

Trends in New York Registered Nursing Graduations, 1996 – 2011

July 2011

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The Center for Health Workforce Studies is a not-for-profit research organization whose mission is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The Center's work assists health, professional, and education organizations; policy makers and planners; and other stakeholders to understand issues related to the supply, demand, distribution, and use of health workers.

PREFACE

This report summarizes the results of the 2010 survey of New York registered nursing education programs conducted by the New York Center for Health Workforce Studies (the Center). Deans and directors of nursing education programs are surveyed annually and asked questions about applications, admissions, and registered nursing (RN) graduations from their programs, as well as barriers to expanding student capacity and their assessment of the local job market for newly-trained RNs. The primary goal of the survey is to document trends in nursing graduations statewide and regionally in New York and understand how these trends affect the supply of RNs in the state. This is the Center's 10th annual survey of nursing education programs in New York and was conducted from the fall of 2010 through spring of 2011.

This report was prepared by Robert Martiniano, Maria MacPherson, and Jean Moore from the Center. The Center is a not-for-profit research center at the School of Public Health, University at Albany, State University of New York. The Center's mission is to provide timely accurate data and conduct policy-relevant research about the health workforce. The ideas expressed in this report are those of the Center for Health Workforce Studies and do not necessarily represent views or positions of the School of Public Health, the University at Albany, or the State University of New York.

BACKGROUND

The Center for Health Workforce Studies (the Center) surveys program directors of registered nursing education programs in New York annually to better understand trends affecting the production of registered nurses (RNs) in the state. The most recent survey was conducted from the fall of 2010 through spring of 2011. The survey included questions about applications, acceptances, and graduations for 2010, as well as projected graduations through 2011. The survey also asked about barriers to admitting more students and perceptions about the local job market for new RNs. This report summarizes the findings from the survey.

In 2010, there were 119 nursing programs in New York. Since 2002, 15 new nursing programs have been approved by the New York State Education Department, though not all have graduated students yet, and one program has closed. Of the 119 nursing programs, 107 responded to the survey for a 90% response rate. Data for the 12 nonrespondents were imputed from responses to previous surveys; consequently, the following data reflect estimated enrollments and graduations for all registered nursing programs in the state. Data for City University of New York (CUNY) schools were also updated using CUNY's annual data report on nursing degree programs.

RN graduates include both new RN graduates and graduates from bachelor of science in nursing (BSN) completion programs, i.e., diploma or associate degree RNs who continue their education to complete a bachelor's degree in nursing. The Center estimates that approximately 34% of the 2010 total BSN graduates were already licensed RNs. Consequently, approximately 16% of all 2010 RN graduates in the state were already licensed RNs.

Not every RN educated in New York practices in the state, and some RNs practicing in New York were educated outside the state. RNs educated in New York, however, represent the single largest source of RNs practicing in the state. An analysis of the New York RN re-registration survey data indicates that 77% of RNs actively practicing in New York received their initial nursing degree in New York.

FINDINGS

Summary of Findings

RN graduations in New York increased slightly between 2009 and 2010, by about 250, or 3%, and it was the eighth consecutive annual increase. Further, RN graduations are projected to increase by 8% between 2010 and 2011. The vast majority (99%) of the additional graduations between 2009 and 2010 were from BSN completion programs. While graduations continued to rise, the job market remains extremely competitive for newly-trained RNs. In stark contrast to previous years, substantially fewer program directors reported “many” job opportunities in their area for newly-trained RNs.

Key Findings

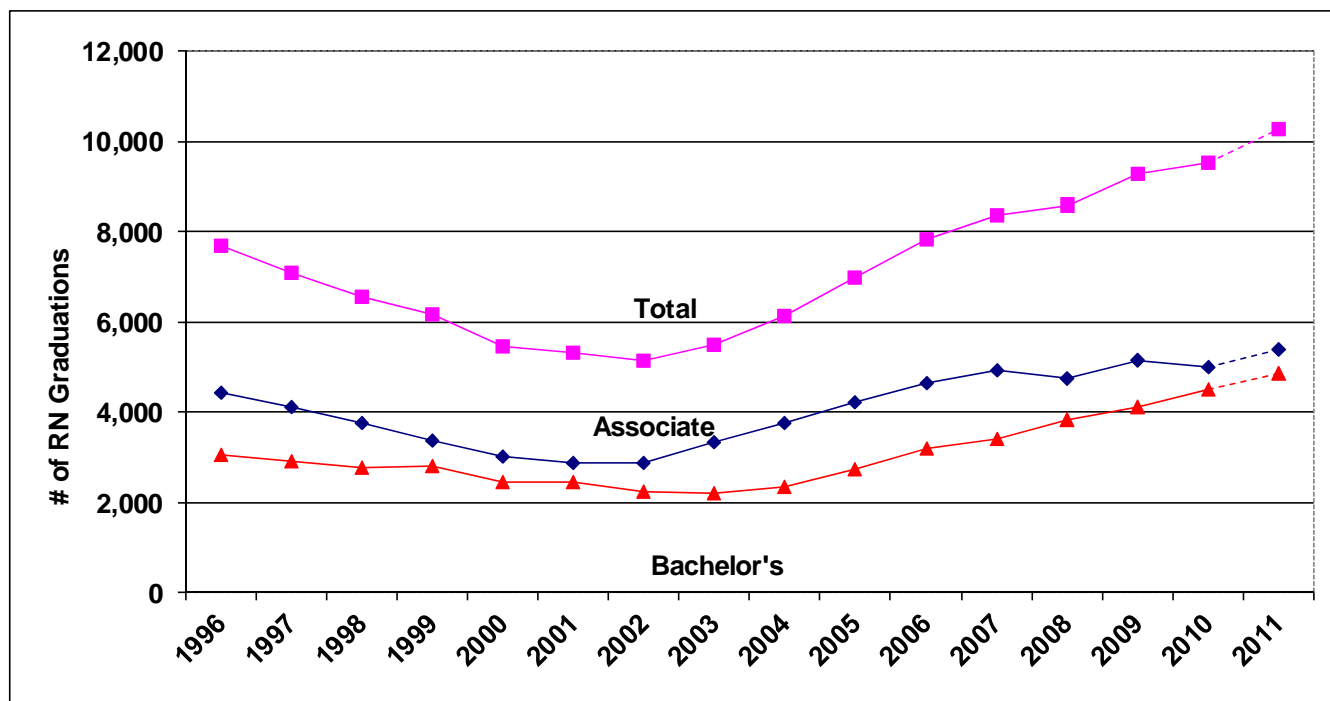
- 1. For the eighth consecutive year, the number of RN graduates in New York in 2010 increased over the number of RN graduations in the previous year. The vast majority of additional RN graduates between 2009 and 2010, however, were existing RNs completing BSN degrees.**

It is estimated that in 2010 there were more than 9,500 graduates from RN education programs in New York. This was the eighth successive year that RN graduations have increased. The total graduations in 2010 represented an 86% increase in RN graduations since 2002, when RN graduations first started rising, following six consecutive years of declines in RN graduations (Figure 1). Almost 99% of the increase in RN graduations in 2010 compared to 2009 were existing RNs completing BSNs.

