	-9.5	-6,033	-24.3	-3,266	-55.2

Note: Positive numbers indicate net in-migration. Negative numbers indicate net out-migration.

destination for young Minnesota college graduates moving out of state. More than three times as many moved from Minnesota to California (3,997) as went the other way (1,289). The number of college graduates who moved to Minnesota from Midwestern states beyond the four bordering states was about the same as the number who left.

Nine percent of all 20- to 29-year-old college graduates who moved to Minnesota came from foreign countries. Without these people, the number of young college graduates who moved to Minnesota would have been barely higher than the number who left.

Minnesota Gains High School Dropouts

Minnesota as a whole had a considerable net in-migration of people age 20 to 29 who had not completed high school. The growing metropolitan counties had a net in-migration of high school dropouts, with much of the net increase coming from other states or foreign countries. The miscellaneous southern counties also gained dropouts, with the greatest net gains coming from other states and other regions in Minnesota.

Dropouts account for only a small portion of the total young adult population and the total migration stream, but the migration patterns from 1985 to 1990 added considerably to Minnesota's young adult dropout population. Among young people who did not finish high school, the number who moved to Minnesota outnumbered two to one those who left. About 17 percent of 20- to 29-year-olds who lived in Minnesota in 1990 and

had not completed high school had moved to Minnesota from other states or foreign countries.

Minnesota had large net gains of dropouts from the Sun Belt and nonbordering Midwestern states. Texas and Illinois contributed the largest number of high school dropouts. Three and one-half times as many dropouts moved to Minnesota from these two states as went in the opposite direction.

High School Graduates Move to Growing Metropolitan and College Counties

Two groups of Minnesota counties — college and growing metropolitan — gained 20- to 29-year-olds who had finished high school but had no college education. The miscellaneous northern, agricultural and retirement county groups all had substantial net out-migration in this category.

The state as a whole had a modest net in-migration of 20- to 29-year-old high school graduates, with the largest net gains in the growing metropolitan counties. Minnesota gained young high school graduates from the Midwest but lost people in this group to other regions.

People with Some College Found in College Counties

Not surprisingly, counties with colleges or universities had a very high net in-migration of people 20 to 29 years old who had some college education but had not attained a college degree. Many of these individuals were enrolled in a college

**Net Migration to or from Minnesota
Ages 20 to 29, by Education**

Origin/Destination	Not High School Graduate	High School Graduate	Some College	Bachelor's Degree or More
Bordering States:				
Iowa	81	537	1,175	2,898
North Dakota	120	595	-1,048	1,753
South Dakota	103	135	306	1,068
Wisconsin	106	853	914	4,291
Other Regions:				
Other Midwest	918	1,228	1,920	52
West and Alaska	194	-173	-1,229	-1,451
Sun Belt (5 states)	719	-1,575	-4,233	-5,245
Other States	274	-1,070	-1,909	-3,096
Foreign countries	2,084	2,533	4,278	3,503
Total	4,599	3,063	174	3,773
Total, excl. foreign	2,515	530	-4,104	270

**Net Migration Rate of 20- to 29-Year-Olds per 1,000
by Education**

Origin/Destination	Not High School Graduate	High School Graduate	Some College	Bachelor's Degree or More
Bordering States:				
Iowa	1.5	2.6	3.9	21.5
North Dakota	2.3	2.9	-3.5	13.0
South Dakota	1.9	0.7	1.0	7.9
Wisconsin	2.0	4.2	3.1	31.8
Other Regions:				
Other Midwest	17.3	6.0	6.4	0.4
West and Alaska	3.6	-0.9	-4.1	-10.8
Sun Belt (5 states)	13.5	-7.7	-14.2	-38.9
Other States	5.2	-5.3	-6.4	-23.0
Foreign countries	39.2	12.4	14.3	26.0
Total	86.5	15.1	0.6	28.0
Total, excl. foreign	47.3	2.6	-13.7	2.0

Note: Sun Belt includes California, Arizona, Florida, Texas and Nevada. Positive numbers show net in-migration; negative numbers show net out-migration.

Source: 1990 Census County-to-County Migration File (STP28)

