

Women of Child-Bearing Ages and High School Graduation Rates in Erie County, NY and Western New York

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Introduction

This study reviews data reflecting demographic variables that are likely to have a significant impact on future higher education enrollments in Erie County and Western New York, specifically, the population of women of child-bearing ages, birth rates, and high school graduation rates. The data were obtained from several sources including the U.S. Census Bureau 2008-2010 American Community Survey 3-Year Estimates, New York State Department of Health Vital Statistics, NYS Education Department resources, and Projections of High School Graduates – New York State – 2007-08 to 2018-19 from the Office of Higher Education Research and Information Systems. Appreciation is also extended to Carol Kostyniak, Secretary for Catholic Education, Diocese of Buffalo, for sharing results from a study on projections for women of childbearing age in Western New York, 2009-2014.

Women of Child-Bearing Ages and Birth Rates in Erie County and WNY

The population of Western New York has been declining over the past decade. In Erie County there was a 3.9% decrease from 2000-2007. Up until 2005 there was a shift in population from the City of Buffalo to the suburbs, but by 2007 the suburban population was also decreasing and it was evident that people were leaving the County altogether.¹ Compared to New York State and National age distributions, Erie County has slightly lower percentages of young people (under 18 years) and a high percentage of people 65 and older.

New York State Department of Health Vital Statistics show that the numbers of women in Erie County between the ages of 15 and 44 have steadily declined from 193,585 in 2002 to 175,439 in 2009 (see Figure 1.). Furthermore, the annual birth rate in Erie County has been consistently lower than that of New York State since at least 2003. In 2007 the birth rate per 1,000 was 11.0 for Erie County and 13.1 for New York State.

¹ 2010 2013 Community Health Assessment – Erie County, NY

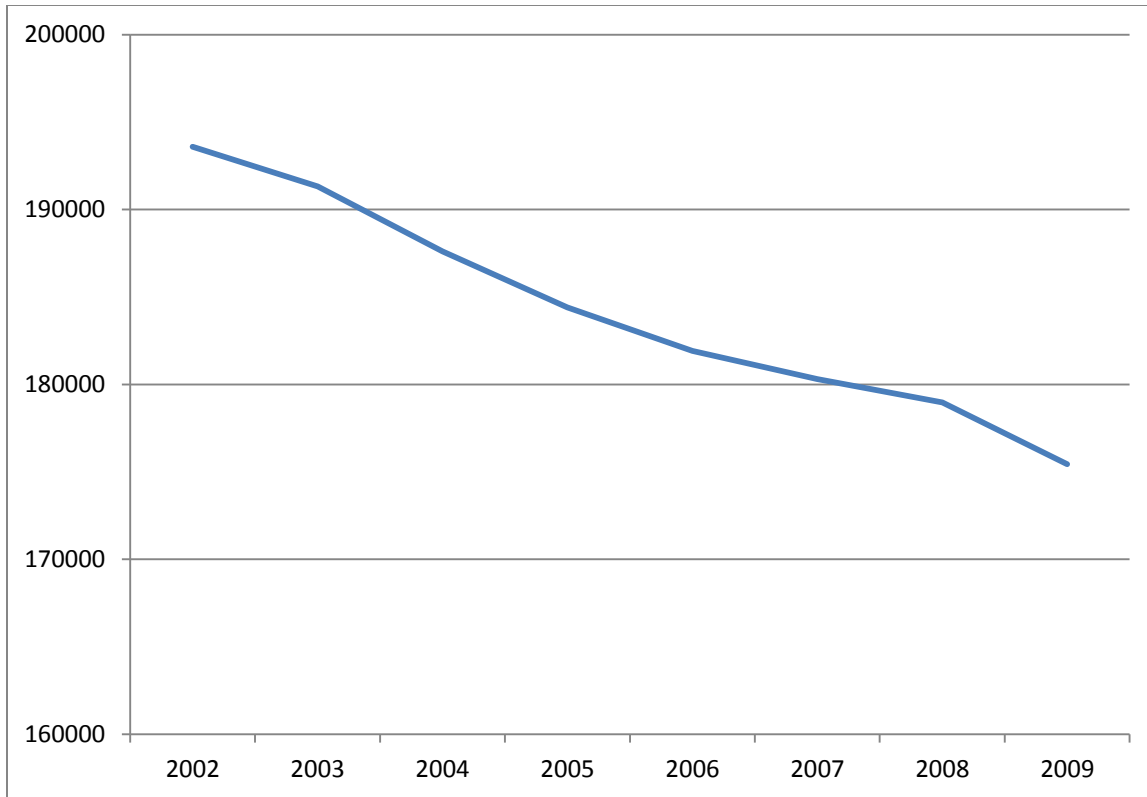


Figure 1. Female Population Aged 15-44 in Erie County, 2002-2009.

Source: New York State Department of health – Vital Statistics

Figure 2. below shows that since 2002 the pregnancy rate for females aged 15-44 has consistently declined until 2005 when these trends started to show slight increases.

