



Migration Trends in Minnesota, 2000 to 2005

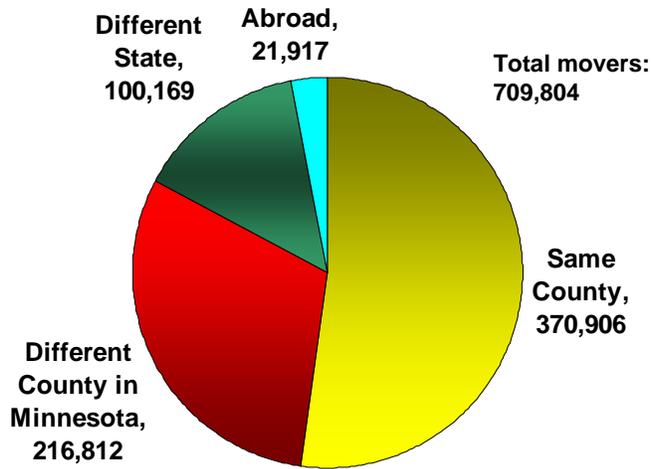
Martha McMurry

- About 14 percent of Minnesotans moved between 2004 and 2005.
- Estimates differ on how much in-migration there has been in the 2000s and on whether it is lower than in the 1990s.
- Using State Demographic Center population estimates, migration accounts for slightly less than half of Minnesota's population growth between 2000 and 2005.
- 44 of 87 counties have had net in-migration so far in the 2000s.
- Minnesota gains substantial numbers of migrants from most states in the central part of the country, except Wisconsin.
- Minnesota loses migrants to large Sunbelt states and to Wisconsin.

Minnesotans, like other Americans, are mobile people. The American Community Survey shows that 14 percent of people living in Minnesota in 2005 had moved during the past year. The comparable national figure was 16 percent.

Most moves are over relatively short distances. Eighty-three percent of all Minnesota moves are within state boundaries, and more than half are within the same county.

Most Moves Are Within Minnesota (Residence 1 Year Ago of Those Who Moved)

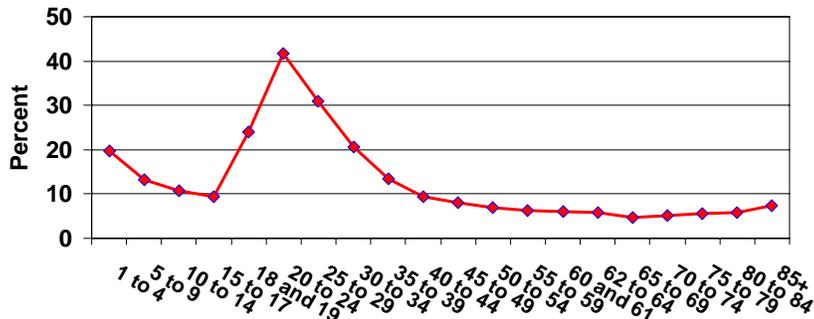


2005 American Community Survey. Subject to sampling error. Household population only.

People are most likely to move when they are in their late teens and twenties. The 2005 American Community Survey showed that 41 percent of Minnesotans ages 20 to 24 had moved within the past year. Mobility is much lower for older adults. Only 5 percent of people ages 65 to 69 moved. The ACS probably understates migration, especially among young adults and the very old, because it does not include people in group quarters such as college dormitories and nursing homes.

Minnesotans in their 20s are the most mobile

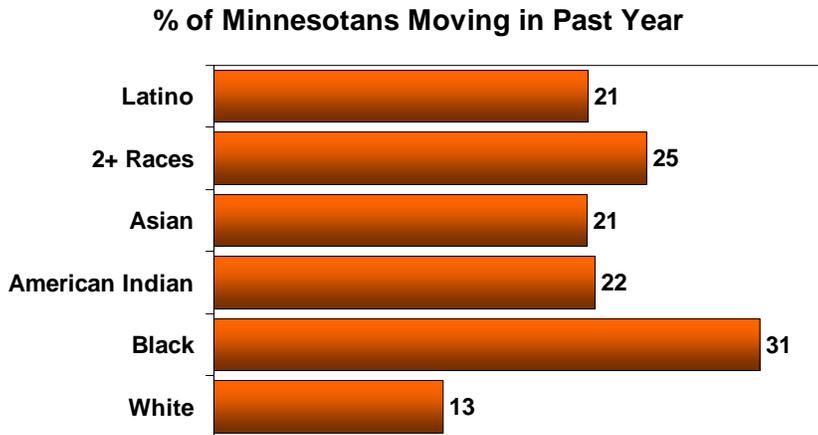
14% of All Minnesotans Moved in Past 12 Months



