New Jersey Nursing Supply and Demand Data 2017

New Jersey Collaborating Center for Nursing

Educational Capacity 2016-2017
Workforce Supply Data 2018
Workforce Demand Data 2017
Projection of Nurse Retirement 2025

NEW JERSEY
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Introduction

The New Jersey Collaborating Center for Nursing (NJCCN or "the Center") is the primary source for data on New Jersey's nursing workforce. The Center serves as a catalyst for the implementation of innovative education and practice models using the data to create programs that address needs in the state. To that end, the Center conducts an annual survey of all nursing schools (RN and LPN) on behalf of the New Jersey State Board of Nursing (BON) in an effort to monitor enrollment and graduation trends as well as demographics of both students and faculty. Working collaboratively with the BON, the Center also collects workforce data at time of licensure for APNs, RNs, and LPNs. Both of these reports provide the data to analyze the **supply** of nurses in New Jersey. This year, the BON switched its survey questions to the Nursys® Licensure and Workforce tool. As a result, this report only contains workforce data from half of the nursing workforce. This is to ensure consistency in reporting data.

Based on the national trends and the need to monitor and prepare the workforce, the Center has determined that using real time **demand** data is an important first step in evaluating demand in the New Jersey landscape. While survey data for a specific industry is important, the limited response rate of surveys and the delays in obtaining primary data in real-time do not make these methods a first-tier approach. Quality data are a prerequisite for effective workforce planning and policy making for the nursing workforce. Healthcare workforce forecasting models provide a means for making future projections, which can be valuable in quantifying the supply, distribution, and demand of nurses and is critical to designing programs and policies that will ensure access to care and an effective healthcare system (Bienemy, 2015).

Forecasting workforce projections is complex. National estimates may differ substantially from state-level projections as state-level data are more detailed. Additionally, as healthcare evolves over time and the state landscape changes, these variables are often difficult to factor in. New this year is a forecasting report for New Jersey to determine retirement projections. Therefore, the goal of this report is to provide current data on supply and demand to help make informed decisions for your organization and the state. However, one must do this in the context of volatility.

Workforce data should to be viewed with the following caveats:

- **National estimates may differ from state data substantially**
- **Nurses work in teams and therefore other healthcare workforce members data are also important to consider. For example, Certified Nursing Assistants, Home Health Aides, MDs**
- **Projections that are further out in years have a greater error rate**
- **Data are only as good as the information that is provided by the respondent**

How to Use the Report

This report is broken up into the following 5 chapters, with references and a glossary at the end:

- Chapter 1: Educational Capacity Report
- Chapter 2: Workforce Supply Data
- Chapter 3: Workforce Demand Data
- Chapter 4: Projection of Nurse Retirement

Executive Summary

The Center's 2017 edition of the Annual Data Report provides detailed information on supply (educational capacity and workforce data) as well as demand data across settings. A new report has been added, projecting nursing capacity based on potential retirements across settings. These data will provide direction for ensuring that we meet the needs of New Jersey citizens.

Factors that may influence the supply and demand of nurses in New Jersey include but are not limited to:

- Aging baby boomers
- The number of nurses retiring
- Healthcare reform changes
- Physician shortages

(Buerhaus, Skinner, Auerbach, and Staiger, 2017)

Table 1. Nurses per capita

New Jersey	National Range
888 RNs / 100,000 population	704-1,515 RNs / 100,000 population
183 LPNs / 100,000 population	63-440 LPNs / 100,000 population

(NCSBN, 2018)

Supply and Demand Projections for New Jersey

Registered Nurses

- Health Resources and Services Administration (HRSA, 2017) shows inequitable distribution and shortage of RNs in New Jersey by 2030. However, migration from surrounding states may eliminate this shortage.
- NJCCN (2017) data from the workforce and educational surveys for New Jersey shows less of a concern regarding the number of RNs through 2025 assuming schools continue to produce their current number of RN graduates through 2025 and healthcare needs remain the same or improve. Industries with the greatest concern include school health services, correctional facilities, academic settings, and occupational health due to an aging workforce.
- The biggest concern for New Jersey is:
    - Adequate faculty to prepare nurses. Aging faculty and the increasing risk of retirement impacts ability to train a more highly educated nursing workforce.
    - New nurses staying in acute care setting instead of shifting to out-of-hospital areas of need such as primary care, post-acute settings, and industries listed above.

Licensed Practical Nurses

- HRSA (2017) data show an excess supply of LPNs for New Jersey by 2030.
- NJCCN (2017) data through 2025 shows an excess of LPNs. However, decline in the graduation rates may resolve this issue.

Advanced Practice Nurses

- Access to care is an issue in New Jersey with 13 of the 21 counties showing a shortage of primary care providers (AHRF, 2018). This could be lessened by modernizing the regulation for APN practice in New Jersey. Currently, 22 states and the District of Columbia have changed regulations to eliminate this barrier by eliminating the required contract with physicians. This change can help with both the mental health crisis and primary care being available to vulnerable populations and communities across New Jersey.

Methodology

Supply

Supply data are derived both from the entrance of new nurses (educational capacity) into the system as well as the data on the current workforce.

Educational Capacity:

An email letter describing the purpose of the New Jersey Educational Capacity Survey was sent to the dean of each nursing program in New Jersey with a portable document file (pdf) of the questionnaire and a glossary of terms. The questionnaire included all items from the nurse minimum dataset (N-MDS) as outlined by the National Forum of Nursing Workforce Centers. Additional questions were added to provide additional context. Data were reviewed for completeness and consistency and adjusted as appropriate. When discrepancies in the data were found, the school was contacted for clarification. This is self-reported data which can have errors in how the school interprets or completes the survey.

Current Workforce Data:

Licensure is renewed for all nursing categories every two years. Thus, every year, half of the APN, RN, and LPN licensure data are collected through the BON licensure data. At the end of the two-year period, the data are merged and analyzed collectively. These data are voluntarily self-reported by the nurses in the state. The data are provided to a third-party vendor and used by the BON prior to being sent to the Center for analysis. Because it is self-reported, these data can have errors. In 2018, the BON changes its survey questions to the Nursys® Licensure and Workforce tool. As a result of this change, only those nurses who renewed in 2018 (approximately half of the nursing workforce) are reported in this publication.

Demand

Demand data that determines workforce trends in real-time is important for predicting the job market. As such, the Center is using Labor Insight™ designed by Burning Glass Technologies (BGT). Labor Insight™ draws on a comprehensive database of real-time demand on a national, state, and regional level. This database can track and analyze employer hiring activities by industry, occupation, education, and skills to help provide direction. Labor Insight™ obtains data on online job postings from up to 40,000 sources, which is mined and coded from each posting to describe skills, education, and experience. O*Net is the nation's primary source of occupational information and is developed under the sponsorship of the US Department of

Labor/Employment and Training Administration. The O*Net Standard Occupational Classification (O*Net –SOC) is used to standardize the approach to postings for the data report.

The NJCCN used data mined from BGT to determine the demand for nurses in the state of New Jersey. The O*Net –SOC taxonomy was used to standardize the occupation-specific indicators. The job ads were reviewed to eliminate any per diem positions, out-of-state commuters, temporary positions, and postings that had job openings outside of New Jersey.

There are several limitations of BGT data. A major limitation is that online job advertisements are only partially representative of the labor market and the demand for labor. Current approaches to advertising also include newspapers, career fairs, and social networking (American Psychological Association {APA}, 2015). Another limitation is that one job posting may advertise the need for multiple nurses, but will only register as a single post in the database. Duplicate postings are common and may be missed even though BGT uses a de-duplication algorithm for each 60-day timeframe. If a job is not filled and is reposted within this 60-day timeframe, it will be a duplicate that cannot be screened out. The use of O*Net-SOC also creates a limitation because it classifies most RNs under a single code (291141.00) and provides special codes only for Acute Care Nurses (291141.01) and Critical Care Nurses (291141.03), which creates challenges for breaking the codes down into more pinpointed specialties and subfields. Lastly, because new web sources of online job ads are continuously added by BGT, samples of job advertisements from different time periods are incomparable (APA, 2015). Thusly, BGT data cannot be used to study longitudinal changes in the online labor market (APA, 2015).

Projection of Nurse Retirement

The workforce survey data captures respondents' age detail along with their intention to retire or already retired. With access to information from 2014, it is possible to build consistent estimates of probability to retire for each age bracket per year (**Table 74**). The age distribution allows us to infer at least 30% of the workforce is at risk of retirement in the next 7 years, considering 62 years as an eligible retirement age. This does not imply that the nurses must retire at 62. However, all nurses are considered retirement-eligible at 62, which presents a potential impact on the workforce. In this analysis, no retirements are assumed below the age of 62.

Assumptions

The following implicit assumptions are considered while measuring this potential impact:

- The historical rates of retirement in various age brackets are assumed to be similar to future projections.
- Retirement risk is considered significant on or after the age of 62.
- Decline in workforce numbers after the age of 62 are assumed to be primarily due to retirement ("retirement" refers to all causes of workforce attrition).
- Return to the workforce after retirement is assumed unlikely.
- In projecting the workforce estimates, the model does not factor in any future events that may be expected to cause a huge change in historical trends of workforce supply, such as a recession or substantive healthcare reform changes.
- Calculations are based on the actual number of nurses, and not on the number of FTEs.

Chapter 1: Educational Capacity Report

The Educational Capacity Report presents data from the 2016-2017 NJCCN Educational Capacity Survey. The first section of this chapter describes self-reported data from pre-licensure and post-licensure programs for Registered Nurse (RN) education. **Pre-licensure** programs qualify graduates to sit for the National Council Licensure Examination (NCLEX). **Post-licensure** programs provide additional credentials for graduates who have already passed the NCLEX and have attained their RN licensure. The second section describes self-reported data from programs for Licensed Practical Nurse (LPN) education. The third section describes employment and demographic data for faculty in RN and LPN educational programs.

Section 1: Educational Capacity Report - RN

New Jersey RN Program Overview

This report includes data for **43** of the **46** schools in New Jersey that provide RN education. Each school may have multiple programs.

New Jersey schools offer the following **pre-licensure** programs:

- **5** Diploma degree programs
- **27** Associate Degree in Nursing (ADN)
  - **16** ADN – Generic
  - **11** ADN – Bridge
- **25** Bachelor of Science in Nursing (BSN)
  - **15** BSN – Generic
  - **9** Accelerated BSN
  - **1** LPN – BSN Program
- **1** Pre-licensure Master's of Science in Nursing (MSN)

Respondents reported the following **post-licensure** programs:

- **18** RN – BSN
- **14** Post-licensure Master's of Science in Nursing (MSN)
- **9** Doctorate of Nursing Practice (DNP)
- **3** Doctor of Philosophy (PhD) in Nursing

Figure 1. Nursing Program Types

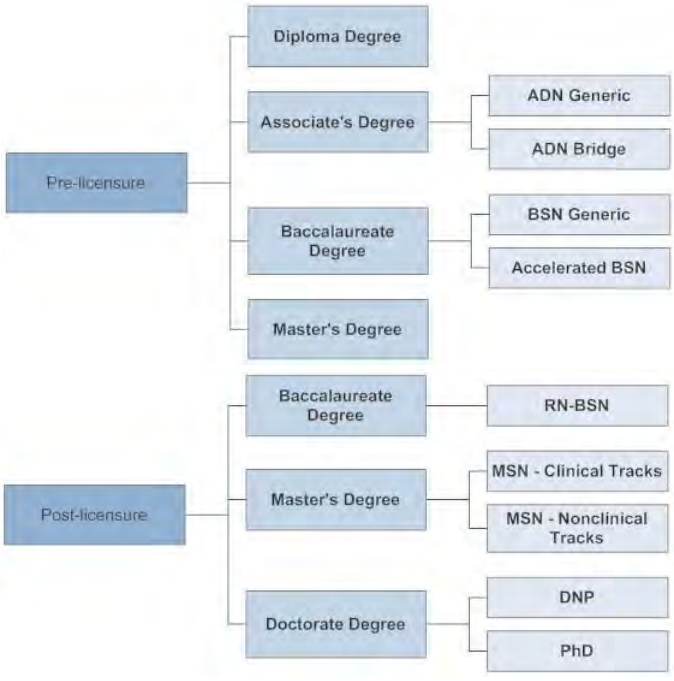


Figure 2 displays the primary location of New Jersey's 46 nursing programs, inclusive of programs that did not participate in the 2016-2017 survey. Many Baccalaureate and Associate Degree programs also have satellite locations that are not noted on this map.

The number in the pin represents the number of nursing programs of that type located in the county. The County Population chart provides context so that density of programs may be compared to density of population (United States Census Bureau, 2016).

Figure 2. Geographic Distribution of RN Programs' Primary Campuses

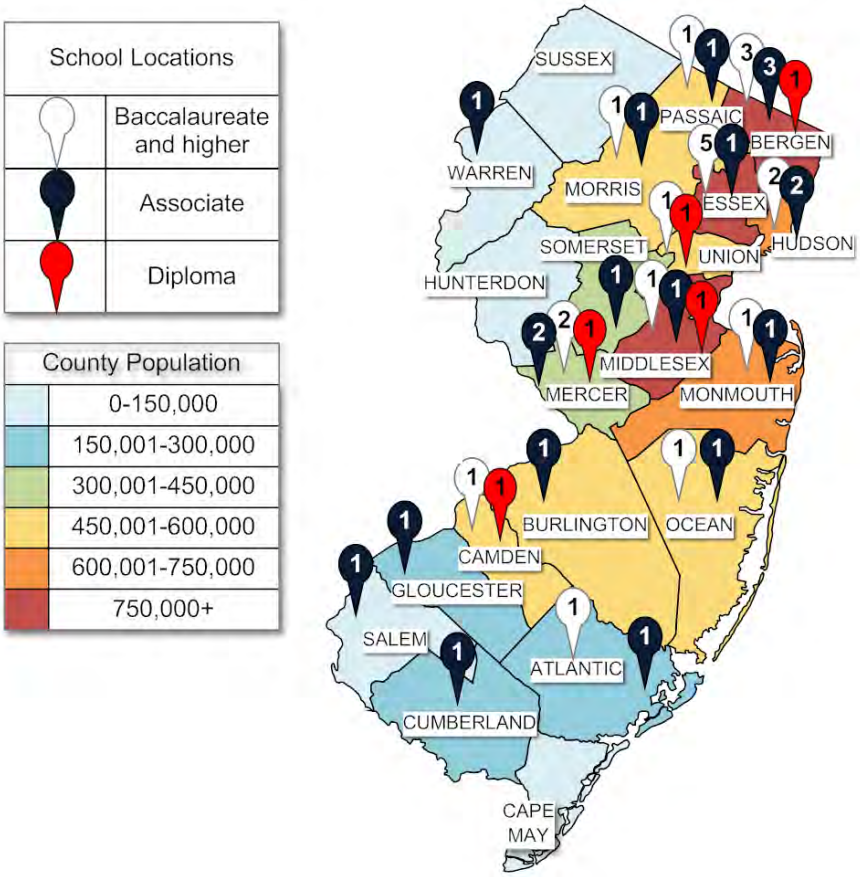


Table 2 and **Table 3** show data on federal tax classification and accreditation status as self-reported by the 2016-2017 RN Educational Capacity Survey respondents.

Table 2. Federal Tax Classification

	Diploma		Associate		Baccalaureate	
	N = 5	%	N = 19	%	N = 20	%
Public	2	40.0	15	79.0	9	47.4
Private/For-Profit	0	0	4	21.1	1	5.3
Private/Non-Profit	3	60.0	0	0	9	47.4

Table 3. Accreditation Status

	Diploma		Associate		Baccalaureate & Higher	
	N = 5	%	N = 19	%	N = 20	%
Accredited	5	100.0	18	94.7	20	100.0
Not Accredited/ In Progress	0	0	1	5.3	0	0

Pre-Licensure Programs

Pre-Licensure Program Characteristics

Table 4 describes the delivery format of pre-licensure programs. A majority of programs are delivered solely through face-to-face lectures. There are currently no programs among respondents that have online-only pre-licensure programs.

Table 4. Pre-Licensure Program Format

	Diploma	ADN Generic	ADN Bridge	BSN Generic	BSN Accelerated	Pre-Licensure MSN
	N = 5	N = 16	N = 11	N = 15	N = 9	N = 1
Face-to-Face Solely	4	12	8	12	6	1
Hybrid	1	4	3	3	3	0

Table 5 describes the percentage of time students spend in each clinical practice setting for pre-licensure programs. Across all settings, the majority of clinical practice time is spent in acute care settings.

Table 5. Setting of Hands-on Clinical Practice Time (%)

	Diploma	ADN Generic	ADN Bridge	BSN Generic	BSN Accelerated	Pre-Licensure MSN
Acute Care	92	83.9	83.3	71	60.6	50
Post-Acute Care	5	10.5	11.2	6.8	7.5	10
Preventative Services	2	1.3	1.6	9.1	13.8	10
Home Care	0	0.5	0.2	8.8	8.8	15
Other	1	3.8	3.8	4.3	9.4	15

Table 6 describes the percentage time students spend in each clinical practice delivery format for pre-licensure programs. Across all pre-licensure settings, a majority of clinical practice is in a hands-on format.

Table 6. Format of Clinical Practice Time (%)

	Diploma	ADN Generic	ADN Bridge	BSN Generic	BSN Accelerated	Pre-Licensure MSN
Skill Lab	13.0	13.9	10.0	14.9	15.6	15.0
Simulation Lab	12.0	13.1	13.9	10.9	12.1	10.0
Hands-On	75.0	66.3	67.8	75.0	62.5	75.0
Other	0	6.7	8.3	0	9.8	0

According to **Table 7**, a majority of BSN and pre-licensure MSN graduates secure their first job within 0-7 months, while graduates of Diploma and Associate Degree programs secure their first job within 8-12 or more months of graduation.

Table 7. Time to Employment after Graduation (%)

	Diploma	ADN Generic	ADN Bridge	BSN Generic	BSN Accelerated	Pre-Licensure MSN
Total Graduates	**N = 457**	**N = 1008**	**N = 337**	**N = 966**	**N = 330**	**N = 24**
0-3 Months after graduation	0	10	4	18	12	20
4-7 Months after graduation	0	15	1	36 > 54%	20	65 > 85%
8-11 Months after graduation	49	14	4	8	0	14
12+ Months after graduation	44	33 > 47%	49	2	0	0
Unknown/ Do not track	8	27	42	37	68	1

* Most Accelerated BSN programs do not track graduate employment.

Pre-Licensure Application, Admission, Enrollment, and Graduation

Pre-Licensure programs are those that prepare students for the **initial** National Council Licensure Examination (NCLEX-RN) that leads to licensure as a registered nurse. The number of qualified and admitted applicants displayed here may be inflated if a person applied to or was admitted by more than one school. Our data do not provide unique identifiers for each applicant. The following four tables provide pre-licensure application, admission, enrollment, and graduation rates for the 2017 academic year and 4-year trended data for the 2014-2017 period.

Table 8 shows pre-licensure application, admission, and enrollment figures for the 2017 academic year. When compared to the 2016 report, there is an increase in enrollees in all program types except the accelerated BSN (↓ 31.5%) and pre-licensure MSN (↓ 69.1%).

Table 8. Pre-Licensure Student Application, Admission, and Enrollment - 2017

	Diploma	ADN (Generic)	ADN (Bridge)	BSN	Accelerated BSN	Pre-Licensure MSN	Total
	N = 5	N = 16	N = 11	N = 15	N = 9	N = 1	N = 41
Available Seats	815	1701	850	1893	464	30	5289
Qualified Applicants	1186	2145	948	4784	484	50	9113
Admitted Applicants	894	1670	813	3713	453	50	7140
Admitted Applicants (%)	75.4	77.9	85.8	77.6	93.6	100	78.3
Enrollees	823	1471	775	1463	278	17	4549
Enrollees (%)	91.2	88.1	95.3	39.4	61.4	34.0	63.7

Table 9 shows that annual admission and enrollment rates since 2014 have remained stable.

Table 9. Pre-Licensure Admission and Enrollment Trend Analysis 2014-2017

	2014	2015	2016	2017
Available Seats	5030	5348	4989	5289
Qualified Applicants	9465	10531	10529	9113
Admitted Applicants	5961	6967	6872	7140
Enrollees	4477	4677	4396	4549
Enrollees (%)	75	67	64	64

Table 10 shows why schools rejected qualified RN applicants. This table is not inclusive of any programs that reported "not applicable," because they did not reject any qualified applicants. Such schools include 3 (60%) of the Diploma Programs, 6 (32%) of the Associate's Degree Programs, and 12 (63%) of the Baccalaureate Degree Programs. Schools that did report rejecting qualified applicants may have provided multiple reasons for doing so.

Table 10. Reason for Rejection of Qualified RN Applicants

	Diploma		Associate		Baccalaureate	
	# Schools N=5	%	# Schools N=19	%	# Schools N=19	%
Lack of qualified faculty	2	40	6	32	1	5
Lack of clinical space	1	20	7	37	4	21
Limited classroom space	2	40	6	32	5	26
Lack of clinical sites	1	20	5	26	4	21
Others	0	0	4	20	3	15

The survey presented the following reasons: lack of qualified faculty; lack of clinical space; limited classroom space; and lack of clinical sites available for students. Additional reasons provided by respondents in a comments box included insufficient budget, lack of available science faculty & lab space admission caps, job market, and inability to meet the program's personal health insurance requirements.

Table 11 shows a 3.8% increase of pre-licensure graduates between 2016 and 2017, however there is only a 1.5% increase over the 4-year period from 2014-2017.

Table 11. Pre-Licensure Graduation Trend Analysis 2014-2017

	2014	2015	2016	2017
Diploma	523	457	484	457
ADN Generic	1015	1002	883	1008
ADN Bridge	357	522	355	337
BSN Generic	667	788	869	966
BSN Accelerated	500	368	384	330
MSN Pre-Licensure	15	24	32	24
Total	**3077**	**3161**	**3007**	**3122**

NCLEX Pass Rates for Pre-licensure Students

Students must pass the National Council Licensure Exam (NCLEX-RN) to apply for licensure as an RN. **Table 12** shows National Council of State Boards of Nursing data on the pass rates for students who took the NCLEX-RN in 2017 (NCSBN, 2017). These data are inclusive of schools that did not respond to the NJCCN 2017 Educational Capacity Survey.

Table 12. Pass Rates for NCLEX-RN Taken in 2017

	# Participants	Total Passed	Total Failed	% Pass Rate
Diploma	522	468	54	90%
ADN	1415	1241	174	88%
BSN	1330	1117	213	84%
MSN	9	8	1	89%

Pre-Licensure Student Demographics

Table 13 on the following page describes prelicensure demographics inclusive of gender, race and ethnicity, and age bracket. The table shows that pre-licensure nursing students continue to be primarily female and show diversity in race and ethnicity, which is needed for the racially diverse population served in New Jersey. Ages are higher in the Diploma, Associate Degree, and Associate Degree Bridge programs as compared to the generic BSN program.