- 2. RN graduations in New York are projected to continue to rise in 2011.**

The number of RN graduations in New York in 2011 is expected to be grow by more than 700, or by 8%, between 2010 and 2011, to nearly 10,300, almost double the number of RN graduations in 2002 (Figure 1).

Figure 1
New York RN Graduations by Degree Type, 1996 to 2011



3. Graduations from both ADN and BSN programs increased between 2002 and 2010.

Between 2002 and 2010, total BSN graduations increased by 101%. During the same time period, ADN graduations increased by 74%, though that included slight declines in ADN graduations between 2007 and 2008 and between 2009 and 2010. ADN and total BSN graduations are also projected to increase again in 2011 (Table 1 and Figure 2).

4. The number of graduates from BSN completion programs has steadily risen since 2007.

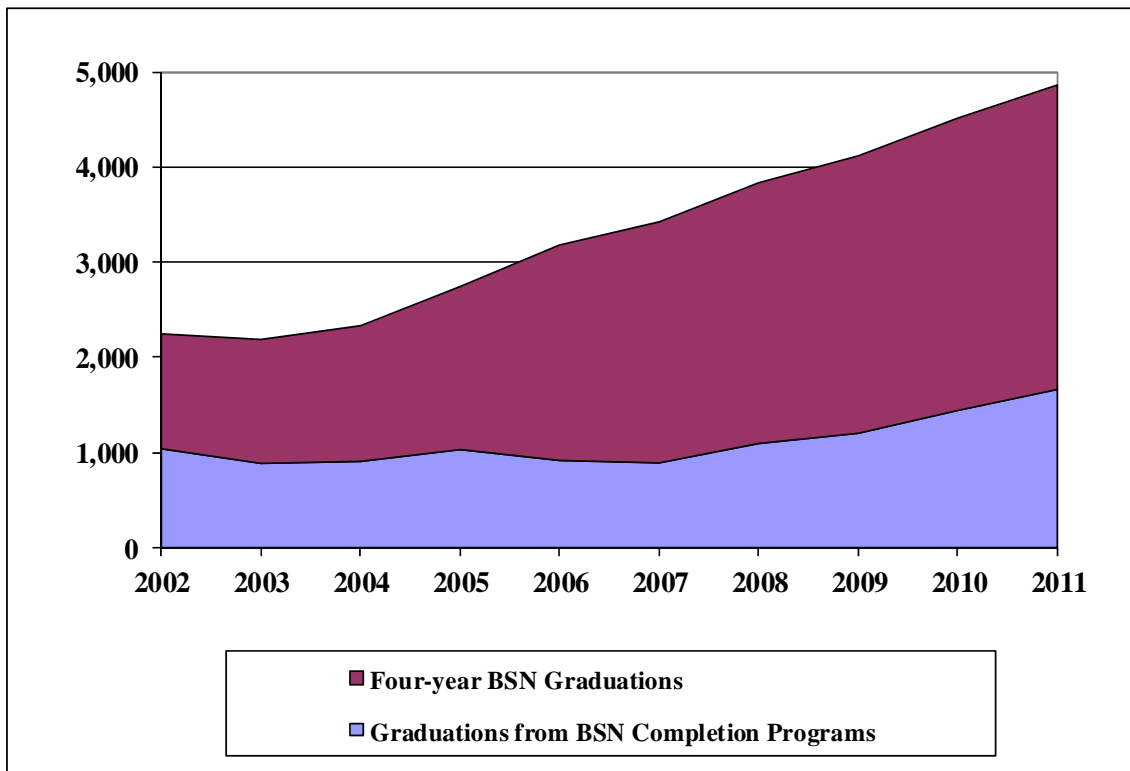
Since 2007, there has been steady growth in the number of RN graduations from BSN completion programs, accounting for an increasing percentage of total BSN graduations. Of the 15 new nursing programs added since 2002, nine were BSN completion programs and nearly 40% of graduations from these new programs were BSN completers. In 2010, BSN completer graduations accounted for 32% of total BSN graduations and 15% of overall RN graduations, up from 25% and 10%, respectively, in 2007. It is projected that in 2011, BSN completer

graduations will account for 34% of total BSN graduations and 16% of overall RN graduations (Table 1 and Figure 2).

Table 1
Graduations from New York RN Education Programs by Degree Type, 1996 to 2011

School Year		Degree Type					Totals
		ADN	BSN			Diploma	
			Total	4-Year	Completer		
Actual Graduations	1996	4,447	3,062	N/A	N/A	176	7,685
	1997	4,102	2,911	N/A	N/A	94	7,107
	1998	3,763	2,780	N/A	N/A	13	6,556
	1999	3,381	2,792	N/A	N/A	4	6,177
	2000	3,015	2,437	N/A	N/A	4	5,456
	2001	2,885	2,437	N/A	N/A	12	5,334
	2002	2,877	2,248	1,208	1,040	3	5,128
	2003	3,323	2,189	1,303	886	3	5,515
	2004	3,780	2,334	1,427	907	11	6,125
	2005	4,211	2,745	1,714	1,031	14	6,970
	2006	4,640	3,183	2,266	917	8	7,831
	2007	4,918	3,426	2,535	891	9	8,353
	2008	4,750	3,837	2,742	1,095	6	8,593
2009	5,156	4,121	2,919	1,202	9	9,286	
2010	4,999	4,517	3,074	1,443	14	9,530	
Projected Graduations	2011	5,395	4,866	3,203	1,663	9	10,270

Figure 2
Graduations from BSN Four-Year and BSN Completion Programs, 2002 – 2011



5. Between 2002 and 2011, RN graduations are projected to increase in all regions of New York.

All regions¹ in New York are projected to experience substantial increases in RN graduations in 2011, compared to 2002, with the greatest increases in the Finger Lakes (193%), Southern Tier (141%), and Long Island (135%) regions. The smallest increases are expected in Central New York (38%), North Country (48%), and Capital District (51%) regions (Figure 3 and Table 2).

¹ This report uses New York State Department of Labor regions as outlined on the map on page 9.

