

Market factors explain why there are few obstetrician-gynecologists in some of New York's rural counties.

Summary

Sixteen predominantly rural New York State counties have fewer than four obstetrician-gynecologists (ob-gyns) or have otherwise been designated by the New York State Board of Regents as an obstetrics-gynecology “shortage” area.¹ Experts have wondered why and interest groups have sought to politicize the question.

While the American Congress of Obstetricians and Gynecologists (ACOG) says these 16 counties² have few or no ob-gyns because of the cost of medical malpractice insurance, in fact the reasons why few ob-gyns practice in these counties have nothing to do with the cost of medical malpractice insurance. Indeed, insurers charge the state's highest medical malpractice insurance premiums on Long Island, which nevertheless has more ob-gyns *per capita* than the state or nation as a whole.

The real reasons there are so few ob-gyns in these 16 counties are principally market-based -- demand and payment for ob-gyn services are low:

Birth rates in these counties are significantly lower than statewide (and lower than the state outside of New York City, which has a lower birth rate than statewide). In 2007 (latest available data) the average of the birth rates for these 16 counties was only 10.9 per 1,000 population compared to 13.1 statewide and 11.8 for the state outside of New York City. In 2007, these 16 counties included nine of the ten New York State counties with a birth rate of only 10 per 1,000 population or less.

Fertility rates, which measure the number of women of child-bearing age who give birth, are also significantly lower than statewide. Furthermore, from 1997 to 2007, in nine of the 16 counties birth rates declined faster than the 5.1 percent decline

¹ The 16 counties and the number of ob-gyns who reported to the State that they practice in them are: Allegany (2), Cattaraugus (3), Chenango (3), Cortland (0), Columbia (5), Delaware (1), Essex (3), Greene (3), Hamilton (0), Livingston (3), Montgomery (2) Schoharie (0), Schuyler (2), Seneca (4), Sullivan (13) and Tioga (2).

² The New York State Board of Regents designates annually areas of the state as Health Professional Shortage Areas. Physicians agreeing to serve in these areas for a specified period can apply for one of at least 80 awards each year of up to \$10,000 for two years. Award amounts are based on undergraduate and medical school student loan amounts, loan interest expense, and income. In addition, beginning in January 2009, office-based physicians practicing in shortage areas have received a 10 percent add-on to their fees.

statewide and in 10 of the counties the fertility rate declined even though it increased 0.2 percent statewide.

A disproportionately large share of deliveries in these 16 counties is Medicaid-funded. ACOG has been correct to publicly raise the inadequacy of Medicaid reimbursement rates as a major concern of their members. In 2008, the Kaiser Foundation's Medicaid Fee Index, which measures each state's physician fees relative to the national average Medicaid fees, reported that New York's index of 0.80 for obstetric care was the fourth lowest in the nation.

In 2006 (the most recent year for which Medicaid-only data is available), in 14 of these 16 counties the percentage of live births covered by Medicaid exceeded the Medicaid percentage for all live births in the state outside of New York City. Fifty-three percent of births in Cortland County, 50 percent of births in Sullivan County and 41 percent in Schoharie County were covered by Medicaid. Furthermore, from 2003 to 2006, even as the percentage of Medicaid covered-births declined statewide the percentage increased in nearly all of the 16 obstetrician-gynecologist "shortage" counties and other counties with fewer than four obstetrician-gynecologists.

The populations of these counties have declined or remained level (while the State's population has increased). From 1990 to 2007, half of the 16 counties lost population. In five other counties the population increase ranged from 1.3 percent to 3.4 percent, well below the state's population increase of 7.3 percent. Furthermore, Upstate's population, generally, is experiencing out-migration of the age 20-34 age group, according to a Federal Reserve Bank of New York study. And the population of much of Upstate is projected to continue to decline. From 2006 to 2030, the population of Western New York is projected to decline 10.1%, Central New York by 9.2%, the Mohawk Valley by 7.5% and Southern Tier by 4.1%.³

These counties tend to have lower per-capita incomes than other counties. Uninsured low-income patients can have difficulty paying medical bills. In 2007, all but one of the 16 obstetrician-gynecologist "shortage" counties or counties with fewer than four ob-gyns ranked in the bottom half of all New York counties in *per capita* personal income. Allegany County, a "shortage" county, is the poorest county in the state.