Table 13. Pre-Licensure Student Demographics 2017

	Diploma	ADN Generic	ADN Bridge	BSN Generic	BSN Accelerated	MSN Pre-Licensure
	N = 3055	N = 2992	N = 939	N = 4575	N = 671	N = 43
Gender						
Female	2597 (85%)	2452 (82%)	858 (91%)	3961 (84%)	540 (81%)	32 (74%)
Male	457 (15%)	455 (15%)	81 (9%)	613 (13%)	131 (20%)	11 (26%)
Transgender	1 (0%)	2 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Did not Disclose	0 (0%)	83 (3%)	0 (0%)	1 (0%)	0 (0%)	0 (0%)
Race/Ethnicity						
American Indian	16 (1%)	3 (0%)	5 (1%)	8 (0%)	0 (0%)	0 (0%)
Asian	234 (8%)	242 (8%)	52 (6%)	710 (16%)	63 (9%)	4 (9%)
Black/African American	1001 (32.8%)	374 (13%)	579 (62%)	535 (12%)	76 (11%)	14 (33%)
Hawaiian/Pacific Islander	20 (1%)	0 (0%)	4 (0%)	14 (0%)	1 (0%)	0 (0%)
White/Caucasian	677 (22%)	1557 (52%)	86 (9%)	2187 (48%)	372 (55%)	12 (28%)
Hispanic/Latino	766 (25%)	479 (16%)	91 (10%)	764 (17%)	64 (10%)	5 (12%)
Other	39 (1%)	13 (0%)	1 (0%)	19 (0%)	0 (0%)	0 (0%)
Two or More Races	79 (3%)	109 (4%)	8 (1%)	133 (3%)	37 (6%)	3 (7%)
Did not Disclose	223 (7%)	214 (7%)	113 (12%)	205 (5%)	58 (9%)	5 (12%)
Age						
17-20	360 (12%)	221 (7%)	2 (0%)	2105 (46%)	49 (7%)	0 (0%)
21-25	858 (28%)	931 (31%)	62 (7%)	1439 (32%)	294 (44%)	24 (56%)
26-30	735 (24%)	613 (21%)	190 (20%)	290 (6%)	205 (31%)	16 (37%)
31-40	754 (25%)	554 (19%)	387 (41%)	187 (4%)	81 (12%)	2 (5%)
41-50	278 (9%)	230 (8%)	241 (26%)	60 (1%)	38 (6%)	1 (2%)
51-60	67 (2%)	59 (2%)	41 (4%)	7 (0%)	4 (1%)	0 (0%)
61+	3 (0%)	2 (0%)	5 (1%)	0 (0%)	0 (0%)	0 (0%)
Did not Disclose	0 (0%)	382 (13%)	11 (1%)	487 (11%)	0 (0%)	0 (0%)

Table 14 shows that schools continue to see a diverse nursing student population.

Table 14. Pre-Licensure Demographic Characteristics Trends Analysis 2014-2017

	2014	2015	2016	2017
	N = 10,943	N = 10,669	N = 11,224	N = 12,275
Total Enrollment by Program				
Diploma	3018 (28%)	2971 (28%)	2867 (26%)	3055 (25%)
ADN	3850 (35%)	3360 (31%)	3493 (31%)	3931 (32%)
BSN (Generic)	3361 (31%)	3719 (35%)	3984 (35%)	4575 (37%)
BSN (Accelerated)	663 (6%)	578 (5%)	793 (7%)	671 (1%)
Master's (Pre-licensure)	51 (0%)	41 (0%)	87 (1%)	43 (0%)
Race/Ethnicity				
American Indian	38 (0%)	39 (0%)	26 (0%)	32 (0%)
Asian	1145 (10%)	1207 (11%)	1238 (11%)	1305 (11%)
Black/African American	2561 (23%)	2268 (21%)	2263 (20%)	2579 (21%)
Hawaiian/Pacific Islander	215 (2%)	66 (1%)	72 (1%)	39 (0%)
White/Caucasian	4368 (39%)	4324 (41%)	4617 (41%)	4891 (40%)
Hispanic/Latino	1680 (15%)	1754 (16%)	1872 (17%)	2169 (18%)
Other	182 (2%)	140 (1%)	105 (1%)	72 (1%)
Two or More Races	166 (1%)	212 (2%)	263 (2%)	369 (3%)
Did not Disclose	858 (8%)	659 (6%)	768 (7%)	818 (7%)
Age				
17-20	2212 (19%)	2443 (23%)	2549 (23%)	2737 (22%)
21-25	3323 (30%)	3314 (31%)	3417 (30%)	3608 (29%)
26-30	1763 (16%)	1912 (18%)	1749 (16%)	2049 (17%)
31-40	1943 (17%)	1788 (17%)	2019 (18%)	1965 (16%)
41-50	963 (9%)	768 (7%)	866 (8%)	848 (7%)
51-60	277 (2%)	173 (2%)	273 (2%)	178 (1%)
61+	17 (0%)	10 (0%)	21 (0%)	10 (0%)
Did not Disclose	815 (7%)	261 (2%)	330 (3%)	880 (7%)

Post-Licensure Programs

Post-Licensure Program Characteristics

Table 15 describes the delivery format of post-licensure programs. Except for PhD programs, post-licensure programs are delivered in a variety of online, face-to-face, and hybrid formats, with hybrid delivery being the most common.

Table 15. Post-Licensure Program Format - 2017

	RN-BSN	MSN Clinical	MSN Non-Clinical	DNP	PhD
Online Solely	5	2	2	3	0
Face-to-Face Solely	5	4	3	2	3
Hybrid	11	4	5	4	0
Total	**21**	**10**	**10**	**9**	**3**

Post-Licensure Application, Admission, Enrollment, and Graduation

Post-licensure programs are for students who are already licensed as Registered Nurses. Post-licensure data in **Table 16** indicate that there are sufficient seats available for new enrollees. However, the number of qualified and admitted applicants displayed here may be inflated if a person applied to or was admitted by more than one school. Our data do not provide unique identifiers for each applicant.

Table 16. Post-Licensure Student Application, Admission, and Enrollment Rates

	RN-BSN	MSN Clinical	MSN Non-Clinical	DNP	PhD	Total
Available Seats	2647	1506	1311	387	8	4548
Qualified Applicants	1307	498	229	267	10	2082
Admitted Applicants	1282	431	219	265	10	2207
Enrollees	795	293	100	203	7	1398
Enrollees (%)	62.0	68.0	45.7	76.6	70.0	70.0

Table 17 shows that enrollment in post-licensure programs has gone down by 51.8% over the 4-year period between 2014 and 2017. This decline may be attributed to national online programs, which are not captured in the Center's educational capacity survey.

Table 17. Post-Licensure Admission and Enrollment Trends 2014-2017

	2014	2015	2016	2017
Available Seats	6590	5109	4945	4548
Qualified Applicants	3989	2775	2953	2082
Admitted Applicants	3739	2675	2833	2207
Enrollees	2900	1932	1613	1398
Enrollees (%)	77.6	72.2	56.9	63.3

Table 18 describes the trends in post-licensure graduates, showing a 37.7% decline in RN to BSN graduates in 2017. This is the first year in which this decline in RN to BSN graduation is seen, and it may be attributed to national online programs that are not captured by the NJCCN educational survey. There is also a decline in MSN graduates and an increase in DNP graduates. This is probably due to APN programs that have changed their degree structure from MSN to DNP. APN programs are shifting from MSN to DNP due to recommendations from the American Assocation of Colleges of Nursing (AACN).

Table 18. Post-Licensure Graduation Trend Analysis 2014-2017

	2014	2015	2016	2017
RN-BSN	926	1068	1063	662
MSN	634	601	616	469
DNP	59	93	88	116
PhD	26	14	7	3
Total	1645	1776	1774	1250

Post-Licensure Student Demographics

Table 19, which is continued on the following page, describes post-licensure student demographics. It shows that post-licensure students are primarily female and exhibit racial and ethnic diversity. Most students in post-licensure programs are 30 or more years old.

Table 19. Post-Licensure Student Demographics

	RN to BSN	MSN Clinical	MSN Non-Clinical	DNP	PhD
	N = 2140	**N = 1185**	**N = 489**	**N = 704**	**N = 82**
Gender					
Female	**1895** (89%)	**754** (64%)	**365** (75%)	**619** (88%)	**76** (93%)
Male	**245** (11%)	**103** (9%)	**43** (9%)	**85** (12%)	**6** (7%)
Transgender	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)
Did not Disclose	**0** (0%)	**328** (28%)	**81** (17%)	**0** (0%)	**0** (0%)

*Table 19 is continued on the following page.

Table 19. (continued) Post-Licensure Student Demographics

	RN to BSN	MSN Clinical	MSN Non-Clinical	DNP	PhD
	N = 2140	N = 1185	N = 489	N = 704	N = 82
Race/Ethnicity					
American Indian	0 (0%)	3 (0%)	1 (0%)	0 (0%)	0 (0%)
Asian	185 (9%)	168 (14%)	40 (8%)	101 (14%)	6 (7%)
Black/African American	216 (10%)	161 (14%)	54 (11%)	164 (23%)	5 (6%)
Hawaiian/Pacific Islander	21 (1%)	32 (3%)	2 (0%)	0 (0%)	0 (0%)
White/Caucasian	1034 (48%)	329 (28%)	227 (46%)	329 (47%)	27 (33%)
Hispanic/Latino	225 (11%)	101 (9%)	29 (6%)	74 (11%)	6 (7%)
Other	10 (1%)	3 (0%)	2 (0%)	0 (0%)	0 (0%)
Two or More Races	32 (2%)	17 (1%)	9 (2%)	0 (0%)	1 (1%)
Did not Disclose	417 (20%)	371 (31%)	125 (26%)	36 (5%)	37 (45%)
Age					
17-20	24 (1%)	0 (0%)	0 (0%)	6 (1%)	0 (0%)
21-25	182 (9%)	48 (4%)	23 (5%)	48 (7%)	0 (0%)
26-30	348 (16%)	157 (13%)	67 (14%)	208 (30%)	10 (12%)
31-40	589 (28%)	243 (21%)	100 (20%)	211 (30%)	34 (42%)
41-50	462 (22%)	236 (20%)	120 (25%)	131 (19%)	10 (12%)
51-60	296 (14%)	101 (9%)	79 (16%)	88 (13%)	6 (7%)
61+	36 (2%)	1 (0%)	10 (2%)	10 (1%)	0 (0%)
Did not Disclose	203 (10%)	399 (34%)	90 (18%)	2 (0%)	22 (27%)

Table 20. Post-Licensure Demographic Characteristics Trends 2014-2017

	2014	2015	2016	2017
	N = 8908	N = 6337	N = 4970	N = 4600
Total Enrollment by Program				
RN to BSN	**5727** (64%)	**3600** (57%)	**2604*** (52%)	**2140** (47%)
MSN Clinical	**1324** (15%)	**1268** (20%)	**1064*** (21%)	**1185** (26%)
MSN Non-Clinical	**1083** (12%)	**792** (12%)	**541*** (11%)	**489** (11%)
DNP	**629** (7%)	**589** (9%)	**677*** (14%)	**704** (15%)
PhD	**145** (2%)	**88** (1%)	**84*** (2%)	**82** (2%)
Race/Ethnicity				
American Indian	**16** (0%)	**9** (0%)	**7** (0%)	**4** (0%)
Asian	**869** (10%)	**671** (11%)	**515** (10%)	**500** (11%)
Black/African American	**1262** (14%)	**938** (15%)	**656** (13%)	**600** (13%)
Hawaiian/Pacific Islander	**80** (1%)	**47** (1%)	**35** (1%)	**55** (1%)
White/Caucasian	**4898** (55%)	**3370** (53%)	**2481** (50%)	**1946** (42%)
Hispanic/Latino	**817** (9%)	**545** (9%)	**502** (10%)	**435** (9%)
Other	**65** (1%)	**29** (0%)	**12** (0%)	**15** (0%)
Two or More Races	**70** (1%)	**55** (1%)	**69** (1%)	**59** (1%)
Did not Disclose	**831** (9%)	**673** (11%)	**693** (14%)	**986** (21%)
Age				
17-20	**19** (0%)	**8** (0%)	**52** (1%)	**30** (1%)
21-25	**429** (5%)	**433** (7%)	**576** (12%)	**301** (7%)
26-30	**1282** (14%)	**1163** (18%)	**1080** (22%)	**790** (17%)
31-40	**2467** (28%)	**2042** (32%)	**1350** (27%)	**1177** (26%)
41-50	**2310** (26%)	**1635** (26%)	**1068** (21%)	**959** (21%)
51-60	**1359** (15%)	**887** (14%)	**553** (11%)	**570** (12%)
61+	**204** (2%)	**89** (1%)	**69** (1%)	**57** (1%)
Did not Disclose	**838** (9%)	**80** (1%)	**222** (4%)	**716** (16%)

*2016 program enrollment rates were erroneously inflated beyond the number of students reported in each race and age category. Enrollment rates were imputed to match proportionately.

Table 21. New Jersey RN Nursing Programs

Schools	County	Diploma	ADN	ADN Bridge	BSN	Accel. BSN	Pre-licensure MSN	RN-BSN	Post-licensure MSN	DNP	PhD
Atlantic Cape Community Coll.	Atlantic		■	■							
Bergen Community College	Bergen		■								
Berkeley College*	Passaic				■						
Bloomfield College	Essex				■			■			
Brookdale Community College	Monmouth		■	■							
Caldwell University	Essex				■	■		■			
Chamberlain University	Middlesex				■						
Coll. of Saint Elizabeth	Morris							■	■		
County Coll. of Morris	Morris		■	■							
Cumberland County College	Cumberland		■	■							
Eastern International College	Hudson		■								
Eastwick College	Bergen		■								
Essex County College	Essex		■	■							
Fairleigh Dickinson University	Bergen				■	■		■	■	■	
Felician University	Bergen				■	■		■	■	■	
Georgian Court University	Ocean				■			■			
Holy Name Medical Center	Bergen	■									
Hudson County College	Hudson		■								
Jersey College at Ewing	Mercer			■							
Jersey College at Teterboro	Bergen			■							
JFK Muhlenberg Snyder	Middlesex	■									
Kean University	Union							■	■		■
Mercer County Community Coll.	Mercer		■								
Middlesex County College	Middlesex		■								
Monmouth University	Monmouth				■			■	■	■	
Montclair State University*	Essex				■			■	■		
New Jersey City University	Hudson					■		■	■		
Ocean County College	Ocean		■								
Our Lady of Lourdes	Camden	■									
Passaic County Community Coll.	Passaic		■	■							
Ramapo College	Bergen				■			■	■		
Raritan Valley Community Coll.	Somerset		■	■							
Richard Stockton University	Atlantic				■	■		■	■		
Rowan College	Burlington		■	■							
Rowan College	Gloucester		■	■							
Rutgers School of Nursing	Essex				■	■		■	■	■	■
Rutgers School of Nursing	Camden				■	■		■		■	
Saint Peter's University	Hudson				■			■	■	■	
Salem Community College	Salem			■							
Seton Hall University	Essex				■	■	■	■	■	■	■
St. Francis Medical Center	Mercer	■									
The Coll. of New Jersey	Mercer				■			■	■		
Thomas Edison State University	Mercer					■		■	■	■	
Trinitas School of Nursing	Union	■									
Warren County Community Coll.	Warren		■								
William Patterson University	Passaic				■			■	■	■	

*School did not participate in this survey period or did not graduate a cohort.

Section 2: Educational Capacity Report - LPN

New Jersey LPN Program Overview

This report includes data for **30** of the **37** schools in New Jersey that provide education for Licensed Practical Nurses (LPNs).

Figure 3. Geographic Distribution of LPN Programs

Figure 3 displays the primary location of New Jersey's 37 practical nursing programs, inclusive of programs that did not participate in the 2016-2017 survey. The number in the pin represents the number of practical nursing programs located in the county The County Population chart provides context so that density of programs may be compared to density of population (United States Census Bureau, 2016).

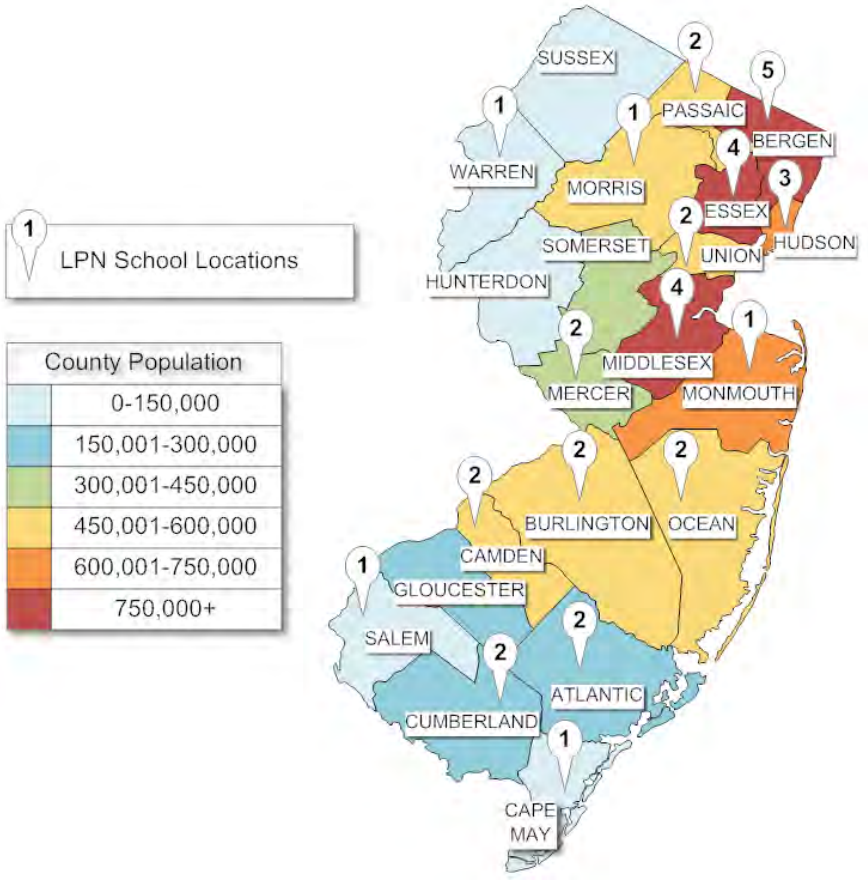


Table 22 and **Table 23** show data on federal tax classification and accreditation status as self-reported by the 2016-2017 LPN Educational Capacity Survey respondents.

Table 22. Federal Tax Classification of LPN Programs

	N = 31	(%)
Public	20	64.5
Private/For-Profit	10	32.3
Private/Non-Profit	1	3.2

Table 23. Accreditation Status		
	N = 31	(%)
Accredited	25	80.7
Not Accredited/In Progress	6	19.4

LPN Program Characteristics

Table 24 describes the delivery format of pre-licensure programs. A majority of programs are delivered solely through face-to-face lectures. There are currently no programs among respondents that have online-only practical nursing programs.

Table 24. LPN Program Format		
	N = 31	(%)
Face-to-Face Solely	28	90.3
Hybrid	3	9.7

Table 25 describes the specialization or setting of clinical practice time in practical nursing programs. A majority of clinical practice time is spent in Post-Acute Care Settings.

Table 25. Setting of Hands-on Clinical Practice Time (%)	
Acute Care	26.5
Post-Acute Care	44.3
Preventative Services	8.5
Home Care	3.2
Other	17.5

Table 26 describes the delivery format of clinical practice time in pre-licensure programs. A majority of clinical practice is hands-on.

Table 26. Format of Clinical Practice Time (%)	
Skill Lab	23.8
Simulation Lab	12.3
Hands-On	59.3
Other	4.7

Figure 4 chart shows the average time (in months) to program completion. The average time for completion of an LPN program is about 1 year.

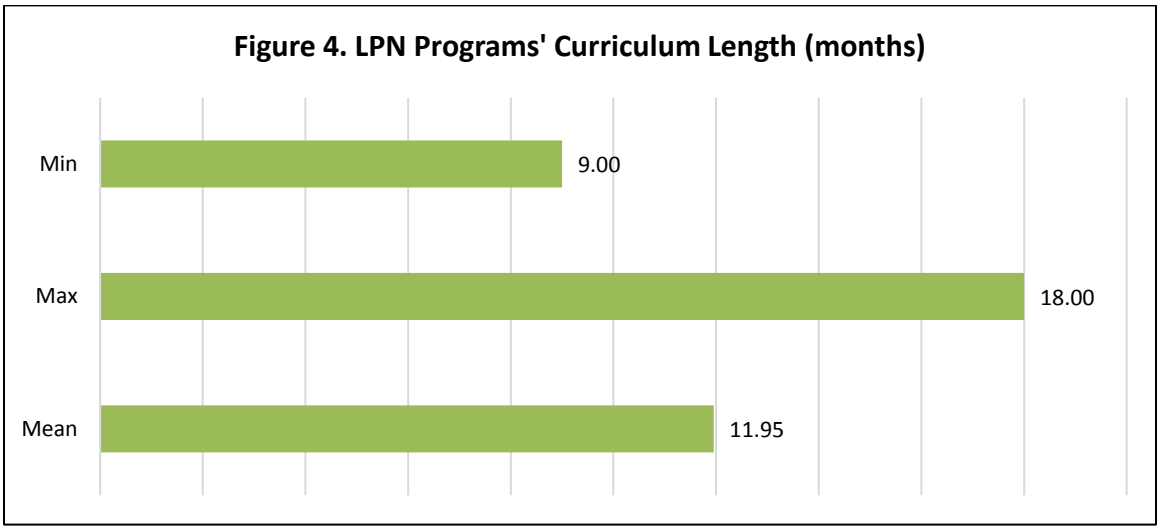


Table 27 shows that most LPNs secure a job within 0-7 months after graduation.

Table 27. Time to Employment after Graduation (%)		
0-3 Months after graduation	42	>84%
4-7 Months after graduation	42	
8-11 Months after graduation	24	
12+ Months after graduation	14	
Unknown/ Do not track	0	

LPN Application, Admission, Enrollment, and Graduation

Licensed Practical Nursing (LPN) Programs are those that prepare students for the National Council Licensure Examination for Licensed Practical Nurses (NCLEX-PN). The number of qualified and admitted applicants displayed here may be inflated if a person applied to or was admitted by more than one school. Our data do not provide unique identifiers for each applicant. **Table 28** shows that graduates continue to decline year over year. From 2014 and 2017, Licensed Practical Nurse graduation declined by 22.5%.

Table 28. LPN Application, Admission, Enrollment, and Graduation Trend Analysis 2014-2017				
	2014	**2015**	**2016**	**2017**
Available Seats	3569	3515	2862	3007
Qualified Applicants	3406	3286	2882	3116
Admitted Applicants	2617	2530	2265	2232
Admitted Applicants (%)	77	77	79	72
Enrollees	2368	2117	1882	1982
Enrolled (%)	90	84	83	89
Graduates	1575	1543	1247	1220

Table 29 shows the reasons for rejection of qualified applicants among LPN programs. This table is not inclusive of any of the 24 (77%) schools that reported "not applicable," because they did not reject any qualified applicants. Schools that did report rejecting qualified applicants may have provided multiple reasons for doing so.

Table 29. Reason for Rejection of Qualified LPN Applicants		
	# Schools N=31	%
Lack of qualified faculty	3	10
Lack of clinical space	1	3
Limited classroom space	5	16
Lack of clinical sites available for students	3	10
Others	1	3

The survey presented the following reasons: lack of qualified faculty; lack of clinical space; limited classroom space; and lack of clinical sites available for students. An additional reason provided by respondents in a comment box included insufficient funding. Limited classroom space was the most frequent response, but only five schools reported that as a concern.

NCLEX Pass Rates for LPN Students

Students must pass the National Council Licensure Exam (NCLEX-PN) to apply for licensure as an LPN. **Table 30** shows NCSBN data on the pass rates for students who took the NCLEX-PN in 2017 (NCSBN, 2017b). These data are inclusive of schools that did not respond to the NJCCN 2017 Educational Capacity Survey.

Table 30. Pass Rates for NCLEX-PN Taken in 2017	
# Participants	1505
Total Passed	1187
Total Failed	318
% Pass Rate	79%

LPN Student Demographics

In **Table 31**, LPN students are primarily female, identifying as Black/African American, and between 21-30 years of age.