Figure 3
Projected Percentage Increase in RN Graduations, 2002 – 2011, by Region

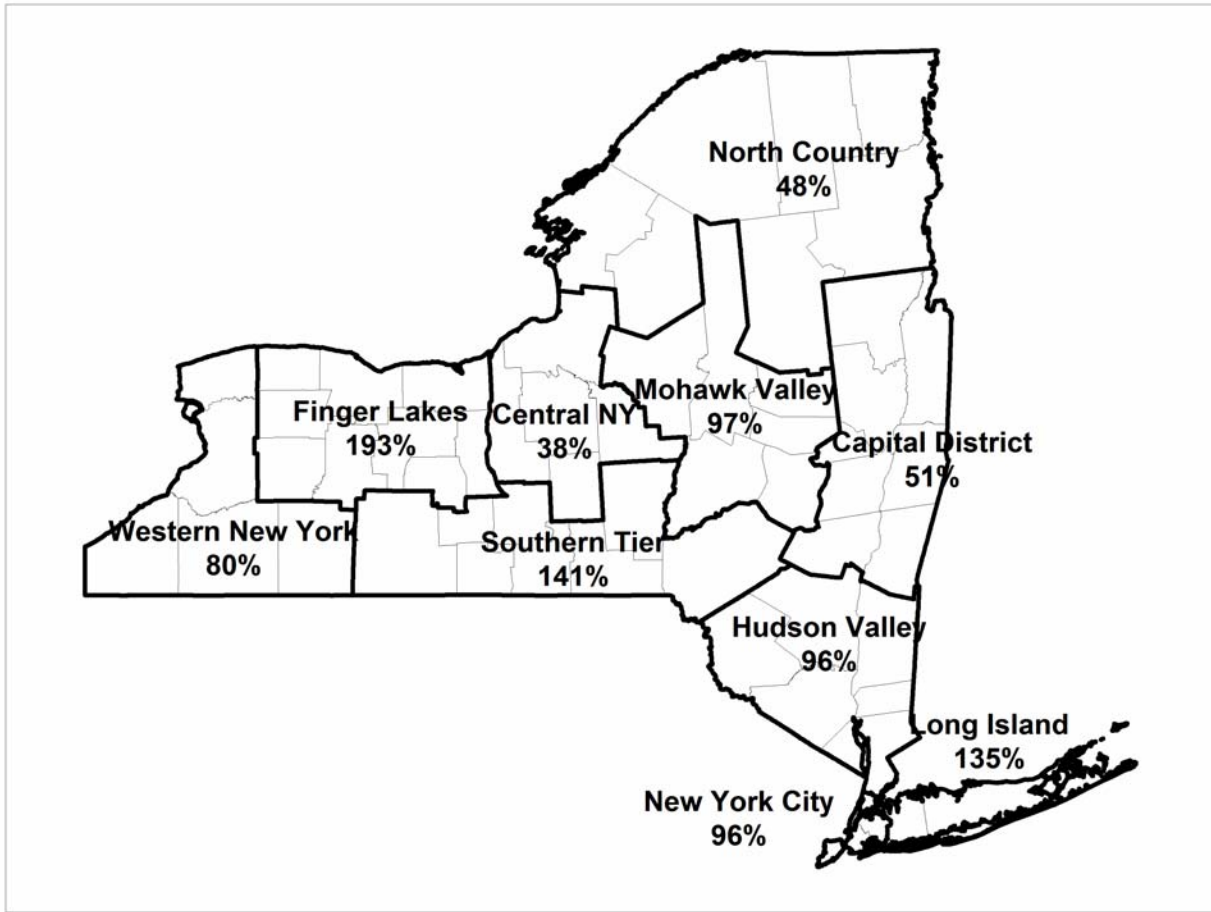


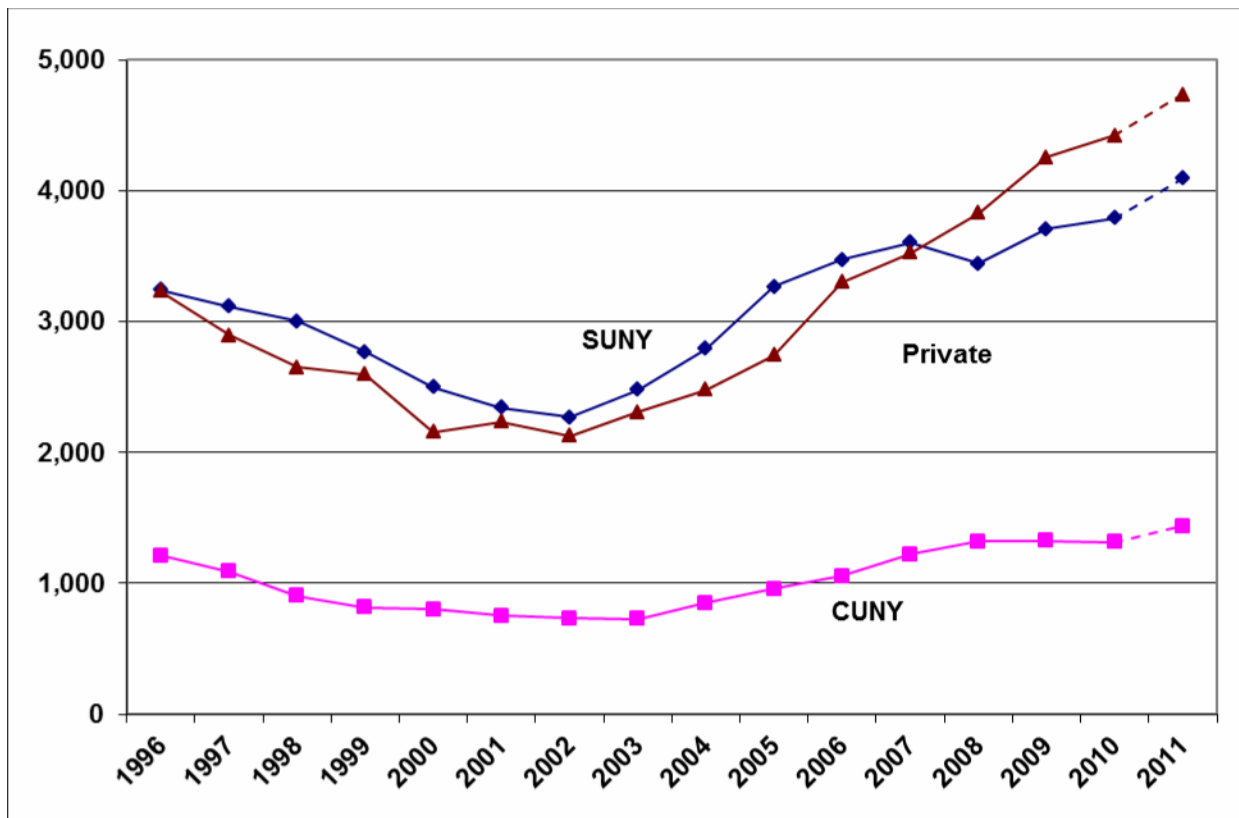
Table 2
Total Number of RN Graduations by Region

Region	2002	2003	2006	2007	2008	2009	2010	2011 Projected	
								Number	% Increase over 2002
Capital District	358	395	458	456	449	458	499	539	51%
Central New York	325	331	398	388	387	394	455	449	38%
Finger Lakes	385	431	657	698	790	878	935	1,126	193%
Hudson Valley	616	689	1,045	1,005	1,081	1,169	1,199	1,208	96%
Long Island	677	795	1,302	1,606	1,467	1,546	1,550	1,593	135%
Mohawk Valley	210	226	305	284	332	329	354	413	97%
New York City	1,544	1,607	2,274	2,461	2,641	2,794	2,826	3,028	96%
North Country	170	166	227	208	178	205	194	251	48%
Southern Tier	236	335	462	490	469	501	506	568	141%
Western New York	535	473	644	679	713	919	887	961	80%

6. Between 2002 and 2011, RN graduations from privately sponsored nursing education programs are projected to grow faster than RN graduations from either SUNY or CUNY schools.