Family Planning Graph 5 – Pregnancy rates age 15-44

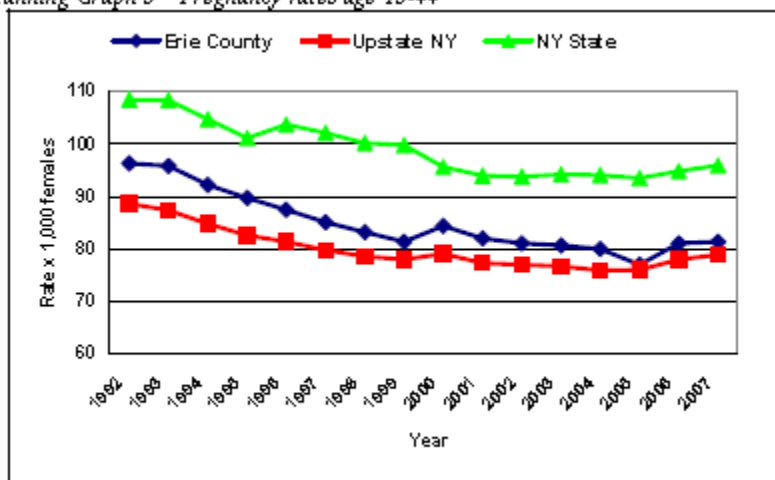


Figure 2. Pregnancy Rates ages 15-44, 1992 – 2007.

Source: 2010-2013 Community health Assessment, Erie County, New York

Source: 2010 2013 Community Health Assessment – Erie County, NY

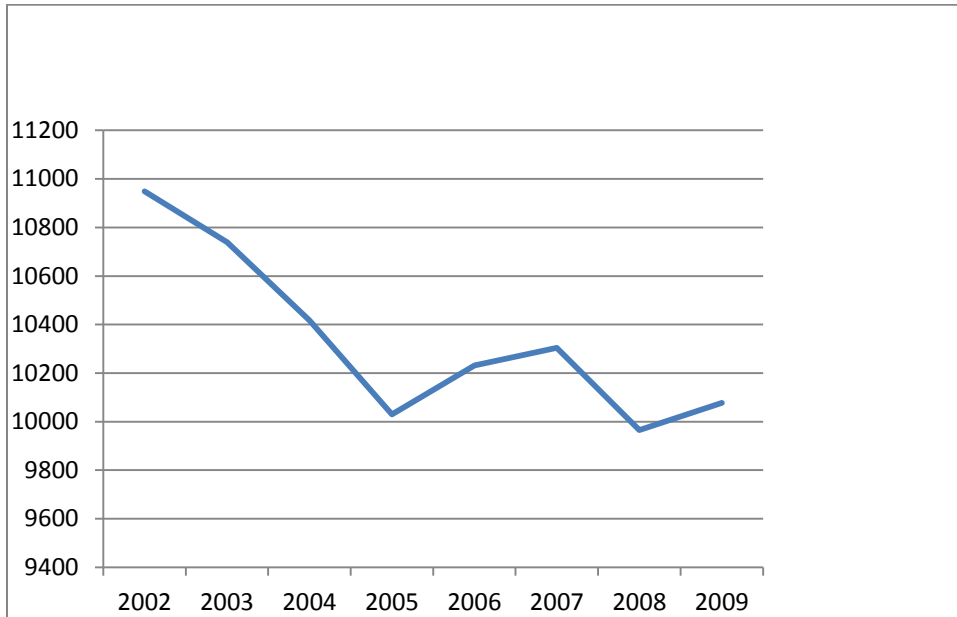


Figure 3. Total Live Births, Erie County, 2002-09.

Source: www.health.ny.gov/nysdoh/vital_statistics/2009/table54.htm

As shown in Figure 3, the total number of live births in Erie County has been steadily declining since 2002, down 8% overall. A further breakdown of this trend by school districts shows a decline over this period in 21 of 29 districts. Only the districts of Akron, Cheektowaga-Maryvale, Cheektowaga-Sloan, Depew, Grand Island, Lackawanna, North Collins, and West Seneca showed positive growth in numbers of live births over this 8 year period (figure 4.).

District	2002 – 2009 Change	Percentage Change
Akron	-35	-27.13%
Alden	5	4.90%
Amherst	-6	-2.13%
Buffalo	-233	-5.78%
Cheektowaga	-19	-8.76%
Chktwaga-Maryvale	15	7.89%
Cheektowaga-Sloan	1	0.93%
Clarence	-65	-25.29%
Cleveland-Hill	-62	-34.44%
Depew	2	1.16%
E. Aurora	-14	-11.67%
Eden	-29	-31.52%
Evans-Brant	-36	-17.22%
Frontier	-35	-9.70%
Gowanda	-8	-7.08%
Grand Island	15	8.43%
Hamburg	-31	-11.27%
Holland	-30	-31.58%
Iroquois	-30	-22.22%
Kenmore	-15	-2.20%
Lackawanna	24	9.72%
Lancaster	-75	-17.56%
N. Collins	4	8.16%
Orchard Park	-57	-18.04%
Springville-Griffith	-16	-11.43%
Sweet Home	-5	-1.55%
Tonawanda	-7	-4.58%
W. Seneca	4	0.78%
Williamsville	-118	-18.29%
Yorkshire-Pioneer	-15	-7.32%
TOTALS	-871	-7.96

Figure 4. Changes in Numbers of Live Births by School district, 2002-2009.

