

## Appendix A. Tables

**Table 1. Births 2000-2008, 25 States and U.S.**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	63,166	60,295	58,867	59,356	59,170	60,262	62,915	64,180	64,345
Arizona	84,985	85,213	87,379	90,783	93,396	95,798	102,042	102,687	99,215
California	531,285	527,371	529,245	540,827	544,685	548,700	562,157	566,137	551,567
Colorado	65,429	67,006	68,420	69,304	68,475	68,922	70,737	70,804	70,028
Florida	204,030	205,800	205,580	212,243	218,045	226,219	237,166	239,120	231,417
Hawaii	17,515	17,043	17,446	18,066	18,238	17,882	18,927	19,086	19,417
Idaho	20,305	20,686	20,973	21,794	22,529	23,064	24,185	25,023	25,156
Iowa	38,250	37,610	37,555	38,139	38,368	39,275	40,592	40,835	40,221
Kansas	39,654	38,832	39,338	39,353	39,553	39,701	40,896	41,951	41,815
Maryland	74,226	73,152	73,250	74,865	74,500	74,880	77,430	78,057	77,268
Michigan	136,048	133,247	129,518	130,850	129,710	127,518	127,537	125,172	121,231
Minnesota	67,451	66,617	68,037	70,053	70,614	70,920	73,515	73,675	72,382
Mississippi	44,075	42,277	41,511	42,321	42,809	42,327	46,046	46,455	44,904
Missouri	76,329	75,290	75,167	76,960	77,709	78,547	81,353	81,883	80,994
Nebraska	24,643	24,818	25,381	25,900	26,324	26,142	26,723	26,935	26,992
New Hampshire	14,591	14,647	14,427	14,382	14,565	14,419	14,375	14,170	13,684
North Carolina	120,247	118,112	117,307	118,292	119,773	123,040	127,646	130,886	130,758
North Dakota	7,676	7,664	7,755	7,976	8,179	8,381	8,616	8,818	8,931
Pennsylvania	145,874	143,404	142,380	145,485	144,194	145,033	148,706	150,322	148,934
South Dakota	10,346	10,475	10,698	11,022	11,339	11,466	11,914	12,253	12,074
Tennessee	79,539	78,318	77,433	78,841	79,572	81,720	84,308	86,661	85,480
Utah	47,331	47,915	49,140	49,834	50,653	51,517	53,475	55,063	55,605
Virginia	98,864	98,531	99,235	100,561	103,830	104,488	106,474	108,417	106,578
Washington	81,004	79,542	79,003	80,482	81,715	82,625	86,845	88,921	90,270
Wisconsin	69,289	69,012	68,510	69,999	70,130	70,934	72,302	72,757	72,002
<b>25 States</b>	2,162,152	2,142,877	2,143,555	2,187,688	2,208,075	2,233,780	2,306,882	2,330,268	2,291,268
<b>U.S.</b>	4,058,814	4,025,933	4,021,726	4,089,950	4,112,052	4,138,349	4,265,555	4,317,119	4,251,095

Note: 2007 and 2008 U.S. data are preliminary.

Sources: U.S. data obtained from National Center for Health Statistics; individual state data obtained from state government agencies (see Appendix B)

