



New Jersey Nursing Supply and Demand Data

2016

New Jersey Collaborating Center for Nursing



Vision

To be the dominant voice on nursing workforce solutions for New Jersey citizens.

Mission

- Ensure that competent, future oriented, diverse nursing providers are available in sufficient numbers and preparation to meet the demand of the evolving healthcare system in New Jersey
- Transform the healthcare system through research and innovative model programs
- Create a central repository for education practice and research related to the nursing workforce
- Engage academic/practice partners, inter-professional colleagues, government and legislative agencies, consumers, business, and industry

NEW JERSEY ANNUAL NURSING DATA REPORT 2016



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Introduction

The New Jersey Collaborating Center for Nursing (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 in an effort to monitor enrollment and graduation trends as well as demographics of both students and faculty. Working collaboratively with the NJ Board of Nursing (BON) the Center also collects workforce data at time of licensure for LPNs, RNs, and APNs. Both of these reports provide the data to analyze the **supply** of nurses in New Jersey.

Based on the national trends and the need to monitor and prepare the workforce, the Center has determined that using real time **demand** data are 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. Health care 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 health care system (Bienemy, C, 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. 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, CNAs, HHAs, 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 will be broken up into 5 chapters. Chapter 1 will provide you with an environmental scan of New Jersey; Chapter 2 will focus on educational capacity; Chapter 3 will provide workforce supply data; Chapter 4 will provide workforce demand data. Based on reviewing these data, Chapter 5 will provide some key trends that are found in the data. We have also provided Appendices where you can find the methodology for each report and definitions to guide you.

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 program with a portable document file (pdf) of the questionnaire. The questionnaire included all items from the nurse minimum data set (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 Board of Nursing 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 NJCCN for analysis. Because it is self-reported, these data can have errors.

Demand

Demand data that determines workforce trends in real-time is important for predicting the job market. As such, the NJCCN 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. These 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 mining 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).

Chapter 1: Environmental Scan

The purpose of this section is to provide a snapshot of the current national and state trends in healthcare and to provide an overview of the work of the New Jersey Action Coalition's direction and progress in meeting the recommendations from the Institute of Medicine's (2011) landmark report, *The Future of Nursing: Leading Change, Advancing Health*.

New Jersey Demographics

According to the 2010 survey by the U.S. Census Bureau, there is greater racial diversity within New Jersey than there is in the whole United States (United States Census Bureau, 2015). When compared to the rest of the country, a smaller proportion of New Jersey residents identified themselves as White alone, not Hispanic or Latino. A greater proportion of New Jersey residents identified themselves as being Hispanic or Latino, Black or African American, or Asian.

Table 1-A. Demographics Comparison

Race	New Jersey	United States
White alone, not Hispanic or Latino	56.2%	64.6%
Hispanic or Latino	19.7%	17.6%
Black or African American	14.8%	13.3%
American Indian or Alaska Native	0.6%	1.2%
Asian	9.7%	5.6%
Native Hawaiian or Other Pacific Islander	0.1%	0.2%
Two or More Races	2.1%	2.6%

(United States Census Bureau, 2015)

When compared to the United States as a whole, New Jersey also has a higher rate of high school and college graduation. The percentage of New Jersey residents with a high school degree is 2.1% greater than that of the United States overall. Likewise, the percentage of New Jersey residents with a Baccalaureate degree is 7.1% greater.

Table 1-B. Education Comparison

Education Level	New Jersey	United States
High School degree or higher, Percentage of persons 25+	88.4%	86.3%
Baccalaureate Degree of higher, Percentage of persons 25+	36.4%	29.3%

(United States Census Bureau, 2015)



New Jersey Population Demographics and Health Rankings

According to the U.S. Census Bureau, New Jersey had 8,944,469 people in 2016 (United States Census Bureau, 2016). County and state trends show differences in demographics in age, race, sex, and ethnicity. These results can be found in **Appendix A**, pages 13-14 of this report (New Jersey Department of Labor and Workforce Development, 2017). Appendix 1 shows the breakdown by county with fastest and slowest growth rates in each demographic category. In **Appendix B**, pages 15-22 of this report, you may find the 2017 County Health Rankings report, which provides an overview of where New Jersey stands in terms of healthcare outcomes by state and county level data (County Health Rankings, 2017). These rankings help to identify some of the issues facing New Jersey citizens inclusive of the social determinants that impact health such as employment and housing.