Altogether, these factors have made these 16 counties less attractive than other areas of the state for practicing obstetrics-gynecology. The recent increase in Medicaid rates for obstetrical procedures is unlikely to offset the locational disincentives of declining populations and loss young adults, low and declining birth and fertility rates and generally lower household incomes.

³ Source: Center for Health Workforce Studies, *New York Physician Supply and Demand Through 2030*, April 2010. The Center cites Claritas, 2006 and Center for Health Workforce Studies adjusted Cornell University Program on Applied Demographics projections from April 2008.

Finally, although ACOG says that accessibility to obstetrician-gynecologists in “shortage” counties and counties with “less than five practicing ob-gyns” “has become a grave public health concern...,” New York State Health Department records indicate that ACOG’s warnings about a special ob-gyn accessibility crisis in predominantly rural counties are not supported. According to the State’s data, and notwithstanding designation of certain obstetrics-gynecology “shortage” counties, pregnant women in the vast majority of these counties are *more* likely to receive early prenatal care and *less* likely to receive late or no prenatal care than are women either statewide or in the state outside of New York City. There are very legitimate concerns about inadequate access to early prenatal care in many parts of the state, particularly in low-income urban communities and among the uninsured and immigrant populations. And to be sure, even the higher levels of early prenatal care (and lower levels of late or no prenatal care) in most of the 16 “shortage” counties and other counties with fewer than four ob-gyns are still too low. But ob-gyn accessibility is a statewide problem unrelated to the number of ob-gyns practicing in a particular county.

Analysis

We reviewed birth and fertility rates, population trends and the percentage of deliveries covered by Medicaid by county, focusing on 16 counties – the State-designated obstetrics-gynecology “shortage” counties and other counties with fewer than four obstetrician-gynecologists.

Birth and fertility rates have been comparatively low in all 16 counties.

In 2007, the New York State live birth rate was 13.1 per 1,000 population. As shown in the table in the Appendix, it was less than this rate in all 16 of these counties. The birth rate outside of New York City was 11.8 per 1,000. It was less than this in 14 of these 16 counties. From 1997 to 2008 the state’s birth rate declined 5.1 percent (0.7 percentage point). It declined more than this in nine of the 16 these counties.

The disparity in fertility rates between these 16 counties and the rest of the state is also striking. The fertility rate measures the number of women of child-bearing age who give birth. In 2007, the statewide fertility rate was 61.9 per 1,000 females age 15 to 44. Outside of New York City the rate was 59.2 per 1,000 females age 15-44. In only one obstetrician-gynecologist “shortage” county, Sullivan, was the fertility rate higher than the outside-New York City rate and in two other counties, Seneca and Tioga, it was nearly the same. As shown in the Appendix table, in seven obstetrician-gynecologist “shortage” counties the fertility rate did not even exceed 50 per 1,000 females age 15 to 44. In three of the other counties with fewer than four obstetrician-gynecologists the fertility rate did not exceed 55 per 1,000.

Although from 1997 to 2007 the New York City fertility increased by 0.2 percent and the rate outside of New York City increased by 1.0 percent, in 10 of the 16 counties the fertility rate declined, in some counties very substantially -- by 7.8 percent in Columbia, 8.1 percent in Schoharie, 9.5 percent in Livingston and 17.0 percent in Hamilton.

Communities with low and declining birth and fertility rates can have difficulty attracting obstetricians to establish a practice.