Table 31. Practical Nursing Student Demographics

Gender	N = 2146
Female	**2081** (88%)
Male	**281** (12%)
Transgender	**1** (0%)
Did not Disclose	**0** (0%)
Race/Ethnicity	**N = 2146**
American Indian	**7** (0%)
Asian	**119** (5%)
Black/African American	**1199** (51%)
Hawaiian/Pacific Islander	**15** (1%)
White/Caucasian	**420** (18%)
Hispanic/Latino	**396** (17%)
Other	**19** (1%)
Two or More Races	**21** (1%)
Did not Disclose	**167** (7%)
Age	**N = 2146**
17-20	**127** (1%)
21-25	**562** (24%)
26-30	**608** (26%)
31-40	**641** (27%)
41-50	**314** (13%)
51-60	**93** (4%)
61+	**4** (0%)
Did not Disclose	**14** (1%)

Table 32 shows that New Jersey continues to a highly diverse LPN population. Practical Nursing students are primarily Black/African American.

Table 32. LPN Student Demographic Characteristics Trends Analysis 2014-2017

	2014	2015	2016	2017
Race/Ethnicity				
American Indian	**5** (0%)	**5** (0%)	**3** (0%)	**7** (0.3%)
Asian	**231** (9%)	**142** (5%)	**107** (5%)	**119** (5.0%)
Black/African American	**1378** (54%)	**1408** (52%)	**1075** (50%)	**1199** (50.7%)
Hawaiian/Pacific Islander	**0** (0%)	**25** (1%)	**31** (1%)	**15** (0.6%)
White/Caucasian	**380** (15%)	**531** (20%)	**420** (20%)	**420** (17.8%)
Hispanic/Latino	**372** (15%)	**369** (14%)	**330** (15%)	**396** (16.8%)
Other	**-**	**29** (1%)	**32** (1%)	**19** (0.8%)
Two or More Races	**-**	**111** (4%)	**18** (1%)	**21** (0.9%)
Did not Disclose	**171** (7%)	**89** (3%)	**130** (6%)	**167** (7.1%)
Age				
17-20	**132** (5%)	**122** (5%)	**98** (5%)	**127** (%)
21-25	**562** (22%)	**604** (22%)	**516** (24%)	**562** (23.8%)
26-30	**649** (26%)	**652** (24%)	**534** (25%)	**608** (25.7%)
31-40	**748** (29%)	**833** (31%)	**595** (28%)	**641** (27.1%)
41-50	**336** (13%)	**382** (14%)	**255** (12%)	**314** (13.3%)
51-60	**79** (3%)	**104** (4%)	**111** (5%)	**93** (3.9%)
61+	**4** (0%)	**5** (0%)	**9** (0%)	**4** (0.2%)
Did not Disclose	**27** (1%)	**7** (0%)	**28** (1%)	**14** (0.6%)

Table 33. LPN Nursing Programs

School Name	County
AVTECH Institute of Technology	Middlesex
Berkeley College	Passaic
Best Care Training Institute	Essex
Burlington County Institute of Technology	Burlington
Camden County College	Camden
Cape May County Technical School	Cape May
Cumberland County College	Cumberland
Cumberland County Technical Education Center	Cumberland
Eastwick College, Hackensack	Bergen
Eastwick College, Ramsey*	Bergen
Essex County College	Essex
Holy Name Medical Center School for Nursing	Bergen
Hudson County Community College	Hudson
Jersey College – Ewing	Mercer
Jersey College – Teterboro	Bergen
Lincoln Technical Institute – Iselin	Middlesex
Lincoln Technical Institute – Moorestown	Burlington
Lincoln Technical Institute - Paramus	Bergen
Mercer County Technical School	Mercer
Merit Technical Institute	Hudson
Metropolitan Learning Institute*	Hudson
Middlesex County Vocational and Technical School	Middlesex
Monmouth County Vocational School District	Monmouth
Morris County School of Technology	Morris
New Community Corporation*	Essex
New Jersey Center for Advanced Training and Studies*	Essex
Ocean County Vocational Technical School	Ocean
Passaic County Technical Institute	Passaic
Pinelands School of Practical Nursing	Ocean
Prism Career Institute – Cherry Hill*	Camden
Prism Career Institute – Egg Harbor*	Atlantic
Salem Community College	Salem
Sierra Allied Health Academy*	Union
Union County College	Union
Universal Training Institute	Middlesex
Warren County Technical School	Warren

*School did not participate in this survey period or did not graduate a cohort.

Section 3: New Jersey Nursing Faculty Report

RN Faculty

RN Faculty Employment

The following tables describe the number of full-time (FT) and part-time (PT) faculty employment and vacancies across pre- and post-licensure nursing programs. Full-time and part-time position vacancies only include those that are being actively recruited.

Table 34. RN Nursing Faculty Positions and Vacancies

	Diploma	Associate	Baccalaureate & Graduate	Total
Full-time positions available	**74**	**165**	**390**	**629**
Full-time faculty employed	69	155	354	578
Full-time position vacancies	5 (6.8%)	10 (6.1%)	36 (9.2%)	51 (8.1%)
Part-time positions available	**92**	**221**	**330**	**643**
Part-time faculty employed	91	208	327	626
Part-time position vacancies	1 (1.1%)	13 (5.9%)	3 (0.9%)	17 (2.6%)

Table 35 shows a 29.4% increase in full-time faculty vacancies from 2014 and 2017, a majority of which are in Baccalaureate and higher degree programs. Conversely, there is approximately a 50% decrease in part-time faculty vacancies across all programs.

Table 35. Nursing Faculty Vacancy Trend

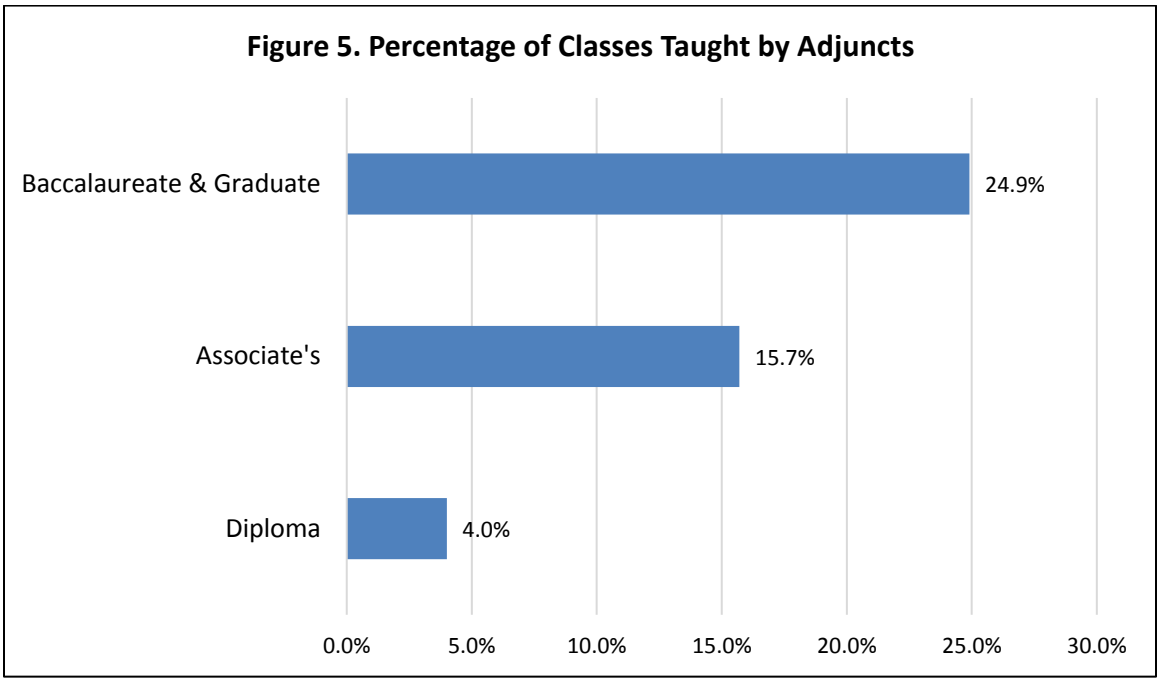
	2014		2015		2016		2017	
	FT	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**
Diploma	4	10	1	1	2	0	5	1
Associate	9	12	5	6	1	16	10	13
Baccalaureate & Higher	23	14	30	25	36	19	36	3
Total	36	36	36	32	39	35	51	17

Table 36 shows the number of full-time and part-time nursing faculty employed annually across pre- and post-licensure programs.

Table 36. Nursing Faculty Employment Trend

	2014		2015		2016		2017	
	FT	PT	FT	PT	FT	PT	FT	PT
Diploma	81	122	75	112	72	115	69	91
Associate	185	342	175	294	163	303	155	208
Baccalaureate & Higher	336	458	350	640	354	552	354	327
Total	602	922	601	1040	589	970	578	626

Figure 5 shows a higher percentage of classes taught by adjuncts in the Baccalaureate & Higher programs as compared to the Diploma and Associate Degree Programs.



There is a steady decrease in the number of full-time and part-time faculty employed annually (**Table 36**), which is not reflected in rising faculty vacancy rates (**Table 35**). Instead, there is a higher percentage of classes taught by adjuncts (**Figure 5**).

RN Faculty Demographics

Tables in this section show demographic data for full-time and part-time faculty members at pre- and post-licensure educational facilities. **Table 37** shows that Diploma and Associate Degree faculty are primarily prepared at the Master's level, and faculty for Baccalaureate & Higher Degree programs are primarily prepared at the PhD or DNP level.

Table 37. RN Faculty Education

	Diploma		Associate		Baccalaureate & Higher	
	N = 69	N = 91	N = 155	N = 260	N = 361	N = 378
Degree	FT	PT	FT	PT	FT	PT
Associate Degree	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)
Nursing Baccalaureate	**0** (0%)	**0** (0%)	**0** (0%)	**14** (5%)	**0** (0%)	**0** (0%)
Non-Nursing Baccalaureate	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**2** (1%)
Nursing Master's	**56** (81%)	**87** (96%)	**129** (83%)	**218** (84%)	**91** (25%)	**277** (73%)
Non-Nursing Master's	**0** (0%)	**0** (0%)	**1** (1%)	**11** (4%)	**5** (1%)	**19** (5%)
DNP	**10** (15%)	**4** (4%)	**17** (11%)	**11** (4%)	**101** (28%)	**46** (12%)
PhD in Nursing	**2** (3%)	**0** (0%)	**4** (3%)	**2** (1%)	**133** (37%)	**20** (5%)
Other doctorate in Nursing	**0** (0%)	**0** (0%)	**4** (3%)	**1** (0%)	**29** (8%)	**5** (1%)
Non-Nursing Doctorate	**1** (1%)	**0** (0%)	**0** (0%)	**03** (1%)	**2** (1%)	**7** (2%)
Missing/Unknown	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**2** (1%)

Table 38 (continued on the following page) shows that faculty are primarily female, white, and at the highest age brackets.

Table 38. RN Faculty Demographics

	Diploma		Associate		Baccalaureate & Higher	
	N = 69	N = 91	N = 155	N = 260	N = 361	N = 378
Gender	FT	PT	FT	PT	FT	PT
Female	**67** (97%)	**86** (95%)	**147** (95%)	**245** (94%)	**333** (92%)	**337** (89%)
Male	**2** (3%)	**5** (6%)	**8** (5%)	**15** (6%)	**21** (6%)	**41** (11%)
Did not Disclose	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**7** (2%)	**0** (0%)
Transgender	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)

Table 38 (continued). RN Faculty Demographics

	Diploma		Associate		Baccalaureate & Higher	
	N = 69	N = 91	N = 155	N = 260	N = 361	N = 378
Race/Ethnicity	FT	PT	FT	PT	FT	PT
American Indian	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)
Asian	**3** (4%)	**21** (23%)	**9** (6%)	**18** (7%)	**21** (6%)	**41** (11%)
Black/African American	**10** (15%)	**25** (28%)	**16** (10%)	**54** (21%)	**31** (9%)	**46** (12%)
Hawaiian/Pacific Islander	**0** (0%)	**0** (0%)	**0** (0%)	**3** (1%)	**2** (1%)	**1** (0%)
White/Caucasian	**53** (77%)	**36** (40%)	**119** (77%)	**168** (65%)	**271** (75%)	**191** (51%)
Hispanic/Latino	**2** (3%)	**9** (10%)	**8** (5%)	**17** (7%)	**17** (5%)	**8** (2%)
Other	**1** (0%)	**0** (0%)	**2** (1%)	**0** (0%)	**1** (0%)	**0** (0%)
Two or More Races	**0** (0%)	**0** (0%)	**1** (1%)	**0** (0%)	**0** (0%)	**2** (1%)
Did not Disclose	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**18** (5%)	**89** (24%)
Age						
30 or younger	**0** (0%)	**2** (2%)	**0** (0%)	**5** (2%)	**1** (0%)	**7** (2%)
31-40	**11** (16%)	**13** (14%)	**10** (7%)	**33** (13%)	**21** (6%)	**63** (17%)
41-50	**11** (16%)	**21** (23%)	**29** (19%)	**68** (26%)	**52** (14%)	**107** (28%)
51-55	**15** (22%)	**19** (21%)	**32** (21%)	**49** (19%)	**58** (16%)	**58** (15%)
56-60	**13** (19%)	**15** (17%)	**31** (20%)	**40** (15%)	**79** (22%)	**49** (13%)
61-65	**18** (26%)	**12** (13%)	**30** (19%)	**50** (19%)	**62** (17%)	**25** (7%)
66-70	**0** (0%)	**5** (6%)	**18** (12%)	**14** (5%)	**44** (12%)	**14** (4%)
71+	**1** (1%)	**4** (4%)	**5** (3%)	**1** (0%)	**17** (5%)	**9** (2%)
Did not Disclose	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**27** (8%)	**46** (12%)
Mean Age	**52.5**	**51.8**	**55.5**	**51.7**	**52.1**	**43.2**

Table 39 indicates that faculty continue to show a trend of being white, female, and in the higher age brackets.

Table 39. RN Faculty Age and Race Trends

	2014		2015		2016		2017	
	N = 602	N = 886	N = 601	N = 1089	N = 354	N = 552	N = 585	N = 729
Race/Ethnicity	FT	PT	FT	PT	FT	PT	FT	PT
American Indian	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**2** (0%)	**0** (0%)	**0** (0%)
Asian	**28** (5%)	**5** (6%)	**28** (5%)	**79** (7%)	**15** (4%)	**39** (7%)	**33** (6%)	**80** (11%)
Black/African American	**61** (10%)	**134** (15%)	**63** (10%)	**165** (15%)	**25** (7%)	**55** (10%)	**57** (10%)	**125** (17%)
Hawaiian/Pacific Islander	**3** (0%)	**12** (1%)	**3** (0%)	**12** (1%)	**3** (1%)	**3** (1%)	**2** (0%)	**4** (1%)
White/Caucasian	**470** (78%)	**559** (63%)	**479** (80%)	**623** (57%)	**274** (77%)	**315** (57%)	**443** (76%)	**395** (54%)
Hispanic/Latino	**22** (4%)	**31** (3%)	**20** (3%)	**37** (3%)	**13** (4%)	**19** (3%)	**27** (5%)	**34** (5%)
Other	**4** (1%)	**2** (0%)	**0** (0%)	**3** (0%)	**0** (0%)	**0** (0%)	**4** (1%)	**0** (0%)
Two or More Races	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**1** (0%)	**2** (0%)
Did not Disclose	**14** (2%)	**93** (10%)	**8** (1%)	**170** (16%)	**24** (7%)	**119** (22%)	**18** (3%)	**89** (12%)
Age								
30 or younger	**5** (1%)	**28** (3%)	**6** (1%)	**22** (2%)	**0** (0%)	**18** (3%)	**1** (0%)	**14** (2%)
31-40	**47** (8%)	**103** (12%)	**39** (6%)	**158** (14%)	**21** (6%)	**85** (15%)	**42** (7%)	**109** (15%)
41-50	**113** (19%)	**184** (21%)	**113** (19%)	**261** (24%)	**51** (14%)	**159** (29%)	**92** (16%)	**196** (27%)
51-55	**105** (17%)	**167** (19%)	**112** (19%)	**191** (18%)	**57** (16%)	**84** (15%)	**105** (18%)	**126** (17%)
56-60	**130** (22%)	**108** (12%)	**134** (22%)	**180** (17%)	**69** (17%)	**76** (14%)	**123** (21%)	**104** (14%)
61-65	**105** (17%)	**72** (8%)	**114** (19%)	**112** (10%)	**66** (19%)	**46** (8%)	**110** (19%)	**87** (12%)
66-70	**45** (7%)	**29** (3%)	**52** (9%)	**40** (4%)	**40** (11%)	**13** (2%)	**62** (11%)	**33** (5%)
71+	**21** (3%)	**10** (1%)	**19** (3%)	**12** (1%)	**20** (6%)	**11** (2%)	**23** (4%)	**14** (2%)
Did not Disclose	**31** (5%)	**185** (21%)	**12** (2%)	**113** (10%)	**30** (8%)	**60** (11%)	**27** (5%)	**46** (6%)

LPN Faculty

LPN Faculty Employment

The following tables describe the number of full-time (FT) and part-time (PT) faculty employment and vacancies in LPN programs. Full-time and part-time position vacancies only include those that are being actively recruited.

Table 40. LPN Nursing Faculty Positions and Vacancies		
Full-time positions available	**135**	**%**
Full-time faculty employed	120	89
Full-time position vacancies	15	11
Part-time positions available	**216**	**%**
Part-time faculty employed	201	93
Part-time position vacancies	15	7

Table 41 shows a 60.0% increase in full-time faculty vacancies from 2014 and 2017. Conversely, there is a 46.7% decrease in part-time faculty vacancies.

Table 41. LPN Nursing Faculty Vacancy Trend							
2014		**2015**		**2016**		**2017**	
FT	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**
6	22	9	28	8	25	15	15

Table 42 shows the number of full-time and part-time nursing faculty employed annually in practical nursing programs.

Table 42. LPN Nursing Faculty Employment Trend							
2014		**2015**		**2016**		**2017**	
FT	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**
152	278	152	270	150	263	135	201

There is a steady decrease in the number of full-time and part-time faculty employed annually (**Table 42**), which is not reflected in rising faculty vacancy rates (**Table 41**).

LPN Faculty Demographics

Tables in this section show demographic data for full-time and part-time faculty members at LPN educational facilities. **Table 43** shows that practical nursing faculty are primarily prepared at the Baccalaureate or Master's level.

Table 43. Practical Nursing Faculty Demographics

	N = 120	N = 210
Degree	**FT**	**PT**
Associate Degree	**1** (1%)	**3** (1%)
Nursing Baccalaureate	**37** (31%)	**84** (40%)
Non-Nursing Baccalaureate	**5** (4%)	**0** (0%)
Nursing Master's	**57** (49%)	**97** (46%)
Non-Nursing Master's	**9** (8%)	**7** (3%)
PhD in Nursing	**3** (3%)	**2** (1%)
DNP	**5** (4%)	**11** (5%)
Other doctorate in Nursing	**3** (3%)	**1** (1%)
Non-Nursing Doctorate	**0** (0%)	**2** (1%)
Missing/Unknown	**0** (0%)	**3** (1%)

Table 44, which is continued on the following page, shows that faculty are primarily female, diverse in race and ethnicity, and more heavily concentrated at the higher age brackets (41 years and older).

Table 44. Practical Nursing Faculty Demographics

	N = 120	N = 210
Gender	**FT**	**PT**
Female	**103** (86%)	**164** (78%)
Male	**17** (14%)	**40** (19%)
Transgender	**0** (0%)	**0** (0%)
Did not Disclose	**0** (0%)	**0** (0%)

Table 44 (continued). Practical Nursing Faculty Demographics

	N = 120	N = 210
Race/Ethnicity	**FT**	**PT**
American Indian	**0** (0%)	**0** (0%)
Asian	**8** (7%)	**32** (15%)
Black/African American	**34** (28%)	**60** (29%)
Hawaiian/Pacific Islander	**3** (3%)	**6** (3%)
White/Caucasian	**70** (58%)	**91** (43%)
Hispanic/Latino	**4** (3%)	**10** (5%)
Other	**0** (0%)	**0** (0%)
Two or More Races	**0** (0%)	**0** (0%)
Did not Disclose	**1** (1%)	**0** (0%)
Age		
30 or younger	**1** (1%)	**0** (0%)
31-40	**13** (11%)	**32** (15%)
41-50	**23** (19%)	**60** (29%)
51-55	**26** (22%)	**6** (3%)
56-60	**20** (17%)	**91** (43%)
61-65	**25** (21%)	**10** (5%)
66-70	**8** (7%)	**0** (0%)
71+	**4** (3%)	**0** (0%)
Did not Disclose	**0** (0%)	**11** (5%)
Mean Age	**53.7**	**48.9**

Table 45. Practical Nursing Faculty Age and Race Trends 2014-2016

	2014		2015		2016		2017	
	N = 139	N = 241	N = 152	N = 283	N = 150	N = 263	N = 120	N = 210
Race/Ethnicity	FT	PT	FT	PT	FT	PT	FT	PT
American Indian	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)
Asian	**11** (8%)	**25** (10%)	**18** (12%)	**38** (13%)	**13** (9%)	**31** (12%)	**8** (7%)	**32** (15%)
Black/African American	**29** (21%)	**55** (23%)	**43** (29%)	**101** (36%)	**45** (30%)	**71** (27%)	**34** (28%)	**60** (29%)
Hawaiian/Pacific Islander	**1** (0%)	**12** (5%)	**0** (0%)	**9** (3%)	**2** (1%)	**12** (5%)	**3** (3%)	**6** (3%)
White/Caucasian	**90** (65%)	**110** (46%)	**83** (55%)	**119** (42%)	**83** (55%)	**134** (51%)	**70** (58%)	**91** (43%)
Hispanic/Latino	**8** (6%)	**17** (7%)	**6** (4%)	**12** (4%)	**7** (8%)	**14** (5%)	**4** (3%)	**10** (5%)
Other	-	-	**1** (1%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)
Two or More Races	-	-	**1** (1%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)	**0** (0%)
Did not Disclose	**0** (0%)	**22** (9%)	**0** (0%)	**4** (1%)	**0** (0%)	**0** (0%)	**1** (1%)	**0** (0%)
Age								
30 or younger	**6** (4%)	**8** (3%)	**3** (2%)	**4** (1%)	**1** (1%)	**7** (3%)	**1** (1%)	**0** (0%)
31-40	**19** (14%)	**40** (17%)	**16** (11%)	**33** (12%)	**20** (13%)	**40** (15%)	**13** (11%)	**32** (15%)
41-50	**28** (20%)	**87** (36%)	**32** (21%)	**79** (28%)	**27** (18%)	**77** (29%)	**23** (19%)	**60** (29%)
51-55	**26** (19%)	**51** (21%)	**36** (24%)	**52** (18%)	**34** (23%)	**53** (29%)	**26** (22%)	**6** (3%)
56-60	**26** (19%)	**30** (12%)	**27** (18%)	**49** (17%)	**28** (19%)	**41** (16%)	**20** (17%)	**91** (43%)
61-65	**12** (9%)	**14** (6%)	**21** (14%)	**27** (10%)	**24** (16%)	**25** (10%)	**25** (21%)	**10** (5%)
66-70	**2** (1%)	**4** (2%)	**0** (0%)	**4** (1%)	**5** (3%)	**12** (5%)	**8** (7%)	**0** (0%)
71+	**2** (1%)	**4** (2%)	**4** (3%)	**3** (1%)	**5** (3%)	**2** (1%)	**4** (3%)	**0** (0%)
Did not Disclose	**18** (13%)	**3** (1%)	**13** (9%)	**32** (11%)	**6** (4%)	**6** (2%)	**0** (0%)	**11** (5%)

Chapter 2: Workforce Supply Data

The data for this chapter were acquired from the 2018 New Jersey Board of Nursing (NJBON) license renewal survey. In 2018, the NJBON changed its survey questions to the Nursys® Licensure and Workforce tool. To ensure consistency of data, the Center did not combine 2018 Nursys® data with the Center's data from the previous year. Therefore, as licenses are due to be renewed every two years, this one-year report only covers **half** of the licensees in New Jersey. Data are only reported if there are sufficient responses to be representative of the response pool.