Between 2002 and 2011, RN graduations from privately sponsored programs, including those based in hospitals, are projected to more than double, increasing by 123%. During the same period, RN graduations from State University of New York (SUNY) and CUNY programs are projected to increase by more than 80% and 97%, respectively. In 2010, 46% of all RN graduations were from privately sponsored nursing education programs, 40% from SUNY, and 14% from CUNY (Figure 4).

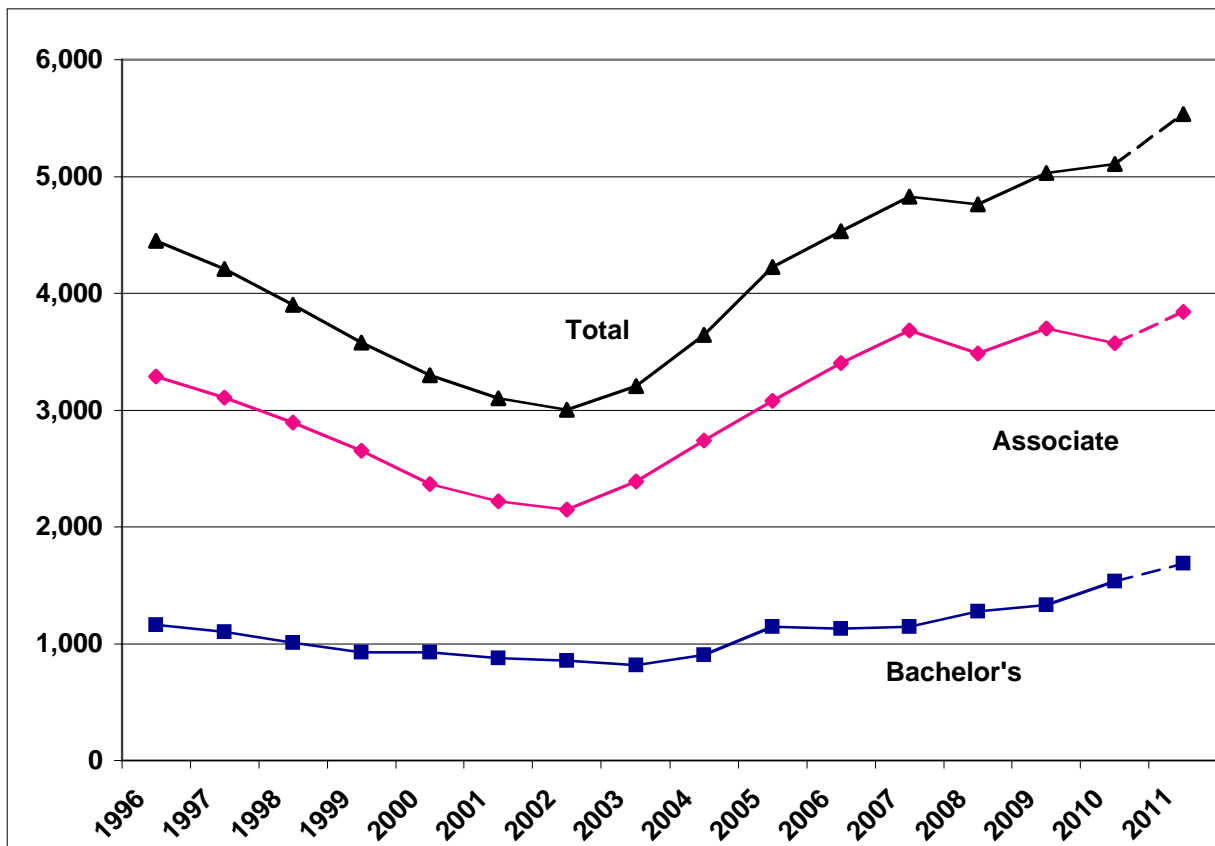
**Figure 4
Graduations from New York RN Education Programs by Sponsor, 1996 to 2011**



7. Graduations from publicly sponsored ADN programs are projected to increase by nearly 1,700 between 2002 and 2011.

Graduations from publicly sponsored (SUNY and CUNY) ADN programs are projected to grow by almost 1,700, or 79% between 2002 and 2011, and graduations from SUNY and CUNY sponsored BSN programs are projected to increase by more than 800, or 98%, over the same period (Figure 5).

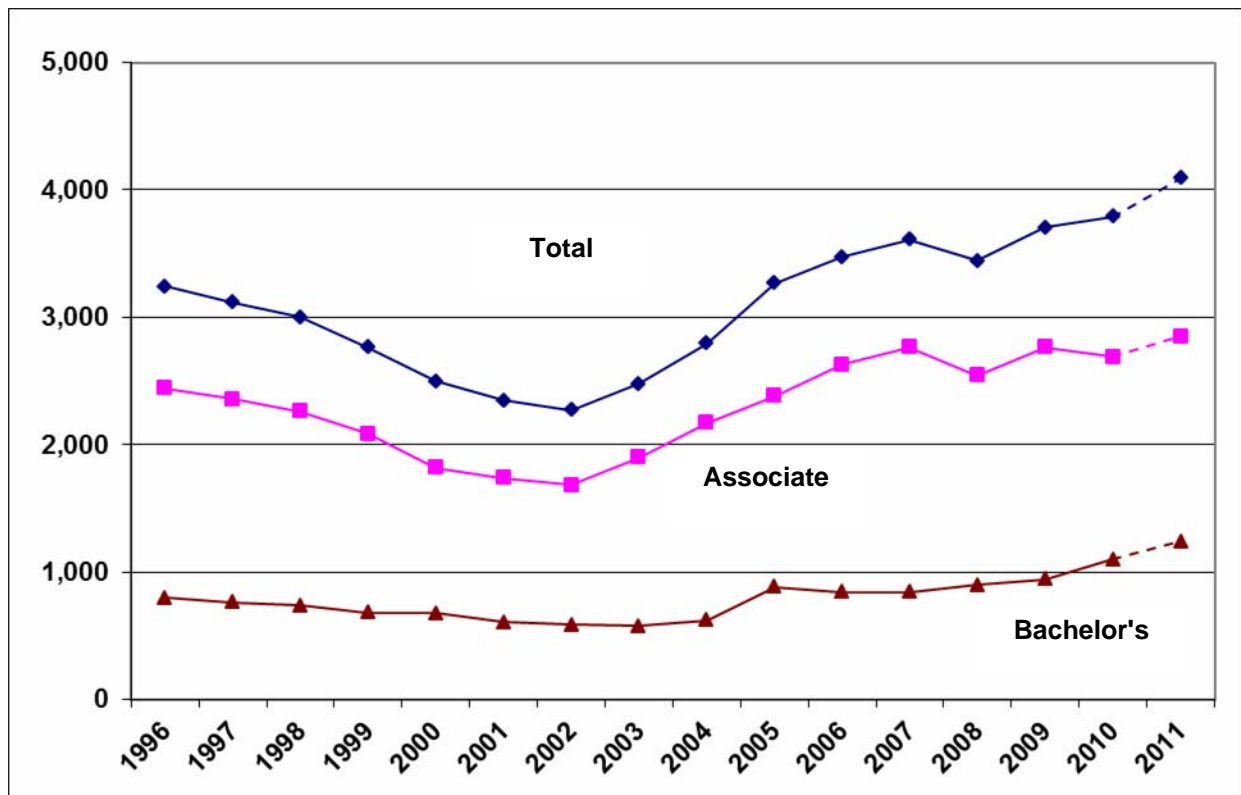
**Figure 5
Publicly Sponsored RN Graduations by Degree Type, 1996 to 2011**



