



Trends in New York Registered Nurse Graduations, 1996-2006



School of Public Health
University at Albany, State University of New York

New York State Registered Nursing Graduations, 1996 – 2006

April 2005

Robert Martiniano

**The Center for Health Workforce Studies
School of Public Health, University at Albany
One University Place
Rensselaer, NY 12144-3456
Phone: (518) 402-0250
Fax: (518) 402-0252
<http://chws.albany.edu>**

NEW YORK STATE REGISTERED NURSING GRADUATIONS, 1996 - 2006

BACKGROUND

The Center for Health Workforce Studies at the School of Public Health, University at Albany (the Center) surveys registered nursing education programs in New York State annually to better understand trends affecting the supply of registered nurses (RNs) in the state. The brief survey includes questions on applications, acceptances, and graduations for the current year as well as projected graduations through 2006. This report summarizes the responses to the 2004 survey.

Of the 105 nursing programs in New York State, 98 responded to the survey for a 93% response rate. Data for the 7 non-respondents were imputed from responses to previous surveys; consequently, the following data reflect enrollment and graduations of all registered nursing programs in the state. It is important to note that *not all RN graduations represent new registered nurses* as many RNs who have completed an associate degree or diploma program return to school to obtain a bachelors degree in nursing (BSN). Based on survey responses, the Center estimates that approximately 40% of 2004 bachelor degree graduates were already RNs, which means that approximately 14% of all RN program graduates in the state were already licensed as RNs.

While not every RN educated in New York State will become licensed and practice in the state, and some RNs practicing in New York were educated outside of the state, RNs educated in New York are by far the single largest source of RNs practicing in the state. A 2002 survey of RNs in the state conducted by the Education Department found that over 78% of licensed RNs had completed their nursing education in the state.¹

Funding for the data analysis portion of this study was provided by the federal Bureau of Health Professions in the Health Resources and Services Administration.

KEY FINDINGS

- 1. For the second consecutive year, the number of RNs graduates in New York State increased over the previous year.**

It is estimated that nearly 6,300 individuals graduated from registered nursing education programs in New York State in 2004. This is the second successive year that RN graduations have increased, following six consecutive years of declining graduations. Even with this increase, the number of graduates in 2004 was 18% lower than the number in 1996, when the number of nursing graduates was at an all time high for the state (Table 1 and Figure 1).

¹ New York State Education Department, Office of the Professions and Fiscal Analysis and Research Unit, Registered Nurses in New York State, 2002, Volume 1: Demographic, Educational, and Workforce Characteristics, September 2003.

2. RN graduations are projected to continue to rise in 2005 and 2006.

RN graduations are projected to continue to rise in 2005 and 2006. The number of RN graduations in 2006 is expected to be more than 30% higher than the number of RN graduates in 2004. With these anticipated increases, RN graduations in 2006 are estimated to be 6% higher than 1996 RN graduations (Table 1 and Figure 1).