Section 1: Registered Nurse (RN) Profile

License Status

In the 2018 survey period, there were 54,559 RN respondents.

Table 46. RN License Status

	N = 54,559	%
Active	**52,246**	**96**
Not Active	**2,313**	**4**

Table 47 describes the method by which RNs attain their licensure. Those who attain their license via exam have graduated from an approved school of nursing and then taken the NCLEX examination. Those who attain their license via endorsement have first been licensed in another state.

Table 47. RN Basis for Licensure

	N = 54,559	%
Exam	**35,912**	**66**
Endorsement	**18,647**	**34**

RN Demographics

Table 48 shows that New Jersey's RNs are primarily white, female, and within 46-65 years of age. The average age of RNs is 49.8 years.

Table 48. RN Demographic Characteristics

Gender	N = 54,559	%
Female	49,878	91
Male	4,680	9
Missing/No Data	1	0
Race/Ethnicity	**N = 54,559**	**%**
Asian	7,408	14
Black/African American	4,447	8
Caucasian	31,488	58
Hispanic	2,227	4
Native American	52	0
Pacific Islander	393	1
Other	1,219	2
Missing/No Data	7,325	13
Age	**N = 54,559**	**%**
0-18	2	0
19-25	974	2
26-35	9,441	17
36-45	9,799	18
46-55	12,891	24
56-65	15,966	29
66-75	4,742	9
76-85	707	1
86+	36	0

Education

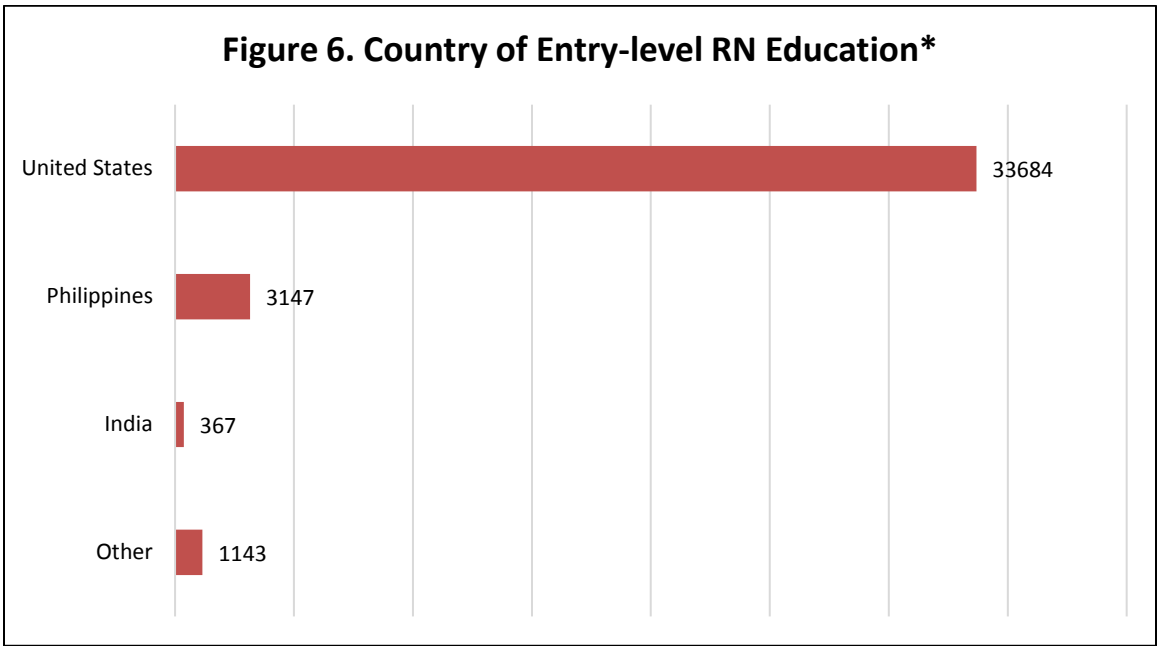
Table 49 describes the highest degree of nursing education currently held by respondents who were renewing their RN license. Of the 39,298 who provided data (excluding "Missing"), 66% have a Baccalaureate or higher degree in nursing, and 29% have an Associate's Degree in nursing.

Table 49. RN Highest Level of Nursing Education*

	N = 54,559	%
Diploma in Nursing	2,257	6
Associate's Degree in Nursing	11,419	29
Baccalaureate Degree in Nursing	21,811	56
Master's Degree in Nursing	3,498	9
DNP in Nursing PhD in Nursing Other Doctoral Degree in Nursing	313	1

*The missing (15,261) are excluded from the percent calculation.

Figure 6 describes the 38,341 respondents who provided data on the country in which they received their entry-level nursing education. The Philippines were the most common source of entry-level nursing education outside of the United States. Other countries in which nurses received their entry-level nursing education include (in order of most to least common) Nigeria, Korea, UK & Northern Ireland, Canada, Poland, and Jamaica.



*The missing (16,218) are excluded from the percent calculation.

Employment Status

In **Table 50**, being "Employed in Nursing" is defined as being employed as a nurse or in a position that requires an RN license. **Table 50** describes the employment status of the 39,455 RNs who reported their employment status.

Table 50. RN Employment Status*

	N = 54,559	%
Employed in Nursing Full-Time	**29,314**	**74**
Employed in Nursing Part-Time	**3,874**	**10**
Employed in Nursing Per Diem	**2,238**	**6**
Volunteering (only) in Nursing	**228**	**1**
Retired	**1,613**	**4**
Unemployed, seeking work in Nursing	**1,085**	**3**
Employed in a field other than Nursing	**1,103**	**3**

*The missing (15,104) are excluded from the percent calculation.

Respondents were asked the number of positions they are currently holding as a nurse. The following table shows their answers, indicating that a portion of New Jersey's RN workforce is holding multiple RN positions. **Table 51** describes the employment status of the 35,303 RNs who reported their number of RN positions.

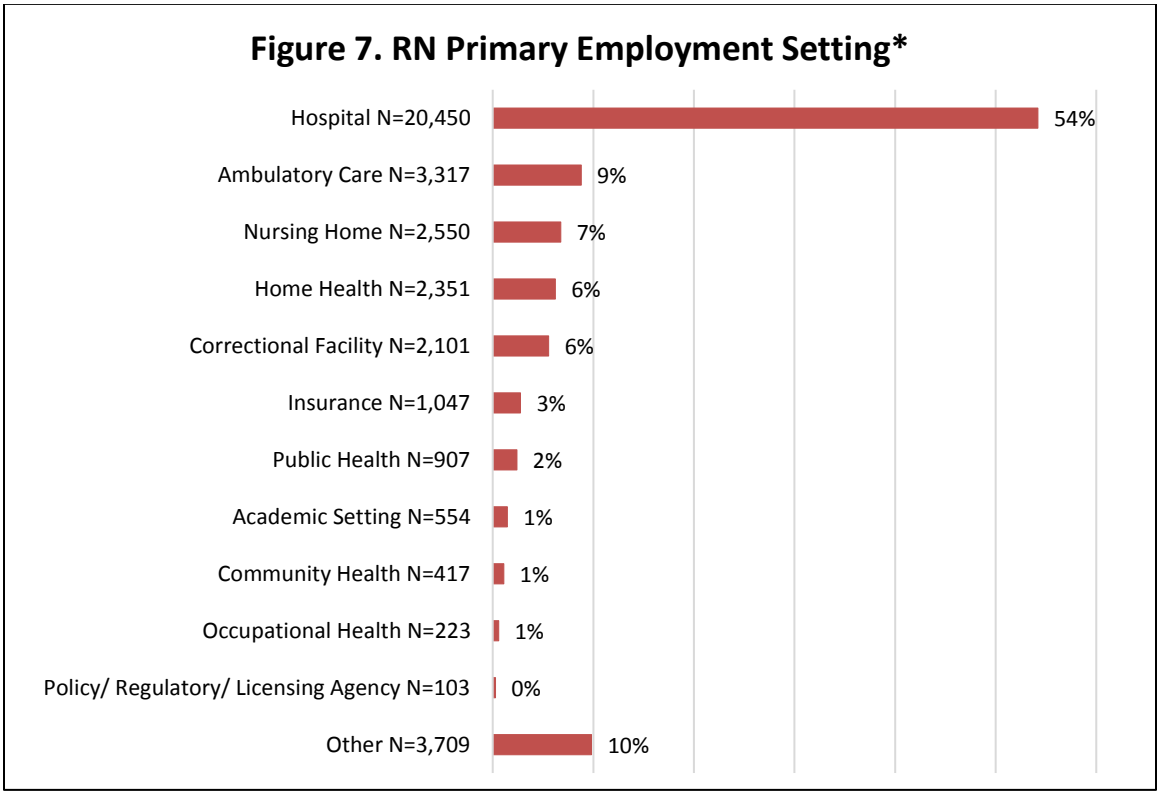
Table 51. Number of RN Positions*

	N = 54,559	%
1 position	**28,895**	**82**
2 positions	**5,785**	**16**
3 positions	**623**	**2**

*The missing (19,256) are excluded from the percent calculation.

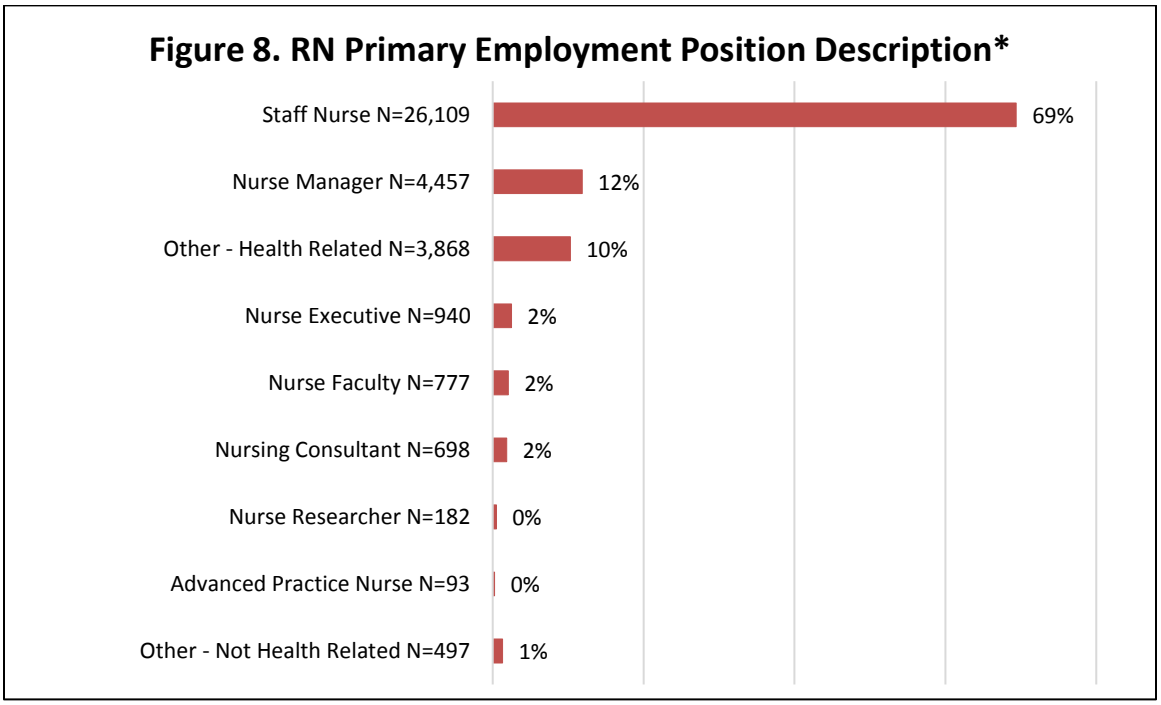
Primary Employment Characteristics

Figure 7 describes the 37,729 respondents who provided **primary employment setting** data. Of those, more than 54% of respondents reported that their primary employment setting was in a hospital.



*The missing (16,830) are excluded from the percent calculation.

Figure 8 describes the 37,621 respondents who provided **primary position** data. Of these, 69% reported that their primary employment position was as a staff nurse.



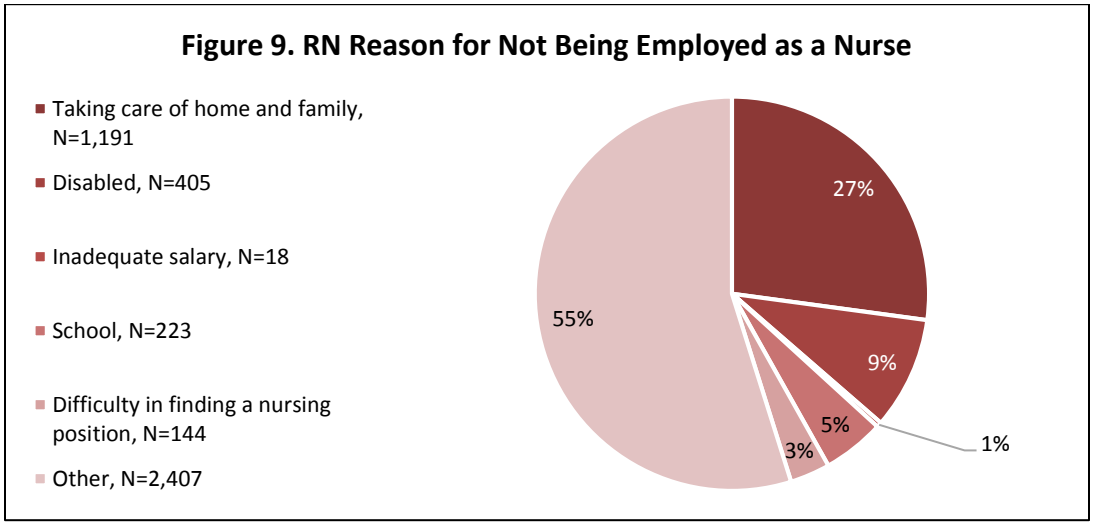
*The missing (16,938) are excluded from the percent calculation.

Secondary Employment Characteristics

Secondary employment setting data were not reported due to a very low response rate.

RN Unemployment

Figure 9 shows that there were 4,388 RNs who reported a reason for not being employed as a nurse. Of those, 55% cited "taking care of home and family" as their main reason.



Intent to Retire

In 2018, NJCCN asked participants of their intent to retire within the next two years, prior to the next renewal. In response, 5% of RNs indicated a plan to retire within this timeframe (not inclusive of missing data).

Table 52 identifies RNs who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 29% intend to retire, and of nurses who are 76-85 years old, 39% intend to retire.

Table 52. RN Intent to Retire by Age*

Age	Number of RNs	Intend to Retire	%
18-25	801	3	0
26-35	7,339	25	0
36-45	7,553	31	0
46-55	9,725	60	1
56-65	11,496	789	7
66-75	2,692	788	29
76-85	333	131	39
86-95	11	6	55

* The missing (14,608) are excluded from the percent calculation.

Section 2: Advanced Practice Nurse (APN) Profile

License Status

The New Jersey Board of Nursing (NJBON) did not ask any questions in their Nursys® survey to identify and count APNs. However, NJCCN added a question to the survey inquiring about respondent specialties (CRNA/CNS/CNM/NP), and answers to that question were matched to those who identified their license type to be RN. Thus, for the purposes of this report, APNs are identified as those who have an RN license and declared one or more certification (CRNA/CNS/CNM/NP). There were 4,058 such respondents.

Table 53. APN License Status

	N = 4,058	%
Active	3,943	97
Not Active	115	3

Table 54. APN Basis for Licensure

	N = 4,058	%
Exam	2,041	50
Endorsement	2,016	50

Table 55. APN Specialty

	N = 4,058	%
Nurse Practitioner (NP)	3,178	78
Clinical Nurse Specialists (CNS)	351	9
Certified Nurse Midwife (CNM)	147	4
Certified Nurse Anesthetist (CRNA)	467	12

APN Demographics

Table 56 shows that New Jersey's APNs are predominantly white, female, and within 45-65 years of age. The average age is 48.7 years.

Table 56. APN Demographic Characteristics

Gender	N = 4,058	%
Female	3,679	91
Male	379	9
Missing/No Data	0	0
Race/Ethnicity	**N = 4,058**	**%**
Asian	444	11
Black/African American	380	9
Caucasian	2,489	61
Hispanic	168	4
Native American	7	0
Pacific Islander	37	1
Other	107	3
Missing/No Data	428	11
Age	**N = 4,058**	**%**
0-18 years	1	0
19-25 years	4	0
26-35 years	754	19
36-45 years	963	24
46-55 years	1,004	25
56-65 years	1,007	25
66-75 years	294	7
76-85 years	29	1
86+ years	2	0

APN Education

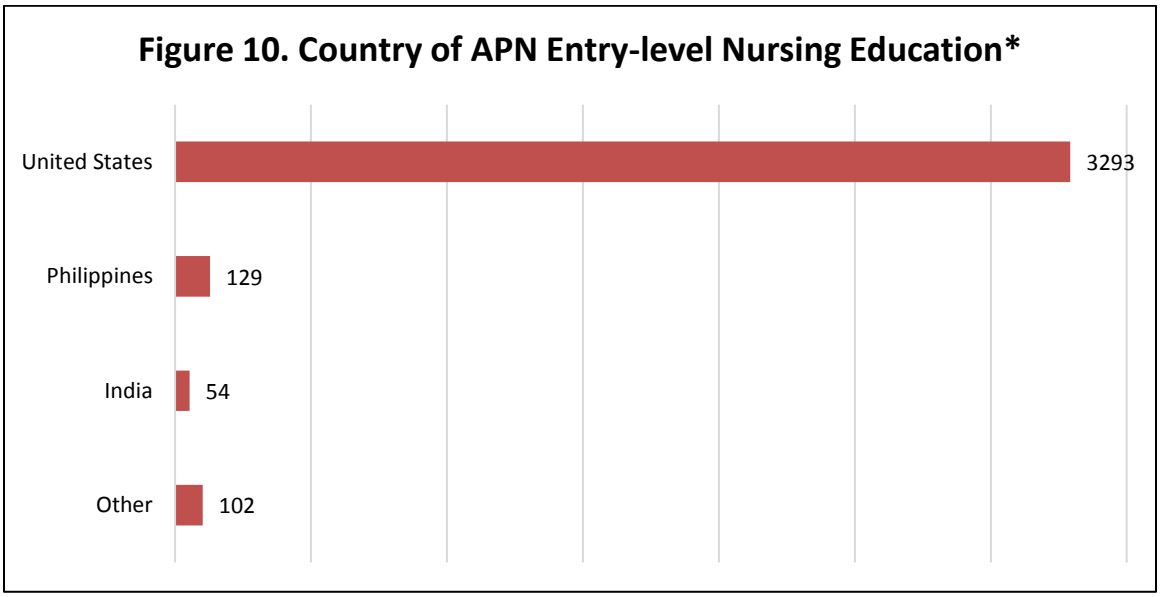
Table 57 describes the highest degree of nursing education currently held by respondents who renewed their APN license in 2018. The majority were prepared at the MSN level.

Table 57. APN Highest Level of Nursing Education*

	N = 4,058	%
Master's Degree in Nursing	3,181	88
DNP in Nursing	320	9
PhD in Nursing	63	2
Other Doctoral Degree in Nursing	39	1

*The missing (455) are excluded from the percent calculation.

Figure 10 shows the country in which respondents received their entry-level nursing education. There were 479 respondents who did not provide data for this question. The Philippines were the most common source of entry-level nursing education outside of the United States. Other countries include (in order of most to least common) Nigeria, Korea, UK & Northern Ireland, Canada, Poland, and Jamaica.



*The missing (479) are excluded from the percent calculation.

Employment Status

Table 58 describes the employment status of APNs. The majority of respondents are working full-time in Nursing.

Table 58. APN Employment Status*

	N = 4,058	%
Employed in Nursing Full-Time	**3,031**	**82**
Employed in Nursing Part-Time	**366**	**10**
Employed in Nursing Per Diem	**127**	**3**
Volunteering (only) in Nursing	**13**	**0**
Retired	**60**	**2**
Unemployed, seeking work in Nursing	**66**	**2**
Employed in a field other than Nursing	**46**	**1**

*The missing (349) are excluded from the percent calculation.

Table 59 describes the number of positions that respondents are currently holding, indicating that nearly a quarter of New Jersey's APN workforce is holding multiple positions.

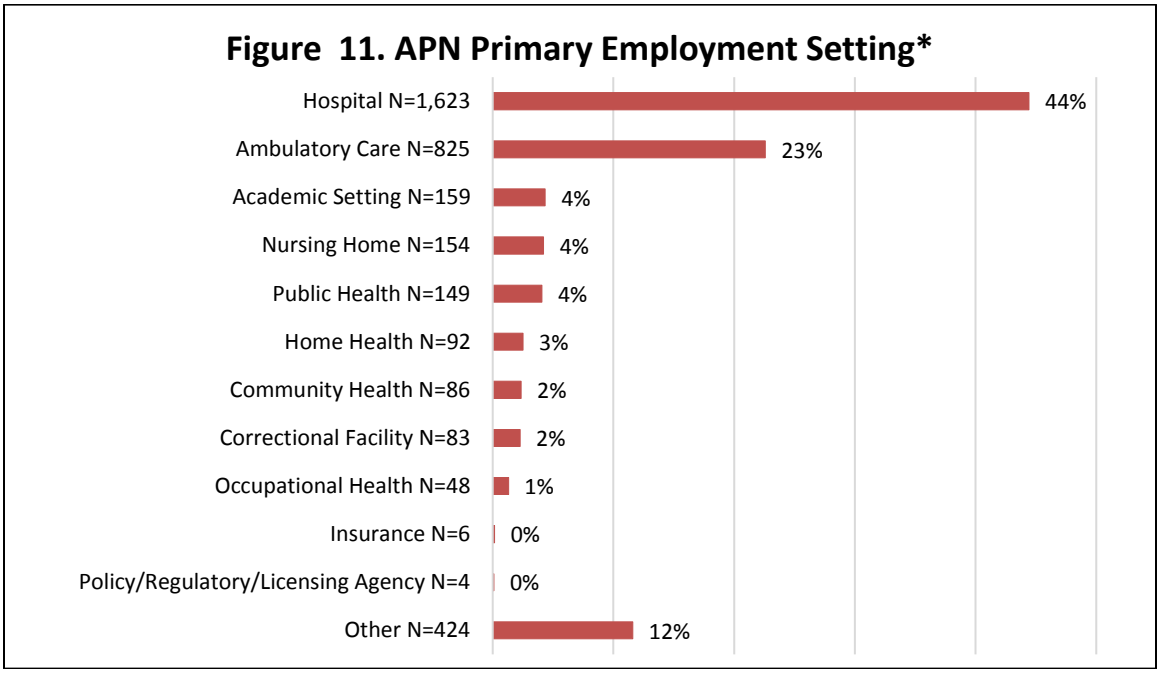
Table 59. Number of APN Positions*

Number of Positions	N = 4,058	%
1	2,452	72
2	782	23
3	168	5

*The missing (656) are excluded from the percent calculation.

