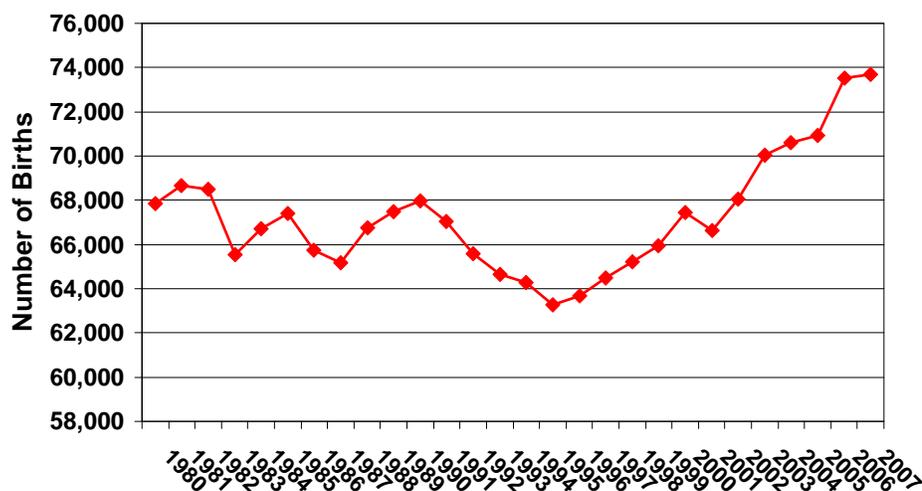


Births, Fertility Rates Show Little Change between 2006 and 2007

Martha McMurry

Shifts in Minnesota births and birth rates between 2006 and 2007 were small compared to the substantial changes recorded between 2005 and 2006. The state recorded 73,674 births in 2007, up slightly from 73,515 in 2006. Between 2006 and 2007 the number of births grew 0.2 percent, much less than the 3.7 percent gain recorded from 2005 to 2006. Births remain high by historic standards. The 2007 number was the highest since 1964, when there were 76,895 births.

Minnesota Births Are Rising in the 2000s; not much change between 2006 and 2007



Minnesota Center for Health Statistics

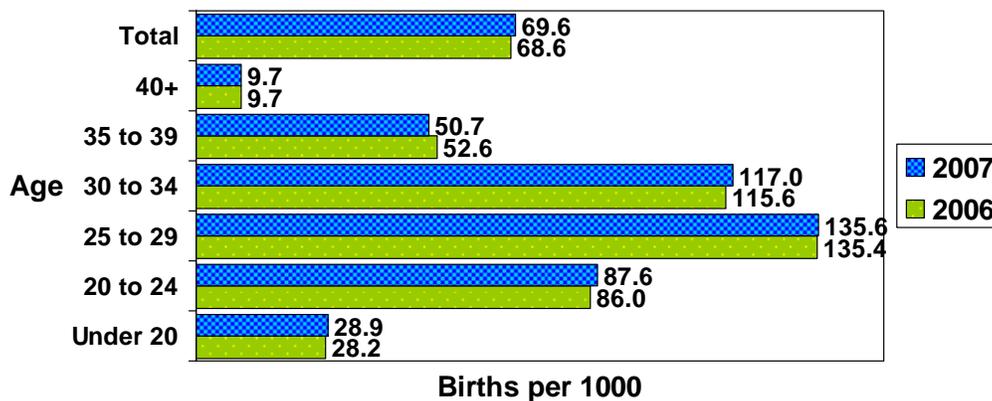
Fertility rates are stable

In 2007 the Minnesota general fertility rate was 69.6 and the total fertility rate was 2.15. The general fertility rate is the number of births per 1,000 women ages 15 to 44. The total fertility rate shows the number of births women will have on average if birth rates by age remain constant. Neither rate has changed much since 2006. In 2006 the general fertility rate was 68.6 and the total fertility rate was 2.14.

Changes in fertility rates by age were also modest. There was no consistent pattern towards older or younger childbearing. There was a modest rise in fertility rates for women ages 30 to 34 and a modest decline for women 35 to 39.