Healthcare System Scan

Table 1-C. National and State Healthcare System Scan

Changes	National Trends	State Examples
Consolidation	<ul style="list-style-type: none"> Hospitals and medical group acquisitions 	<ul style="list-style-type: none"> There are increasing numbers of large Healthcare Systems in New Jersey. Robert Wood Johnson Barnabas Health System and Hackensack Meridian Health are the two largest systems (1).
Move toward value-based payment models by government and commercial payer groups	<ul style="list-style-type: none"> Patient-centered medical homes Bundled payment, Accountable Care Organizations (ACOs) 	<ul style="list-style-type: none"> 23 Federally Qualified Health Centers (FQHCs) 80% are recognized as Patient Centered Medical Homes Cardiac and Joint replacement bundled payment model starting July 2017 by CMS in certain selected geographic areas ACOs include: Barnabas North ACO; Atlantic Health; Hackensack University Medical Center and Optimus Healthcare Partners LLC; Holy Name Medical Center Hospital/Physician ACO; Barnabas Central Jersey ACO; Meridian ACO; Summit Health-Virtua; AtlantiCare; Walgreens; <i>Medicaid ACOs</i>; Camden Coalition of Healthcare Providers; Healthy Greater Newark ACO; and the Trenton Health Team
Care model innovations	<ul style="list-style-type: none"> Retailers providing care, telehealth, and mobile technology 	<ul style="list-style-type: none"> 37 CVS Minute Clinics Insurance providers creating and supporting new models
Increased focus on post-acute care	<ul style="list-style-type: none"> ACO preferred models 	<ul style="list-style-type: none"> ACOs connecting the continuum of services
Patient volume	<ul style="list-style-type: none"> Expansion of Medicaid continues. Chronic disease and obesity are major health issues. People with chronic illnesses cost the health care system about 75% of the total health care expenditures (5). Aging population Mental health issues are 	<ul style="list-style-type: none"> As of 4/17, New Jersey has 1.8 million individuals in Medicaid and CHIP, an increase of 38.03% since 2013. (2) 250,000 residents have gained coverage through the marketplace. (3) The uninsured rate fell from 15% to 6% with the ACA. (3) Every county has had an increase in the elderly between 2010 and 2016. Five

	increasing and the number of providers is inadequate. 60% of adults with a mental illness receive no mental health services.	counties with the largest population of 65+ residents are now Bergen, Ocean, Essex, Middlesex, and Monmouth counties. (4) <ul style="list-style-type: none"> • Mental health issues are increasing in NJ and there is a shortage of providers.
Price and cost pressures	<ul style="list-style-type: none"> • Across the continuum • Alignment of incentives through ACOs and bundled payment 	<ul style="list-style-type: none"> • Same as national issues
Talent management	<ul style="list-style-type: none"> • Need leaders who can drive change in demand • New leadership skills which require an expansion of talents • Turnover of leadership 	<ul style="list-style-type: none"> • Same as national issues
Information Technology	<ul style="list-style-type: none"> • Population health tools and analytics in demand • New Electronic Healthcare Records (EHR) • System breaches of concern 	<ul style="list-style-type: none"> • Shifts in EHR records and integration of population health analytics in system by insurers • Breaches of concern in New Jersey

1. <http://www.njha.com/membership/list-of-nj-providers/healthcare-systems/>
2. <https://www.medicaid.gov/Medicaid/by-state/stateprofile.html?state=new-jersey>
3. NJHA (2017). Financial Indicators & Advocacy Agenda. NJ: Health Economics Department/NJHA.
4. NJDOL and Workforce Development (2017). Retrieved from: http://lwd.dol.state.nj.us/labor/lpa/dmograph/est/est_index.html
5. American Hospital Association (2016). Environmental Scan. Retrieved from: http://www.hhnmag.com/ext/resources/inc-hhn/pdfs/2015/EnviroScan_2016.pdf
6. NJDOH. (n.d.) Public Health Topics and Dataset Queries. Retrieved from: <https://www26.state.nj.us/doh-shad/topic/Index.html>