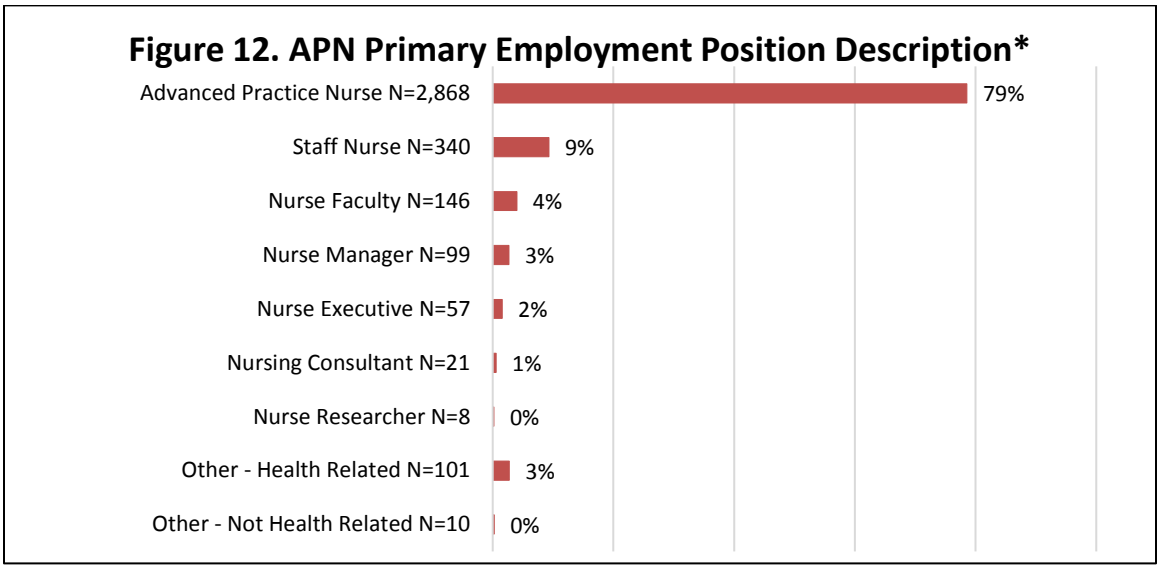
Primary Employment Characteristics

Figure 11 describes the 3,653 respondents who provided primary employment setting data. Of those, 44% are in hospital settings with the majority of APNs working outside of hospital settings.



*The missing (405) are excluded from the percent calculation.

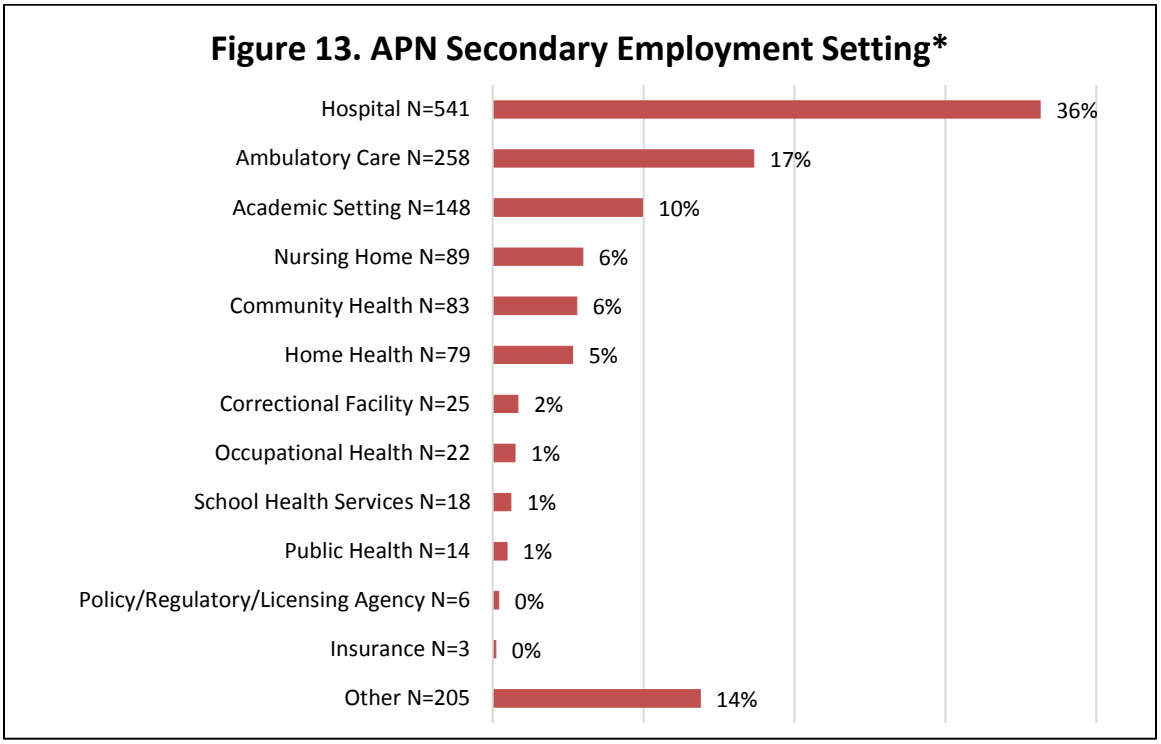
Figure 12 describes the 3,650 respondents who provided primary employment position descriptions. Of these, 79% reported that their primary employment position was as an APN.



*The missing (408) are excluded from the percent calculation.

Secondary Employment Position Characteristics

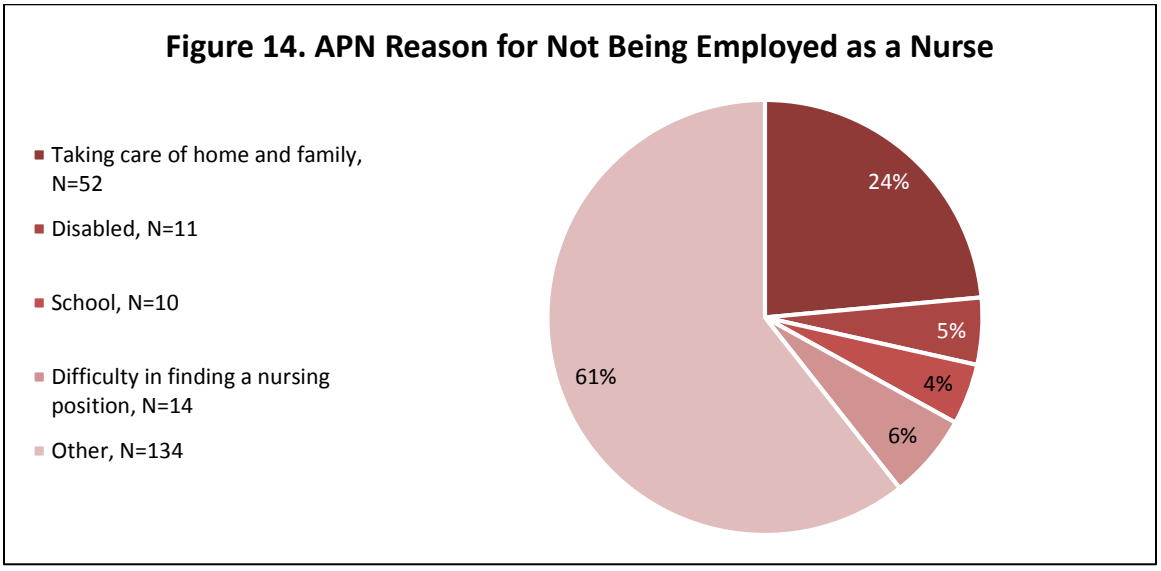
Figure 13 describes 1,491 respondents who provided secondary employment setting data. These data comprise RNs who have two or more jobs.



*There were 459 APNs who reported that they did not have a secondary employment setting, and additional missing (2,108). These are not included in the percent calculation.

APN Unemployment

Figure 14 provides details on the 220 APNs who gave a reason for not being employed as a nurse. Of these, 24% reported that they are taking care of home and family.



Intent to Retire

In 2018, NJCCN asked participants of their intent to retire within the next two years, prior to the next renewal. In response, 3% of APNs indicated a plan to retire within this timeframe (not inclusive of missing data).

Table 60 identifies APNs who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 25% intend to retire, and of nurses who are 76-85 years old, 22% intend to retire.

Table 60. APN Intent to Retire by Age*

Age	Number of APNs	Intend to Retire	%
18-25	4	0	0
26-35	720	3	0
36-45	917	4	0
46-55	959	7	1
56-65	942	39	4
66-75	270	67	25
76-85	23	5	22
86-95	2	0	0

*The missing (221) are excluded from the percent calculation.

Section 3: Licensed Practical Nurse (LPN) Profile

License Status

In the 2018 survey period, there were 10,425 LPN respondents.

Table 61. LPN License Status

	N = 10,425	%
Active	10,041	96
Not Active	384	4

Table 62. LPN Basis for Licensure

	N = 10,425	%
Exam	9,152	88
Endorsement	1,272	12
Invalid Response	1	0

LPN Demographics

Table 63 shows that New Jersey's LPNs are predominantly white, female, and within 45-65 years of age. The average age is 49.5 years.

Table 63. LPN Demographic Characteristics

Gender	N = 10,425	%
Female	9,342	90
Male	1,083	10
Missing/No Data	0	0
Race/Ethnicity	**N = 10,425**	**%**
Asian	630	6
Black/African American	2,715	26
Caucasian	4,279	41
Hispanic	667	6
Native American	22	0
Pacific Islander	56	1
Other	484	3
Missing/No Data	1,572	15
Age	**N = 10,425**	**%**
0-18	0	0
19-25	114	1
26-35	1,771	17
36-45	2,262	22
46-55	2,542	24
56-65	2,507	24
66-75	1,097	11
76-85	123	1
86+	9	0

Employment Status

In **Table 64**, being "Employed in Nursing" is defined as being employed as a nurse or in a position that requires an LPN license.

Table 64. LPN Employment Status Detail*

	N = 10,425	%
Employed in Nursing Full-Time	**3,861**	**72**
Employed in Nursing Part-Time	**539**	**1**
Employed in Nursing Per Diem	**276**	**5**
Volunteering (only) in Nursing	**20**	**0**
Retired	**183**	**3**
Unemployed, seeking work in Nursing	**273**	**5**
Employed in a field other than Nursing	**241**	**4**

*The missing (5,032) are excluded from the percent calculation.

Table 65 describes the number of positions held by respondents, indicating that a portion of New Jersey's LPN workforce is holding multiple LPN positions.

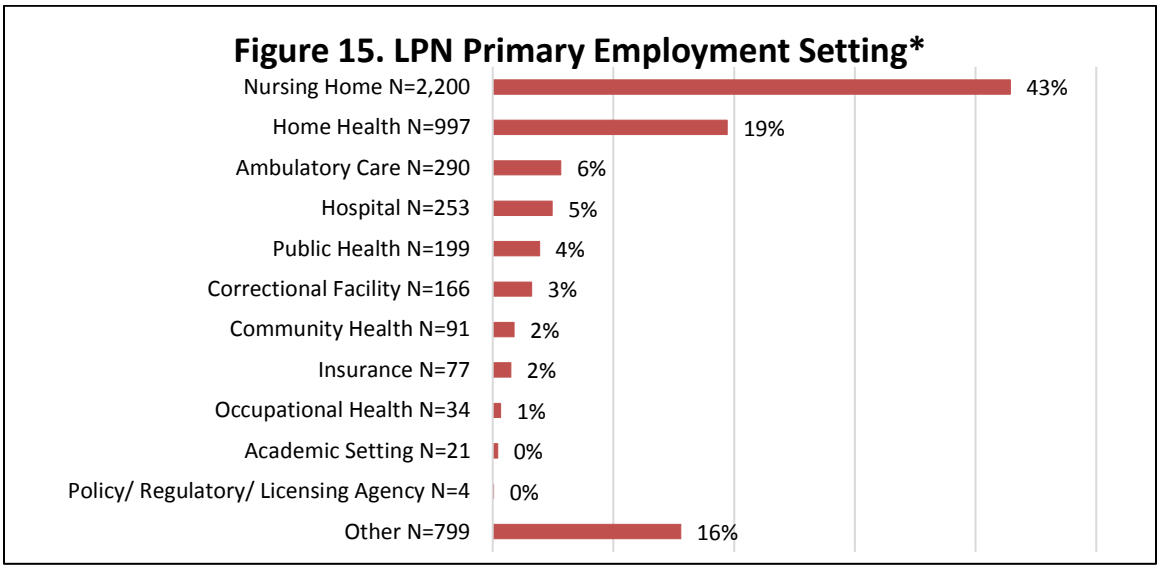
Table 65. Number of LPN Positions*

Number of Positions	N = 10,425	%
1	**3,811**	**82**
2	**776**	**17**
3	**74**	**2**

*The missing (5,764) are excluded from the percent calculation.

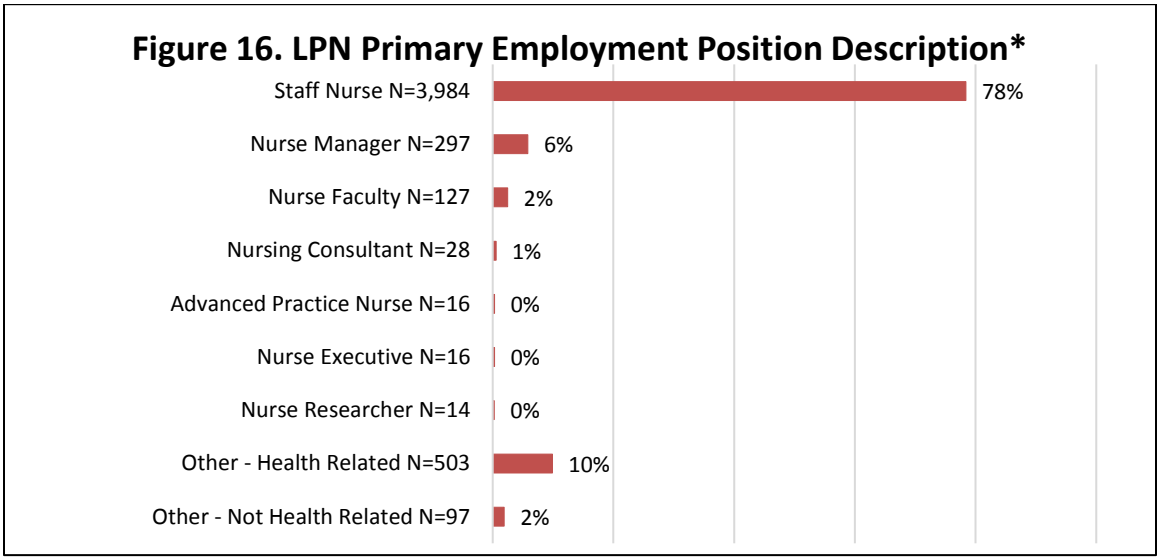
Primary Employment Characteristics

Figure 15 shows the **primary employment settings** of the 5,131 respondents who answered this survey question. Primary employment settings for LPNs were nursing homes and home health agencies.



*The missing (5,294) are excluded from the percent calculation.

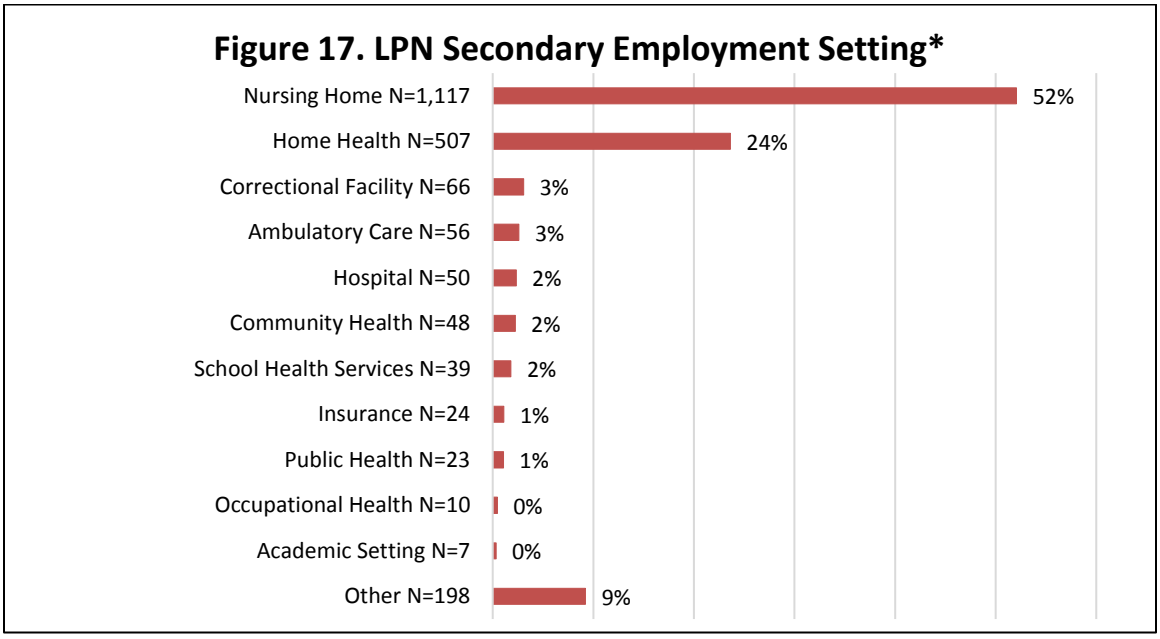
Figure 16 shows the **primary employment settings** of the 5,082 respondents who answered this survey question. Of these, 78% reported that their primary employment position was as a staff nurse.



*The missing (5,343) are excluded from the percent calculation.

Secondary Employment Characteristics

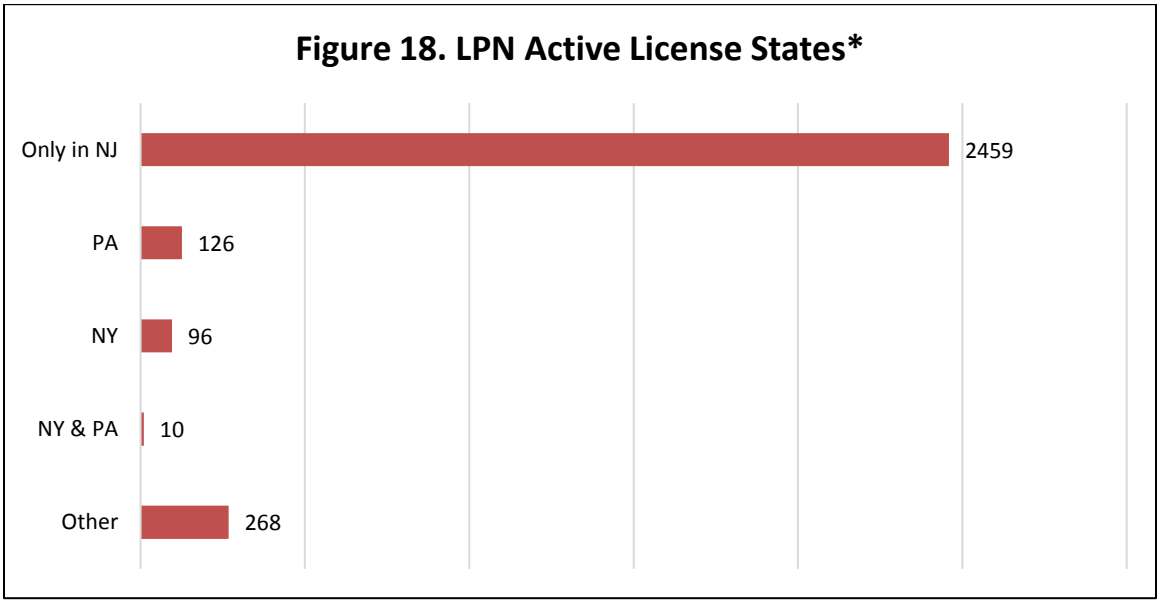
Figure 17 shows the **secondary employment settings** of the 2,145 respondents who answered this survey question.



*There were 914 LPNs who reported that they did not have a secondary employment setting, and additional missing (7,366). These are not included in the percent calculation.

Location of LPN Practice and Licensure

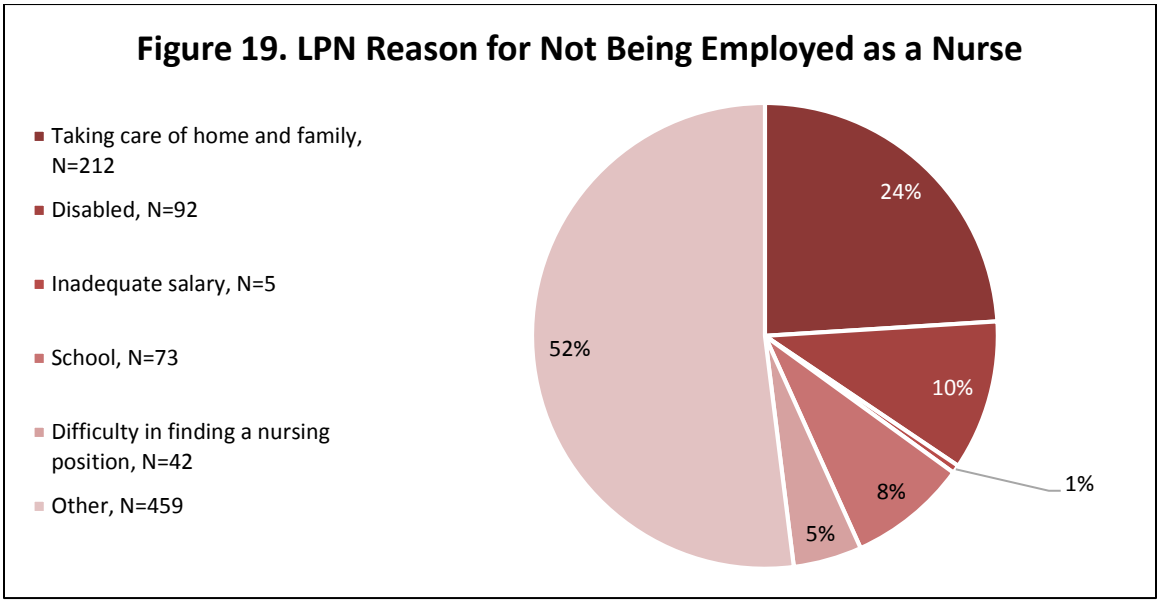
Figure 18 shows the states in which respondents have an active licensure. Note that all respondents in the table below are licensed in New Jersey. These data are only reported for LPNs due to higher response rate.



*The missing (7,544) are excluded from the percent calculation.

LPN Unemployment

There were 883 LPNs who reported a reason for not being employed as a nurse. Of those 883, 24% identified taking home of family as the primary reason, and 52% had other reasons that were not described.



Intent to Retire

In 2018, NJCCN asked participants of their intent to retire within the next two years, prior to the next renewal. In response, 4% of LPNs indicated a plan to retire within this timeframe (not inclusive of missing data).

Table 66 identifies LPNs who declared an intent to retire by age bracket. Of nurses who are 66-75 years old, 26% intend to retire, and of nurses who are 76-85 years old, 24% intend to retire.

Table 66. LPN Intent to Retire by Age*

Age	Number of LPNs	Intend to Retire	%
18-25	87	0	0
26-35	1,207	7	1
36-45	1,439	10	1
46-55	1,422	10	1
56-65	1,176	65	6
66-75	399	102	26
76-85	50	12	24
86-95	3	2	67

*The missing (4,642) are excluded from the percent calculation.

Chapter 3: Workforce Demand Data

NJCCN used data mined from Burning Glass Technologies™ to determine demand for nurses in the State of New Jersey. The O*Net-SOC taxonomy was used to standardize the occupation-specific indicators. The job ads were reviewed to eliminate any per diem positions, out-of-state commuters, temporary positions, and postings that had job openings outside of New Jersey.

Table 67 shows employment, job posting, and salary data from Burning Glass Technologies. Definitions of terms may be found in the Glossary. One limitation of these data is that these findings represent a snapshot in time and cannot be used for trending purposes or to compare with previous years.