Minnesota fertility rates show little change in most age groups

2006 and 2007 Minnesota Center for Health Statistics data

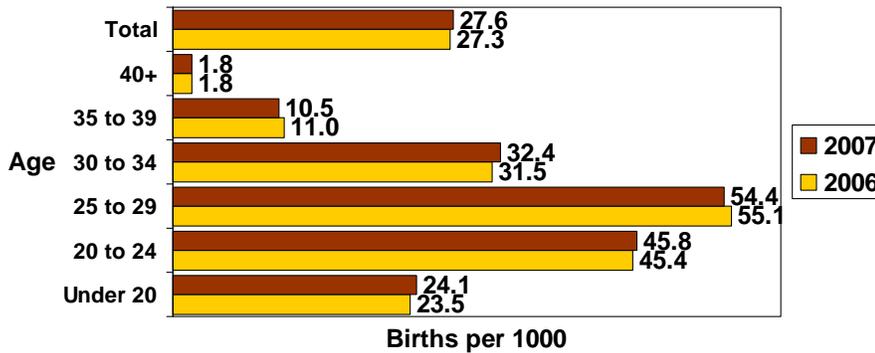


Minnesota Center for Health Statistics; U.S. Census Bureau age estimates

The distribution of first, second and higher-order births did not change much between 2006 and 2007. There was a modest gain in the birth rates for third and higher-order births. Overall, 40 percent of 2007 births were first births, 32 percent were second births, 17 percent were third births, and the remaining 11 percent were fourth or higher-order births.

First-birth rates show little change in most Minnesota age groups

2006 and 2007 Minnesota Center for Health Statistics data



Minnesota Center for Health Statistics; U.S. Census Bureau age estimates

Births trends by race and ethnicity vary

The number of births to white, Latino and American Indian mothers fell between 2006 and 2007. Births to black and Asian mothers increased. The 2006 to 2007 trend marks a change from 2005 to 2006, when births increased in all racial and ethnic groups.

Minnesota Births, 2006 and 2007 by Race and Hispanic origin

	2006	2007
White alone	55,095	54,849
White alone, not Hispanic	54,497	53,189
Black alone	6,162	6,368
Asian/Pacific Islander alone	4,479	4,875
American Indian alone	1,417	1,318
Two or more races	913	1,004
Other race alone	4,864	4,634
Unknown race	585	519
Hispanic origin	6,011	5,909

Source: Minnesota Center for Health Statistics

Birth rates are higher for nonwhite and Latino mothers, though the magnitude of these differences depends on the source used. There are at least two different methods for estimating fertility rates by race and ethnicity. The first way uses the vital statistics births by race for the numerator and Census population estimates of the female population ages 15 to 44 for the denominator. A second option is to use data from the Census Bureau's American Community Survey. The ACS asks women ages 15 to 50 if they had a birth in the past year. Most of the data appearing in this report uses the vital statistics method.

Minnesota general fertility rate and rate of births in the past 12 months, 2007

	General Fertility Rate, 2007	Births in past 12 months per 1000 women 15 to 50
Total	69.6	59.6
White, not Latino	65.6	55.9
Latino	130.3	91.6
American Indian	111.5	69.2
Black	125.9	89.6
Asian/Pacific Islander*	109.0	60.3
Two+ Races	73.3	90.5

The general fertility rate is the number of births per 1,000 women ages 15 to 44. Births from Minnesota Center for Health Statistics. Unknown race and ethnicity cases were assigned according to the frequency of known cases. Age estimates are from the U.S. Bureau of the Census at: <http://www.census.gov/popest/datasets.html>

The data on women giving birth during the past 12 months comes from the 2007 American Community Survey conducted by the U.S. Bureau of the Census. <http://factfinder.census.gov/home/saff/main.html>

*Data on births in past 12 months does not include Pacific Islanders and Hawaiians.

In addition to the difference in the age groups used as the denominator, there are other measurement differences between the American Community Survey and vital statistics birth data. The time period covered is different. The vital statistics counts births during the calendar year. The ACS asks women if they had a live birth in the previous 12 months. This would include births occurring in 2006 if mothers were surveyed early in 2007. If a woman had more than one baby within a twelve-month period, each birth would be counted separately in the vital statistics but only one woman would be counted in the ACS. Finally, the ACS data is tabulated according to where women were living when they answered the survey. The vital statistics data is based on where women are residing when they give birth.

These two sources give very different estimates of fertility rates. Since the American Community Survey includes the very low fertility 45 to 50 age group in the denominator, it is not surprising that the ACS estimate of 59.6 births per 1,000 (or, more precisely, 59.6 child-bearing women per 1,000) is lower than general fertility rate using vital statistics, 69.6 per thousand.