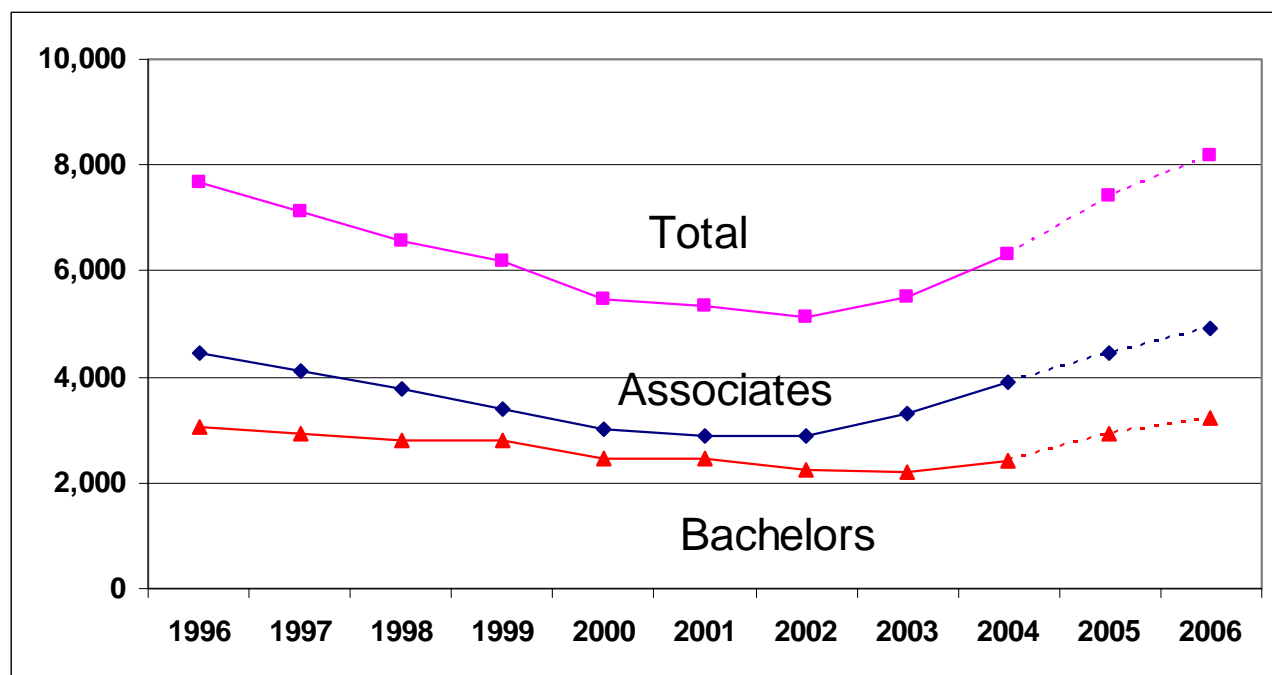
3. Graduations from both associate degree and bachelor degree RN programs increased between 2003 and 2004. Both associate and bachelor degree RN programs anticipate an increasing number of RN graduations through 2006.

Associate degree RN graduations decreased by more than 35% between 1996 and 2002, while bachelor degree RN graduations decreased by more than 28% between 1996 and 2003. Associate degree graduations began increasing in 2003 and are projected to rise by 71% between 2002 and 2006. Bachelor degree RN program graduations began increasing in 2004 and are expected to rise by 47% between 2003 and 2006 (Table 1 and Figure 1).

**Table 1
New York State RN Graduations by Degree Type, 1996 to 2006**

Degree Type	Actual Graduations									Projected Graduations	
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Associates	4,447	4,102	3,763	3,381	3,015	2,885	2,877	3,311	3,878	4,463	4,932
Bachelors	3,062	2,911	2,780	2,792	2,437	2,437	2,248	2,199	2,407	2,922	3,238
Diplomas	176	94	13	4	4	12	3	3	11	22	12
Total	7,685	7,107	6,556	6,177	5,456	5,334	5,128	5,513	6,296	7,407	8,182

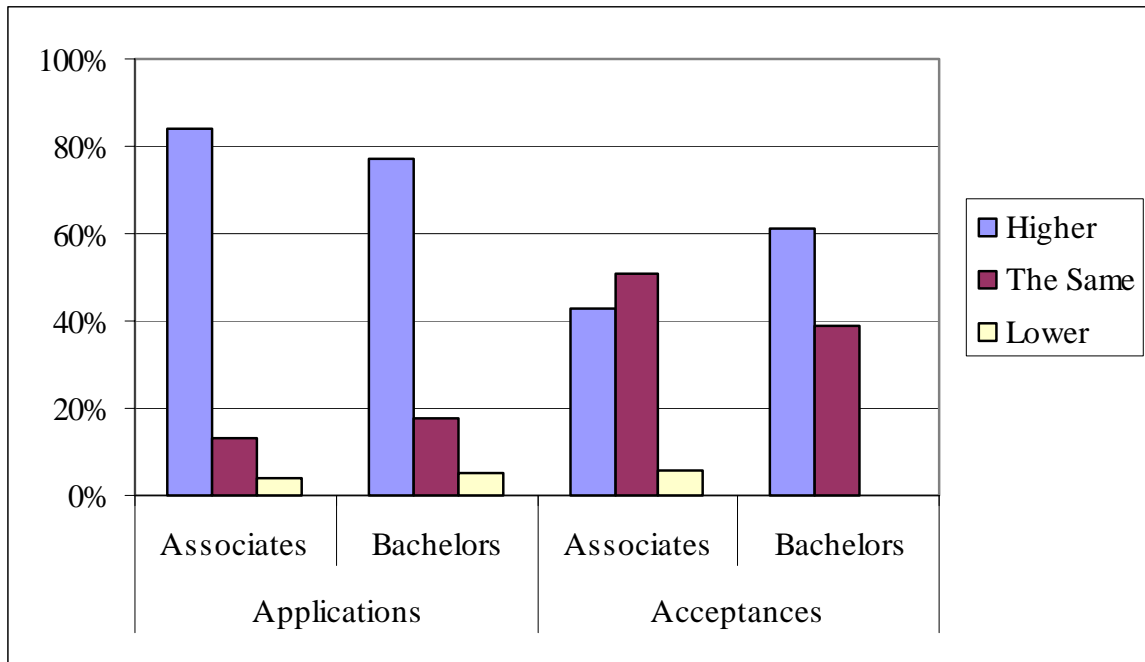
Figure 1
New York State RN Graduations by Degree Type, 1996 to 2006