Future of Nursing Update for New Jersey

Linking the NJAC focus on building nursing capacity to improving health and healthcare in New Jersey has required changes in structure. While we continue to work on building capacity, other organizations have taken on many of those initiatives. Moving nurses into the community is now a major goal of the NJAC, which is housed at the NJCCN. This is being accomplished by developing nurse coaches and volunteers in every county in New Jersey and working with key partners across the state, including NJDOH, NJHCQI, YMCA, Library Association, NJPN, RUHealth, and AARP. These partnerships will provide opportunities for nurses to become engaged in their communities. These coaches and nurse volunteers will integrate into the cities and municipalities to engage nurses in current and future projects that improve the health and healthcare of New Jersey citizens. Information on this program can be found at njac.njccn.org.

Recommendation: Implement nurse residency programs:

Residency programs across the spectrum are being evaluated such as acute care (NJCCN and the Leadership Council housed at ONL/NJ), and post-acute care (NJAC). These programs help new nurses transition into new roles. Through the work of the NJAC a book on developing nurse residency programs in post-acute setting has been developed to help organizations develop their own program. Evaluation of this program has also been published in peer reviewed journals.



Cadmus, E., Salmond, S., Hassler, L., Bohnczyk, N., & Black, K. (2017). *Developing a residency in post-acute care*. Indianapolis, IN. Sigma Theta Tau International.

Recommendation: Expand opportunities for nurses to lead and diffuse collaborative improvement efforts.

The national campaign to engage nurses on boards has been transferred to the organization of Nurse Leaders/NJ to continue our role in having nurses take a leadership role in shaping health and healthcare. This aligns with their mission and vision of their organization.

The NJCCN has been awarded funding by NJHI the statewide grant making program of the Robert Wood Johnson Foundation. The funding supports the vision of NJCCN to expand the leadership capacity of school nurse and their communities. This is being implemented through the framework of the 21st century school nurse practice™ developed by NASN. Retreats, education, and standards application are currently underway in collaboration with the NJSSNA. One key area of focus is on the mental health first aid certification for school nurses who are confronted with needs of students and families in their schools.

Recommendation: Nurses should work to the full extent of their education and training.

The NJSNA continues to focus on access to care for consumers by working on legislation surrounding APN practice. The NJCCN has focused on looking at inconsistencies in APN practices in hospital settings to provide direction to hospital leadership.

Recommendation: Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.

Academic Progression continues to be the work of the NJAC to ensure seamless academic progression. Pilots continue to be developed and implemented to improve this process for nurses with the goal of 80% BSN by 2020. To meet this goal, New Jersey needs to continue to work on this recommendation.

Recommendation: Prepare and enable nurses to lead change to advance health.

Through the funding by the Robert Wood Johnson Foundation and support by the NJHA/HRET, NJNI is focused on transforming nursing education. Reshaping curricula and experiences for nurse to change the way students are prepared for future demands in community-based care and improving population health. For more information: <http://www.njni.org/about/>



Appendix A: Estimates of 2016 State and County Population by Age, Race, Sex and Hispanic Origin