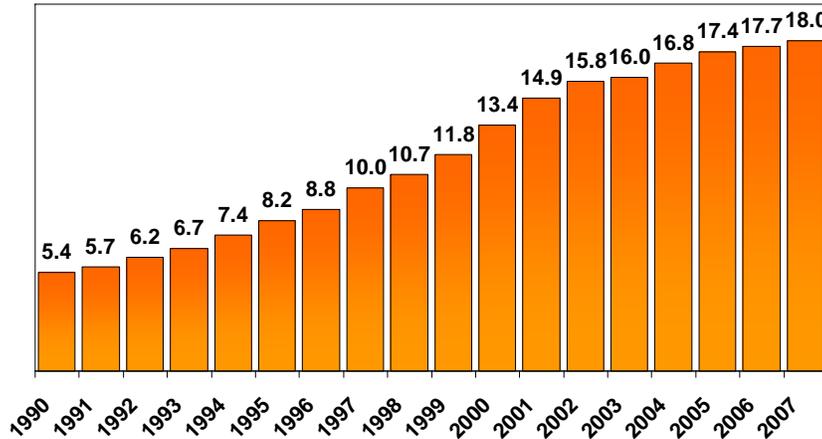
Differences among racial and ethnic groups also vary greatly between the two data sources. For example, in the vital statistics data the fertility rate of Latino women is twice as high as the rate for white, not Latino women, but in the American Community Survey it is only 64 percent higher. American Indian fertility is 70 percent higher than white, not Latino fertility in the vital statistics data but only 24 percent higher in the ACS. At the other extreme, the fertility rate for women of two or more races is similar to white fertility in the vital statistics, but much higher than white fertility in the ACS.

While the vital statistics data give an accurate depiction of resident births, the American Community Survey may provide a better perspective on the size of racial and ethnic differences. The vital statistics method relies on population estimates to use in the denominators. If the size of a population group is over- or under-estimated, the estimated fertility rates will be too high or too low. The ACS surveys women directly about their race and fertility experience, so the numerator and denominator are drawn from the same source.

Births to women born abroad rise slightly

Eighteen percent of Minnesota's 2007 births, a total of 13,201, were to women born outside the United States. Both the number and the proportion increased modestly since 2006.

Percent of births to foreign-born mothers in Minnesota

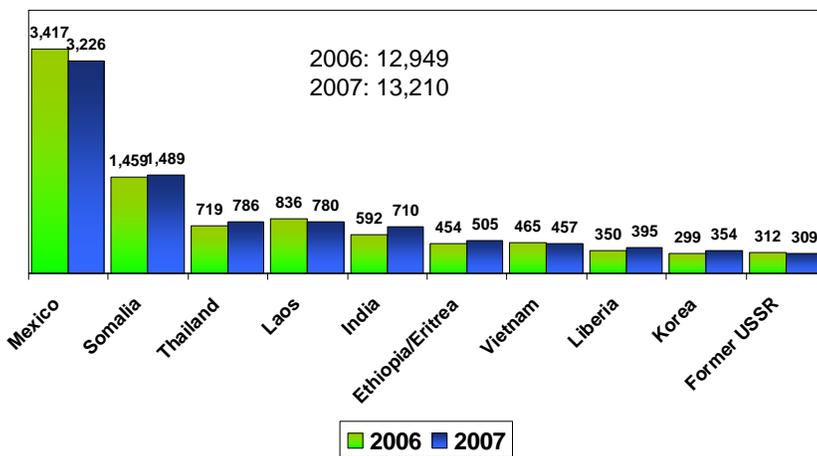


Source: Minnesota Center for Health Statistics

Mexico remains the leading origin of foreign-born mothers. However, the number of Mexican-born mothers dropped between 2006 and 2007, paralleling the decline in overall Latino births. This fall-off may indicate a slowing of Mexican migration to Minnesota as the economy began to slump in 2007.

Other leading birthplaces include Somalia, Thailand, Laos and India. Births to mothers born in India have shown a pronounced rise from 523 in 2005 to 710 in 2007, possibly indicating a rising Indian immigrant population in Minnesota.