Table 67. Summary Demand and Requirements Table by Occupation - 2017

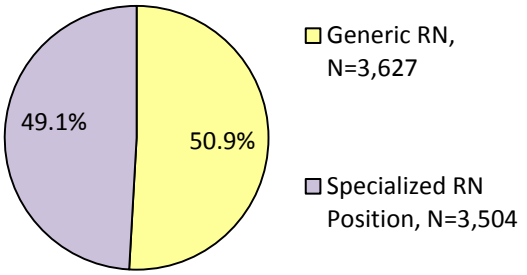
Category		Demand and Employment				Salary
	Source:	Burning Glass	BLS/OES2017	BGT Projections		BLS/OES2017
SOC Code (ONET-6)	Occupation Title	Number of Job Postings	Number Employed 2017	% Change in Employment, 2016-2017	Projected Statewide Change in Employment, 2017-2027	Mean Salary
29-1141	Registered Nurses	26,067	80,560	1%	12.3%	$82,010
29-2061	Licensed Practical and Licensed Vocational	4,838	17,240	5%	12.4%	$54,840
29-1171	Nurse Practitioners	3,063	4,840	26%	30.7%	$117,630

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Section 1: RN Demand Profile

Highest Demand

Figure 20. RN Job Postings

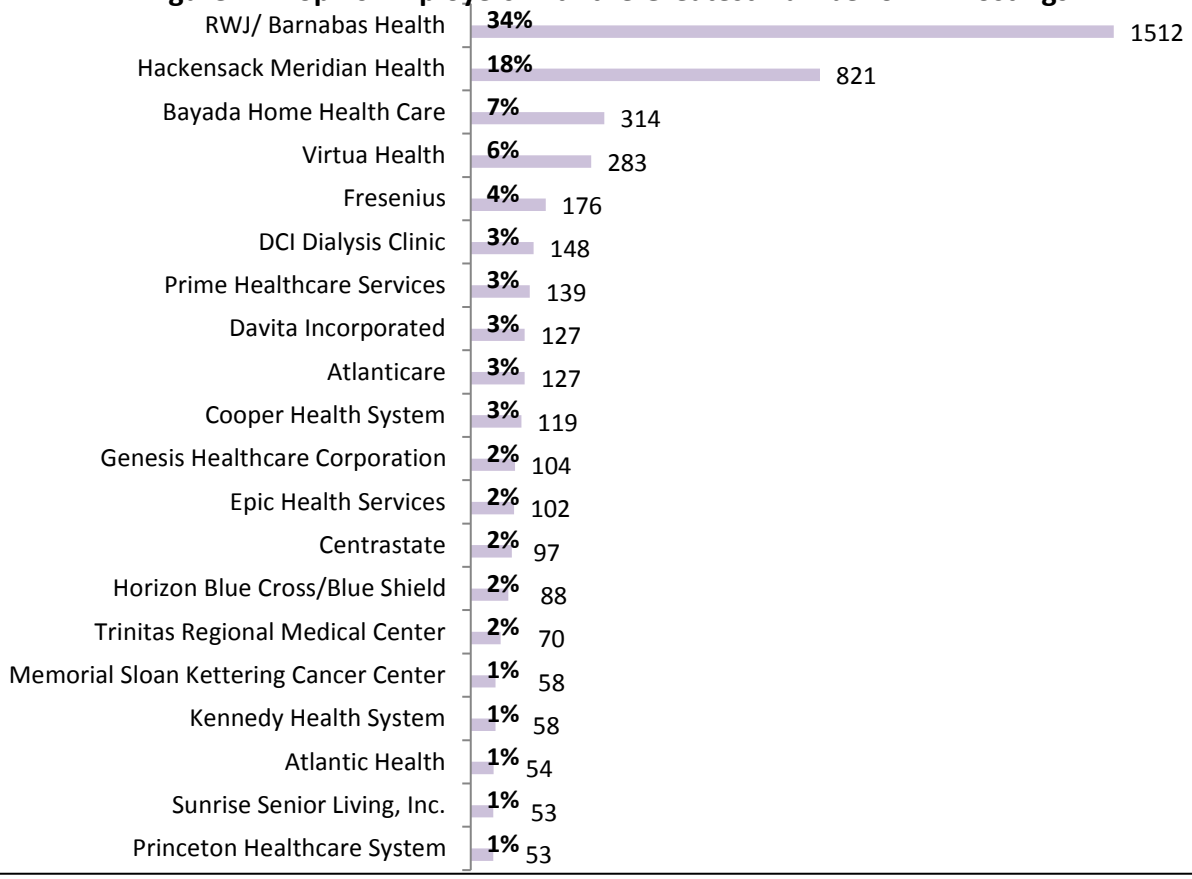


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

There were 7,131 RN job postings during the sampling period (January 1, 2017 – December 31, 2017). Approximately half (3,627) of the postings were for generic RN/Staff Nurse positions. The remaining 3,504 postings were classified based on job titles and job settings, described here as "specialized RN positions" as they generally require specialty skills and education (See **Figure 20**).

Exclusion criteria included staffing agencies, non-nursing employers, and out-of-state employers. Where applicable, hospitals were combined under their healthcare system. The 20 employers/ health systems with the greatest number of postings were then selected for **Figure 21**. These top 20 employers account for 4,503 of all nurse job postings, for which Robert Wood Johnson/Barnabas Health accounts for 34%. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees.

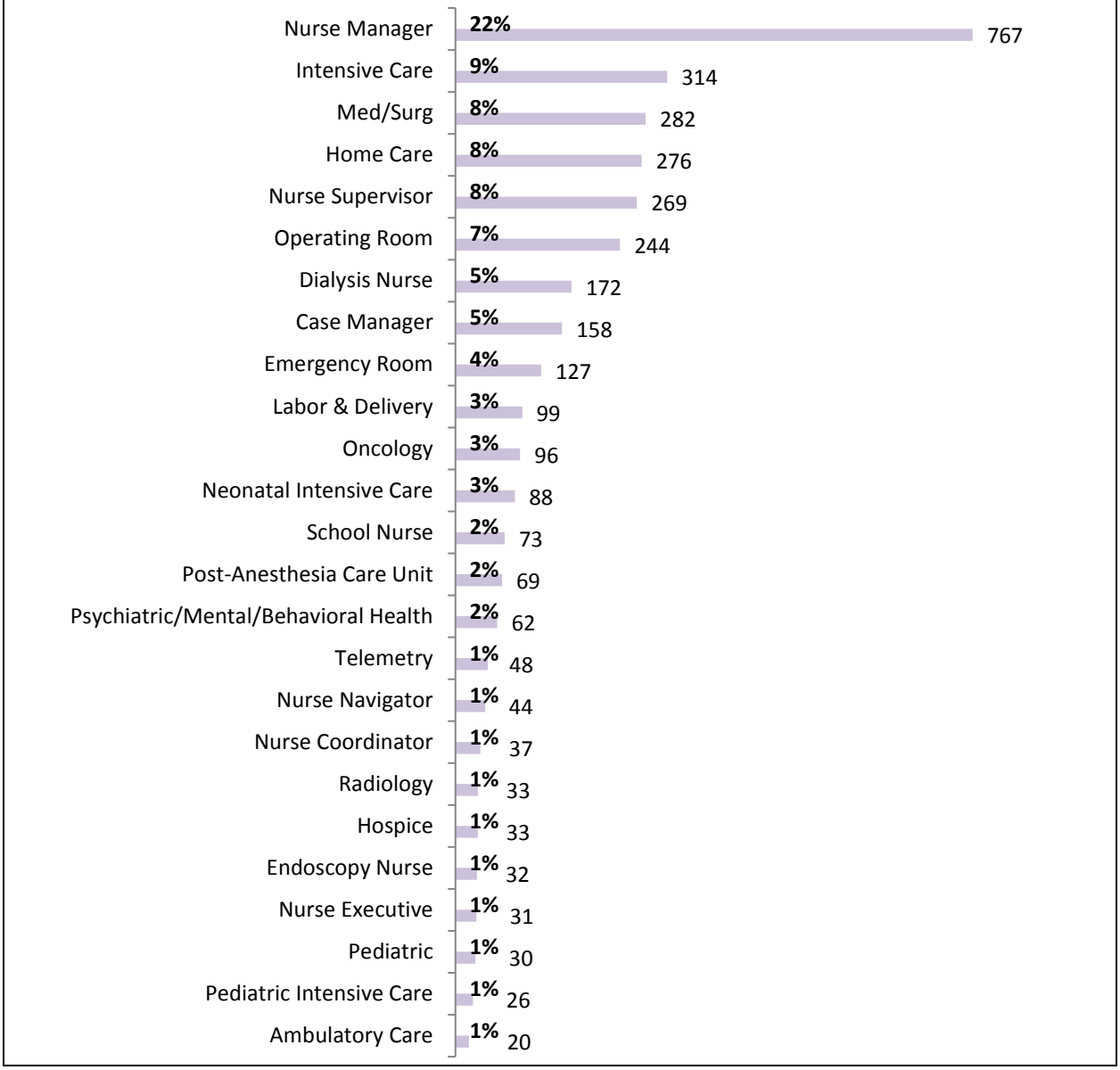
Figure 21. Top 20 Employers with the Greatest Number of RN Postings



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Figure 22 describes the breakdown of job postings for the top 25 specialized RN positions. These highest demand positions comprise 3,430 job postings. 3,627 postings were for generic RN/Staff Nurse positions, and 74 postings were for niche specialized positions that did not make it into the top 25.

Figure 22. Top 25 RN Positions

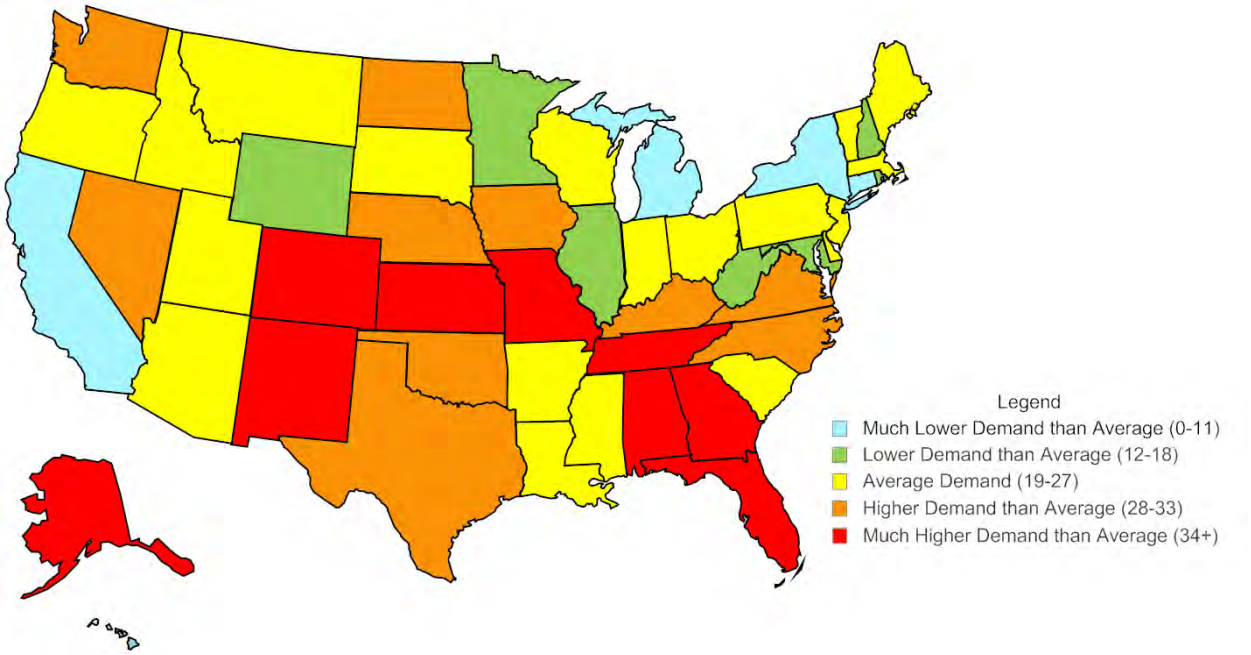


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

National Demand Comparison

Figure 23 shows the level of demand for Registered Nurses across the United States from January 1, 2017 through December 31, 2017. The demand for RNs is identified here as the ratio of RN job posting per 10,000 employed persons.

Figure 23. National Demand for RNs



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

The average rate of demand for RNs nationally is 19-26 job postings per 10,000 employed persons. When compared to this rate, New Jersey has an **average level of demand for nursing positions**, with a ratio of 19.71 job postings per 10,000 employed persons. The states with the highest demand are Colorado (42.06), Alaska (37.88) and Tennessee (36.95). The states with the lowest demand are California (4.72), New York (5.12), and Michigan (5.56).

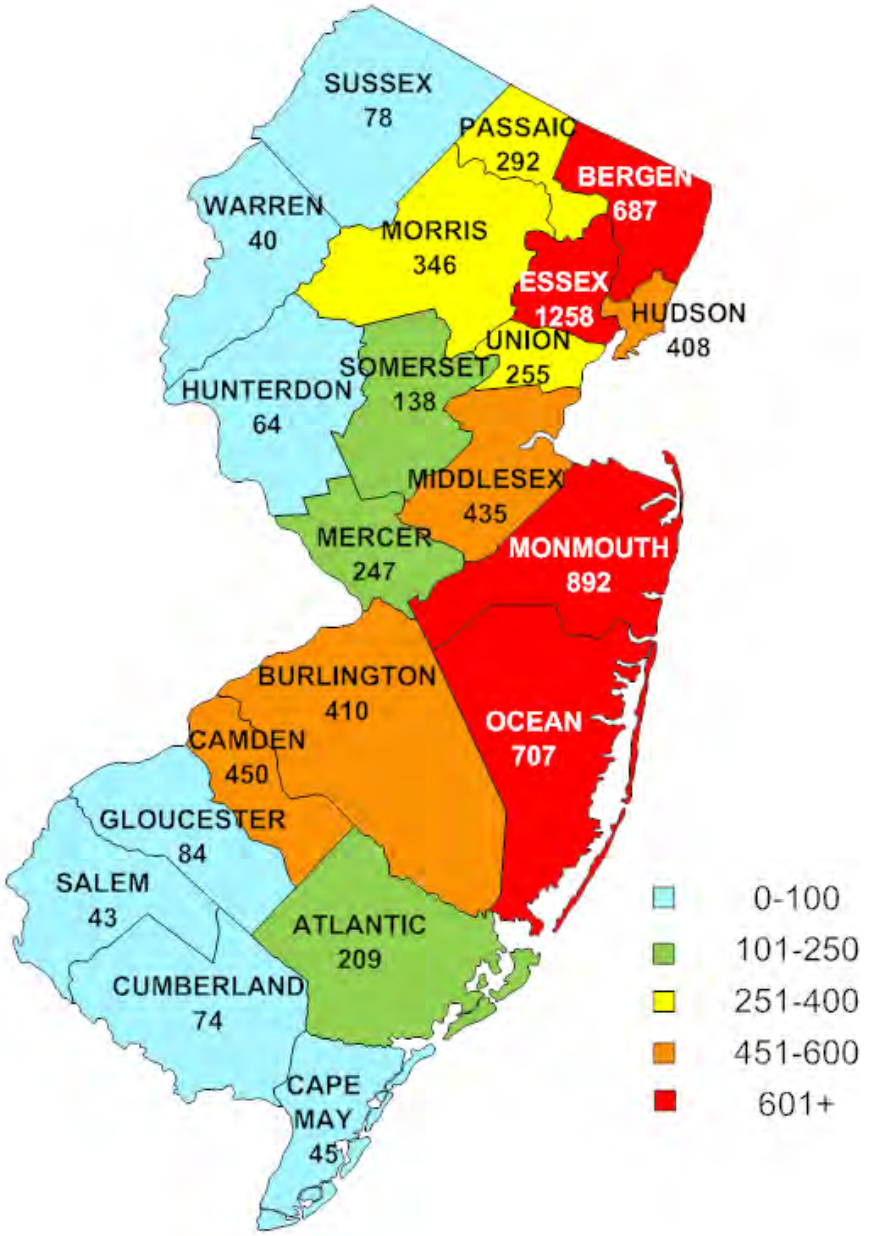
In New Jersey, there was only a **1% change in employment** between 2016-2017 for the top occupations in this set of postings. Nationally, there was a **2% change in employment** between 2016-2017 for the top occupations in this set of postings.

Job Postings by County

Jan. 01, 2017 - Dec. 31, 2017
There were 6,280 postings available with the current filters applied.

Counties in New Jersey with the greatest **raw** number of job opportunities are Essex (N = 1,258) and Monmouth (N = 892).

Figure 24. RN Job Postings per County 2017



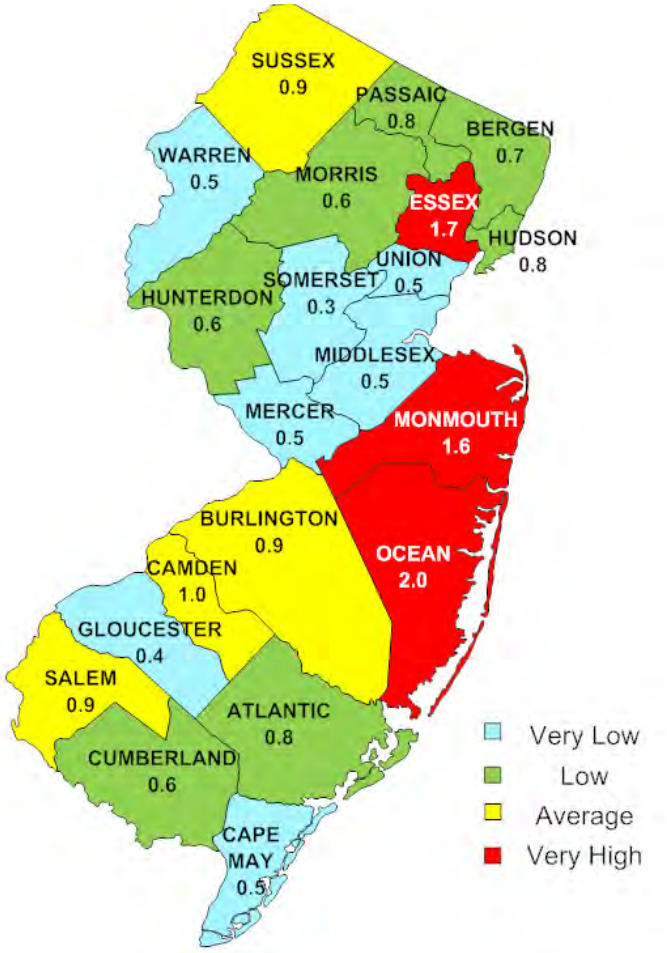
(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Location Quotient

The Location Quotient (LQ) is a per capita measure that aims to show the concentration of a job in a given area compared to nationwide.

- A location quotient that is exactly equal to the national average would be 1.0. A location quotient greater than 1.0 would indicate that demand is greater than the national average (for example, 1.2 would indicate that demand is 20% higher than the national average).
- Likewise, a location quotient less than 1.0 would indicate that demand is lower than the national average (for example, 0.8 would indicate that demand is 20% lower than the national average).

Figure 25. RN Location Quotient by County 2017



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Figure 25 shows the location quotient of RN job postings by county in 2017. Categories "Very Low," "Low," "Average," and "Very High" are relative to the national average. **Most of the counties in New Jersey have a location quotient lower than the national average**. The counties with the lowest location quotient are Somerset (0.3) and Gloucester (0.4). Camden County has a location quotient of 1, equal to the national average. The counties with the highest location quotient are Essex (1.7) and Ocean (2.0).

Bergen County, which had 687 RN job postings, shows a low location quotient, but Ocean County, which had a comparable 707 RN job postings, shows a very high location quotient. This discrepency indicates that although there are approximately the same number of job postings in Bergen and Ocean Counties, there are a lot more employed persons in Bergen County than in Ocean County.

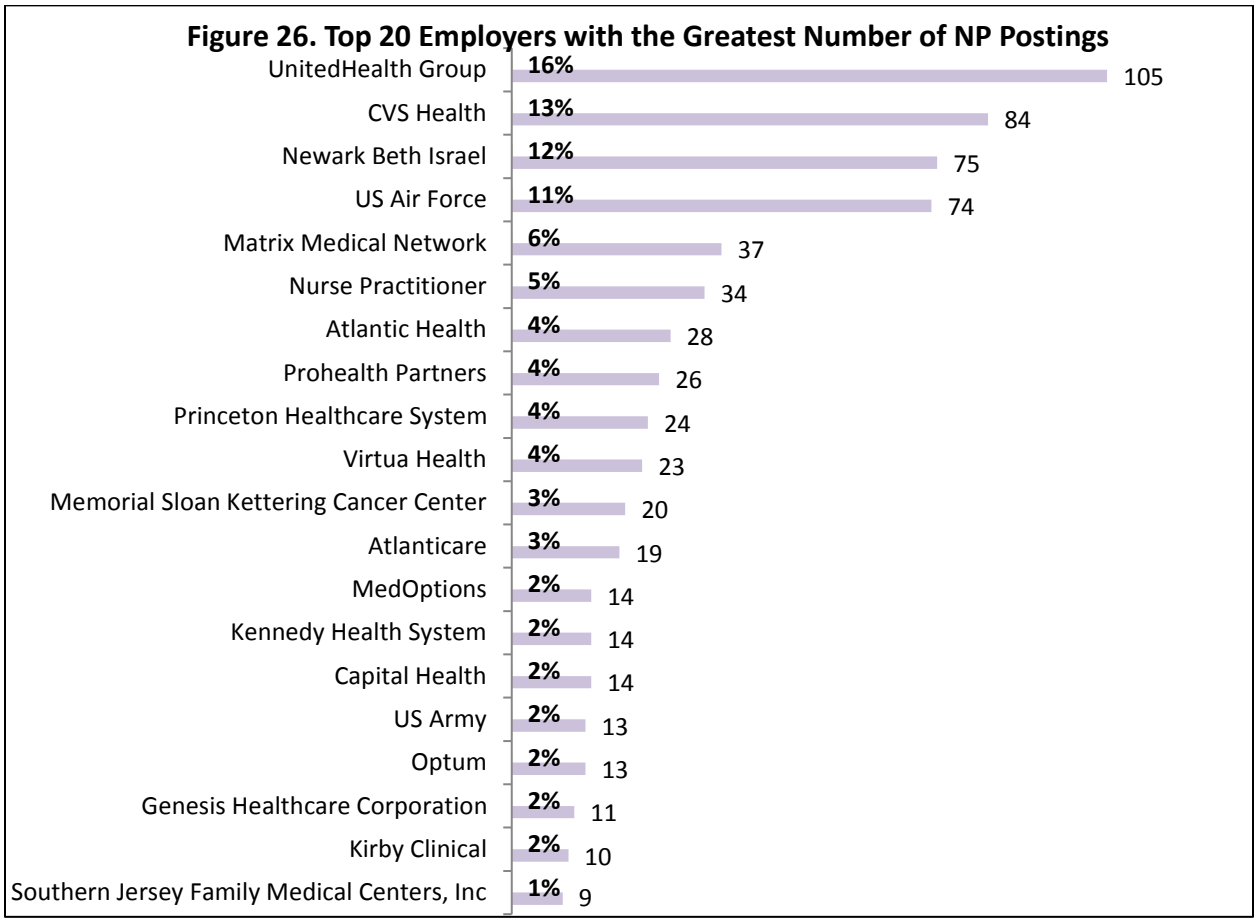
Table 68. NJ County Demand Comparison			
County	**Raw Job Postings**	**% Job Postings**	**Location Quotient**
Atlantic	209	2.9	0.8
Bergen	687	9.6	0.7
Burlington	410	5.7	0.9
Camden	450	6.3	1.0
Cape May	45	0.6	0.5
Cumberland	74	1.0	0.6
Essex	1,258	17.6	1.7
Gloucester	84	1.2	0.4
Hudson	408	5.7	0.8
Hunterdon	64	0.9	0.6
Mercer	247	3.4	0.5
Middlesex	435	6.1	0.5
Monmouth	892	12.5	1.6
Morris	346	4.8	0.6
Ocean	707	9.9	2.0
Passaic	292	4.1	0.8
Salem	43	0.6	0.9
Somerset	138	1.9	0.3
Sussex	78	1.1	0.9
Union	255	3.6	0.5
Warren	40	0.6	0.5

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Section 2: Nurse Practitioner Demand Profile

Highest Demand

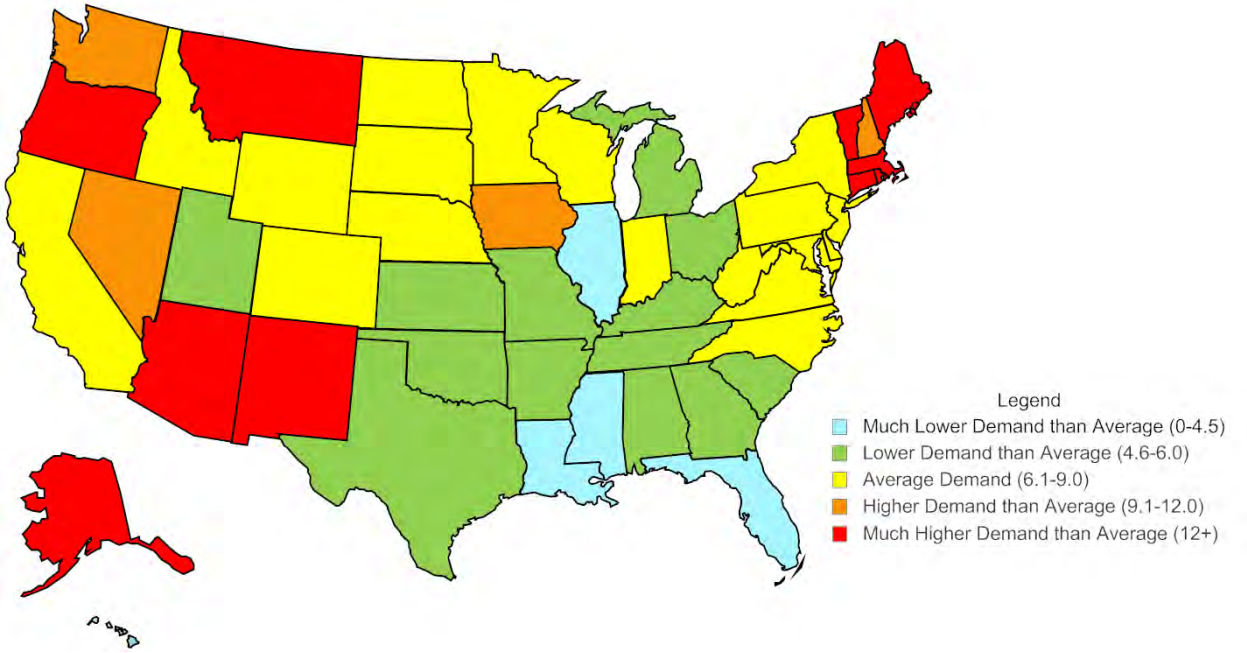
Figure 26 shows the companies that generate the greatest number of Nurse Practitioner (NP) job postings in New Jersey. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees. Of the employers with the greatest number of NP postings, 29% are found in the insurance industry and in outpatient primary care facilities.