4. **For the third consecutive year, both associate and bachelor degree programs reported a significant increase in applications and acceptances to their programs. Based on anticipated acceptances, RN graduations will likely rise for the next several years.**

Nearly 84% of associate degree programs and almost 77% of bachelor degree programs reported an increase in the number of applications in 2004 over 2003. This was the fourth consecutive year that nursing education programs reported an increasing number of applications over the prior year. Additionally, more than 43% of associate degree programs and over 61% of bachelor degree programs reported an increase in acceptances.

Figure 2
Percentage Change in the Number of Applications and Acceptances
By Degree Type Between 2003/04 and 2004/05



5. In 2004, an increasing number of survey respondents reported turning away qualified applicants, compared to 2003.

Fifty-seven percent of respondents (56) indicated they turned away qualified applicants, compared to 49% of the respondents (48) in 2003. Nearly 75% of associate degree programs and almost 40% of bachelor degree programs reported turning away qualified applicants in 2004, compared to 68% and 26%, respectively, in 2003. An increasing number of programs in five of the eight regions of the state reported turning away qualified applicants (Table 2).

Table 2
Percent of Respondents Reporting Turning Away Qualified Applicants
by Program Type and HSA Region

HSA Region	Type of Program					
	All Nursing Programs		Associate Degree		Bachelor Degree	
	2003	2004	2003	2004	2003	2004
New York State	49%	57%	68%	73%	26%	39%
Western NY	44%	44%	50%	50%	33%	33%
Finger Lakes	55%	80%	100%	100%	29%	67%
Central NY	50%	64%	70%	80%	0%	25%
NY-Penn	100%	100%	100%	100%	100%	100%
Northeastern NY	64%	57%	82%	55%	0%	67%
Hudson Valley	36%	43%	50%	63%	0%	17%
New York City	46%	54%	54%	83%	36%	25%
Nassau-Suffolk	71%	75%	100%	100%	33%	50%

6. It is estimated that an increasing number of qualified applicants were turned away in 2004.

The percent of nursing education programs that reported turning away 81 or more qualified applicants increased between 2003 and 2004. The percent of nursing education programs that reported turning away at least 41 qualified applicants more than doubled from 11% in 2003 to 23% in 2004. The percents of both associate degree and bachelor degree nursing education programs that reported turning away at least 41 qualified applicants also more than doubled, 12% to 25% and 9% to 21%, respectively (Table 3). Based on responses to these ranges, it is estimated that between 1,700 and 2,800 qualified applicants were turned away in 2004.

Table 3
Number of Qualified Applicants Turned Away
by Program Type

Number of Qualified Applicants Turned Away	Type of Program					
	All Nursing Programs		Associate Degree		Bachelor Degree	
	2003	2004	2003	2004	2003	2004
1 – 20	24%	26%	35%	32%	6%	18%
21 – 40	17%	10%	21%	16%	11%	0%
41 – 60	0%	5%	0%	4%	0%	8%
61 – 80	3%	5%	5%	5%	0%	5%
81 or More	8%	13%	7%	16%	9%	8%

7. Lack of faculty continued to be the main reason that nursing education programs reported turning away qualified applicants.