2005 American Community Survey. Household population. Subject to sampling error.

Nonwhites and Latinos are more likely to move than white Minnesotans. About 31 percent of African Americans moved during the year, compared to 13 percent of white people. This is in part attributable to age differences. A larger proportion of the white population is in the older, less mobile age groups.

Nonwhites and Latinos are More Mobile



American Community Survey. Race alone data. Subject to sampling error. Household population only.

Are Migration Levels Changing in the 2000s?

As people move from house to house, county to county, state to state or nation to nation, some areas have a net gain of migrants and other areas have a net loss. There are several ways to measure or estimate migration. These methods give different results, some finding less in-migration (or a shift to out-migration) in the 2000s and others finding little change.

Residual Method

The most straightforward and simplest way to estimate migration is the residual method, which defines net migration as the difference between population change and natural increase. Natural increase is the difference between births and deaths.

The results of the residual method differ depending on which number is used to estimate the total 2005 state population. The state population number produced by adding up the State Demographic Center and Metropolitan Council county estimates is considerably higher than the Census Bureau's estimate. The reference dates are also slightly different, April 1 in the State Demographic Center numbers and July 1 for the Census numbers. The Demography estimate of net migration over 5 years is almost 131,000, compared to only 48,000 in the Census estimate. The Demography estimate puts the state on a pace to match the 10-year net in-migration total between 1990 and 2000, estimated at 258,056 (See "Migration a Major Factor in Minnesota's Population Growth," *Population Notes*, July 2002). The Census estimate shows the state lagging well behind the pace of the 1990s.

Survival Rate Method

The survival rate method takes the 2000 population by age, estimates how many would die during a 5-year period given current mortality rates, and then subtracts the number of survivors from the 2005 estimated by age

**Comparison of estimated migration: State Demographic Center,
U.S. Census Bureau, and U.S. Internal Revenue Service**

	State Demographic Center, Residual Method	State Demographic Center, Survival Rate Method	Census Bureau, Residual Method	Survival Rate Method Using Census Estimates	Internal Revenue Service
Population 2000	4,919,479		4,933,756		
Population 2005	5,205,091		5,132,799		
Population change	285,612		199,043		
Births	343,757		341,259		
Deaths	188,685		188,157		
Natural Increase	155,072		153,102		
Total net migration	130,540		47,888	46,277	
International Migration		68,875	67,275		
Domestic Migration		61,665	-19,387		
Residual adjustment			-1,947		
Domestic In-migrant exemptions, 2000 to 2005					387,622
Domestic out-migrant exemptions, 2000 to 2005					408,152
Foreign In-migrant exemptions, 2000 to 2005					17,290
Foreign Out-migrant exemptions, 2000 to 2005					8,853
Net migration (exemptions), 2000 to 2005					-12,093

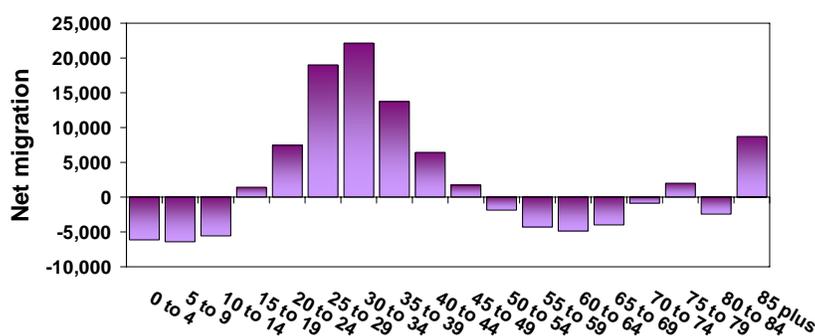
Source: State Demographic Center; U.S. Bureau of the Census; U.S. Internal Revenue Service

State Demographic Center estimates of international migration are calculated using the survival rate method. Domestic migration is derived by subtracting international migration from total net migration.

in the Census Bureau estimates. The difference between the 2005 population and expected survivors is attributed to migration. This method gives an estimated net migration of about 47,000 for the 2000 to 2005 period, very close to the Census Bureau estimates using the residual method. This is not surprising since both are based on the same set of Census population estimates for 2005.