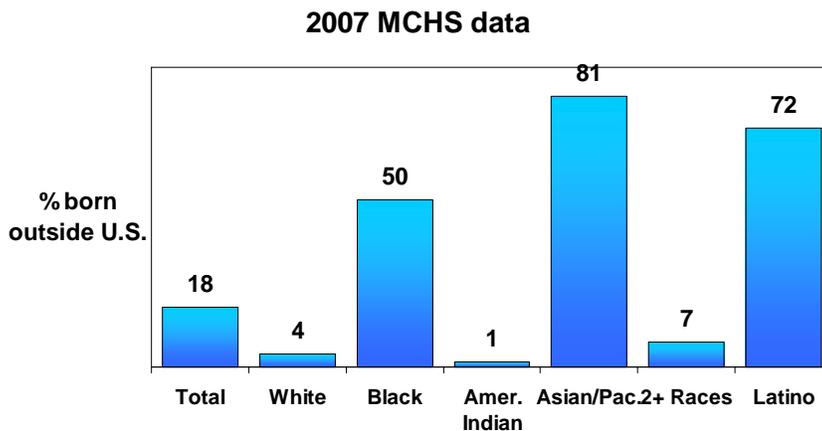
Leading origins of foreign-born mothers in Minnesota, 2006 and 2007



Source: Minnesota Center for Health Statistics

In 2007 births to mothers born outside the United States accounted for slightly more than half of all births to black mothers, a figure much higher than the national average. Eighty-one percent of Asian/Pacific Islander mothers and 72 percent of Latino mothers were born outside the U.S. Most white, American Indian and multiple race mothers were born in the U.S.

More than half of Minnesota black, Asian and Latino moms born outside the U.S.



Based on cases with known race, ethnicity and birthplace

Overall, foreign-born women have higher fertility rates than native-born women. In the vital statistics based data, the fertility rate for foreign-born women is double that of native-born women, while American Community Survey microdata shows foreign-born fertility to be about 39 percent higher than native-born fertility. The vital statistics data may overstate the differences between foreign-born and native women. The vital statistics shows the birthplace of mothers, but not all mothers born outside the United States are actually foreign-born. For example, they may have been born to American citizens living abroad on a military or work assignment.

**General fertility rate and rate of births in past 12 months, 2007
for foreign born and native born women in Minnesota**

	General Fertility Rate, 2007	Births in past 12 months per 1000 women 15 to 50
Total	69.6	61.1
Native born	65.2	59.0
Foreign born	129.7	82.3

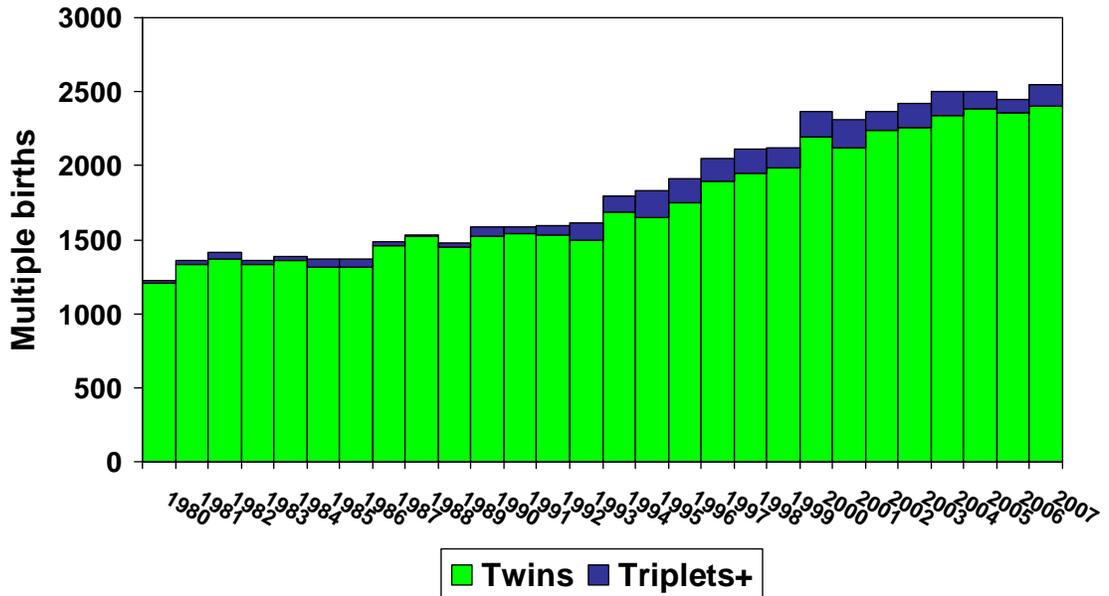
General fertility rate is the rate of births to women born inside/outside the U.S. per 1,000 native born/foreign born women 15 to 44 in the 2007 American Community Survey Public Use Microdata Sample

The births in 12 months data are based on the American Community Survey Public Use Microdata sample. They show the proportion of foreign-born and native-born women who had a birth in the preceding 12 months before they were surveyed.