Seventy-seven percent (43 of 56) of programs that reported turning away qualified applicants cited lack of faculty as a reason. Over 50% percent of these programs reported that lack of clinical training sites was another reason for turning away qualified applicants. Another 20% cited space at the school as a reason for turning away qualified applicants.

Of those RN education programs that cited lack of faculty as the reason for turning away qualified applicants, 33 (77%) were publicly sponsored programs and 33 (77%) were associate degree programs (Table 4).

**Table 4
Reasons for Turning Away Qualified Applicants By Sponsorship and by Degree Type**

Reason for Turning Away Qualified Applicant	Total	Sponsorship		Degree Type	
		Public	Private	Associates Degree	Bachelors Degree
Lack of Faculty	43	33	10	33	10
Lack of Training Sites	31	23	8	24	7
Lack of Financial Aid	6	3	3	4	2
Lack of classroom/lab space	11	5	6	9	2
Other	14	13	1	8	6
Totals²	56	40	16	42	14

8. Forty-four percent (43) of all survey respondents reported actively recruiting faculty.

Less than half (44%) of the all respondents indicated they were actively recruiting nursing faculty. Slightly more privately sponsored nursing programs reported actively recruiting faculty than publicly sponsored nursing programs, and more associate degree programs reported actively recruiting faculty than bachelor degree programs.

Of the forty-three programs that reported turning away qualified applicants due to lack of faculty, nineteen (44%) were actively recruiting faculty. Fifteen of the thirty-three publicly sponsored nursing programs (45%) that reported turning qualified applicants due to lack of faculty were actively recruiting faculty. Fourteen of the thirty-three associate degree nursing programs (42%) that reported turning away qualified applicants due to lack of staff were actively recruiting faculty (Table 5).

² Nursing education programs may indicate more than one reason for turning away qualified applicants.

Table 5
Nursing Programs Actively Recruiting Faculty

	Total	Sponsor		Degree Type		
		Public	Private	Associates Degree	Bachelors Degree	Diploma
Turned away qualified applicants and cited lack of faculty as reason	19	15	4	14	5	0
Turned away qualified applicants and cited other reasons	6	1	5	2	4	0
Didn't turn away qualified applicants	18	5	13	6	11	1
Totals	43	21	22	22	20	1

9. Increases in RN graduations are projected for all regions of New York State between 2005 and 2006.

All regions in New York State experienced double digit declines in RN graduations between 1996 and 2002, ranging from a low of 17% in the Northeastern New York Region to a high of 51% in the NY-Penn Region. In contrast, all regions are projected to experience significant increases in RN graduations between 2002 and 2006, ranging from 41% in the Northeastern New York Region to 87% in the Finger Lakes Region. Every region is projected to have an increase in the number of RN graduations between 2004 and 2005. Projected increases in graduations in 2006 will result in RN graduations in six of the eight regions that will be higher than their 1996 RN graduations (Figure 3 and Table 6).

Figure 3
Projected Percentage Increase in RN Graduations, 2002 – 2006, by HSA Region