Estimated Net Migration by Age, 2000 to 2005

Survival rate method, Census population estimates



The survival rate method shows substantial out-migration for children ages 0 to 14 and moderate out-migration for people ages 45 to 74. The young adult population ages 20 to 44 shows strong in-migration. The finding for children is puzzling. People in their 20s, 30s and 40s are likely to be rearing children. If there is in-migration for ages 20 to 49, one would expect in-migration of children, yet the data from the survival rate method shows out-migration. The discordant pattern found in the 2000 to 2005 data are consistent with the idea that the Census Bureau may be underestimating Minnesota’s child population (See “Minnesota Age Trends, 2000 to 2005,” *Population Notes*, August 2006.)

International Migration and Domestic Migration

The Census Bureau estimates net international migration to Minnesota at about 67,000 between 2000 and 2005. Subtracting this estimate from total migration reveals a net domestic out-migration to other states of about 19,000 over 5 years.

A second estimate is based on applying the survival rate method to the 2000 Census foreign-born population. The expected survivors are then compared to the 2005 American Community Survey foreign-born population. The 2005 foreign-born population is inflated by about 2 percent to adjust for the population in group quarters, which is not included in the ACS. The results show a net gain of about 69,000 foreign-born people attributable to migration.

The two numbers are very similar, yet they are not measuring the same thing. The Census Bureau is attempting to measure how many people move to Minnesota directly from other countries. This could include people born in the U.S. as well as foreign-born people. The Bureau then subtracts an estimate of emigration, how many people leave the U.S. for other countries. The resulting number is net international migration.

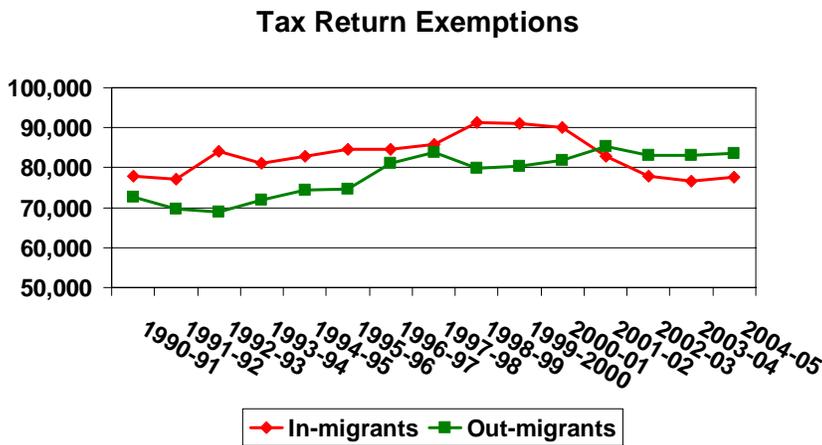
The survival rate method does not estimate emigration, applies only to foreign-born, and could include foreign-born people who move to Minnesota from other states as well as those moving directly from abroad. The fact that the two numbers are so similar is probably coincidental.

Internal Revenue Service Data

The U.S. Internal Revenue Service provides data on in-migrants and out-migrants based on matched income tax returns. The number of exemptions on these matched returns is used as an indicator of migration. From the standpoint of measuring migration, IRS data has both good and bad points. The information is collected annually, allowing creation of time series. It also gives information on origin and destination. On the down side, the tax method misses immigrants, many people in family or household transitions, first-time filers, and people who do not file tax returns.

The tax data show a shift from net in-migration in the 1990s to net out-migration between 2000 and 2005. This is compatible with Census estimates of net domestic migration. This consistency is not surprising since the Census uses the Internal Revenue Service data in developing the migration component for its population estimates.

IRS data show a shift to out-migration in Minnesota after 2000



Internal Revenue Service data based on matched income tax returns. Includes domestic and abroad filers.