Multiple births show small gain

About 3.5 percent of Minnesota births were twins, triplets or other higher-order births. The number of multiple births rose slightly between 2006 and 2007. Births to women ages 35 to 39 are most likely to be higher-order births.

Multiple birth trends, 1980 to 2007



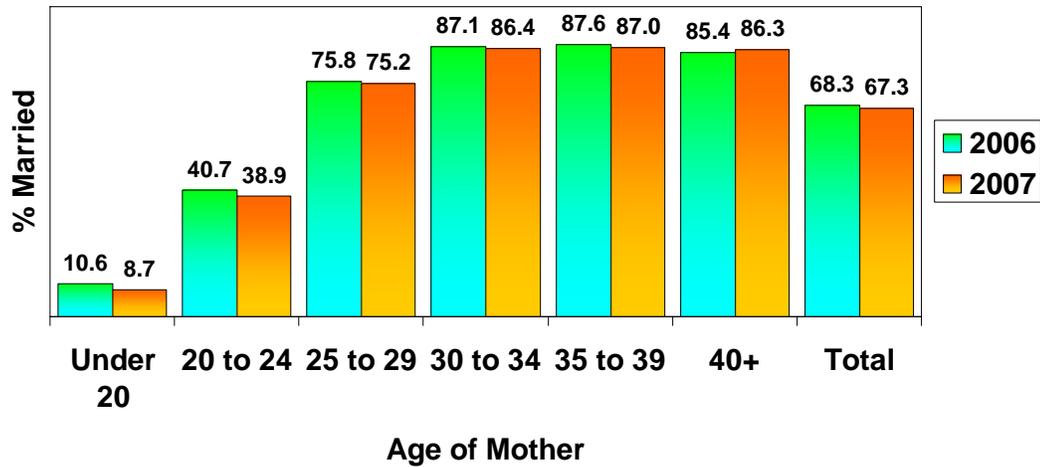
Minnesota Center for Health Statistics

Proportion of mothers who are unmarried increases

Sixty-seven percent of Minnesota mothers were married at the time of the birth, down about one percent from the 2006 number. The proportion of mothers who are not married has been rising gradually for many years. Mothers under age 25 are most likely to be unwed. Only nine percent of teenaged mothers and 39 percent of those ages 20 to 24 were married.