The statewide birth rate declined from 13.8 per 1,000 population in 1997 to 13.1 in 2007. Declining birth rates may discourage new doctors from practicing obstetrics-gynecology, according to a study issued in 2006 by the SUNY Albany Center for Health Workforce Studies, *Changing Practice Patterns of Obstetricians/Gynecologists in New York*. The study discussed the declining numbers of births and birthrates in New York State and reported that that “the demand for obstetricians/gynecologists steadily declined between 1998 and 2002.” According to the study, analysis of the Center’s 1999 and 2003 Resident Exit Surveys found that newly trained obstetrician-gynecologists “reported having more difficulty finding satisfactory jobs in 2003 than in 1999” and “newly trained Ob/Gyns reported receiving fewer job offers both regionally and nationally than did newly trained physicians in other specialties.”

Population declined in eight of the 16 counties and in five others it failed to keep pace with the slow population increase in New York State outside of New York City.

From 1990 to 2007, New York State’s population increased by 7.3 percent -- by 13.0 percent in New York City and 3.3 percent elsewhere in the state. As Table 1 shows, in eight of the 16 counties and in five other counties it did not keep pace with the non-New York City part of the state.

Table 1. Population 1990, 2000, 2007. 16 counties designated as ob-gyn “shortage” areas or that otherwise have fewer than four ob-gyns.

	2007 estimate	2000 census	1990 census	2000 to 2007	1990 to 2007
New York State	19,297,729	18,976,457	17,990,455	+1.69%	+7.27%
New York City	8,274,527	8,008,278	7,322,564	+3.32%	+13.00%
Rest of state	11,023,202	10,968,179	10,667,891	+0.50%	+3.33%
Allegany	49,637	49,927	50,470	-0.58%	-1.65%
Cattaraugus	80,087	83,955	84,234	-4.61%	-4.92%
Chenango	51,207	51,401	49,344	-0.38%	+3.79%
Columbia	62,363	63,094	62,982	-1.15%	-0.9%
Cortland	48,369	48,599	48,963	-0.38%	-1.21%
Delaware	46,286	48,055	47,225	-3.68%	-1.99%
Essex	38,119	38,851	37,152	-1.88%	+2.60%
Greene	49,246	48,195	44,739	+2.18%	+10.07%
Hamilton	5,075	5,379	5,279	-5.65%	-3.86%
Livingston	63,196	64,328	62,372	-1.76%	+1.32%
Montgomery	48,695	49,708	51,981	-2.04%	-6.32%
Schoharie	32,063	31,582	31,859	+1.52%	+0.6%
Schuyler	19,027	19,224	18,662	-1.02%	+1.95%
Seneca	34,228	33,342	33,682	+2.66%	+1.62%
Sullivan	76,303	73,966	69,277	+3.12%	+10.14%
Tioga	50,453	51,784	52,337	-2.56%	-3.60%

Upstate New York, overall, has significantly fewer obstetrician-gynecologists per capita than Downstate – 14 active patient-care obstetrician-gynecologists per 100,000 population compared to 18 Downstate, according to the SUNY Center for Health

Workforce Studies. Part of the explanation for this may be that Upstate New York is losing its younger residents. A study by the Buffalo branch of the Federal Reserve Bank of New York found that Upstate New York is aging faster than the nation and “upstate New York’s trend has been driven by the out-migration of non-elderly adults, especially those aged 20 to 34.” This is exactly the population that starts families and requires the services of obstetricians.

Rates of Medicaid coverage of deliveries have been higher in the 16 obstetrician-gynecologist “shortage” counties and counties that have fewer than four obstetrician-gynecologists.

In New York State outside of New York City, Medicaid covered approximately 32 percent of deliveries in 2006. Table 2 shows that this rate was met or exceeded in 13 of these 16 counties -- in some counties by at least ten percentage points. Publicly available data for 2007 combines the Medicaid and Family Health programs; 12 of the 16 counties met or exceeded the non-New York City rate.

Table 2 also shows that even as the Medicaid share of all births outside of New York City declined from 37.7 percent in 2003 to 31.8 percent in 2006, it increased in 13 of the 16 counties. In some instances, the increase was very substantial -- in eight counties at least five percentage points.