Minnesota exchanges a large volume of migrants with its bordering states, the Internal Revenue Service data shows. Wisconsin, Iowa, North Dakota and South Dakota are among the leaders as both sources of in-migrants and destinations of out-migrants, with Wisconsin ranking first on both lists. In the 2000s, Minnesota consistently lost migrants to Wisconsin, largely because of rapid development in the Wisconsin counties bordering the Twin Cities area.

Leading Sources of In-Migrants to Minnesota and Out-Migrants from Minnesota, 2004-2005, Based on Matched Tax Returns

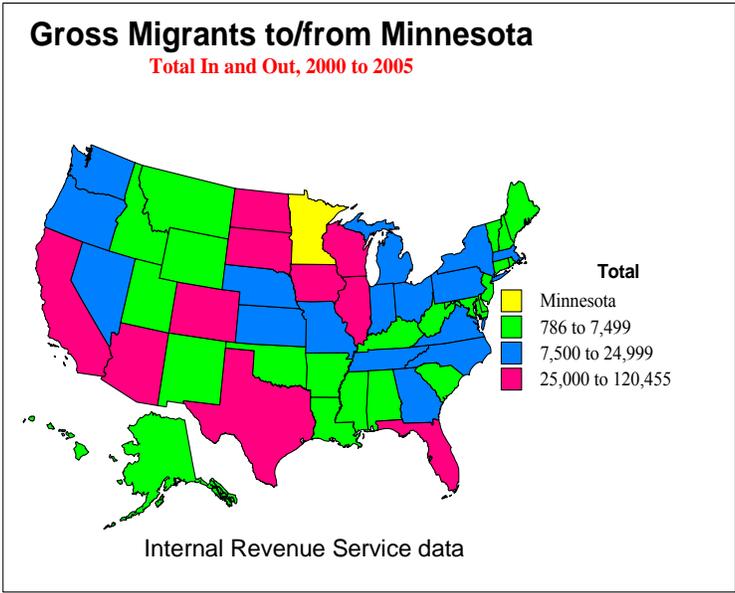
	In-Migrants			Out-Migrants	
	Returns	Exemptions		Returns	Exemptions
Wisconsin	7,170	11,294	Wisconsin	7,064	13,059
North Dakota	3,524	5,856	Florida	2,940	5,304
California	3,000	5,565	California	3,348	5,271
Illinois	2,507	4,996	Texas	2,394	4,862
Texas	2,005	4,339	North Dakota	2,917	4,688
Iowa	2,447	4,237	Arizona	2,422	4,139
Foreign	2,434	3,208	Illinois	2,311	4,053
South Dakota	1,609	2,730	Iowa	2,044	3,823
Florida	1,532	2,706	South Dakota	1,721	3,024
Michigan	1,264	2,332	Colorado	1,552	2,461

Source: U.S. Internal Revenue Service.

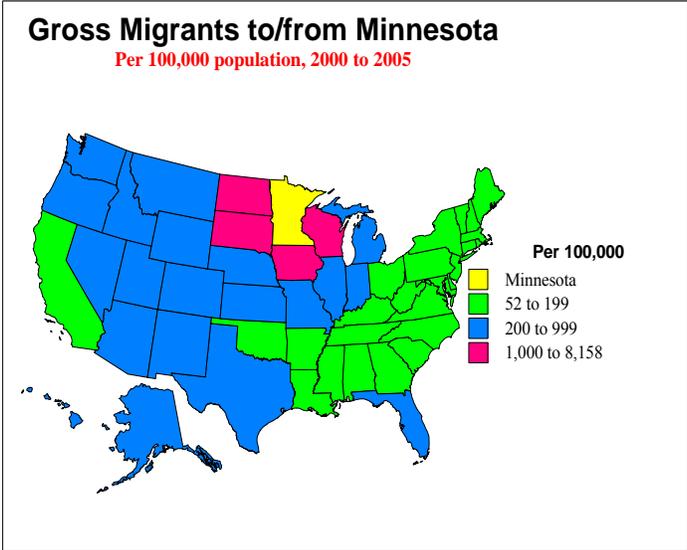
Ranking is based on number of exemptions.

"Foreign" does not indicate international immigration. It includes only people who filed U.S. tax returns in both 2005 and 2006.