Proportion of Minnesota mothers who are married by age, 2006 and 2007

Mothers Ages 30+ More Likely to Be Married

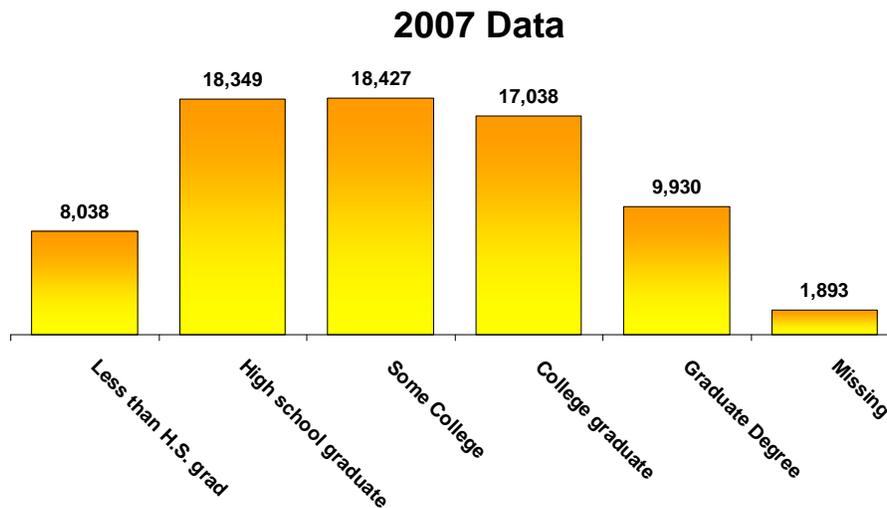


Minnesota Center for Health Statistics

Mothers have more education

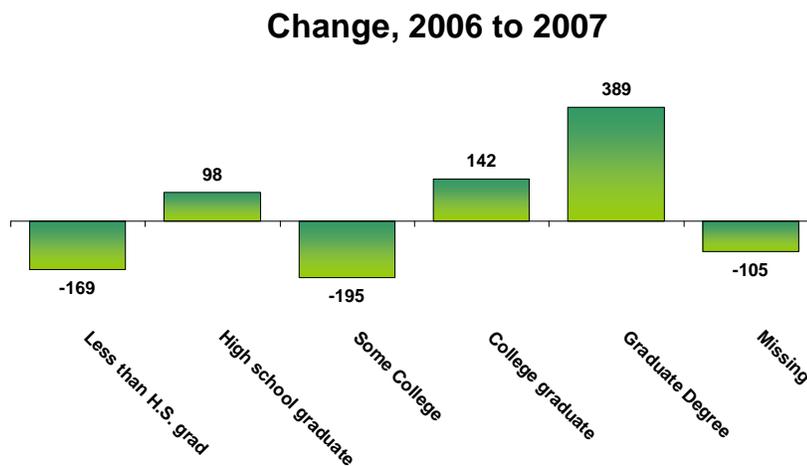
Educational attainment of Minnesota mothers continues to increase. In 2007, thirty-eight percent were college graduates. Twenty-six percent were high school graduates, twenty-six percent had some college, and eleven percent had not finished high school. Between 2006 and 2007, the number of college graduate mothers rose by 531 while the number who were not college graduates declined by 266.

Educational Attainment of Minnesota Mothers



Minnesota Center for Health Statistics birth data.