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Figure 27 shows the level of demand for Nurse Practitioners across the United States from October 1, 2017 through September 31, 2018. The demand for NPs is identified here as the ratio of NP job posting per 10,000 employed persons.

Figure 27. National Demand for NPs



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

The average rate of demand for NPs nationally is 6-9 job postings per 10,000 employed persons. When compared to this rate, New Jersey has an **average level of demand for Nurse Practitioner positions**, with a ratio of 6.07 job postings per 10,000 employed persons. The states with the highest demand areConnecticut (29.11), Maine (24.31), and Vermont (21.28). The states with the lowest demand are Hawaii (3.01), Louisiana (3.94), and Mississippi (4.00).

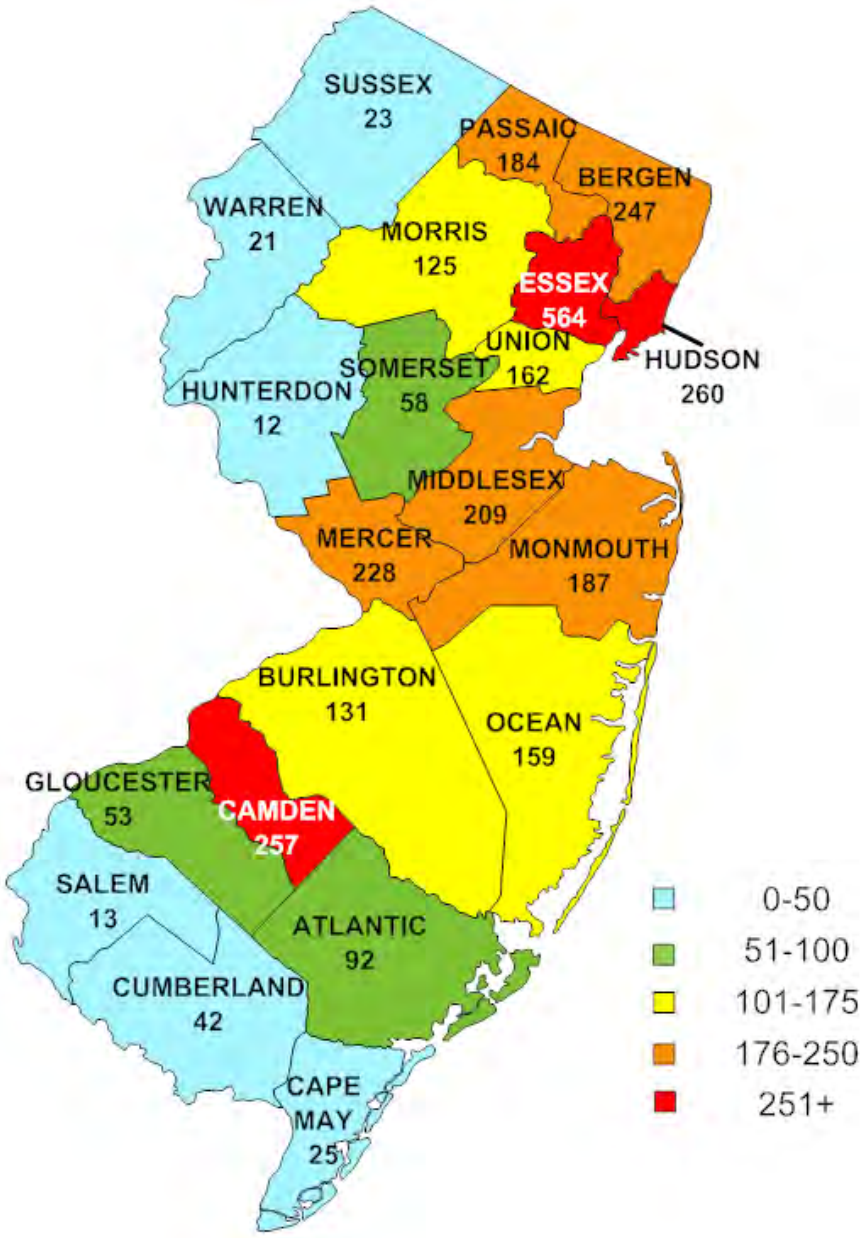
In New Jersey, there was a **26% change in employment** between 2016-2017 for the top occupations in this set of postings, while as there was a **11% change in employment** between 2016-2017 nationally.

Job Postings by County

Jan. 01, 2017 - Dec. 31, 2017
There were 3,055 postings available with the current filters applied.

Counties in New Jersey with the greatest **raw** number of job opportunities for Nurse Practitioners are Essex (N = 564), Camden (N = 257), and Hudson (N = 260).

Figure 28. NP Job Postings per County 2017



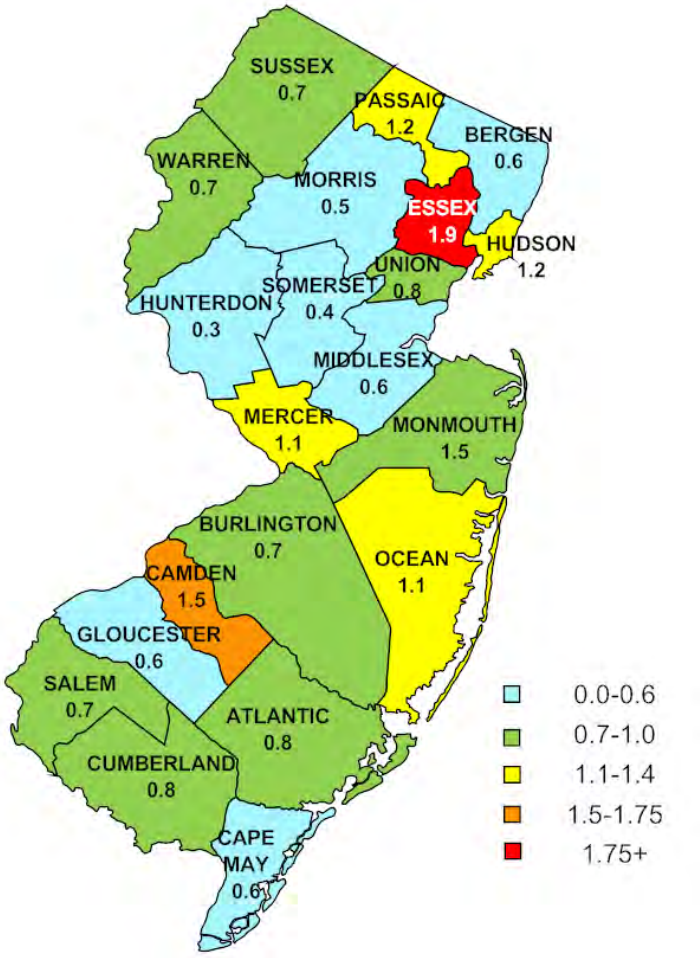
(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Location Quotient

The Location Quotient (LQ) is a per capita measure that aims to show the concentration of a job in a given area compared to nationwide.

- A location quotient that is exactly equal to the national average would be 1.0. A location quotient greater than 1.0 would indicate that demand is greater than the national average (for example, 1.2 would indicate that demand is 20% higher than the national average).
- Likewise, a location quotient less than 1.0 would indicate that demand is lower than the national average (for example, 0.8 would indicate that demand is 20% lower than the national average).

Figure 29. NP Location Quotient by County 2017



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Figure 29 shows the location quotient of NP job postings by county in 2017. Categories "Very Low," "Low," "Average," and "Very High" are relative to the national average. **Most of the counties in New Jersey have a location quotient lower than the national average**. The counties with the lowest location quotient are Hunterdon (0.3) and Somerset (0.4). Mercer County has a location quotient of 1.1, approximately equal to the national average. The counties with the highest location quotient are Camden (1.5) and Essex (1.9).

Bergen County, which had 247 NP job postings, shows a very low location quotient, but Camden County, which had a comparable 257 NP job postings, shows a high location quotient. This discrepency indicates that although there are approximatley the same number of job postings in Bergen and Ocean Counties, there are a lot more employed persons in Bergen County than in Camden County.

Table 69. NJ County Demand Comparison

County	Raw Job Postings	% Job Postings	Location Quotient
Atlantic	92	3.0	0.8
Bergen	247	8.1	0.6
Burlington	131	4.3	0.7
Camden	257	8.4	1.5
Cape May	25	0.8	0.6
Cumberland	42	1.4	0.8
Essex	564	18.5	1.9
Gloucester	53	1.7	0.6
Hudson	260	8.5	1.2
Hunterdon	12	0.4	0.3
Mercer	228	7.5	1.1
Middlesex	209	6.8	0.6
Monmouth	187	6.1	0.8
Morris	125	4.1	0.5
Ocean	159	5.2	1.1
Passaic	184	6.0	1.2
Salem	13	0.4	0.7
Somerset	58	1.9	0.4
Sussex	23	0.8	0.7
Union	162	5.3	0.8
Warren	21	0.7	0.7

(Source: Burning Glass Technologies. “Labor Insight Real-Time Labor Market Information Tool.” http://burning-glass.com. 2018)

Section 3: LPN Demand Profile

This section is excerpted from the LPN Demand Data Report that was presented to the NJ Board of Nursing in the summer of 2018.

National Demand Data for New Jersey

The Health Resources and Services Administration's (HRSA) Health Workforce Simulation model estimates current and future supply and demand for health workers. It assumes that demand equals supply in the base year. It also assumes that the state will provide the same level of nursing care consistent with 2014. According to the HRSA report projection for New Jersey, there will be an 11.3% adequacy/surplus of LPNs for New Jersey, as shown in **Table 70**.

Table 70. New Jersey Demand for LPNs 2014-2030

2014	2030	2030		
Supply/Demand	**Supply**	**Demand**	**Difference**	**Adequacy**
19,400	30,500	27,400	3,100	11.3%

(Source: HRSA, 2017)

Using a similar assumption that during the first year the supply and demand are equal for the Long-Term Services and Supports (LTSS) segment of the workforce (institutional, home, and community settings), the data show that the northeast has the slowest growth rate anticipated from 2015 to 2030 for LPNs as compared to other regions. New Jersey's LTSS demand data are shown in **Table 71**.

Table 71. New Jersey LTSS Demand for LPNs 2015-2030

2015	2020	2025	2030	% change*
10,770	12,130	13,510	15,510	44%

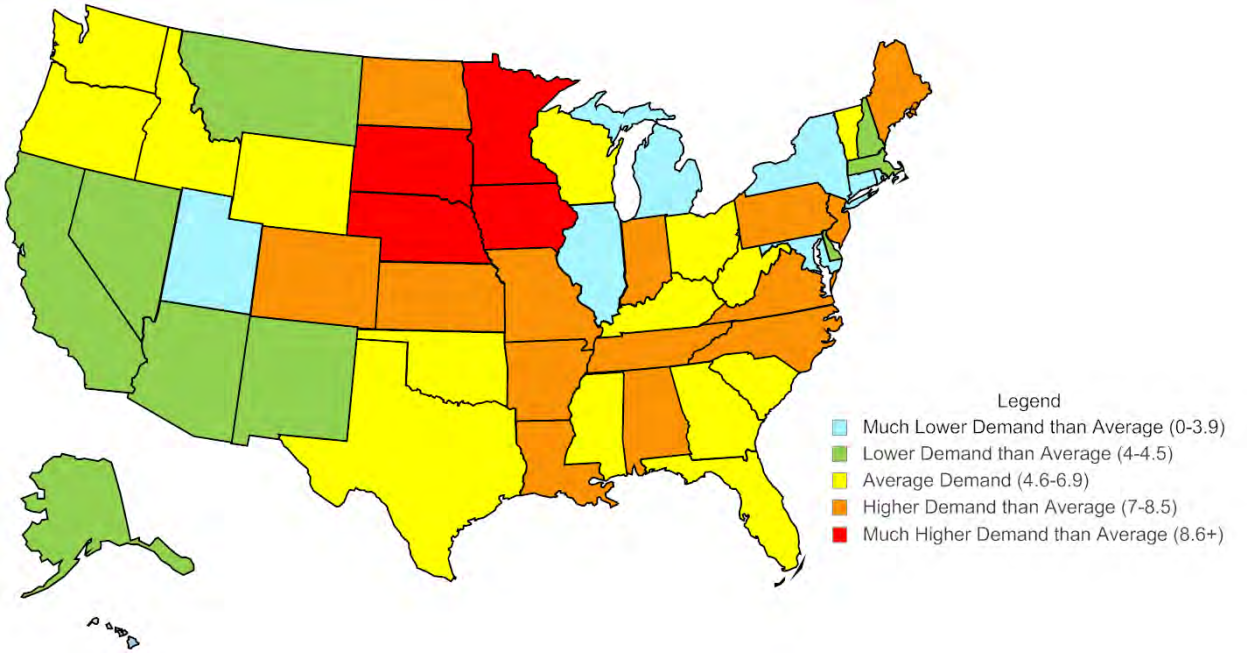
(Source: HRSA, 2017b)

*This change equates to a 2.9% change each year.

It is recognized however that changes in delivery systems, economic volatility, and insurance coverage can impact these models either in a positive or negative manner.

Figure 30 shows the level of demand for Licensed Practical Nurses across the United States from January 1, 2017 through December 31, 2017. The demand for LPNs is identified here as the ratio of RN job posting per 10,000 employed persons.

Figure 30. National Demand for LPNs



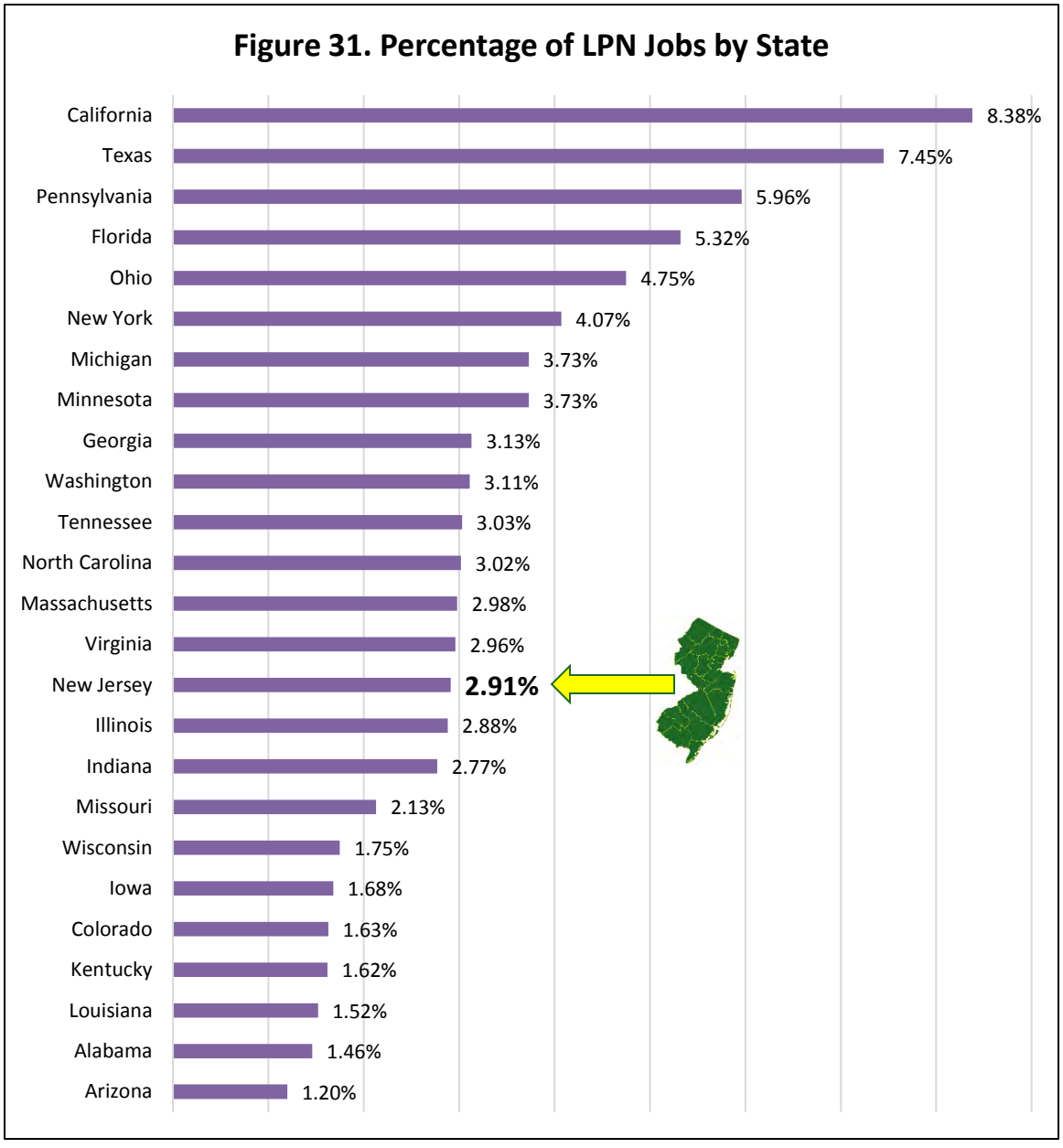
(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

The average rate of demand for LPNs nationally is 4.6-6.9 job postings per 10,000 employed persons. When compared to this rate, New Jersey has a **higher than average level of demand for nursing positions**, with a ratio of 7.93 job postings per 10,000 employed persons. The states with the highest demand are Minnesota (12.06), Iowa (11.69), and Nebraska (10.38). The states with the lowest demand are New York (2.17), Connecticut (2.48) and Hawaii (2.79).

In New Jersey, there was a **5% change in employment** between 2016-2017 for the top occupations in this set of postings, while as there was a **0% change in employment** between 2016-2017 nationally.

LPN Jobs by State

The following charts and figures present a comparison of New Jersey to other states in terms of LPN demand. A search by location of job opportunities for 2017 shows that there were 173,218 LPN job postings nationally. Those postings were distributed across the US. As indicated below in **Figure 31**, New Jersey accounts for only 2.9% of the jobs available for the year.

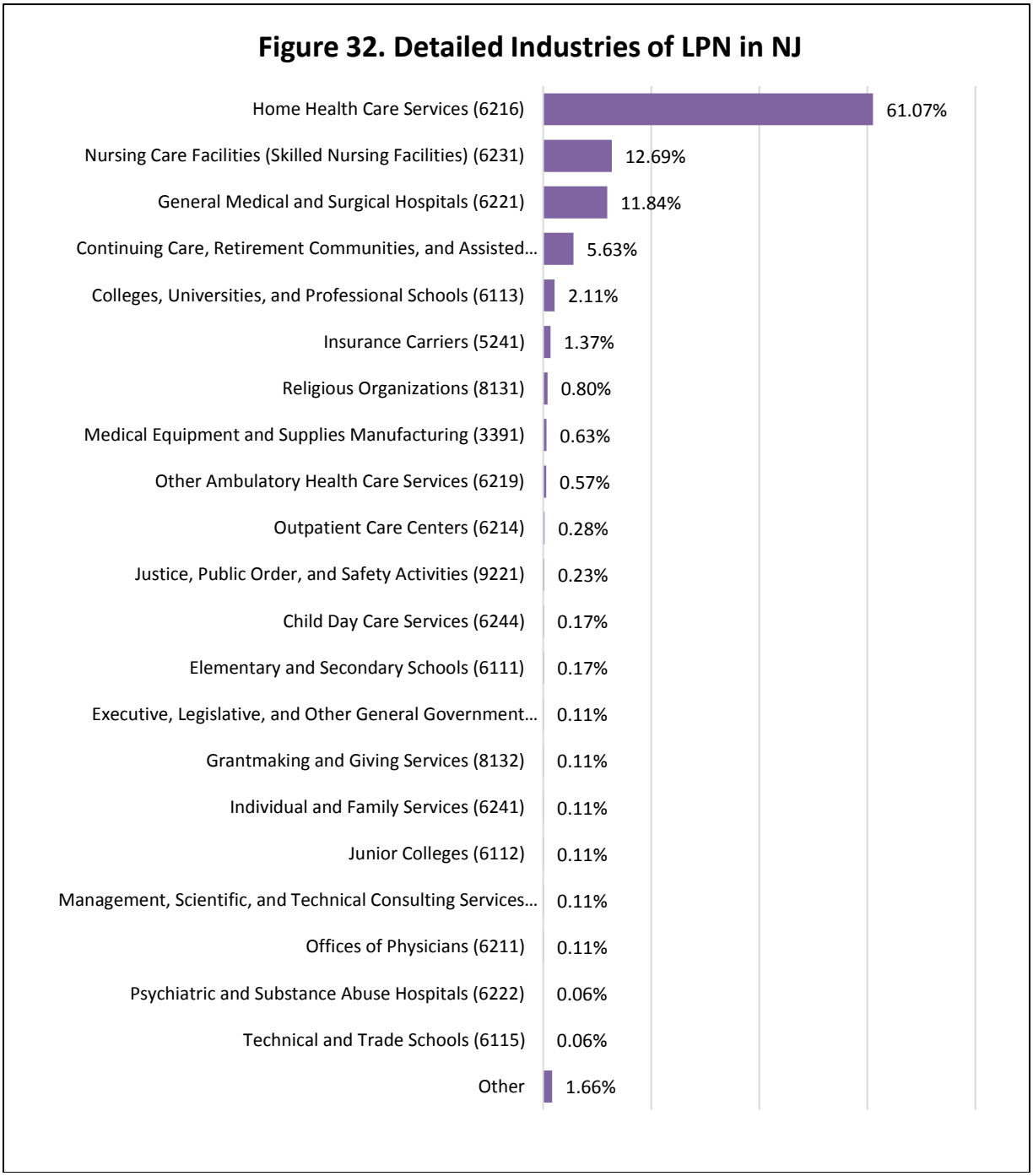


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Industry Utilization in New Jersey

For 2017, there were 2089 postings for LPNs in New Jersey. Of these postings, the majority were in post-acute settings. They include Home Care Services (61.07%), Skilled Nursing Care (12.69%) and Continuing Care/Retirement/Assisted Living Facilities (5.63%) **Figure 32** provides a detailed listing of the industry sectors.