**Table 2. Birth Rates 2000-2008, 25 States and U.S.**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	65.1	62.6	61.8	62.8	62.8	64.1	66.7	68.1	68.3
Arizona	77.9	76.6	77.0	78.7	79.3	79.0	81.9	81.0	77.2
California	70.1	69.0	68.9	70.1	70.4	70.9	72.6	73.1	71.0
Colorado	67.1	67.7	68.8	69.8	69.1	69.3	70.7	70.2	68.8
Florida	63.1	62.9	62.0	63.4	64.2	65.5	68.0	68.6	66.7
Hawaii	69.2	67.8	69.6	71.9	72.4	71.1	75.2	76.5	78.0
Idaho	72.9	73.9	74.5	77.0	78.8	79.4	82.0	83.7	83.4
Iowa	62.6	62.1	62.7	64.3	65.0	67.0	69.5	70.3	69.5
Kansas	69.1	68.0	69.1	69.6	70.3	71.0	73.6	75.6	75.5
Maryland	62.3	61.1	61.0	62.2	62.0	62.3	64.6	65.6	65.4
Michigan	63.1	62.1	60.8	61.9	61.8	61.3	61.9	61.5	60.5
Minnesota	62.2	61.4	62.9	65.1	66.0	66.7	69.4	69.9	69.0
Mississippi	69.4	67.2	66.6	68.4	69.5	69.0	76.0	76.7	74.3
Missouri	63.3	62.5	62.5	64.2	64.9	65.7	68.2	68.8	68.4
Nebraska	67.5	68.4	70.3	72.1	73.8	73.6	75.6	76.6	76.9
New Hampshire	54.1	54.0	53.2	53.2	54.1	53.9	54.2	54.0	52.8
North Carolina	67.4	65.9	65.2	65.5	66.1	67.3	69.1	69.8	69.1
North Dakota	56.9	57.7	59.3	61.7	63.4	65.7	67.9	70.1	71.3
Pennsylvania	57.0	56.5	56.6	58.3	58.2	59.0	60.8	61.8	61.6
South Dakota	65.6	66.9	68.8	71.1	73.3	74.5	77.8	80.1	79.2
Tennessee	63.6	62.6	62.1	63.3	63.9	65.4	67.1	68.8	67.9
Utah	89.6	89.4	90.7	91.1	91.3	91.4	92.9	93.6	93.1
Virginia	62.1	61.7	61.9	62.5	64.3	64.5	65.7	67.0	66.0
Washington	62.6	61.2	60.7	61.8	62.6	63.2	66.0	67.3	67.9
Wisconsin	59.8	59.7	59.4	61.0	61.4	62.5	64.1	64.9	64.7
<b>25 States</b>	65.7	64.8	64.8	66.0	66.5	67.2	69.2	69.9	68.8
<b>U.S.</b>	65.8	65.2	65.1	66.2	66.5	66.9	68.9	69.7	68.7

Notes: 2007 and 2008 U.S. data are preliminary; birth rate (general fertility rate) is the number of births per thousand women ages 15-44.

Sources: U.S. rates calculated using data from National Center for Health Statistics and U.S. Census Bureau; individual state rates calculated using data obtained from state government agencies(see Appendix B) and U.S. Census Bureau

**Table 3. Per Capita Income 2000-2008, 25 States and U.S. (in 2008 \$)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	30,094	30,510	30,896	31,304	32,375	32,950	33,624	34,145	33,768
Arizona	32,834	32,747	32,543	32,598	33,700	34,795	35,774	35,734	34,335
California	41,752	41,175	40,697	40,862	41,977	42,630	44,217	44,880	43,641
Colorado	42,484	42,920	41,925	41,141	41,771	42,486	43,692	44,074	42,985
Florida	36,358	36,269	36,537	36,699	38,363	39,432	40,911	40,709	39,267
Hawaii	36,350	35,870	36,541	36,882	38,509	39,522	41,138	42,478	42,055
Idaho	30,862	31,190	31,151	30,976	32,430	32,678	33,820	34,168	33,074
Iowa	34,126	33,918	34,506	34,453	36,101	35,614	36,153	37,070	37,402
Kansas	35,607	36,069	35,614	36,066	36,379	36,523	38,186	38,825	38,820
Maryland	43,362	44,096	44,477	44,712	46,303	46,963	48,188	48,856	48,378
Michigan	36,749	36,443	36,129	36,523	36,073	35,570	35,455	35,501	34,949
Minnesota	40,757	40,537	40,782	41,292	42,260	41,881	42,734	43,367	43,037
Mississippi	26,951	27,741	27,703	28,081	28,687	29,584	29,913	30,684	30,399
Missouri	34,873	34,798	35,025	35,383	35,828	35,583	36,377	36,663	36,631
Nebraska	35,759	36,357	36,297	37,608	37,930	37,847	38,154	39,364	39,150
New Hampshire	42,621	42,205	42,038	41,771	42,868	42,346	43,785	44,475	43,623
North Carolina	34,903	34,519	34,083	33,908	34,861	35,350	35,926	36,294	35,344
North Dakota	32,039	32,458	32,754	34,824	34,579	35,666	35,885	38,104	39,870
Pennsylvania	37,648	37,327	37,706	37,943	38,583	38,560	39,863	40,558	40,140
South Dakota	33,043	33,881	33,597	35,632	36,671	36,545	36,062	37,890	38,661
Tennessee	33,372	33,474	33,681	33,964	34,531	34,571	35,228	35,604	34,976
Utah	30,655	31,044	30,695	30,224	30,576	31,528	32,381	32,958	31,944
Virginia	39,560	40,438	40,422	40,987	42,071	42,972	44,179	44,937	44,224
Washington	40,518	40,057	39,621	39,630	41,015	40,539	42,316	43,633	42,857
Wisconsin	36,434	36,595	36,871	37,041	37,312	37,139	38,088	38,428	37,767
<b>25 States</b>	37,670	37,575	37,490	37,691	38,613	38,996	40,101	40,586	39,765
<b>U.S.</b>	37,906	37,868	37,663	37,775	38,637	39,077	40,291	40,944	40,208