Greatest Increase Occurs among Mothers Who Are College Graduates

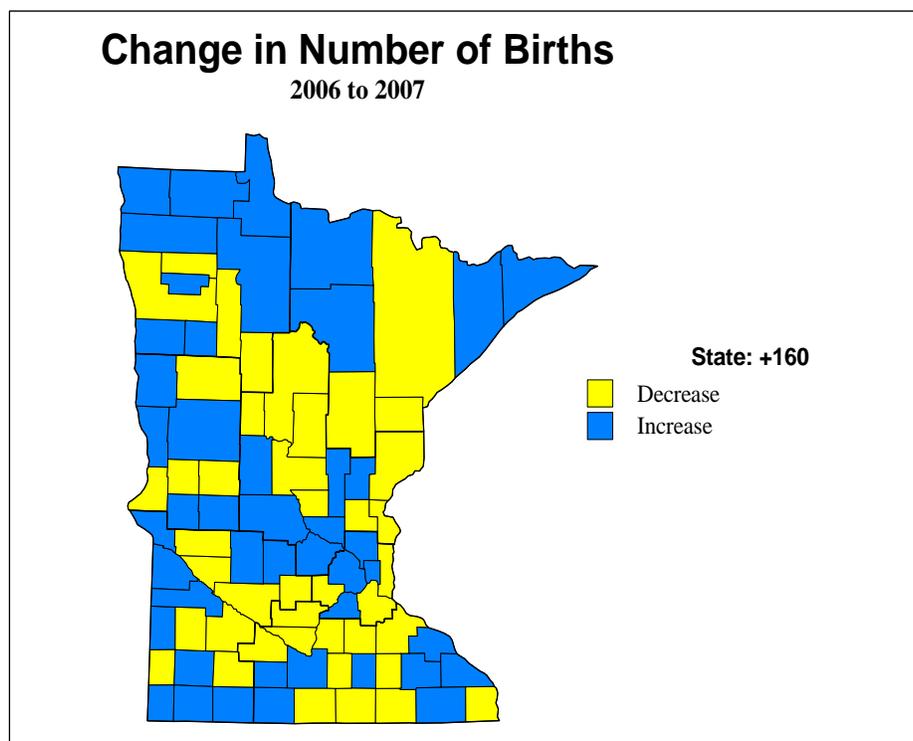


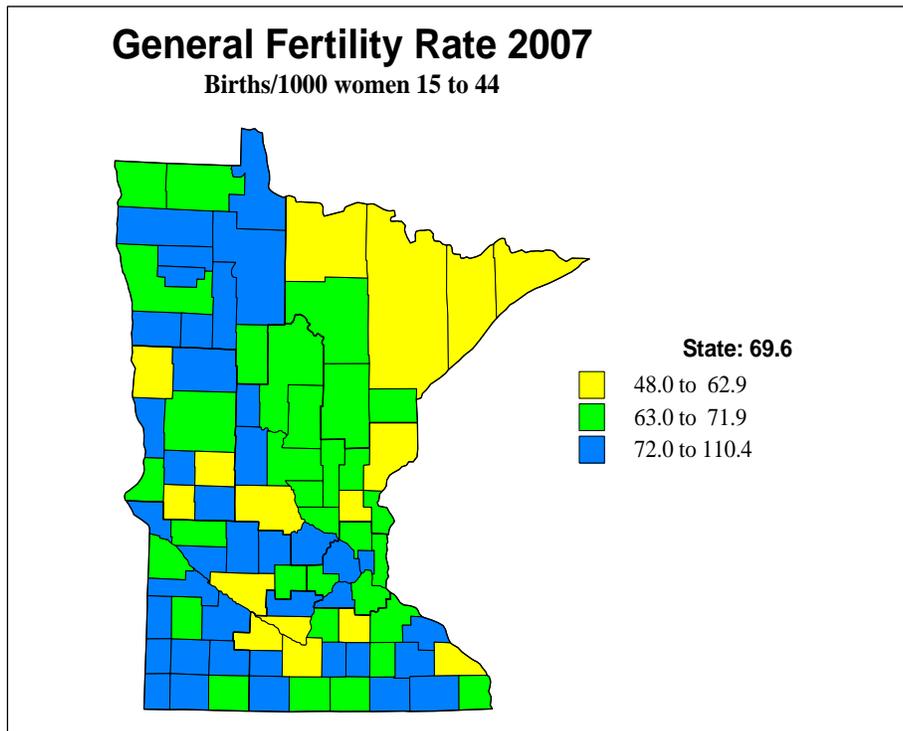
Minnesota Center for Health Statistics birth data.

Births by county and city show modest changes

Forty-five counties saw increases in births between 2006 and 2007, while births fell in 42 counties. The changes were small in most cases and there was no clear-cut geographic pattern of gains and losses.

The highest general fertility rates occurred in Greater Minnesota in Nobles (110.4), Mahnomen (105.0), Watonwan (99.8) and Martin (90.3) counties. Counties with college or university campuses tend to have low fertility rates. These include Winona (48.0), St. Louis (54.8), Blue Earth (55.9), Stevens (56.9) and Rice (57.9) counties. Koochiching County also ranks low on fertility, with a rate of 55.0 per thousand.





Five cities recorded more than 1,000 births in 2007: Minneapolis, St. Paul, Rochester, Brooklyn Park, and Duluth. Between 2006 and 2007 the greatest increases occurred in Rochester, Brooklyn Center, St. Cloud and Shakopee. The largest declines were posted in Minneapolis, Richfield, Woodbury and Lakeville.

Births by County of Residence, Minnesota, 2005-2006 and 2007

	2005 Births	2006 Births	2007 Births	General Fertility Rate, 2007
Minnesota	70,920	73,515	77,688	69.6
Aitkin	145	162	157	64.1
Anoka	4,363	4,471	4,543	66.2
Becker	406	432	429	73.4
Beltrami	656	725	734	75.3
Benton	599	620	615	66.8
Big Stone	59	54	68	85.8
Blue Earth	745	792	800	55.8
Brown	286	331	281	60.3
Carlton	421	429	413	65.3
Carver	1,237	1,338	1,269	66.1
Cass	405	371	354	68.2
Chippewa	144	174	166	79.7
Chisago	718	696	681	64.6
Clay	715	757	782	59.9
Clearwater	116	127	118	81.7
Cook	49	47	53	58.6
Cottonwood	131	146	136	73.7
Crow Wing	774	812	809	67.9
Dakota	5,424	5,664	5,592	67.0
Dodge	270	297	270	68.7
Douglas	432	421	413	60.7
Faribault	168	164	160	69.4
Fillmore	289	283	309	83.7
Freeborn	372	378	361	66.9
Goodhue	552	601	589	68.6
Grant	64	80	73	73.0
Hennepin	16,348	16,780	16,848	72.2