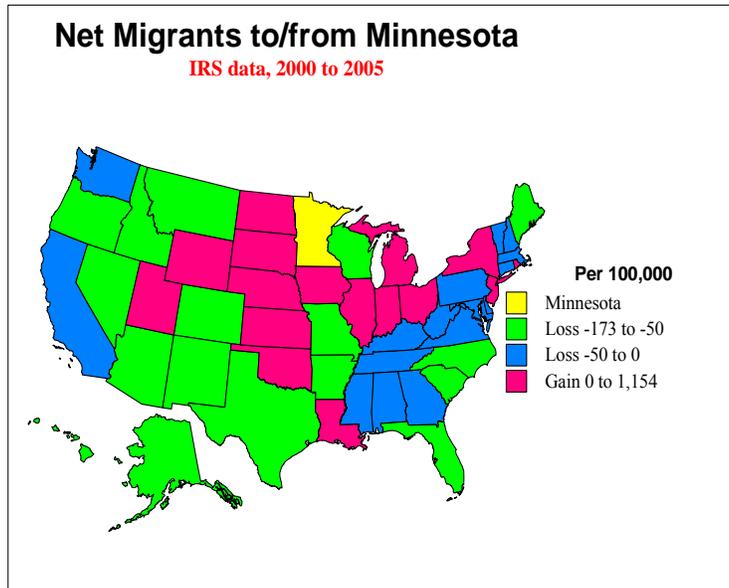
Gross migration, the sum of in- and out-migration, is a good indicator of how much exchange of population goes on between states. In addition to its border states, Minnesota exchanges large numbers of migrants with large Midwestern states such as Illinois, Michigan and Indiana, Sunbelt states such as Arizona and Florida, and large population centers such as Texas, California and New York.



Controlling for population size highlights the significance of exchanges with neighboring states. The rate of exchange per 100,000 population is much higher in North Dakota than in any other state. On a per capita basis, Minnesota's Upper Midwest and westward tilt is evident. Exchanges with Midwestern and western states occur at a higher rate than exchanges with eastern states.

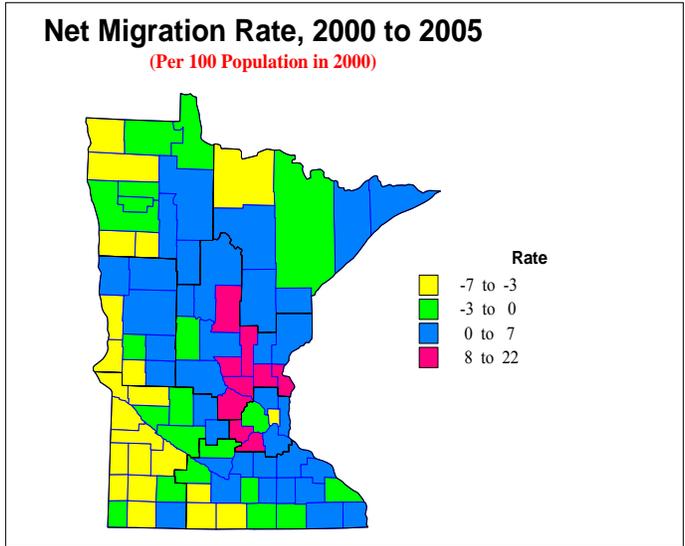
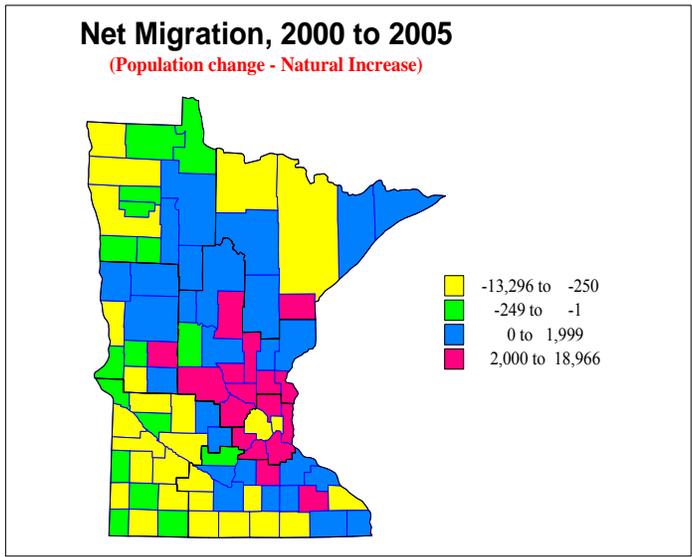


Minnesota gains net migrants from most Midwestern states except Wisconsin. Other than Wisconsin, the biggest net losses between 2000 and 2005 were to Florida, Arizona and Texas. The largest net gains were from foreign addresses, North Dakota, Illinois and Iowa.