8. In 2010, RN graduations from SUNY sponsored ADN programs accounted for 71% of total SUNY RN graduations.

In 2010, there were nearly 3,800 graduations from SUNY sponsored education programs with ADN graduations representing 71% of all SUNY RN graduations. Between 2002 and 2011, it is projected that overall RN graduations from SUNY sponsored programs will grow by 80%, with total BSN graduations increasing by 111% and ADN graduations growing by 70% (Figure 6). Of the 12 new BSN programs approved since 2002, six are SUNY sponsored and five of them are BSN completion programs. Of the 1,100 BSN graduations from SUNY sponsored nursing education programs in 2010, 40% were from BSN completion programs. The percentage of BSN completer graduations as a share of total BSN graduations from SUNY sponsored programs is projected to increase to 45% in 2011.

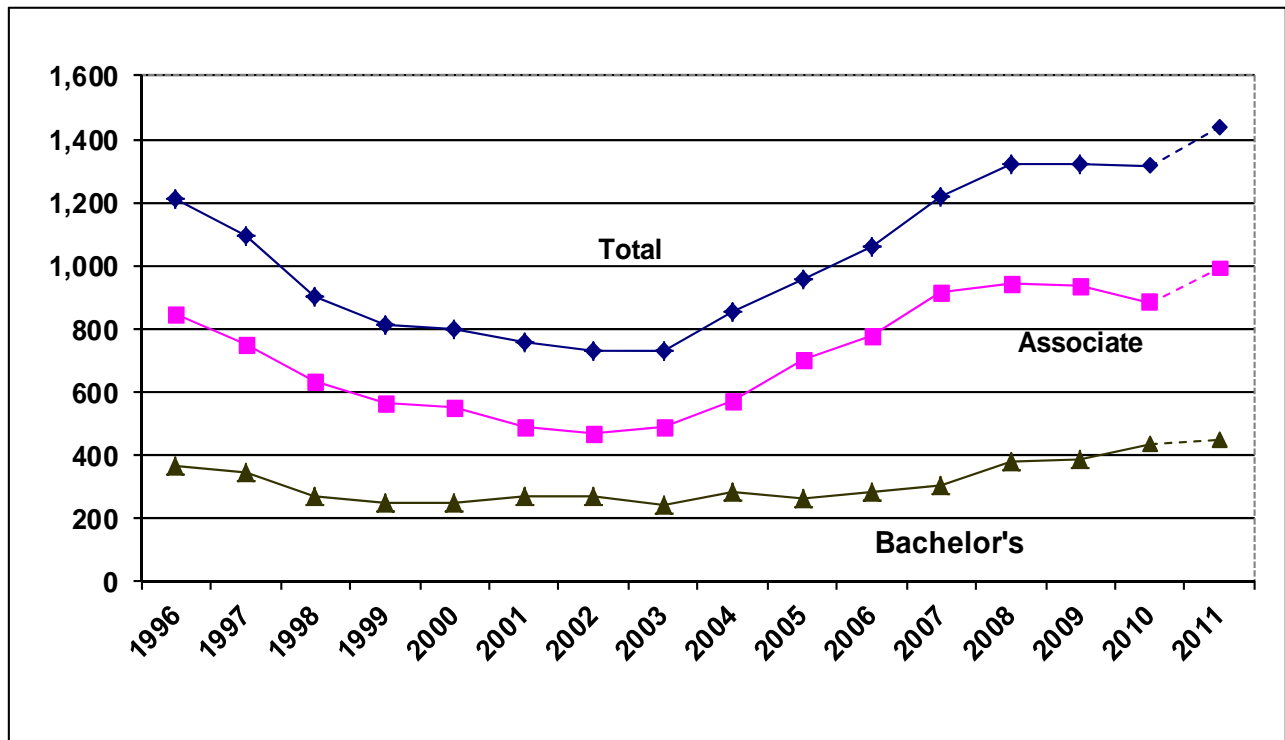
**Figure 6
Graduations from SUNY RN Education Programs by Degree Type, 1996 to 2011**



9. Between 2002 and 2011, ADN graduations from CUNY RN programs are projected to increase at a faster rate than BSN graduations from CUNY RN programs.

Between 2002 and 2011, ADN graduations from CUNY nursing programs are expected to more than double, while total BSN graduations are projected to increase by 69%. Between 1996 and 2011, overall CUNY RN graduations are expected to grow by 19%, with ADN graduations rising 17% and BSN graduations increasing by nearly 23% (Figure 7). In 2010, 72% of all CUNY BSN graduates were from BSN completion programs.