The higher Medicaid delivery coverage rates in obstetrician-gynecologist “shortage” counties would not have been a concern for ob-gyns had Medicaid provider fees been sufficient. But in 2008, New York ranked fourth from the bottom among states in Medicaid physician fees for obstetric care.⁴ ACOG has stated that, “Low Medicaid reimbursement rates are only contributing to the major health care crisis taking place in New York State...”⁵

Table 2. Rates of public health insurance payment for deliveries in counties designated as ob-gyn “shortage” areas or that otherwise have fewer than four ob-gyns.

	Live births 2007	Medicaid + Family Health Plus live births 2007	Medicaid covered deliveries 2006	Medicaid covered deliveries 2003
Births recorded outside of NYC	128,222⁶	31.7%	31.8%	37.7%
Allegany	525	37.5%	38.8%	31.5%
Cattaraugus	966	34.0%	32.1%	23.7%
Chenango	549	47.0%	48.9%	45.9%
Columbia	582	10.8%	9.5%	26.6%

⁴ Kaiser Foundation State Health Facts, Medicaid Fee Index, www.statehealthfacts.org. The index measures each state’s physician fees relative to national average Medicaid fees.

⁵ ACOG District II/NY, *Analysis of the Current Medical Liability Climate in New York State*, June 2008.

⁶ An additional 4,857 births to New York City residents were recorded outside of New York City. 15.5% of these were covered by Medicaid or Family Health Plus.

	Live births 2007	Medicaid + Family Health Plus live births 2007	Medicaid covered deliveries 2006	Medicaid covered deliveries 2003
Cortland	528	47.3%	52.8%	46.6%
Delaware	461	44.2%	43.8%	41.9%
Essex	357	42.0%	35.1%	21.5%
Greene	456	12.1%	13.3%	28.5%
Hamilton	33	18.2%	34.3%	22.9%
Livingston	602	29.6%	32.7%	31.7%
Montgomery	600	43.3%	47.0%	40.0%
Schoharie	290	37.7%	40.9%	38.2%
Schuyler	179	50.3%	40.7%	41.9%
Seneca	384	31.8%	34.2%	29.6%
Sullivan	921	46.1%	49.8%	43.1%
Tioga	564	35.4%	35.5%	19.3%

Women in counties with few obstetrician-gynecologists are more, not less, likely to receive early prenatal care.

According to Department of Health records, most pregnant women in counties with few obstetrician-gynecologists are not missing out on early prenatal care.⁷ In fact, women in such counties are *more* likely to receive early prenatal care than women in the rest of the state.

The percentage of women receiving early prenatal care is higher outside of New York City than in New York City. In Table 3, county rates for 2008 higher than even the higher outside-of New York City rates are shown in blue and italics. Overwhelmingly, in all age groups, the early prenatal care rate in “shortage” counties and in the other counties with fewer than four obstetrician-gynecologists was higher than in the rest of the state outside of New York City.

Table 3. Percent of women with early prenatal care, by age, 2008. Counties designated as ob-gyn “shortage” areas or that otherwise have fewer than four ob-gyns.

	15-17	18-19	20-24	25-34	35+
New York State	46.8	54.4	62.3	74.8	77.4
New York City	44.6	52.0	60.8	70.6	73.7
Outside of NYC	49.0	56.6	63.7	78.8	81.1
Allegany	<i>60.0</i>	<i>77.8</i>	<i>76.1</i>	<i>84.4</i>	<i>84.2</i>
Cattaraugus	<i>64.5</i>	<i>61.5</i>	<i>73.1</i>	78.4	71.8
Chenango	<i>75.0</i>	<i>79.1</i>	<i>79.6</i>	<i>87.3</i>	74.1
Columbia	40.0	<i>64.9</i>	<i>74.3</i>	<i>81.7</i>	<i>84.2</i>
Cortland	<i>54.5</i>	<i>87.5</i>	<i>77.4</i>	<i>90.0</i>	<i>81.8</i>
Delaware	<i>60.0</i>	<i>70.0</i>	<i>70.9</i>	<i>82.6</i>	<i>91.5</i>
Essex	<i>66.7</i>	<i>58.3</i>	<i>73.5</i>	76.3	80.5
Greene	<i>66.7</i>	<i>64.3</i>	<i>67.0</i>	<i>78.9</i>	<i>83.1</i>