Half of Minnesota Counties Have Net In-Migration

Half of Minnesota's counties, 44 out of 87, had net in-migration between 2000 and 2005. This conclusion is based on applying the residual method to the State Demographic Center/Metropolitan Council population estimates. Fewer counties would show in-migration if the lower Census Bureau population estimates were used. In-migration is less widespread than in the 1990s. Between 1990 and 2000, 55 counties had net in-migration. (See "Migration a major factor in Minnesota's population growth," *Population Notes*, July 2002.)



The highest net in-migration, expressed both in numbers and rates, are in the suburbs of the Twin Cities. Scott County had the highest number of net in-migrants, 18,966, followed by Dakota, 17,531, and Wright, 15,071. The high rates of in-migration occurred in Sherburne (21.5 per 100 population in 2000), Scott (21.2) and Isanti (17.5) counties.

Population Change, Natural Increase and Net Migration by County, 2000 to 2005

County	2000 Population	2005 Population	Population Change	Births	Deaths	Natural Increase (Births- Deaths)	Net Migration (Population change- natural increase)	Net Migration per 100 Population in 2000
Minnesota	4,919,479	5,205,091	285,612	343,757	188,685	155,072	130,540	2.7
Aitkin	15,301	16,216	915	734	888	-154	1,069	7.0
Anoka	298,084	326,393	28,309	21,720	7,181	14,539	13,770	4.6
Becker	30,000	31,872	1,872	1,984	1,619	365	1,507	5.0
Beltrami	39,650	42,698	3,048	3,051	1,664	1,387	1,661	4.2
Benton	34,226	38,532	4,306	2,872	1,554	1,318	2,988	8.7
Big Stone	5,820	5,495	-325	265	440	-175	-150	-2.6
Blue Earth	55,941	58,494	2,553	3,357	2,187	1,170	1,383	2.5
Brown	26,911	26,555	-356	1,430	1,368	62	-418	-1.6
Carlton	31,671	34,096	2,425	1,931	1,653	278	2,147	6.8
Carver	70,205	85,204	14,999	5,967	1,529	4,438	10,561	15.0
Cass	27,150	28,843	1,693	1,681	1,479	202	1,491	5.5
Chippewa	13,088	12,781	-307	697	776	-79	-228	-1.7
Chisago	41,101	49,417	8,316	3,470	1,577	1,893	6,423	15.6
Clay	51,229	53,946	2,717	2,889	1,894	995	1,722	3.4
Clearwater	8,423	8,477	54	568	524	44	10	0.1
Cook	5,168	5,368	200	201	241	-40	240	4.6
Cottonwood	12,167	11,842	-325	712	750	-38	-287	-2.4
Crow Wing	55,099	60,194	5,095	3,614	2,627	987	4,108	7.5
Dakota	355,904	391,558	35,654	26,818	8,695	18,123	17,531	4.9

County	2000 Population	2005 Population	Population Change	Births	Deaths	Natural Increase (Births- Deaths)	Net Migration (Population change- natural increase)	Net Migration per 100 Population in 2000
Dodge	17,731	19,596	1,865	1,386	601	785	1,080	6.1
Douglas	32,821	35,125	2,304	1,880	1,661	219	2,085	6.4
Faribault	16,181	15,486	-695	811	1,079	-268	-427	-2.6
Fillmore	21,122	21,347	225	1,320	1,245	75	150	0.7
Freeborn	32,584	31,904	-680	1,867	1,858	9	-689	-2.1
Goodhue	44,127	46,000	1,873	2,713	2,213	500	1,373	3.1
Grant	6,289	6,098	-191	319	430	-111	-80	-1.3
Hennepin	1,116,033	1,150,912	34,879	82,185	39,218	42,967	-8,088	-0.7
Houston	19,718	19,942	224	1,064	940	124	100	0.5
Hubbard	18,376	18,873	497	988	860	128	369	2.0
Isanti	31,287	37,699	6,412	2,145	1,214	931	5,481	17.5
Itasca	43,992	44,285	293	2,359	2,368	-9	302	0.7
Jackson	11,268	11,175	-93	555	647	-92	-1	0.0
Kanabec	14,996	16,213	1,217	889	631	258	959	6.4
Kandiyohi	41,203	41,487	284	2,778	1,857	921	-637	-1.5
Kittson	5,285	4,785	-500	223	363	-140	-360	-6.8
Koochiching	14,355	13,773	-582	656	782	-126	-456	-3.2
Lac qui Parle	8,067	7,623	-444	348	536	-188	-256	-3.2
Lake	11,058	11,189	131	478	659	-181	312	2.8
Lake of the Woods	4,522	4,427	-95	200	224	-24	-71	-1.6