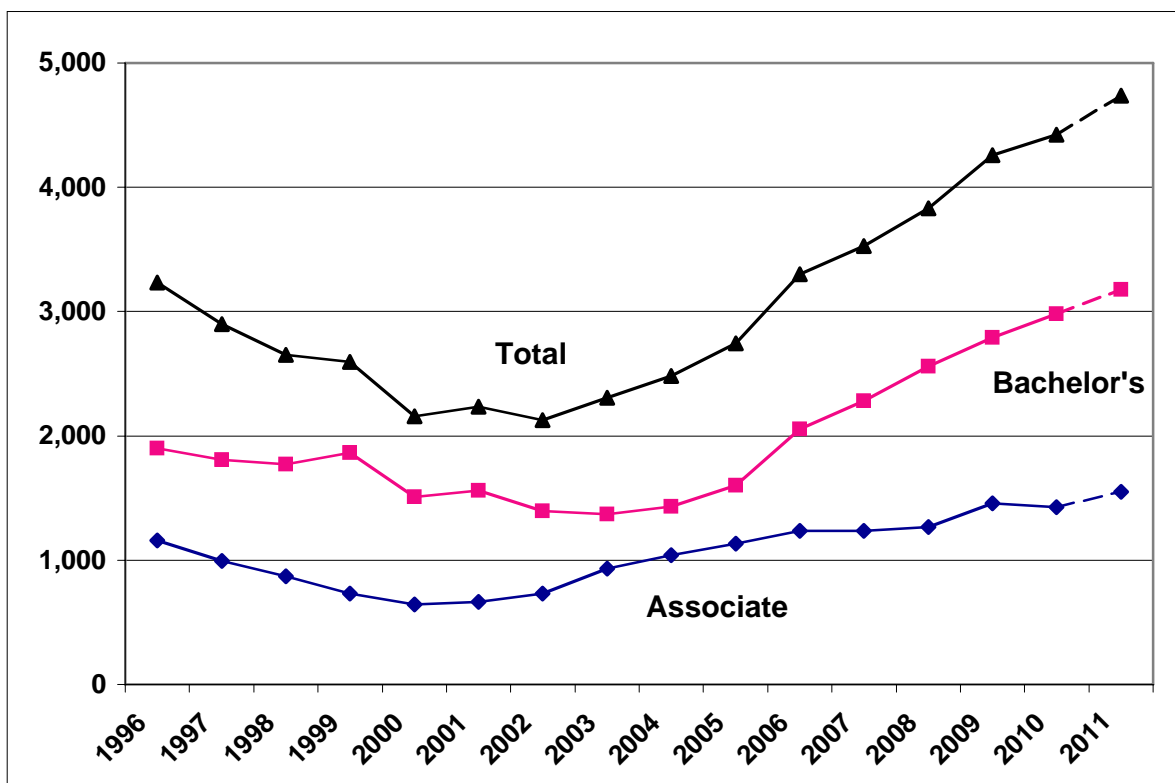
Figure 7
Graduations from CUNY RN Education Programs by Degree Type, 1996 to 2011



10. Graduations from privately sponsored RN education programs are projected to more than double between 2002 and 2011.

Both BSN and ADN graduations from privately sponsored nursing programs are projected to more than double between 2002 and 2011, with BSN graduations increasing by 128% and ADN graduations growing by 113%. BSN graduations will account for two-thirds of overall graduations from privately sponsored RN education programs (Figure 8) by 2011. BSN completer graduations accounted for nearly one-fourth of total BSN graduations from privately sponsored nursing education programs in 2010 and are projected to account for 26% of total BSN graduations in 2011.

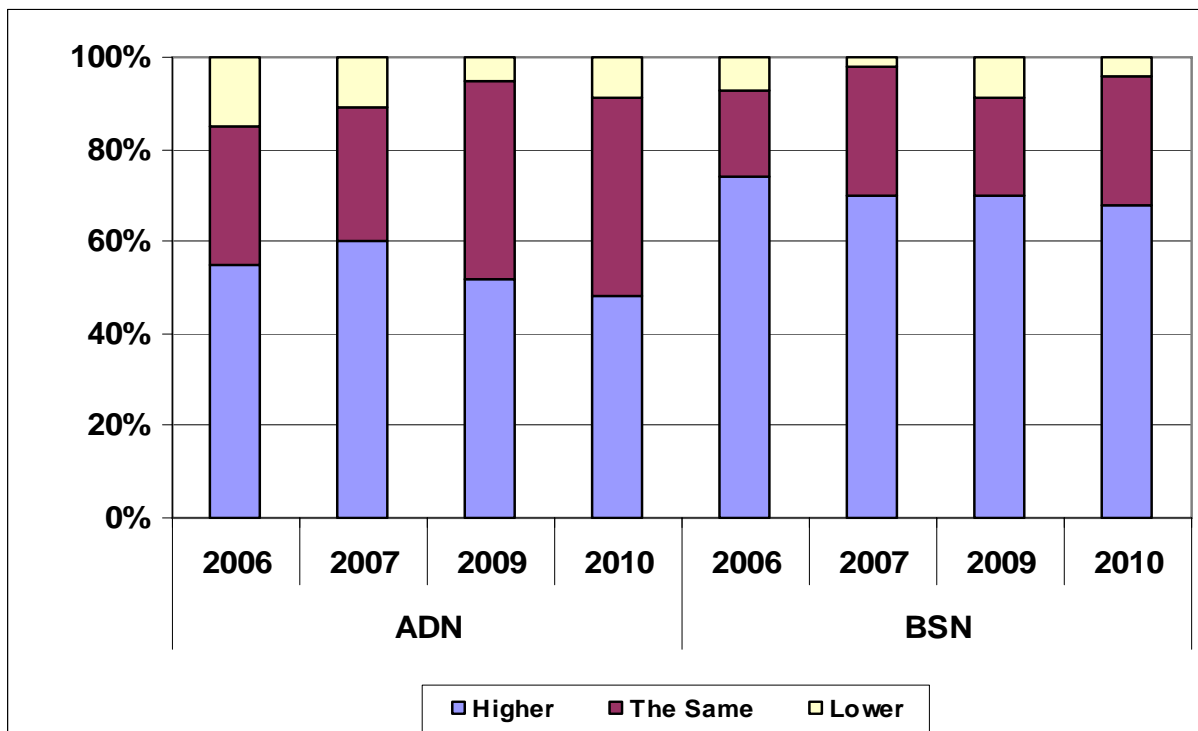
Figure 8
Graduations from Private RN Education Programs by Degree Type, 1996 to 2011



11. Less than half of ADN program directors reported increases in applications to their nursing education programs in 2010 over 2009 levels.

Forty-eight percent of ADN program directors reported an increase in applications to their nursing education programs in 2010 over 2009 levels, the first time since the survey began that less than half of ADN program directors reported increasing applications over the previous year. Although two-thirds of BSN program directors reported an increase in the number of applications to their nursing education programs in 2010, this was also down slightly from the 2009 levels. Overall, fewer nursing program directors reported increases in the number of applications between 2009 and 2010 while the percentage of program directors reporting a decrease in the number of applications remained consistent at 7% since 2007 (Figure 9).²