⁷ According to the Department of Health, the date of the first prenatal care visit and the number of prenatal care visits are included on the birth certificate. The Department considers this data to be highly reliable, according to an email response to a NYSTLA query.

	15-17	18-19	20-24	25-34	35+
Hamilton	na	<i>100.0</i>	<i>75.0</i>	68.4	80.0
Livingston	<i>62.5</i>	<i>75.0</i>	59.4	<i>82.4</i>	78.7
Montgomery	<i>85.7</i>	57.9	<i>66.9</i>	<i>80.2</i>	<i>83.3</i>
Schoharie	<i>100.0</i>	<i>75.0</i>	<i>82.2</i>	<i>84.8</i>	71.8
Seneca	<i>71.4</i>	<i>88.9</i>	57.9	66.3	59.4
Schuyler	<i>75.0</i>	<i>80.0</i>	<i>72.7</i>	<i>78.9</i>	68.8
Sullivan	26.3	37.0	<i>72.5</i>	<i>83.9</i>	<i>82.1</i>
Tioga	<i>80.0</i>	54.3	<i>72.5</i>	<i>83.9</i>	<i>82.1</i>

Nor does designation of a county as an obstetrics-gynecology “shortage” area mean that pregnant women in those counties are more likely to receive late prenatal care or no prenatal care. As Table 4 illustrates, in most of the designated “shortage” counties and other counties with fewer than four obstetrician-gynecologists, pregnant women are *less* likely than women in the rest of the state outside of New York City to receive late or no prenatal care. (Percentages less than for the state outside of New York City are shown in blue and italics.)

Table 4. Percent of women with late/no prenatal care, by age, 2008. Counties designated as ob-gyn “shortage” areas or that otherwise have fewer than four ob-gyns.

	15-17	18-19	20-24	25-34	35+
New York State	15.1	11.7	9.5	6.4	5.7
New York City	18.6	15.3	12.3	9.4	8.2
Outside of NYC	11.5	8.3	6.5	3.5	3.1
Allegany	<i>6.7</i>	<i>0.0</i>	<i>5.5</i>	6.2	<i>2.6</i>
Cattaraugus	<i>6.5</i>	<i>2.6</i>	<i>7.6</i>	5.0	12.9
Chenango	<i>0.0</i>	<i>2.3</i>	<i>3.0</i>	<i>2.8</i>	3.4
Columbia	0.0	10.8	7.1	3.9	3.8
Cortland	<i>9.1</i>	<i>0.0</i>	<i>2.7</i>	<i>2.2</i>	5.5
Delaware	<i>0.0</i>	<i>0.0</i>	<i>5.2</i>	<i>2.2</i>	<i>1.7</i>
Essex	<i>0.0</i>	<i>0.0</i>	<i>1.7</i>	<i>2.9</i>	<i>2.4</i>
Greene	<i>11.1</i>	<i>0.0</i>	<i>4.3</i>	<i>3.5</i>	<i>1.4</i>
Hamilton	0.0	<i>0.0</i>	12.5	5.3	0.0
Livingston	<i>0.0</i>	<i>3.6</i>	<i>5.1</i>	<i>2.3</i>	<i>2.7</i>
Montgomery	<i>0.0</i>	10.5	11.0	9.1	6.4
Schoharie	<i>0.0</i>	10.7	<i>2.7</i>	<i>1.2</i>	<i>2.6</i>
Schuyler	<i>25.0</i>	<i>6.7</i>	<i>0.0</i>	<i>4.2</i>	<i>0.0</i>
Seneca	<i>0.0</i>	<i>0.0</i>	8.4	4.0	14.3
Sullivan	21.1	<i>5.6</i>	8.6	6.1	<i>2.3</i>
Tioga	<i>0.0</i>	8.6	<i>3.7</i>	<i>2.1</i>	<i>1.5</i>