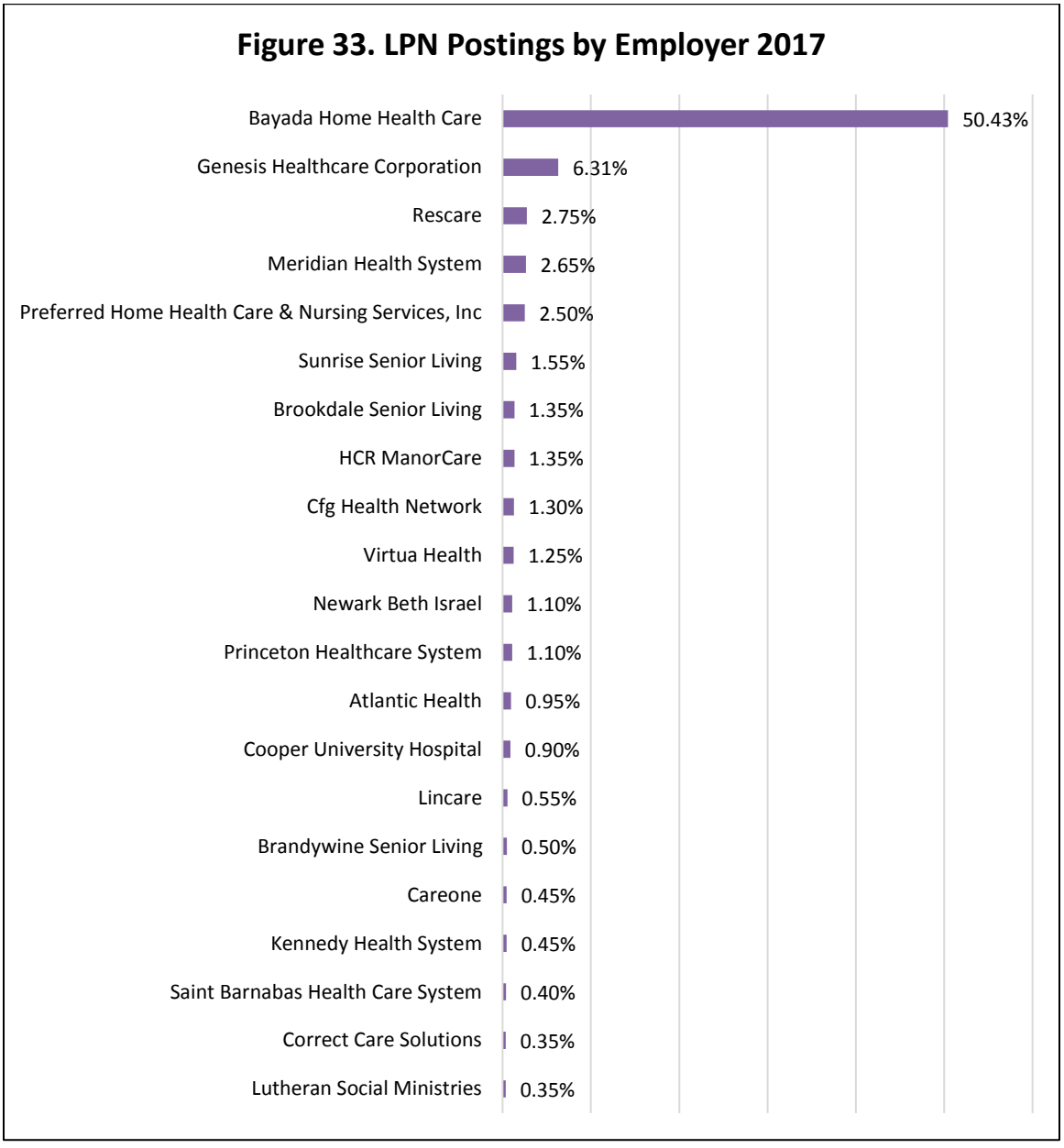
Figure 32. Detailed Industries of LPN in NJ



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Employer Postings

Figure 33 shows that most of the postings in New Jersey came from one employer: Bayada, in the field of Home Health Care. The greater numbers of postings may reflect a high rate of turnover, frequent repeated postings, or a high demand from employers.



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Demand by Metropolitan Statistical Area (MSA)

Demand by MSAs for New Jersey are provided in the following chart. MSAs serve a group of counties and cities in a specific geographic area for the purposes of population census and the compilation of related data. As seen below, MSAs also cross state lines.

Table 72. Location Quotient by MSA

MSA	Job Postings	Location Quotient	Concentration
New York-Newark-Jersey City, NY-NJ-PA	2,096	0.5	Very Low
Philadelphia-Camden-Wilmington, PA-NJ-DE	1,422	1.1	Average
Allentown-Bethlehem-Easton PA-NJ-DE	256	1.6	Very High
Trenton, NJ	133	1.2	Average
Atlantic City-Hammonton, NJ	103	1.7	Very High
Vineland-Bridgeton, NJ	55	2	Very High
Ocean City, NJ	40	2	Very High

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

*Grayed-out values should be used with caution due to low posting totals.

Demand within Each NJ County

Location Quotients (LQ) show how concentrated demand is within a geographical area. US-wide average demand equals 1.0. An LQ of 1.2 indicates 20% higher demand than the US average. New Jersey's LQ overall for LPNs is 1.1, which demonstrates an average demand as compared to the US as a whole. **Table 73** shows that New Jersey's counties with the highest concentration of demand as defined by the LQ are Burlington, Passaic, Ocean, Atlantic, and Camden.

Table 73. Location Quotient by County

County*	Job Postings	Location Quotient
Burlington, NJ	195	2.1
Bergen, NJ	192	0.9
Passaic, NJ	184	2.4
Camden, NJ	161	1.7
Monmouth, NJ	153	1.3
Ocean, NJ	137	1.8
Mercer, NJ	133	1.2
Middlesex, NJ	126	0.7
Essex, NJ	118	0.7
Atlantic, NJ	103	1.7

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

* Additional counties are not shown due to low posting totals.

Burning Glass Technologies calculates statewide projections for LPN demand. Their most recent projection, which covers the period from 2016 to 2026, shows a 14.6% increase in demand. This is equivalent to a 1.46% increase per year, which can be accommodated by available seats in current LPN programs.

Chapter 4: Projection of Nurse Retirement

Overview

A projection of the rates of retirement for nurses from now through 2025 creates the following expectations: a 22% decline in the active RN workforce, an 11% decline in APN workforce, and a 15% in the LPN workforce. In order to maintain an adequate supply of nurses in the workforce, the number of new graduates must be equal to or greater than the number of retirees each year. If current rates of graduation are sustained over the years, the gap in the RN/APN workforce due to expected retirement will reduce considerably. For LPNs, sustaining current rates of graduation will lead to an excess supply of LPNs. Certain settings including Academic Setting, School Health service, Correctional Facilities, Occupational Health and Home Health have the greatest number of retirement-age nurses.

The following charts will outline how RN, APN, and LPN projections were calculated. Assumptions are outlined in the methodology section of this report, page 8.

Retirement Risk Based on Age

Table 74 describes the current age distribution of RNs, APNs, and LPNs. Based on the assumptions, these data are the basis for establishing how many nurses will be at risk of retirement in seven (7) years.

Table 74. Age Distribution of RNs, APNs, and LPNs in 2018

	RN (%)	LPN (%)	APN (%)
18-25 years	1.8	1.1	0.1
26-35 years	17.3	17.0	18.6
36-45 years	18.0	21.7	23.7
46-55 years	23.6	24.4	24.7
56-65 years	**29.3**	**24.0**	**24.8**
66-75 years	**8.7**	**10.5**	**7.2**
76-85 years	**1.3**	**1.2**	**0.7**
85 years +	0.1	0.1	0.0
Total at risk of retirement	**39.3**	**35.7**	**32.7**

*Chart is based on 1 year of data, equivalent to 50% of the nursing workforce.

(Source: BON Survey 2018)

Table 75 shows the historical trended retirement percentages from 2016 through 2018 for RNs, APNs, and LPNs. These percentages help calculate the projections for potential nurse retirement through 2025.

Table 75. Rate of Retirement by Age Bracket of Nurses in NJ across RN, APN, & LPNs in 2018

	RN			APN			LPN		
Age	2016 (%)	2017 (%)	2018 (%)	2016 (%)	2017 (%)	2018 (%)	2016 (%)	2017 (%)	2018 (%)
46-50	0.04	0.04	0.02	-	-	-	0.08	0.08	0.1
51-55	0.09	0.09	0.1	-	-	0.2	0.3	0.4	0.4
56-60	0.3	0.3	0.2	-	0.3	1	1	1	1
61-65	1	1	1	2	3	2	5	5	4
66-70	5	5	5	8	4	11	19	17	9
71-75	23	23	18	11	15	17	32	25	10
76-80	39	39	24	19	5	19	34	25	13
81-85	45	45	22	-	-		52	46	5
86+	49	49	23	-	-	50	56	50	38

(Source: NJCCN 2016-17, BON Survey 2018)

This table corresponds all those that answered 'Retired' to the survey question "*If you are **not** employed as an RN, how important are each of the following factors in why you are not employed as an RN?*" in NJCCN survey 2017 and "*What is your employment status?"* in BON survey 2018.

Assessing Potential Risk Across Employment Settings

Table 76 shows the percent distribution of nurses in New Jersey across 11 broad employment settings and an "other" category.

Table 76. Distribution of Nurses Across Employment Setting

Employment Setting	RN (%)	APN (%)	LPN (%)
Hospital	54	41	6
School Health Service	10	4	2
Ambulatory Care Setting	9	7	4
Nursing Home*	7	5	20
Home Health	6	8	0
Correctional Facility	6	21	16
Insurance Claims/Benefits	3	8	45
Public Health	2	2	1
Academic Setting	1	4	3
Occupational Health	1	0	2
Community Health	0	0	0
Other	1	0	0

*Nursing Home includes Nursing Home, Extended Care & Assisted Living (Source: BON Survey 2018)

Table 77 shows the percentage distribution of RNs, APNs, and LPNs in each of the settings by three age brackets. Highlighted cells indicate employment settings with a higher percentage of nurses at risk of retirement. For example, some settings, such as School Health Service for RNs, will be expected to be impacted more than others.

Table 77. Distribution of Nurses by Age Categories Across Employment Settings

	RN			APN			LPN		
Employment Setting	**18-55 (%)**	**56 - 65 years (%)**	**66 + years (%)**	**18-55 (%)**	**56 - 65 years (%)**	**66 + years (%)**	**18-55 (%)**	**56 - 65 years (%)**	**66 + years (%)**
Hospital	73	23	3	66	27	6	72	20	7
School Health Service	52	**35**	**13**	72	19	9	85	12	3
Ambulatory Care Setting	61	33	6	73	17	9	79	16	5
Nursing Home*	62	30	8	59	26	15	74	19	7
Home Health	55	34	11	47	**40**	**13**	62	**38**	**0**
Correctional Facility	49	**40**	**11**	64	23	13	65	**23**	**12**
Insurance Claims/Benefits	61	32	6	72	21	6	79	17	4
Public Health	60	30	10	56	31	13	74	18	9
Academic Setting	39	**41**	**20**	57	35	8	73	21	6
Occupational Health	42	**43**	**15**	50	**33**	**17**	77	19	4
Community Health	59	31	10	-	-	-	-	-	-
Other	57	29	14	0	50	50	100	0	0

*Nursing Home includes Nursing Home, Extended Care & Assisted Living (Source: BON Survey 2018)

Retirement Risk Through 2025

We estimate the risk of retirement for nurses in each age bracket by calculating their age in subsequent years based on their reported age in 2018.

Table 78. Projected Trend of the Active NJ Nursing Workforce Through 2025

	RN		APN		LPN	
	2020	**2025**	**2020**	**2025**	**2020**	**2025**
Expected # of Retirements	7,169	23,831	179	786	826	3,161
Active Workforce after retirements (projected)	98,855	82,193	7,201	6,594	20,004	17,670
% reduction in the workforce from 2018	7	22	2	11	4	15

(Source: NJCCN Educational Survey 2017, BON Survey 2018)

Note: For purposes of projection, the number of respondents from 2017-2018 surveys were combined to get an estimate of the total number of nurses in the workforce. The assumed numbers are as follows: 106,024 RNs, 7,380 APNs, and 20,831 LPNs. The actual number of nurses in the state is higher than this estimate since not all nurses have completed the surveys. Taking the estimates for retirement rates among each age bracket, our projection suggests a 22% decline in the RN workforce, 11% decline in APN workforce and 15% in the LPN workforce between now and 2025.

Table 79 shows the number of new graduates from all schools across New Jersey.

Table 79. Graduation Rates Trended 2013-2017*					
	2013	**2014**	**2015**	**2016**	**2017**
RN	3101	3077	3161	3007	3122
APN	65	59	93	88	116
LPN	1777	1575	1543	1247	1220

(Source: NJCCN Educational Survey 2013-2018)

For purposes of projection, it is assumed based on NJCCN Educational Survey data, that 3,000 RNs, 100 APNs, and 1,200 LPNs enter the workforce every year.

Table 80 shows the percent net reduction in workforce for 2020 and 2025.

Table 80. Projected Trend of the NJ Active Nursing Workforce through 2025[1]						
	RN		**APN**		**LPN**	
	2020	**2025**	**2020**	**2025**	**2020**	**2025**
Expected number of Retirements	7,169	23,831	179	786	826	3,161
Active Workforce after retirements (projected)	98,855	82,193	7,201	6,594	20,004	17,670
Reduction in the workforce from 2018	-7%	-22%	-2%	-11%	-4%	-15%
Expected new graduates entering workforce	6,000	21,000	200	700	2,400	8,400
Net reduction in the workforce from 2018	**-1%**	**-3%**	**0%**	**-1%**	**8%**	**25%[2]**
95% Confidence Intervals for % net reduction in workforce[3]	(-2%, -0.3%)	(-5%, -1%)	(-2%, 2%)	(-8%, 6%)	(0%, 15%)	(-1%, 52%)

(Sources: BON Survey 2018, NJCCN Educational Surveys 2013-2018)

Note[1]: For purposes of projection, the number of respondents from 2017-2018 surveys were combined to get an estimate of the total number of nurses in the workforce. The assumed numbers are as follows: 106,024 RNs, 7,380 APNs, and 20,831 LPNs. The actual number of nurses in the state is higher than this estimate since not all nurses have completed the surveys.

Note[2]: There is inconclusive evidence that graduates from practical nursing programs are joining the LPN workforce. Hence, there is a question of whether the LPNs are not working in nursing, out-migrating or just unresponsive to the survey. The projections for LPNs may be overstated and should be used with caution (See Note[3]). However, note that the data from the national HRSA report also reflects an excess of LPNs by 2030 which is consistent with this report.

Note[3]: There is a certain level of intrinsic uncertainty in the '% net reduction in the workforce'. Schools may not graduate the assumed numbers in the projections every year. All graduates may not find a job in the workforce or within the state. There may not be insufficient applicants to schools in the coming years. For such cases, the 95% confidence demonstrates the best and worst-case scenarios and inform the level of confidence in estimates. For example, a 25% excess

of LPNs is expected by 2025. However, if schools were to graduate fewer than 1200 graduates per year, or LPN graduates seek employment outside of the LPN workforce, then a decline of 1% in LPNs can be expected by 2025. Likewise, if schools were to graduate more than 1200 graduates per year and all of them join the workforce, higher gains to the likes of 52% excess LPNs could be seen by 2025.

In **Table 78** and **Table 80**, the percentage reduction in workforce represents the compounded decline in the workforce year-over-year. The yearly rate can be approximated by dividing by 7. For example, for LPNs, the percent net reduction in the workforce is 25%, which divided by 7 is 3.6% excess annually.

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Glossary of Terms

Accelerated BSN Nursing Program (2nd Degree): A program of instruction to prepare registered nurses that admits students with baccalaureate degrees in other disciplines and no previous nursing education and, at completion, awards a baccalaureate degree in nursing and eligibility to apply for licensure as an RN. The curriculum is designed to be completed in less time than the generic (entry-level) baccalaureate program usually through a combination of "bridge"/transition courses (American Association of Colleges of Nursing). (Interagency Collaborative on Nursing Statistics, 2016)

Admitted Applicants: A count of the individuals who received official notice from the program that they were invited to begin the nursing program during the Reporting Period.

ADN Program, Generic: A program of instruction that requires at least two years of FTE college academic work generally within a junior or community college, the completion of which results in an associate degree (e.g., AS, AA, AAS, ADN, etc.) with a major in nursing and eligibility to apply for licensure as an RN. (Interagency Collaborative on Nursing Statistics, 2016)

ADN/ASN Program, Bridge (*LPN/VN to Associate Degree in Nursing Program)*: A program of instruction to prepare registered nurses that is specifically designed to admit individuals licensed as practical/vocational nurses and, at completion, awards an associate degree in nursing and eligibility to apply for licensure as an RN. (Interagency Collaborative on Nursing Statistics, 2016)

Available Seats: A count of the total number of seats available for *newly admitted students*.

Diploma Nursing Program: A program of instruction that requires two to three years of full-time coursework, usually within a hospital-based structural unit, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an RN. (Interagency Collaborative on Nursing Statistics, 2016)

DNP Program: A program of instruction that prepares graduates for the highest level of nursing practice beyond the initial preparation in the discipline. The doctor of nursing practice degree is the terminal practice degree. (American Association of Colleges of Nursing) (Interagency Collaborative on Nursing Statistics, 2016)

Enrollees (%): The percentage of Admitted Applicants who subsequently enrolled for the first time in the nursing program during the Reporting Period, relative to the total number of Admitted Applicants. This count should include *only individuals who were still enrolled in a nursing course after the first two weeks of class*.

Enrollees: A count of the Admitted Applicants who subsequently enrolled for the first time in the nursing program during the Reporting Period. This count should include *only individuals who were still enrolled in a nursing course after the first two weeks of class*.

Faculty Vacancy: A vacant position for a faculty member that is being actively recruited as of the fall semester census date.

Full-time Faculty: Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed full-time as defined by the institution, hold academic rank, carry the full scope of faculty responsibility (e.g., teaching, advisement, committee work), and receive the rights and privileges associated with full time employment. These faculty may be tenured, tenure-track, or non-tenure track (given that there is a tenure system in the institution).

Graduates: A count of the number of students who *successfully completed the program requirements* and were *formally awarded the degree* during the Reporting Period.

Labor demand is derived from three sources: 1) growth, 2) retirement, and 3) churn (people changing jobs). Contrary to intuition, most of demand reflects job churn, and growth is only a small percentage of the total demand. The Bureau of Labor Statistics provides occupational employment statistics. These data, however, cannot be compared year to year based on their methodology, and may only be accurately used to provide a snapshot of the demand for positions.

License by Endorsement: The process by which a registered nurse or licensed practical nurse in another state becomes licensed in New Jersey.

License by Exam: An RN or LPN who has graduated from an approved school of nursing and has taken the NCLEX examination (either the NCLEX-RN or the NCLEX-PN respectively).

LPN Program: A program of instruction that requires at least one year of full-time equivalent coursework generally within a high school, vocational/technical school or community/junior college setting, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an LPN/VN. Please combine *all curriculum options or tracks* for your pre-licensure LPN program. For example, if your state collects separate data on *advanced placement CNA-to-LPN program tracks*, please combine it with data on generic or traditional LPN program tracks.*

MSN Program – Clinical Track: A post-licensure master's program with emphasis on advanced clinical practice, including Nurse Practitioner, Nurse Anesthetist, Nurse Midwifery, and Clinical Nurse Specialist tracks. If your state collects separate data on different clinical tracks, please combine them.

MSN Program – Non-clinical Track: A post-licensure master's program with non-clinical emphasis, such as Nurse Educator and Management/Leadership tracks. If your state collects separate data on different non-clinical tracks, please combine them.

NCLEX Pass Rate: The percentage of first-time candidates for the National Council Licensure Examination (PN or RN) who pass the exam. This percentage can be computed in any time period that accommodates quarters, such as a fiscal year or calendar year. The National Council of State Boards of Nursing (NCSBN) produces quarterly reports of NCLEX results by program, including the number of first-time candidates and the number who pass. The NCLEX pass rate can be computed by summing the candidates and passers across the necessary quarters before dividing to produce the percentage. NCLEX pass rates for calendar years are computed by the NCSBN.

Part-Time Faculty: Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed part-time as defined by the institution. These faculty members are typically not eligible for tenure.

PhD Program: A post-licensure doctoral program that culminates in the Doctorate of Philosophy in Nursing.

Post-licensure BSN Program (RN-BSN Program): Admits RNs with associate degrees or diplomas in nursing and awards a baccalaureate nursing degree. (Interagency Collaborative on Nursing Statistics, 2016)

Pre-licensure BSN Program, Generic: A program of instruction to prepare registered nurses that admits students with no previous nursing education, the completion of which results in a baccalaureate degree (e.g., BA, BS, BSN, etc.) with a major in nursing and eligibility to apply for licensure as an RN. The program requires at least four years but not more than five years of full time equivalent college academic work within an educational institution or university. (Interagency Collaborative on Nursing Statistics, 2016)

Pre-licensure MSN Program (Entry MSN): A program of instruction that admits students with baccalaureate degrees in other disciplines and no previous nursing education. The program prepares graduates for entry into the profession, eligibility to apply for licensure as an RN, and upon completion awards a master's degree (e.g., MSN, MS, MA, etc.) in nursing. (American Association of Colleges of Nursing) (Interagency Collaborative on Nursing Statistics, 2016)

Qualified Applicants: A count of the individuals who submitted complete applications on time and who *met all institutional requirements* for formal admission to the nursing program during the Reporting Period.

Supply Data are derived both from the entrance of new nurses into the system as well as the data on the current workforce. Entry of new RNs into the workforce could counteract the retirement concerns. Retirements and entry rates fluctuate based on the economy, changes in healthcare laws, and new delivery methods. Recessions and how healthcare becomes organized has consequences for using nurses.

Total student enrollment: A count of the number of students enrolled on the fall semester census date. Include students *at all points of the program's curriculum sequence*, including newly enrolled, continuing, and students in their final semester or year.