**Figure 9
Percent Change in Number of Applications by Program Type, 2006 - 2010**

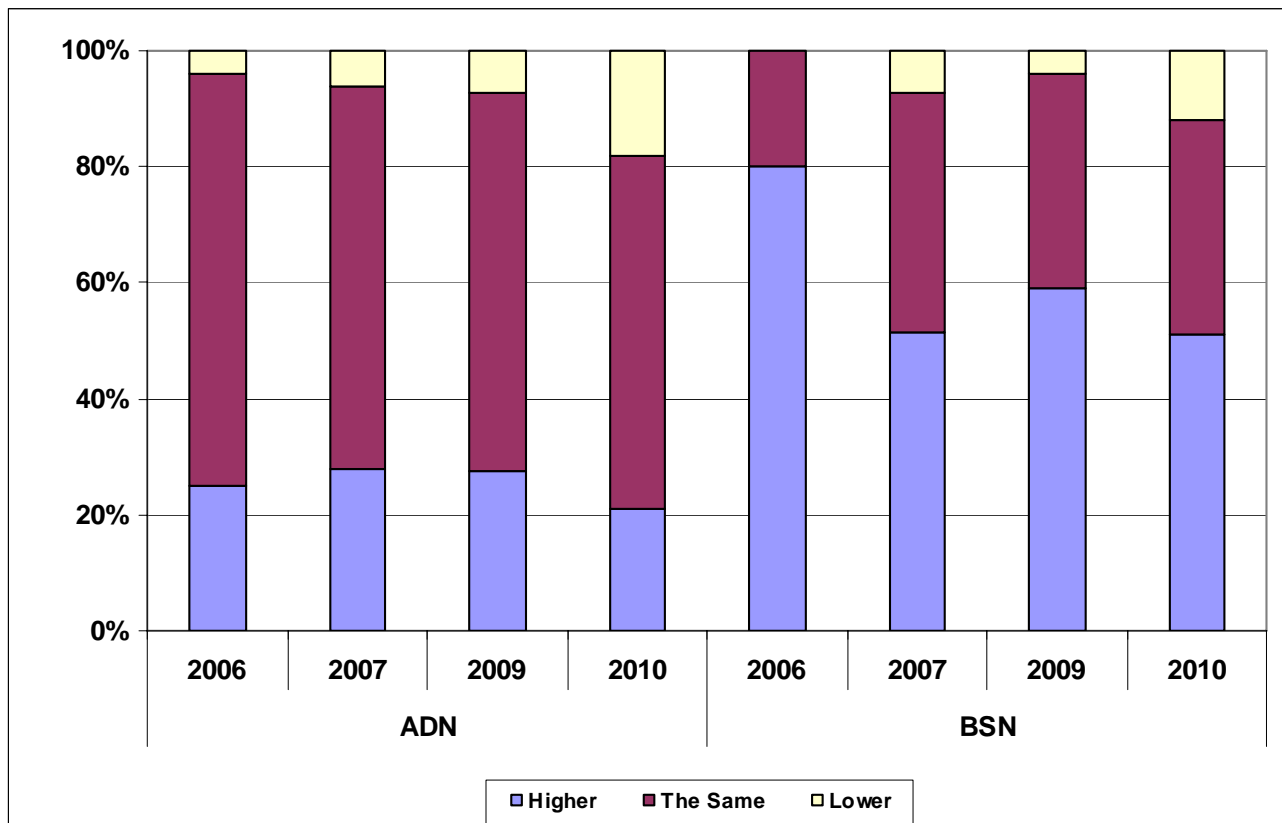


² Prior to 2008, the Center surveyed nursing programs only in the early fall. Starting in 2008, the survey starts later in the fall and extends into the spring of the following year. This caused the break in reporting years for certain survey questions, including applications, acceptances, the number of qualified applicants turned away, and perception of the job market.

12. Twenty-one percent of ADN program directors reported a higher number of acceptances to their nursing programs and 18% reported fewer acceptances.

The percentage of ADN program directors reporting increased acceptances to their nursing education programs was 21% in 2010, which was down from 2009 levels. At the same time, the percentage of ADN program directors that reported fewer acceptances increased from 7% in 2009 to 18% in 2010. Half of BSN program directors reported an increase in acceptances in 2010 over 2009, and 12% reported a decrease in acceptances, up from 4% in 2009. Overall, since 2006, there has been a decline in the number of nursing program directors who reported increases in the number of acceptances, and an increase in those reporting fewer acceptances (Figure 10).

**Figure 10
Percent Change in Number of Acceptances by Program Type, 2006 – 2010**



13. Nearly two-thirds of program directors either wait-listed or turned away qualified applicants.

Overall 66% of nursing program directors indicated they either wait-listed or turned away qualified applicants, including 79% of ADN program directors and 53% of BSN program directors. Of those programs that wait-listed students, nearly 47% of the BSN program directors and 10% of ADN program directors anticipated a majority of those on the waiting list would gain admission into their nursing programs.

Forty-eight percent of nursing program directors reported turning away qualified applicants in 2010, the second consecutive year that less than half reported turning away qualified applicants. ADN programs were more likely to turn away qualified applicants than BSN programs. Slightly more than two-thirds of ADN programs and slightly more than one-third of BSN programs reported turning away qualified applicants in 2010 (Table 3).

Table 3
Percent of RN Education Program Directors Reporting
Turning Away Qualified Applicants by Program Type, 2004 - 2010

	2004	2005	2006	2007	2009	2010
All Programs	57%	67%	59%	54%	42%	48%
ADN	73%	80%	72%	65%	48%	68%
BSN	39%	50%	43%	41%	33%	34%

14. More qualified applicants were denied admission to nursing education programs in 2010 than any year since 2005.

Based on survey responses, it was estimated that slightly more than 2,500 qualified applicants were turned away from New York’s nursing education programs in 2010, the highest number of qualified applicants turned away since 2005. The percentage of nursing programs that turned away 81 or more qualified applicants more than doubled, going from 14% in 2009 to 30% in 2010. Since applicants may apply to more than one nursing education program, these numbers do not represent an unduplicated count of qualified applicants denied admission to nursing

education programs in the state. Additionally, the estimate does not consider students who were waited-listed (Table 4).

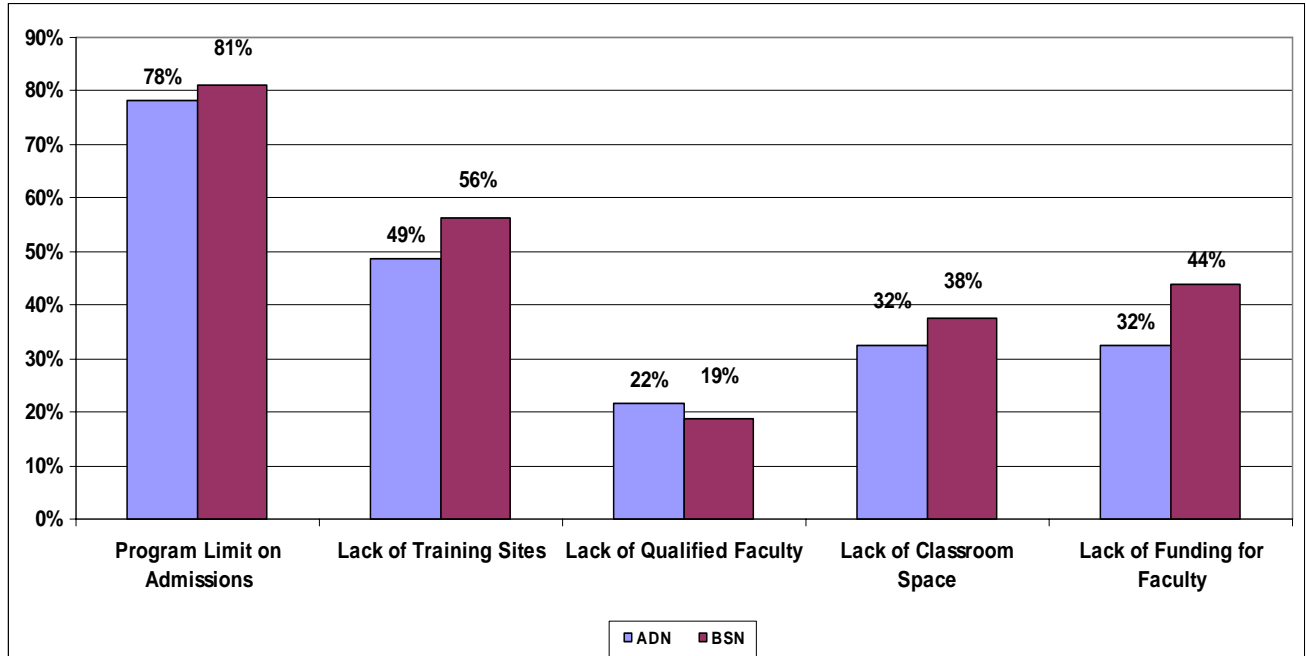
Table 4
Number of Qualified Applicants Turned Away by Program Type, 2006 - 2010