Final observations

Low and declining birth rates, declining populations and out-migration of young adults, comparatively low household incomes and high numbers of Medicaid deliveries combine to discourage obstetrician-gynecologists from practicing in “shortage” counties. Ultimately, however, for doctors in any field of practice, lifestyle preferences may

discourage practicing in one of the state's physician "shortage" areas. According to a survey of hospitals and an accompanying report the Hospital Association of New York State issued in 2009, *The Doctor Can't See You Now*, rural areas of state "are experiencing the most severe physician shortages." Hospitals were asked to identify their biggest recruitment barriers. Number one among the top three barriers for rural hospitals was "geographic location," cited by 91% of hospitals. "Lack of opportunity for spouse" was cited by 56% of hospitals, reflecting how times have changed from when nearly all doctors were men and, if they were married, had a homemaker wife.

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Appendix

2007 and 2003 birth and fertility rates by county. Ob-gyn "shortage" counties are and other counties with fewer than four ob-gyns are in blue and asterisked.							
County	2007 birth rate**	Difference from NYS, 2007	2007 fertility rate***	1997 birth rate**	1997 Fertility rate***	1997 to 2007 birth rate	1997 to 2007 fertility rate
NEW YORK STATE	13.1	-	61.9	13.8	61.8	-5.1%	+0.2%
OUTSIDE OF NYC	11.8	-1.3	59.2	12.6	58.6	-6.3%	+1.0%
NYC	14.8	+1.7	65.2	15.7	66.0	-5.7%	-1.2%
Albany	10.8	-2.3	48.7	10.8	47.0	0.0%	+3.6%
Allegheny*	10.6	-2.5	56.9	11.0	52.4	-3.6%	+8.6%
Bronx	16.6	+3.5	71.1	18.3	77.2	-9.3%	-7.9%
Broome	10.8	-2.3	52.5	10.3	48.3	+4.6%	+8.7%
Cattaraugus*	12.4	-0.7	63.4	12.5	61.2	-0.8%	+3.6%
Cayuga	10.0	-2.1	52.1	11.0	54.7	-9.1%	-4.7%
Chautauqua	11.2	-1.9	55.7	11.5	57.2	-2.6%	-2.6%
Chemung	12.5	-0.6	65.5	10.3	51.6	+21.3%	+21.2%
Chenango**	10.7	-2.4	55.2	11.4	57.3	-6.1%	-3.7%
Clinton	10.2	-2.9	46.9	9.0	40.1	+13.3%	+16.9%
Columbia*	9.4	-3.7	51.4	10.2	52.5	-7.8%	-2.1%
Cortland*	10.9	-2.2	45.8	11.0	46.2	-0.9%	-0.9%
Delaware*	10.0	-3.1	53.8	10.4	55.4	-3.8%	-2.9%
Dutchess	10.5	-2.6	51.3	12.7	58.5	-17.3%	-7.2%
Essex*	9.4	-3.7	51.8	10.2	55.2	-7.8%	-6.1%
Erie	11.0	-2.1	55.6	11.9	56.1	7.6%	-0.9%
Fulton	11.0	-2.1	56.3	11.5	58.0	-4.3%	-2.9%
Franklin	11.0	-2.1	61.8	9.2	47.7	+19.6%	+29.5%
Genesee	12.3	-0.8	63.8	12.2	59.1	+0.8%	+7.9%
Greene*	9.3	-3.8	50.5	10.3	54.5	-9.7%	-7.3%
Hamilton*	6.5	-6.6	39.5	8.4	47.6	-22.6%	-17.0%
Herkimer	11.4	-1.7	57.9	10.8	55.0	+5.5%	+5.0%
Jefferson	15.2	+2.1	70.0	15.1	72.7	+0.7%	-3.7%
Kings	16.6	+3.5	74.2	16.7	70.9	-0.5%	+4.6%
Lewis	11.1	-2.0	55.9	11.8	59.7	-5.9%	-1.8%
Livingston*	9.5	-3.6	42.9	10.5	43.6	-9.5%	-1.6%
Madison	11.2	-1.9	51.5	11.4	50.6	-1.7%	+1.8%
Monroe	11.9	-1.2	57.7	13.0	57.7	-8.5%	0.0%
Montgomery*	12.3	-0.8	64.8	11.5	60.9	+6.4%	+6.4%
Nassau	11.6	-1.5	63.1	13.3	64.0	-12.8%	-1.6%
New York	12.8	-0.3	50.9	12.5	49.9	+2.4%	+2.0%
Niagara	10.5	-2.6	52.2	11.7	56.0	-10.2%	-6.8%
Oneida	11.2	-1.9	58.6	10.5	53.1	-1.6%	+9.4%
Onondaga	12.2	-0.9	57.9	12.4	55.3	-1.6%	+4.5%
Ontario	10.8	-2.3	54.1	11.9	55.3	-9.2%	-9.2%
Orange	14.1	+1.0	67.6	14.2	66.2	-0.7%	-2.1%
Orleans	10.6	-2.5	49.8	12.0	58.3	-11.8%	-11.7%
Oswego	11.3	-1.8	51.9	11.5	51.3	+1.2%	+1.1%