Source: www.health.ny.gov/nysdoh/vital_statistics/2009/table54.htm

A few years ago, the Office of Education for the Buffalo Diocese commissioned a study of the numbers of women of childbearing ages projected between 2009 to 2014 for all the counties of Western New York. The results are beautifully represented in a large, wall-size map showing areas of growth and decline down to specific blocks. While it was not possible to reproduce that map here, the overall results show very a very similar overall pattern of stagnant or declining numbers with small pockets of growth, mostly in suburban and some rural areas.

High School Graduation Rates

Data from the New York State Department of Education on 4-year graduation rates for cohorts of students beginning high school from 2001 to 2006, show a pattern of modest but steady increase until the 2006 cohort (graduating in 2010).

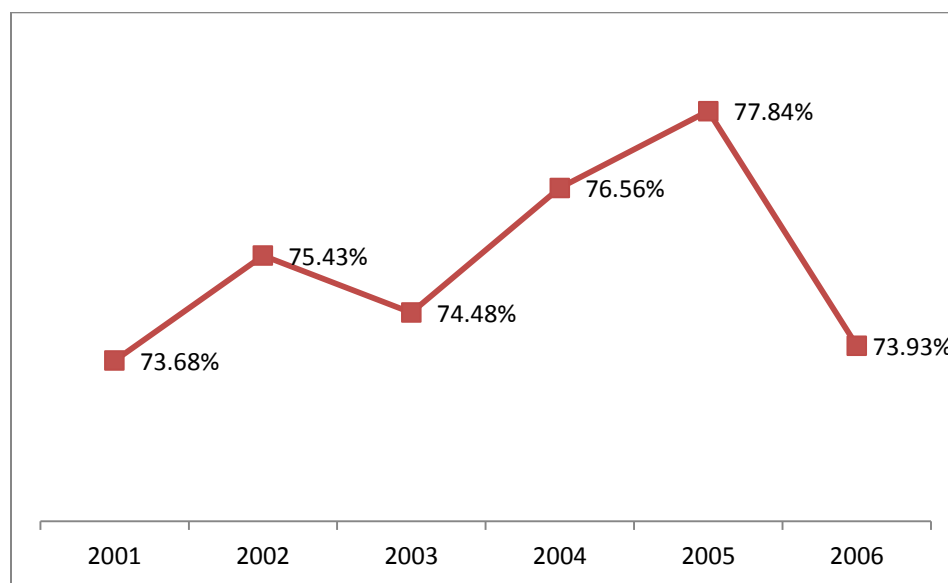


Figure 5. **4-year HS Graduation Rates by Cohort Year: Erie Co.**

Source: <http://www.p12.nysed.gov/irs/cohort/archive-grad.html>

As has been well-publicized in the local media, the graduation rates among schools in the Buffalo city district have been near or even below 50% during the period represented in Figure 5., while the graduation rates among suburban and rural districts has tended to fall between 80% to 95% and remained relatively steady or even increased slightly. The one exception among non-urban districts has been the Lackawanna Central School District where graduation rates have fluctuated between 45% and 67%.

Projections of Numbers of High School Graduates

Projections by the New York State Office of Higher Education, Research and Information Systems are for declining numbers of high school graduates at least through 2019. These projected declines are based on progressively smaller classes of elementary grades which are the result of a drop in the birth rates after the baby boom and the net out-migration of the population from the state. Across the state the decrease in high school graduates is projected to be a 16.5% decline. These changes are likely to vary by county/region and ethnicity. The greatest decline in numbers of graduates statewide is expected among Blacks (-28%) and Whites (-22%) with increases projected among Hispanic (+4%) and Asian (+15%) graduates. The decreases are projected to be greater for the New York City area (-19.8%) than for the rest of the state (-14.9%). The projections for the counties of Western New York are shown below.

Change '08 to '19	County
-39.2%	Orleans
-29.9%	Genesee
-28.0%	Cattaraugus
-22.5%	Wyoming
-21.3%	Chautauqua
-20.9%	Niagara
-17.7%	Erie
-12.4%	Allegany

Figure 6. Projected Change in NYS High School Graduates 2008 to 2019 Rank ordered for WNY Counties
Source: Projection of High School Graduates, NYS 2007-08 to 2018-19. NYS Office of Higher Education, Research and Information Systems.

Conclusions

The data presented above confirm that the population of Western New Yorkers attending local colleges and universities can be expected to decline for the foreseeable future. Most of this decline is expected to be the result of population loss due to out-migration and lower birth rates. This will undoubtedly increase competitive pressures for recruitment of local area high school graduates. Strategies that hope to maintain or even boost enrollment by recruiting beyond local graduates may find it necessary to increase those efforts over an increasingly wide area outside the Western New York region and into neighboring states or even broader.