HIGHLIGHTS

- ✓ Similar to the national trend, New Jersey's population continued to become older and racially and ethnically diversified. Minority population (persons other than non-Hispanic whites) had increased their share in New Jersey's total population to 44.2% in 2016, up from 40.4% in 2010.
- ✓ Non-Hispanic white population declined in almost every county in NJ except Ocean between 2010 and 2016. Middlesex (-34,938) and Bergen (-32,367) counties experienced the largest numeric loss of non-Hispanic whites. Their rate of decline in Middlesex County (-8.7%) was also the steepest in the state.
- ✓ African American population grew by 4.4% in New Jersey since the 2010 Census, led by Middlesex County's net gain of 10,270. African Americans increased the fastest in Warren County (+30.2%) from a small base. However, Black population declined somewhat in five counties during this period: Atlantic, Salem, Cape May, Hunterdon and Monmouth.
- ✓ With a hefty 17.5% increase, Asian was the fastest growing race group in NJ since 2010 Census. Asians grew in every county. The net gain of 29,516 in Middlesex County was the largest, while the 27.6% increase in Somerset County was the fastest. Sussex County had the slowest growth of 7.2%.
- ✓ NJ's net increase of 152,575 total residents was the result of a net loss of 78,949 non-Hispanics and a net gain of 231,524 Hispanics. Hispanics grew in all counties led by Bergen's 36,822 and Union's 27,022 gains. Hispanic growth rates between 2010 and 2016 ranged from 9.3% in Hudson County to 28.4% in Gloucester County.
- ✓ In 2016, six counties were the "majority-minority" counties (less than 50% residents were non-Hispanic whites) in NJ: Hudson, Essex, Union, Passaic, Middlesex, and Cumberland. However, the share of minority population remained low in Sussex (13.2%) and Hunterdon (14.1%) counties, as of 2016.
- ✓ New Jersey's median age increased from 39.0 in 2010 to 39.7 in 2016, as the state's elderly population (65 & over) increased substantially (+15.7%) while number of children (under 18) declined (-3.9%).
- ✓ Elderly population increased in every county between 2010 and 2016. Bergen (+17,740) and Middlesex (+18,938) counties had the largest numeric growth, while Hunterdon's 29.47% and Sussex's 27.9% growth were the most rapid. Bergen (154,843), Ocean (131,778) and Middlesex (118,400) had more elderly population than other counties, as of 2016.

- ✓ In 2016, more than one in every five residents in Cape May (25.0%) and Ocean (22.2%) counties were senior citizens. On the other hand, Hudson (11.0%) and Essex (12.9%) counties had relatively low percentages of elderly population. These four counties also had the highest and lowest percentages of elderly population in 2010.
- ✓ Number of children declined in most counties except Hudson, Ocean and Union. The -14,943 decrease in Monmouth County was the most severe between 2010 and 2016. The rate of change among children population ranged from -18.0% in Sussex County to +5.8% in Hudson County.
- ✓ Three rural counties had the most noticeable increase of median age between 2010 and 2016: Sussex (+2.8), Hunterdon (+2.7) and Warren (+2.5). Hudson County had the state's lowest median age (34.2) in 20146+, while median ages were the highest in Cape May (49.0), Hunterdon (46.2) and Sussex (44.6) counties.
- ✓ NJ's sex ratio (men per 100 women) increased somewhat from 94.8 in 2010 to 95.4 in 2016, as male population grew at a faster pace (2.1%) than their female counterparts (1.4%). Sex ratio ranged from 92.7 Essex County to 105.1 in Cumberland County, as of 2016.

Prepared by New Jersey Department of Labor and Workforce Development, Division of Labor Market and Demographic Research, on June 23, 2017.



Appendix B: 2017 County Health Rankings: New Jersey

View the New Jersey County Health Rankings at the following link:

https://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2017_NJ.pdf



Chapter 2: Educational Capacity

This chapter is divided into two sections. The first section 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. The data spans the 2015-2016 academic year.

Section 1: Educational Capacity Report - RN

New Jersey RN Program Characteristics

This report includes data for the 41 of the 43 schools in New Jersey that provide education for registered nurses (RNs).

The schools reported the following **pre-licensure** programs:

- **6** Diploma degree programs
- **27** Associate Degree in Nursing (ADN)
 - **15** ADN – Generic
 - **12** ADN – Bridge
- **23** Bachelor of Science in Nursing (BSN)
 - **14** BSN – Generic
 - **9** Accelerated BSN
- **1** Pre-licensure Master's of Science in Nursing (MSN)

The schools reported the following **post-licensure** programs:

- **(16)** RN – BSN
- **(15)** Post-licensure Masters of Science in Nursing (MSN)
- **(9)** Doctorate of Nursing Practice (DNP)
- **(3)** Doctor of Philosophy (PhD) in Nursing