MIGRATION OF PEOPLE AGE 20 TO 29, BY EDUCATIONAL ATTAINMENT, 1985 TO 1990

COUNTY TYPE	In-Migrants			Out-Migrants			Net Migrants		
	Total	From Elsewhere in Minnesota	From Other States/Countries	Total	To Elsewhere in Minnesota	To Other States	Total	Within Minnesota	Other States/Countries
Migration of College Graduates									
Agricultural	2,369	1,204	1,165	4,799	2,504	2,295	-2,430	-1,300	-1,130
Miscellaneous southern	2,389	1,509	880	3,512	2,114	1,398	-1,123	-605	-518
College	5,268	3,086	2,182	18,935	11,166	7,769	-13,667	-8,080	-5,587
Retirement	1,008	652	356	1,590	941	649	-582	-289	-293
Growing metropolitan	48,689	15,849	32,840	23,848	3,341	20,507	24,841	12,508	12,333
Miscellaneous northern	2,255	1,271	984	5,521	3,505	2,016	-3,266	-2,234	-1,032
STATE			38,407			34,634			3,773
Migration of Persons With Some College									
Agricultural	4,675	2,439	2,236	15,438	9,315	6,123	-10,763	-6,876	-3,887
Miscellaneous southern	4,612	2,890	1,722	8,809	6,414	2,395	-4,197	-3,524	-673
College	29,053	20,132	8,921	12,979	7,540	5,439	16,074	12,592	3,482
Retirement	2,531	1,768	763	5,928	4,184	1,744	-3,397	-2,416	-981
Growing metropolitan	48,885	18,704	30,181	40,395	14,750	25,645	8,490	3,954	4,536
Miscellaneous northern	6,961	4,607	2,354	12,994	8,337	4,657	-6,033	-3,730	-2,303
STATE			46,177			46,003			174
Migration of High School Graduates									
Agricultural	3,594	1,943	1,651	5,514	3,030	2,484	-1,920	-1,087	-833
Miscellaneous southern	3,281	2,069	1,212	3,545	2,398	1,147	-264	-329	65
College	5,510	3,414	2,096	5,246	3,247	1,999	264	167	97
Retirement	2,226	1,403	823	2,972	1,920	1,052	-746	-517	-229
Growing metropolitan	22,428	7,442	14,986	14,663	4,326	10,337	7,765	3,116	4,649
Miscellaneous northern	4,129	2,030	2,099	6,165	3,380	2,785	-2,036	-1,350	-686
STATE			22,867			19,804			3,063
Migration of High School Dropouts									
Agricultural	1,203	430	773	1,142	619	523	61	-189	250
Miscellaneous southern	981	546	435	627	364	263	354	182	172
College	1,307	741	566	1,313	833	480	-6	-92	86
Retirement	627	409	218	716	476	240	-89	-67	-22
Growing metropolitan	7,975	1,690	6,285	3,794	1,277	2,517	4,181	809	3,768
Miscellaneous northern	1,527	634	893	1,429	881	548	98	634	345
STATE			9,170			4,571			4,599

Note Positive numbers indicate net in-migration. Negative numbers indicate net out-migration. Data on out-migration to other countries is not available. As a result, out-migration is underestimated. Net in-migration is overestimated; net out-migration is underestimated.

or university. The majority of these college students came from elsewhere in Minnesota; other states also contribute. College counties evidently play a large role in migration between regions, attracting large numbers of students but losing most of them after graduation.

Growing metropolitan counties also had a net in-migration of this group, though at a much lower rate than the college counties. All other groups of counties experienced very high rates of net

out-migration of people in this age and education bracket.

In the state as a whole, about the same number of young people with some college moved in as moved out. Excluding foreign-origin movers, Minnesota had a net out-migration of people in the some-college group, with the largest net losses to Sun Belt states.

Long-Term Changes in Educational Attainment Vary by Region

Primarily as a result of migration trends, the total college-educated population has become more concentrated in the growing metropolitan counties. The gain in the proportion of residents who have a college degree has been greatest in these counties. This group contained 73.8 percent of the state's college graduates in 1990, up from 68.2 percent in 1970, and accounted for almost 84 percent of the state gain from 1980 to 1990.

All county groups, even those regions that experienced considerable out-migration of college graduates, have had an increase in the proportion of adults who have a college degree. This apparently incongruous trend is attributable to the historical rise in the educational attainment of the population. Younger generations have on average more education than older generations. As the older, less educated people die, the educational level of the remaining population goes up.

Conclusion

Findings from the 1990 census county-to-county migration file provide strong support for the widely held belief that young college graduates leave the nonmetropolitan areas of Minnesota. They do not all head for the Twin Cities, however; only slightly more go to growing metropolitan counties than to other states. Conversely, the growing metropolitan counties do not rely solely on other Minnesota counties as a source of college graduates in their 20s; about half of the growing metropolitan group's net in-migration comes from other states and foreign countries.

The implications of migration trends are equivocal for the state. Minnesota increases the educational level of its population by attracting young college graduates from neighboring states, most of whom

go to the Twin Cities. The in-migration of college graduates from bordering states is counterbalanced by the in-migration of high school dropouts from elsewhere, particularly from nonbordering Midwestern and Sun Belt states. The state also has a net out-migration of young college graduates to regions outside the Midwest.

While there is considerable in-migration of young college graduates from foreign countries, it is not clear whether this represents a net gain for Minnesota. Since the census does not pick up migration from the United States to foreign countries, how many of these individuals stay permanently is unknown.