County	2000 Population	2005 Population	Population Change	Births	Deaths	Natural Increase (Births- Deaths)	Net Migration (Population change- natural increase)	Net Migration per 100 Population in 2000
Le Sueur	25,426	27,786	2,360	1,655	1,083	572	1,788	7.0
Lincoln	6,429	6,065	-364	335	505	-170	-194	-3.0
Lyon	25,425	24,948	-477	1,632	1,165	467	-944	-3.7
McLeod	34,898	36,642	1,744	2,572	1,475	1,097	647	1.9
Mahnomen	5,190	5,113	-77	401	261	140	-217	-4.2
Marshall	10,155	9,942	-213	541	466	75	-288	-2.8
Martin	21,802	20,982	-820	1,143	1,184	-41	-779	-3.6
Meeker	22,644	23,416	772	1,496	1,166	330	442	2.0
Mille Lacs	22,330	25,598	3,268	1,537	1,236	301	2,967	13.3
Morrison	31,712	32,866	1,154	2,077	1,521	556	598	1.9
Mower	38,603	38,965	362	2,630	1,995	635	-273	-0.7
Murray	9,165	8,857	-308	455	514	-59	-249	-2.7
Nicollet	29,771	31,449	1,678	1,928	915	1,013	665	2.2
Nobles	20,832	20,553	-279	1,556	932	624	-903	-4.3
Norman	7,442	7,059	-383	360	508	-148	-235	-3.2
Olmsted	124,277	136,526	12,249	10,063	3,939	6,124	6,125	4.9
Otter Tail	57,159	58,665	1,506	2,893	3,202	-309	1,815	3.2
Pennington	13,584	13,624	40	871	731	140	-100	-0.7
Pine	26,530	28,453	1,923	1,545	1,216	329	1,594	6.0
Pipestone	9,895	9,497	-398	590	631	-41	-357	-3.6
Polk	31,369	31,021	-348	1,734	1,784	-50	-298	-0.9
Pope	11,236	11,249	13	571	723	-152	165	1.5
Ramsey	511,202	515,258	4,056	36,928	19,576	17,352	-13,296	-2.6
Red Lake	4,299	4,317	18	250	222	28	-10	-0.2

County	2000 Population	2005 Population	Population Change	Births	Deaths	Natural Increase (Births- Deaths)	Net Migration (Population change- natural increase)	Net Migration per 100 Population in 2000
Redwood	16,815	16,096	-719	987	1,046	-59	-660	-3.9
Renville	17,154	16,771	-383	1,005	1,070	-65	-318	-1.9
Rice	56,665	61,547	4,882	3,610	2,200	1,410	3,472	6.1
Rock	9,721	9,541	-180	628	658	-30	-150	-1.5
Sibley	15,356	15,384	28	977	745	232	-204	-1.3
Stearns	133,166	142,684	9,518	8,939	3,913	5,026	4,492	3.4
Steele	33,680	35,662	1,982	2,472	1,394	1,078	904	2.7
Stevens	10,053	9,816	-237	518	412	106	-343	-3.4
Swift	11,956	11,429	-527	601	622	-21	-506	-4.2
Todd	24,426	24,614	188	1,447	1,139	308	-120	-0.5
Traverse	4,134	3,817	-317	172	277	-105	-212	-5.1
Wabasha	21,610	22,366	756	1,310	965	345	411	1.9
Wadena	13,713	13,668	-45	834	972	-138	93	0.7
Waseca	19,526	19,551	25	1,236	874	362	-337	-1.7
Washington	201,130	224,857	23,727	14,325	5,289	9,036	14,691	7.3
Watonwan	11,876	11,528	-348	768	604	164	-512	-4.3
Wilkin	7,138	6,811	-327	386	378	8	-335	-4.7
Winona	49,985	49,930	-55	2,608	2,014	594	-649	-1.3