Otsego	8.8	-4.3	38.8	9.5	42.6	-7.4%	-8.9%
Putnam	10.4	-2.7	55.4	13.7	60.1	-24.1%	-7.8%
Rensselaer	11.9	-1.2	57.5	11.2	51.7	+6.2%	+10.1%
Rockland	16.2	+3.1	87.2	15.8	74.4	+2.5%	+14.7%
St. Lawrence	11.3	-1.8	53.5	10.4	49.3	+8.6%	+8.5%
Saratoga	10.9	-2.2	51.8	11.9	52.4	-8.4%	-1.1%
Schenectady	11.9	-1.2	60.3	11.7	56.6	+1.7%	+6.5%
Schoharie*	9.1	-4.0	44.5	9.9	46.0	-8.1%	-3.3%
Schuyler*	9.4	-3.7	50.0	10.2	52.5	-7.8%	-4.8%
Seneca*	11.3	-1.8	59.7	10.7	53.4	+5.3%	+11.8%
Steuben	12.1	-1.8	61.3	11.7	59.4	+3.4%	+3.2%
Sullivan*	12.4	-0.7	63.4	12.0	62.8	+0.4	+0.9%
Suffolk	12.7	-0.4	65.1	12.0	65.4	+5.8%	-0.4%
Tioga*	11.2	-1.9	58.4	11.8	57.3	-5.1%	+1.9%
Tompkins	9.3	-3.8	33.3 ⁸	8.4	30.9	+10.7%	+7.2%
Ulster	10.2	-2.9	51.1	11.4	53.5	-10.6%	+4.5%
Warren	9.5	-3.6	47.2	10.9	51.4	-13.3%	-8.2%
Washington	10.2	-2.9	53.3	9.8	50.9	+4.1%	+4.7%
Wayne	11.7	-1.4	60.2	12.6	64.8	-7.1%	-7.1%
Westchester	12.5	-0.6	64.1	13.9	65.0	-10.1%	-1.4%
Wyoming	10.3	-2.8	58.3	10.0	52.8	+3.0%	+10.4%
Yates	12.7	-0.4	64.3	11.4	66.7	+11.4%	-3.6%

** Live births per 1,000 population ***Live births per 1,000 female population age 15 to 44.

⁸ Low rate may be explained in part by presence of Cornell University and Ithaca College.