Figure 2-A. Nursing Program Types

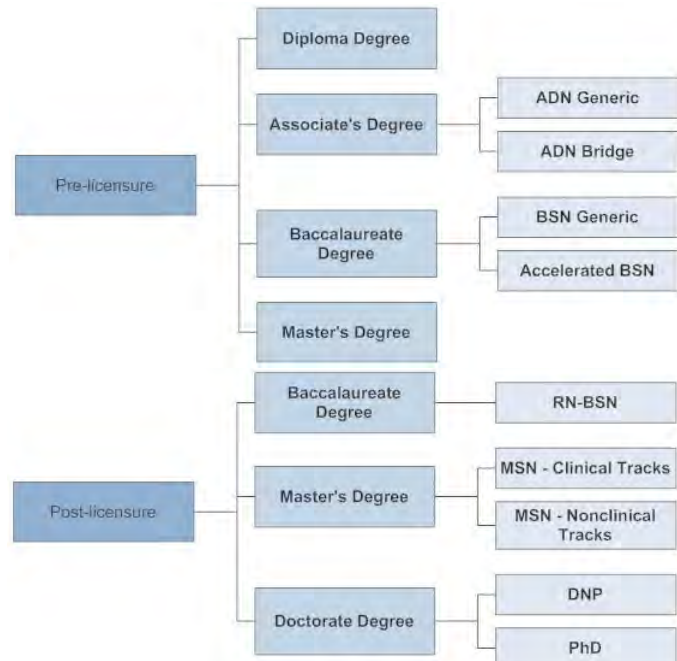
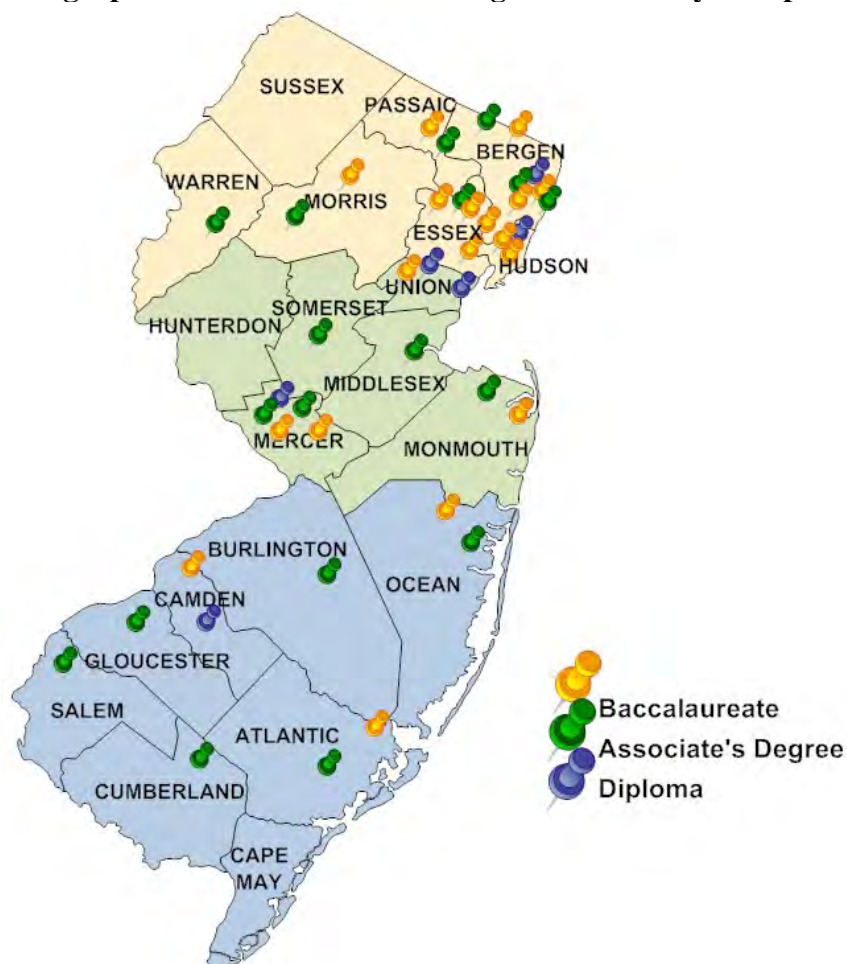


Figure 2-B. Geographic Distribution of RN Programs' Primary Campuses*



*This figure displays the location of nursing programs' primary campuses. Many of the Baccalaureate and Associate Degree programs also have satellite locations.