Sources: Statistics calculated using data from Bureau of Economic Analysis and U.S. Census Bureau

## Appendix B. Sources for State Fertility Data

<u>State</u>	<u>Website</u>
Alabama	<a href="http://www.adph.org/healthstats/assets/vs08.pdf">http://www.adph.org/healthstats/assets/vs08.pdf</a>
Arizona	<a href="http://www.azdhs.gov/plan/">http://www.azdhs.gov/plan/</a>
California	<a href="http://www.cdph.ca.gov/data/dataresources/requests/Pages/VitalStatisticsBirthDeathFetalDeathMarriageData.aspx">http://www.cdph.ca.gov/data/dataresources/requests/Pages/VitalStatisticsBirthDeathFetalDeathMarriageData.aspx</a>
Colorado	<a href="http://www.cdph.state.co.us/hs/mchdata/mchdata.html">http://www.cdph.state.co.us/hs/mchdata/mchdata.html</a>
Florida	<a href="http://www.doh.state.fl.us/planning_eval/vital_statistics/index.html">http://www.doh.state.fl.us/planning_eval/vital_statistics/index.html</a>
Hawaii	<a href="http://www.hhdw.org/">http://www.hhdw.org/</a>
Idaho	<a href="http://www.healthandwelfare.idaho.gov/">http://www.healthandwelfare.idaho.gov/</a>
Iowa	<a href="http://www.idph.state.ia.us/apl/health_statistics.asp#statistics">http://www.idph.state.ia.us/apl/health_statistics.asp#statistics</a>
Kansas	<a href="http://www.kdheks.gov/hci/annsumm.html">http://www.kdheks.gov/hci/annsumm.html</a>
Maryland	<a href="http://vsa.maryland.gov/html/reports.cfm">http://vsa.maryland.gov/html/reports.cfm</a>
Michigan	<a href="http://www.mdch.state.mi.us/pha/osr/index.asp?Id=2">http://www.mdch.state.mi.us/pha/osr/index.asp?Id=2</a>
Minnesota	<a href="http://www.health.state.mn.us/divs/chs/countytables/index.htm">http://www.health.state.mn.us/divs/chs/countytables/index.htm</a>
Mississippi	<a href="http://mstahrs.msdc.ms.gov/">http://mstahrs.msdc.ms.gov/</a>
Missouri	<a href="http://www.dhss.mo.gov/VitalStatistics/">http://www.dhss.mo.gov/VitalStatistics/</a>
Nebraska	<a href="http://www.hhs.state.ne.us/ced/vs.htm">http://www.hhs.state.ne.us/ced/vs.htm</a>
New Hampshire	<a href="http://nhvrrinweb.sos.nh.gov/default.aspx">http://nhvrrinweb.sos.nh.gov/default.aspx</a>
North Carolina	<a href="http://www.epi.state.nc.us/SCHS/">http://www.epi.state.nc.us/SCHS/</a>
North Dakota	<a href="http://ndhealth.gov/vital/pubs.htm">http://ndhealth.gov/vital/pubs.htm</a>
Pennsylvania	<a href="http://www.portal.health.state.pa.us/portal/server.pt/community/health_statistics_and_research/11599">http://www.portal.health.state.pa.us/portal/server.pt/community/health_statistics_and_research/11599</a>
South Dakota	<a href="http://doh.sd.gov/Statistics/healthstats.aspx">http://doh.sd.gov/Statistics/healthstats.aspx</a>
Tennessee	<a href="http://health.state.tn.us/statistics/index.htm">http://health.state.tn.us/statistics/index.htm</a>
Utah	<a href="http://health.utah.gov/vitalrecords/vitalstatistics/vitalstatistics.htm">http://health.utah.gov/vitalrecords/vitalstatistics/vitalstatistics.htm</a>
Virginia	<a href="http://www.vdh.state.va.us/healthstats/">http://www.vdh.state.va.us/healthstats/</a>
Washington	<a href="http://www.doh.wa.gov/ehsphi/CHS/CHS-Data/main.htm">http://www.doh.wa.gov/ehsphi/CHS/CHS-Data/main.htm</a>
Wisconsin	<a href="http://dhs.wisconsin.gov/births/index.htm">http://dhs.wisconsin.gov/births/index.htm</a>