Number of Qualified Applicants Turned Away	Type of Program											
	All Nursing Programs				ADN				BSN			
	2006	2007	2009	2010	2006	2007	2009	2010	2006	2007	2009	2010
1 – 20	23%	25%	15%	30%	35%	30%	19%	35%	9%	20%	10%	19%
21 – 40	12%	13%	10%	23%	17%	18%	12%	24%	7%	7%	8%	19%
41 – 60	9%	5%	2%	9%	6%	5%	3%	8%	14%	4%	0%	13%
61 – 80	4%	2%	0%	8%	4%	4%	0%	5%	5%	0%	0%	13%
81 or More	10%	10%	14%	30%	11%	9%	14%	27%	9%	11%	15%	38%

15. Limits on program admissions and lack of training sites are the primary reasons nursing education programs turn away qualified applicants.

The majority of ADN and BSN programs that denied admission to qualified applicants cited limits on program admissions as the primary reason for doing so. In 2010, 78% of ADN program directors turned away qualified applicants due to limits on program acceptances, an increase of 9% over 2009. For BSN programs that turned away qualified applicants in 2010, 81% were due to program limits on acceptances, an increase of 34% over 2009. Both ADN and BSN programs also indicated that a lack of clinical training sites was a factor in turning away qualified applicants (Figure 11).

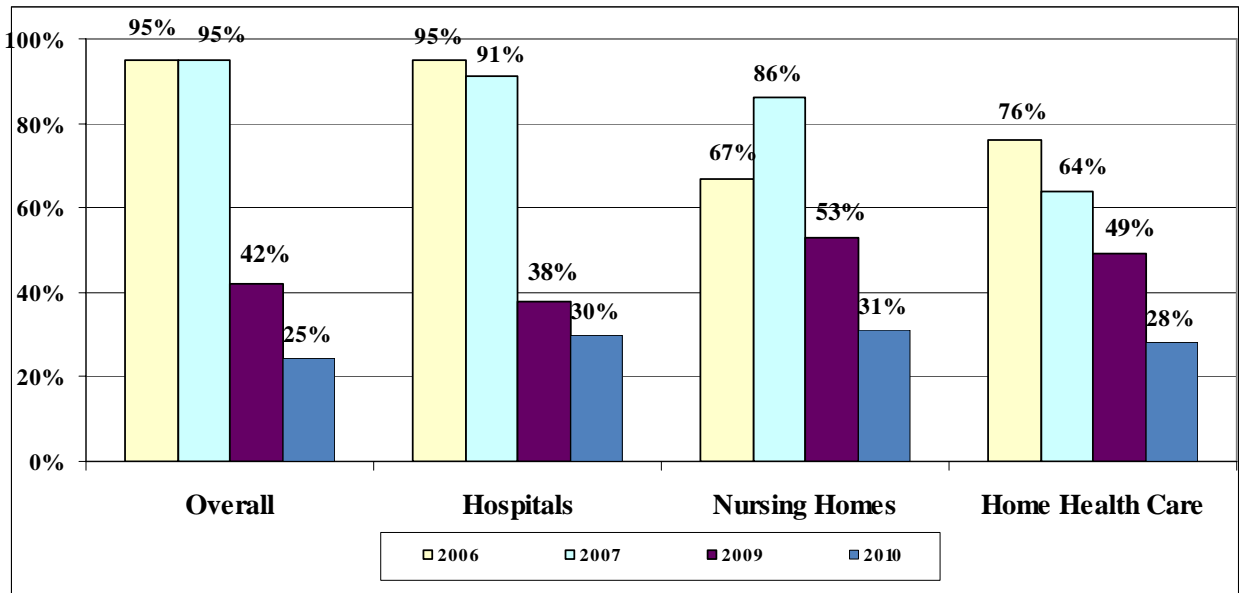
Figure 11
Reasons for Turning Away Qualified Applicants by Degree Program Type, 2010



16. Fewer nursing program directors reported “many jobs” for new graduates.

The vast majority of nursing program directors consistently reported a strong job market for their graduates through the 2007 survey. However, starting in 2009 and continuing with the 2010 survey, the percentage of nursing program directors reporting “many jobs” for their graduates significantly declined. In 2010, only 25% of nursing program directors reported “many jobs” for newly-trained RNs, a sharp contrast to 2006 and 2007 when 95% of nursing program directors reported “many jobs.” This trend persisted across hospitals, nursing homes, and home health care agencies (Figure 12).

Figure 12
Percent of RN Program Directors Reporting a Strong Job Market, 2006 – 2010



DISCUSSION

While the number of RN graduates from New York programs has steadily grown over the past eight years, it appears that the programs are nearing their capacity to produce new RNs. Fewer nursing program directors reported more applications and acceptances and cited limits on program admissions as the primary reason for turning away qualified applicants.

The increase in the number of RN graduates between 2009 and 2010 was attributable to BSN completers, i.e., existing RNs who went on to obtain a bachelor’s degree in nursing and they do not represent new RN capacity. The majority of new nursing programs begun in the state since 2002, 9 of 15, are BSN completion programs. These programs play a critical role in supporting educational attainment for RNs and can increase the number of RNs who qualify to become nurse practitioners.

Currently, health care providers in the state face fiscal uncertainty related to the recent economic downturn as well as reductions in Medicaid and Medicare reimbursement. This has resulted in a

dampening of demand for RNs in the short-term with newly trained RNs facing a highly competitive job market. A declining number of program directors reported ‘many jobs’ for their graduates. However, in the long-term, it is projected that demand for RNs will increase, fueled by an aging population and the growing prevalence of chronic diseases such as diabetes and heart disease. Further, more retirements of older RNs will also contribute to an increase in job openings for RNs.

While current levels of production are clearly sufficient to meet the existing demand for RNs, it is unclear whether it will be sufficient to meet future demand. It will be important to continue to monitor the supply and production of RNs in the state as well as demand for RNs in order to identify potential RN supply/demand imbalances. Data from this effort can inform programs and policies designed to ensure adequate RN capacity across the state.