	2005 Births	2006 Births	2007 Births	General Fertility Rate, 2007
Houston	225	255	233	65.2
Hubbard	226	236	215	65.5
Isanti	473	533	514	59.9
Itasca	450	514	528	67.6
Jackson	112	108	131	71.9
Kanabec	168	210	212	66.2
Kandiyohi	574	608	625	83.3
Kittson	38	42	43	71.3
Koochiching	122	114	122	55.0
Lac Qui Parle	69	75	75	71.9
Lake	112	103	110	59.4
Lake of the Woods	43	38	47	73.2
Le Sueur	365	402	367	66.7
Lincoln	74	70	75	82.3
Lyon	320	382	366	71.9
McLeod	509	563	505	69.4
Mahnomen	97	83	92	105.0
Marshall	92	95	123	81.3
Martin	244	229	287	90.3
Meeker	336	323	326	79.3
Mille Lacs	405	371	372	70.1
Morrison	443	443	442	71.8
Mower	538	575	549	82.3
Murray	95	88	103	78.0
Nicollet	372	439	419	59.8
Nobles	314	344	366	110.4
Norman	91	60	74	72.3
Olmsted	2,179	2,210	2,347	82.0
Otter Tail	602	632	666	68.3
Pennington	176	200	195	73.7

	2005 Births	2006 Births	2007 Births	General Fertility Rate, 2007
Pine	328	363	322	61.1
Pipestone	138	143	132	85.5
Polk	378	395	389	68.5
Pope	124	120	137	72.8
Ramsey	7,309	7,578	7,693	73.9
Red Lake	42	41	55	75.7
Redwood	202	227	212	85.0
Renville	182	226	160	60.4
Rice	794	842	796	57.9
Rock	136	134	147	89.9
Roseau	223	195	206	69.2
St. Louis	2,106	2,167	2,107	54.8
Scott	2,169	2,118	2,179	74.9
Sherburne	1,329	1,385	1,388	70.2
Sibley	206	215	203	73.5
Stearns	1,885	1,990	1,998	61.1
Steele	520	541	549	76.4
Stevens	108	122	123	56.9
Swift	117	111	100	67.7
Todd	325	319	356	82.9
Traverse	35	44	37	66.9
Wabasha	272	256	290	73.3
Wadena	196	196	187	82.9
Waseca	260	272	260	77.0
Washington	2,870	2,960	2,943	63.2
Watonwan	146	160	183	99.8
Wilkin	64	74	88	76.8
Winona	552	538	562	48.0
Wright	2,023	2,152	2,183	84.0
Yellow Medicine	128	134	137	83.9

Population estimates from U.S. Bureau of the Census. Birth data from Minnesota Center for Health Statistics. The general fertility rate is the total number of births per 1,000 women ages 15 to 44.

**Births in 1995, 2000, 2005, 2006 and 2007 for Minnesota Cities
with 500 or more Births in 2007**

	1995	2000	2005	2006	2007
Minneapolis	5,739	6,645	6,247	6,557	6,316
St. Paul	4,764	5,138	5,165	5,216	5,234
Rochester	1,359	1,525	1,826	1,814	1,953
Brooklyn Park	1,021	1,215	1,383	1,416	1,444
Duluth	1,004	1,019	993	1,036	1,020
Bloomington	982	889	929	959	935
Burnsville	909	898	923	952	926
St. Cloud	636	746	851	854	911
Blaine	579	663	797	848	884
Coon Rapids	1,035	826	873	882	854
Woodbury	580	856	848	900	851
Eagan	1,142	950	825	852	850
Shakopee	287	442	775	793	848
Maple Grove	662	757	798	799	827
Plymouth	873	863	799	762	769
Eden Prairie	794	781	853	782	765
St. Louis Park	570	642	601	601	651
Apple Valley	581	656	618	597	649
Brooklyn Center	417	441	529	535	619
Richfield	461	496	585	689	612
Farmington	267	451	588	613	593
Lakeville	582	567	577	600	562
Mankato	358	400	420	498	544
Cottage Grove	419	437	455	493	516

Source: Minnesota Center for Health Statistics

Sources:

The Minnesota birth data come from a file of 2007 births provided by the Minnesota Center for Health Statistics. Carol Hajicek provided the data.

“Minnesota Births and Fertility Rates Rise in 2006,” *Population Notes*, Minnesota State Demographic Center, December 2007.

“Births: Final Data for 2006,” *National Vital Statistics Reports*, Volume 57, Number 7, January 7, 2009
http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf

2007 American Community Survey data
<http://factfinder.census.gov/home/saff/main.html>

2007 American Community Survey Public Use Microdata Sample downloaded from
http://factfinder.census.gov/home/en/acs_pums_2007_1yr.html

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