Migration patterns appear to be producing a growing disparity in educational levels among young adults, because the greatest net gains are among those with the most and the least education.

Technical Notes

The data used for this report come from the county-to-county migration file (STP28) from the 1990 census. This file contains information about people who moved across county boundaries between 1985 and 1990. Some of the data items included are county of residence in 1985 and 1990, age, education and gender. For this analysis, Minnesota counties were grouped into six categories based on the U.S. Department of Agriculture classification of nonmetropolitan counties, county migration patterns by age and the judgment of staff members in the State Demographer's Office. The typology is functional, rather than strictly geographic. For example, counties with universities or colleges are grouped together even though they are located in different areas.

The six types of counties are:

1. Agricultural. This is the largest group, with 32 counties including Big Stone, Chippewa, Cottonwood, Dodge, Faribault, Fillmore, Grant, Houston, Jackson, Kittson, Lac Qui Parle, Lincoln, Marshall, Martin, Meeker, Murray, Nobles, Norman, Pipestone, Polk, Pope, Red Lake, Redwood, Renville, Rock, Sibley, Swift, Traverse, Wabasha, Watonwan, Wilkin and Yellow Medicine. These western and southern Minnesota

NUMBER OF COLLEGE GRADUATES AGE 25 AND OLDER AND PERCENT WHO ARE COLLEGE GRADUATES, BY COUNTY GROUP, 1970, 1980 AND 1990

	College Graduates Age 25+			College Graduates As % of 25+ Population			Change in % Who Are College Graduates			Change in Number of College Graduates		
	1970	1980	1990	1970	1980	1990	1970 to 1990	1970 to 1980	1980 to 1990	1970 to 1990	1970 to 1980	1980 to 1990
MINNESOTA	220,932	407,281	604,584	11.1	17.4	21.8	10.7	6.3	4.5	383,652	186,349	197,303
County Type												
Agricultural	15,081	26,339	30,684	5.7	9.5	11.1	5.4	3.8	1.6	15,603	11,258	4,345
Miscellaneous southern	10,548	18,340	24,278	7.2	11.0	13.5	6.3	3.9	2.4	13,730	7,792	5,938
College	18,684	33,082	45,907	10.8	16.2	19.6	8.8	5.4	3.4	27,223	14,398	12,825
Retirement	5,638	12,035	15,733	6.1	10.5	12.4	6.3	4.3	1.9	10,095	6,397	3,698
Growing metropolitan	151,401	281,400	446,202	14.3	21.8	27.1	12.8	7.5	5.2	294,801	129,999	164,802
Miscellaneous northern	19,580	36,085	41,780	7.6	12.3	13.7	6.1	4.6	1.4	22,200	16,505	5,695

counties are the most economically dependent on agriculture and generally have a history of population declines and out-migration of young adults.

2. Miscellaneous southern. These nine counties (Brown, Goodhue, Freeborn, LeSueur, McLeod, Mower, Kandiyohi, Steele and Waseca) are located in southern Minnesota and do not fit into any other category. They rely less on agriculture and often have had stable populations or lower rates of population loss than agricultural counties.

3. College. These nine counties (Beltrami, Blue Earth, Clay, Lyon, Nicollet, Rice, Stearns, Stevens and Winona) have large college or university campuses and distinctive age-related migration profiles. They have high net in-migration among 15- to 24-year-olds and high net out-migration for 25- to 34-year-olds.

4. Retirement. These seven counties (Aitkin, Cass, Crow Wing, Douglas, Hubbard, Mille Lacs and Otter Tail) are popular destinations for retirees and have substantial net in-migration of people 55 to 74 years old. Most are located in north-central Minnesota and have many lakes and other recreational attractions. Retirement counties are often low-income areas that have out-migration among younger age groups. The total population in most of these counties has been increasing.

5. Growing metropolitan. More than half the state's population lives in one of these 13 counties (Anoka, Benton, Carver, Chisago, Dakota, Hennepin, Isanti, Olmsted, Ramsey, Scott, Sherburne, Washington and Wright), which also are where most of Minnesota's population growth has been occurring. This category includes counties in the Minneapolis-St. Paul

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metropolitan area, as well as Olmsted and Benton. Stearns County (St. Cloud) was not included in this group but rather in the college group because of its college-type migration pattern.

6. Miscellaneous northern. The 17 northern Minnesota counties that did not fit elsewhere went in this group. Many, but not all, of these counties lost population in the 1980s. They are Becker, Carlton, Clearwater, Cook, Itasca, Kanabec, Koochiching, Lake, Lake of the Woods, Mahnomen, Morrison, Pennington, Pine, Roseau, St. Louis, Todd and Wadena.



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