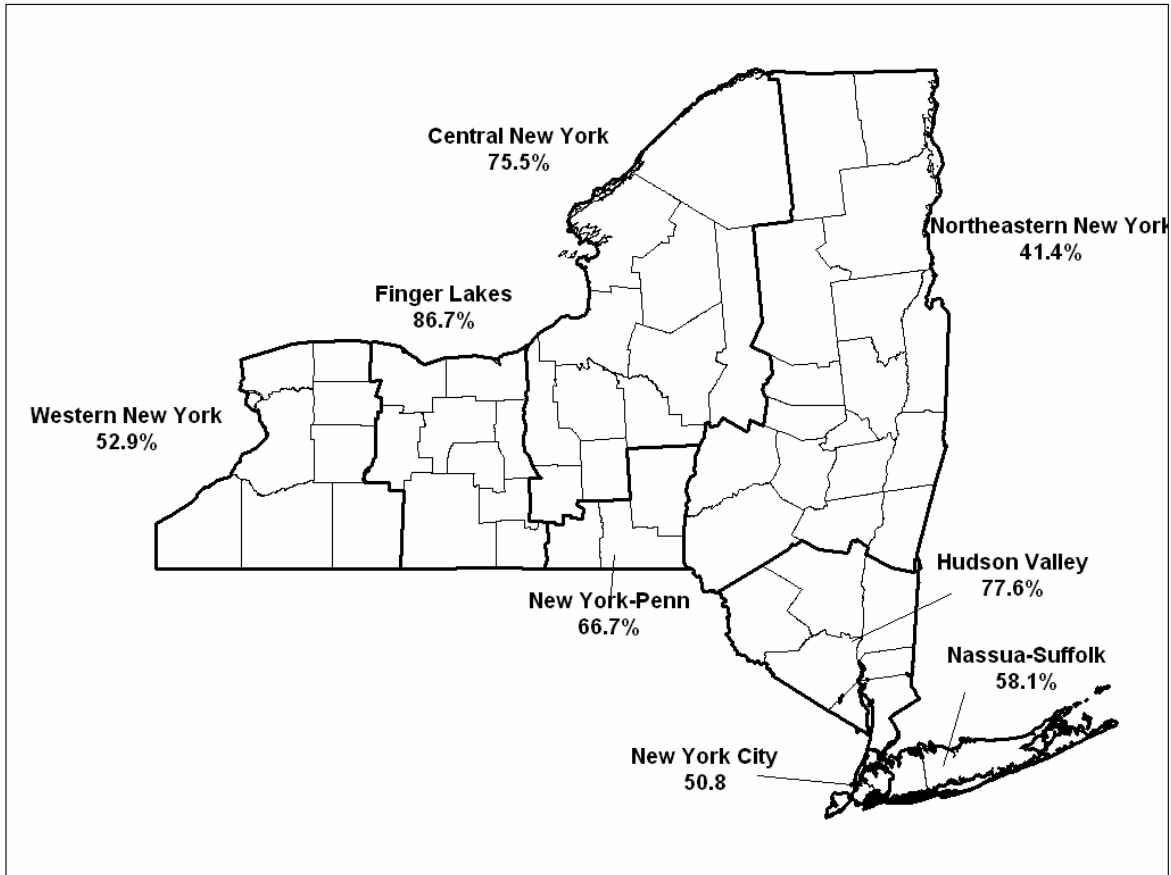


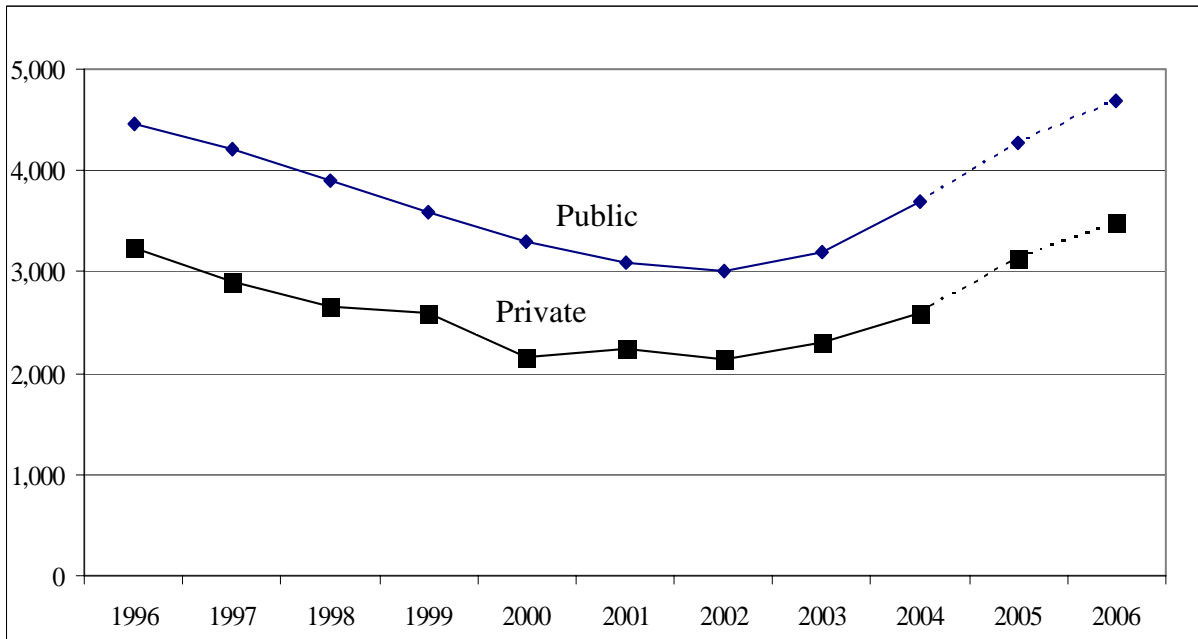
Table 6
Percent Change in the Number of RN Graduations by Region