Table 2-A. Program Distribution by County

2	Atlantic County	1	Middlesex County
7	Bergen County	2	Monmouth County
1	Burlington County	2	Morris County
2	Camden County	2	Ocean County
1	Cumberland County	2	Passaic County
5	Essex County	1	Salem County
1	Gloucester County	1	Somerset County
3	Hudson County	3	Union County
5	Mercer County	1	Warren County

Table 2-B. Federal Tax Classification - 2016

	Diploma	Associate's	Baccalaureate
Public	1	15	7
Private/For-Profit	1	3	1
Private/Non-Profit	4	0	8
Total	6	18	16

Table 2-C. Distribution of Clinical Hands-on Practice Time (%) - 2016

	Diploma	Associate's	Baccalaureate
Acute	82.5	78.9	64.5
Post-Acute	11.7	16	10.3
Preventative	1.7	2.4	10.4
Home Care	2.5	0.2	9.8
Other	1.7	2.4	5
Total	100.0	100.0	100.0

Pre-Licensure Application, Admission, and Enrollment

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.

Table 2-D. Pre-Licensure Student Application, Admission, and Enrollment Rates - 2016

	Diploma	ADN (Generic)	ADN (Bridge)	BSN	Accelerated BSN	Pre- Licensure MSN	Total
Available Seats	913	1599	767	1115	525	70	4989
Qualified Applicants	1388	1934	1096	5292	743	76	10529
Admitted Applicants	822	1408	719	3321	534	76	6872
Enrollees	792	1376	693	1114	406	55	4396
Enrollees (%)	96%	98%	96%	34%	76%	72%	64%

Table 2-E. Pre-Licensure Admission and Enrollment Trend Analysis 2012-2016

	2013	2014	2015	2016
Available Seats	4797	5030	5348	4989
Qualified Applicants	8347	9465	10531	10529
Admitted Applicants	5670	5961	6967	6872
Enrollees	4211	4477	4677	4396
Enrollees (%)	74%	75%	67%	64%



From 2013-2016, the number of available seats and enrollees has remained stable, but the number of admitted applicants has seen a 20% increase. This may be due to the way that schools report their number of available seats. In past years, schools have reported an “unlimited” number of available seats to reflect the fact that they are able to adjust their facilities and faculty to accommodate any reasonable number of enrollees. However, such reports skew the data, and we have encouraged schools to report an estimate of their capacity in lieu of reporting unlimited seats. The most recent data reflects compliance with our suggested change.

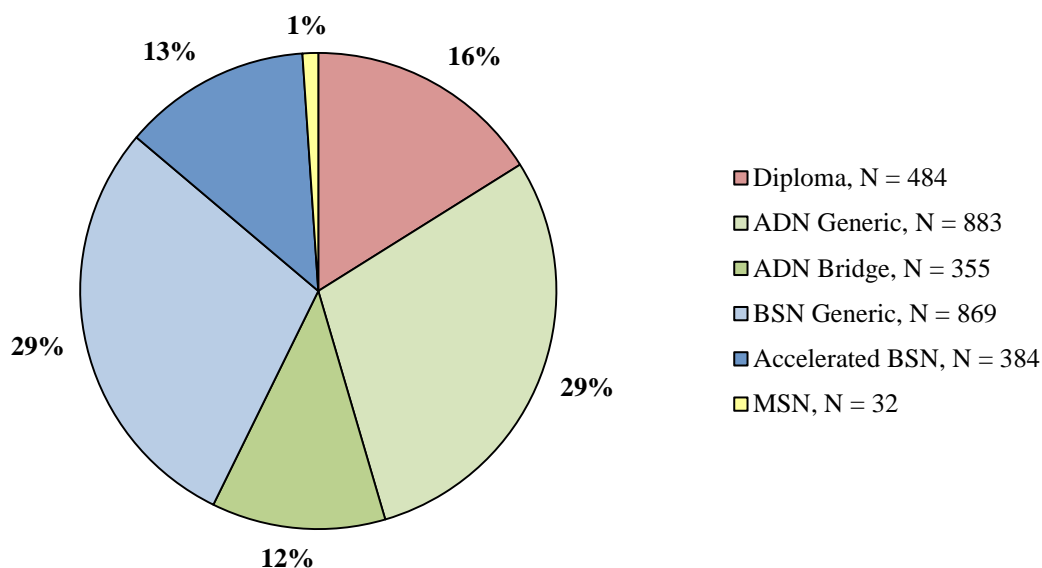
The lack of unique identifiers for applicants means that the data cannot be used to ascertain whether there are sufficient seats for all qualified applicants. However, based on the identified available seats and the number of enrollees, it appears to be sufficient.