County	2000 Population	2005 Population	Population Change	Births	Deaths	Natural Increase (Births- Deaths)	Net Migration (Population change- natural increase)	Net Migration per 100 Population in 2000
Wright	89,986	110,836	20,850	8,570	2,791	5,779	15,071	16.7
Yellow Medicine	11,080	10,583	-497	616	657	-41	-456	-4.1

2005 population from Minnesota State Demographic Center and Metropolitan Council.

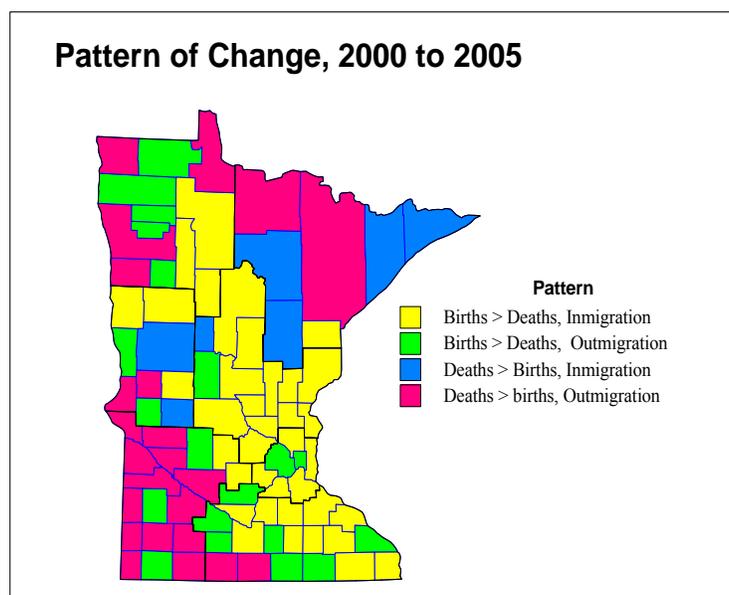
2000 population from 2000 Census.

Births and deaths from Minnesota Center for Health Statistics.

Out-migration numbers were greatest in Ramsey (-13,296), Hennepin (-8,088) and St. Louis (-1,739) counties. Because these counties have large populations, their out-migration rates are not high as in many smaller counties. The highest rates of out-migration were in rural counties including Kittson (-6.8 per 100), Traverse (-5.1), Wilkin (-4.7) and Nobles (-4.3.)

Total population change is the result of natural increase (births minus deaths) and net migration (in-migration minus out-migration). Counties that have both net in-migration and natural increase are guaranteed to grow. Thirty-seven counties fit this profile between 2000 and 2005. These counties are located in the major population growth belt extending from Rochester up through north central Minnesota.

Counties with natural decrease – more deaths than births – and net out-migration are certain to lose population. Twenty-three counties located in western and far northern Minnesota fit this profile.



Twenty counties, including Hennepin and Ramsey and a number of rural counties in western Minnesota, combine natural increase with out-migration. These counties may be losing or gaining population depending on the balance of births, deaths, and migration. Between 2000 and 2005, ten had population increases and ten experienced losses.

The combination of natural decrease and in-migration is relatively uncommon. Seven counties fit this profile. Most are counties that attract older adults to recreational opportunities provided by lakes and forests. Population grew in six of these seven counties.

Sources:

Internal Revenue Service migration data
<http://www.irs.gov/taxstats/index.html>

American Community Survey migration data from American FactFinder
<http://factfinder.census.gov/home/saff/main.html>

Birth and death data provided by Minnesota Department of Health Statistics, Minnesota Department of Health.

2005 population estimates from Minnesota State Demographic Center and Metropolitan Council from:
<http://www.demography.state.mn.us/estimates.html>

Census Bureau estimates of total population and population by age from:
<http://www.census.gov/popest/estimates.php>

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