Region	1996	2002	2003	2004	Projected		Percent Change		
					2005	2006	96 to 02	02 to 06	96 to 06
Western New York	890	535	473	605	735	818	-39.9%	52.9%	-8.1%
Finger Lakes	654	442	482	536	704	825	-32.4%	86.7%	26.1%
Central NY	961	666	724	835	1,038	1,169	-30.7%	75.5%	21.6%
NY-Penn	92	45	50	60	70	75	-51.1%	66.7%	-18.5%
Northeastern NY	641	531	628	658	673	751	-17.2%	41.4%	17.2%
Hudson Valley	1,058	616	689	886	996	1,094	-41.8%	77.6%	3.4%
New York City	2,258	1,544	1,605	1,793	2,111	2,329	-31.6%	50.8%	3.1%
Long Island	937	677	795	867	1,027	1,070	-27.7%	58.1%	14.2%

10. **Between 2002 and 2003, both publicly and privately sponsored RN education program graduations increased and are projected to continue increasing through 2006.**

RN graduations have been steadily increasing since 2002 in both publicly sponsored (SUNY, CUNY, and Excelsior College) and privately sponsored programs (including hospital based programs) and are projected to continue increasing through 2006 (Figure 4).

Figure 4
Change in RN Graduations in Public and Independent Nursing Programs



DISCUSSION

While increased enrollments in RN education programs and renewed interest in nursing as a career have fueled an increase in nursing graduations, RN production in New York State must increase beyond currently projected 2006 levels to meet the future demand for RNs in the state.

The federal Bureau of Labor Statistics (BLS) forecasts that between 2002 and 2012, over 1.1 million RN job openings will occur in the United States, including 627,000 new jobs. New York State currently employs approximately 7.3% of the active nursing workforce, and it will need to produce nearly 80,000 *new* RNs over that same 10 year period, or 8,000 *new* RNs per year, just to meet BLS projections. With an estimated 14% of RN graduates already holding an RN license, New York State would have to produce more than 9,300 RNs per year to produce 8,000 new RNs.

HRSA's National Center for Health Workforce Analysis estimated that New York State had a shortage of over 16,000 RNs, or 11%, in 2000 and is projecting a shortage of over 12,500 RNs, or 8%, by 2005. However, by 2010, the shortage is projected to exceed 17,000 RNs, or 10% of the nursing workforce and increase to almost 30,000, or 16%, by 2015³.

One factor affecting future production of RNs is the capacity of nursing programs to produce more graduates. The 2004 survey found that many New York State nursing programs are currently at capacity and nearly half of the programs are actively recruiting nursing faculty. Problems related to recruitment and retention of faculty, inadequate classroom and laboratory space, and an insufficient number of clinical training sites must be addressed in order for RN education programs to accommodate more entrants in registered nursing.

Nursing scholarship and loan repayment programs are an approach often suggested for addressing the RN shortage. When targeted appropriately, nursing scholarships can enhance the diversity of the RN workforce by providing opportunities to qualified under represented minority applicants who would not be able to afford nursing school and can address problems of maldistribution by targeting placements to underserved communities. This can be particularly effective when partnered with other strategies such as collaborations between nursing programs and high schools, mentoring programs, and other targeted recruitment tools.

The utility of scholarships and loan repayment for increasing the supply of RNs overall, however, is limited by the capacity limitations of RN education programs in the State. To fully address current or future RN shortages in New York State, a multi-pronged approach is required that will address not only the issue of attracting students into nursing but also the issue of also removing the barriers to expanding program capacity.

³ *Projected Supply, Demand, and Shortages of Registered Nurses: 2000 – 2020*, Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis, July 2002.