Graduation Rates

Pre-Licensure RN Graduation rates have been stable for the last four years.

	2013	2014	2015	2016
Diploma	513	523	457	484
ADN Generic	1012	1015	1002	883
ADN Bridge	317	357	522	355
BSN Generic	753	667	788	869
BSN Accelerated	486	500	368	384
MSN Pre-Licensure	20	15	24	32
Total	3101	3077	3161	3007

Figure 2-C. Pre-Licensure Graduates 2016



Pre-Licensure Student Demographics

Table 2-G. Pre-Licensure Student Demographics

	Diploma N = 2867	ADN Generic N = 2701	ADN Bridge N = 792	BSN Generic N = 3984	BSN Accelerated N = 793	MSN Pre- Licensure N = 87
Gender						
Female	2443 (85%)	2203 (82%)	683 (86%)	3456 (87%)	667 (84%)	77 (89%)
Male	408 (14%)	450 (17%)	92 (12%)	518 (13%)	136 (16%)	10 (11%)
Did not Disclose	16 (1%)	48 (2%)	17 (2%)	10 (0%)	0 (0%)	0 (0%)
Race/Ethnicity						
American Indian	15 (1%)	2 (0%)	3 (0%)	6 (0%)	0 (0%)	0 (0%)
Asian	225 (8%)	224 (8%)	42 (5%)	670 (17%)	72 (9%)	5 (6%)
Black/African American	924 (32%)	313 (12%)	467 (59%)	438 (11%)	105 (13%)	16 (18%)
Hawaiian/Pacific Islander	20 (1%)	25 (1%)	6 (1%)	17 (0%)	4 (1%)	0 (0%)
White/Caucasian	660 (23%)	1530 (57%)	105 (13%)	1898 (48%)	400 (50%)	24 (28%)
Hispanic/Latino	694 (24%)	375 (14%)	73 (9%)	608 (15%)	102 (13%)	20 (23%)
Other	71 (2%)	18 (1%)	0 (0%)	12 (0%)	4 (1%)	0 (0%)
Two or More Races	18 (1%)	81 (3%)	9 (1%)	130 (3%)	22 (3%)	3 (3%)
Did not Disclose	240 (8%)	133 (5%)	87 (11%)	205 (5%)	84 (11%)	19 (2%)
Age						
17-20	315 (11%)	211 (8%)	3 (0%)	1986 (50%)	34 (4%)	0 (0%)
21-25	796 (28%)	971 (36%)	82 (10%)	1323 (33%)	235 (30%)	10 (11%)
26-30	683 (24%)	549 (20%)	156 (20%)	163 (4%)	181 (23%)	17 (20%)
31-40	762 (27%)	574 (21%)	297 (38%)	176 (4%)	195 (25%)	15 (17%)
41-50	243 (8%)	255 (9%)	178 (22%)	89 (2%)	85 (11%)	16 (18%)
51-60	65 (2%)	61 (2%)	34 (4%)	48 (1%)	50 (6%)	15 (17%)
61+	3 (0%)	6 (0%)	2 (0%)	5 (0%)	3 (0%)	2 (2%)
Did not Disclose	0 (0%)	74 (3%)	40 (5%)	194 (5%)	10 (1%)	12 (14%)