## Appendix C. Methodology

### Fertility Data

The state data consists of all 25 states whose final 2008 birth data were available at the time of analysis. All state-level birth data were obtained directly from each individual state. Resident births—the total number of births to residents of a state, regardless of where the birth occurred—are shown for all states except Hawaii. For Hawaii, the number of births represents those births that occurred in Hawaii to residents of that state.

For national-level analyses, the majority of birth data were obtained from the National Center for Health Statistics. NCHS [birth statistics for 2007](#) and [birth statistics for 2008](#) are preliminary; they include 98.7% of all births in 2007 and 99.9% of all births in 2008. NCHS [birth statistics for 2009](#) are provisional. Some information for the historical fertility series extending to 1920 was obtained from data developed by Robert L. Heuser and available from the Princeton University [Office of Population Research](#).

Population estimates provided by the [U.S. Census Bureau](#) were used in calculating all birth rates. For rates from 2000 forward, vintage 2008 population estimates were used. For earlier years, archived population estimates were used.

Birth rates are measured using the general fertility rate (GFR), which is the number of births divided by the number of women of childbearing age (15-44)<sup>1</sup>.

When the annual change in number of births is within the range of +/- 0.5%, this change is considered “leveling off.” Similarly, a fertility rate is defined as “leveling off” if its annual change is within the range of +/- 0.5%.

### Economic Data

In choosing economic indicators to use in this report, we were most interested in finding those variables that are good indicators of an individual’s experiences with the economic downturn; that are available at the state level; and that use standardized metrics, which allow for cross-state comparisons. Ultimately, seven indicators relating to income, employment and the housing market were tested to see whether their variations were associated with variations in fertility:

- Annual Per Capita Income, calculated using data from the [Bureau of Economic Analysis](#), and the [U.S. Census Bureau](#), and adjusted to year 2008 dollars using the [National Consumer Price Index-U](#). The other major estimate of income is household income as estimated by the U.S. Census Bureau from its Annual Social and Economic Supplement to the Current Population Survey. Both measures of income are comprehensive, including wages and salaries, and also interest, rental and other sources of income. They also trend similarly across the business cycle. We chose to use the per capita income measure because it is readily available at the state level. Per capita income is also a more comprehensive measure because it includes employer contributions to pension funds and health and other insurance plans.

---

<sup>1</sup> In 2007, women ages 15-44 accounted for 99.7% of all births in the U.S.

- [Real Per Capita Gross Domestic Product](#), by state, using 2000 dollars, available from the Bureau of Economic Analysis
- Annual Employment Rate for the civilian noninstitutionalized workforce (persons ages 16 and older), calculated using data available from the [Bureau of Labor Statistics](#)
- [Annual Unemployment Rate](#), available from the Bureau of Labor Statistics
- [Initial Unemployment Claims](#) for the second quarter, available from the Department of Labor
- Foreclosure Rate, the percent of all housing stock in foreclosure in 2007, as determined by [RealtyTrac](#)
- [House Price Index \(HPI\)](#) for the second quarter, which measures single-family house prices, available through the Federal Housing Finance Agency