Table 2-H. Pre-Licensure Demographic Characteristics Trends Analysis 2013-2016

	2013	2014	2015	2016
	N = 10,301	N = 10,943	N = 10,669	N = 11,224
Program				
Diploma	2983 (29%)	3018 (28%)	2971 (28%)	2867 (26%)
ADN	3182 (31%)	3850 (35%)	3360 (31%)	3493 (31%)
BSN (Generic)	3317 (32%)	3361 (31%)	3719 (35%)	3984 (35%)
BSN (Accelerated)	773 (8%)	663 (6%)	578 (5%)	793 (7%)
Master's (Pre-licensure)	46 (0%)	51 (0%)	41 (0%)	87 (1%)
Race/Ethnicity				
American Indian	34 (0%)	38 (0%)	39 (0%)	26 (0%)
Asian	1394 (14%)	1145 (10%)	1207 (11%)	1238 (11%)
Black/African American	2244 (22%)	2561 (23%)	2268 (21%)	2263 (20%)
Hawaiian/Pacific Islander	0 (0%)	215 (2%)	66 (1%)	72 (1%)
White/Caucasian	4739 (46%)	4368 (39%)	4324 (41%)	4617 (41%)
Hispanic/Latino	1784 (17%)	1680 (15%)	1754 (16%)	1872 (17%)
Other	0 (0%)	182 (2%)	140 (1%)	105 (1%)
Two or More Races	0 (0%)	166 (1%)	212 (2%)	263 (2%)
Did not Disclose	106 (1%)	858 (8%)	659 (6%)	768 (7%)
Age				
17-20	2231 (22%)	2212 (19%)	2443 (23%)	2549 (23%)
21-25	3248 (32%)	3323 (30%)	3314 (31%)	3417 (30%)
26-30	1695 (16%)	1763 (16%)	1912 (18%)	1749 (16%)
31-40	1844 (18%)	1943 (17%)	1788 (17%)	2019 (18%)
41-50	919 (9%)	963 (9%)	768 (7%)	866 (8%)
51-60	238 (2%)	277 (2%)	173 (2%)	273 (2%)
61+	20 (0%)	17 (0%)	10 (0%)	21 (0%)
Did not Disclose	206 (2%)	815 (7%)	261 (2%)	330 (3%)

NCLEX Pass Rates for Pre-licensure Students

Students must pass the National Council Licensure Exam (NCLEX-RN) to apply for licensure as an RN. These data are self-reported by schools to the NJCCN according to **fiscal year**. There may be differences between the data that are reported here and the final numbers that are reported to the National Council of State Boards of Nursing due to a timing factor.

Table 2-I. NCLEX Pass Rate of First-Time Candidates

	Diploma	ADN Generic	ADN Bridge	BSN Generic	BSN Accelerated	MSN (Pre- licensure)
Mean	86.6%	79.4%	80.1%	81.0%	82.2%	95.8%
Max	100%	98%	100%	100%	100%	95.8%
Min	70.1%	10.5%	22.2%	70.1%	31.1	95.8%

Post-Licensure Application, Admission, and Enrollment

Post-licensure programs are for students who are already licensed as Registered Nurses. Post-licensure data 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. Trended data for four years demonstrates a 50% increase in RN to BSN completion. Unlike previous years, the 2016 data does not include doctoral programs other than DNP or PhD in nursing.

Table 2-J. Post-Licensure Student Application, Admission, and Enrollment Rates

	RN to BSN	MSN	DNP	PhD
Available Seats	3168	1624	135	18
Qualified Applicants	1797	794	350	12
Admitted Applicants	1712	767	342	12
Enrollees	851	504	255	3
Enrollees (%)	49.7%	65.7%	74.6%	25.0%

Table 2-K. Post-Licensure Admission and Enrollment Trends 2013-2016

	2013	2014	2015	2016
Available Seats	4039	6590	5109	4945
Qualified Applicants	5628	3989	2775	2953
Admitted Applicants	5027	3739	2675	2833
Enrollees	3055	2900	1932	1613
Enrollees (%)	60.8%	77.6%	72.2%	56.9%

Post-Licensure Graduation

Post-Licensure RN Graduation rates have been stable for the last four years.

Table 2-L. Post-Licensure Graduation Trend Analysis 2013-2016

	2013	2014	2015	2016
RN-BSN	693	926	1068	1063
MSN	642	634	601	616
DNP	65	59	93	88
PhD	17	26	14	7
Total	1417	1645	1776	1774

Figure 2-D. Post-Licensure Graduates 2016

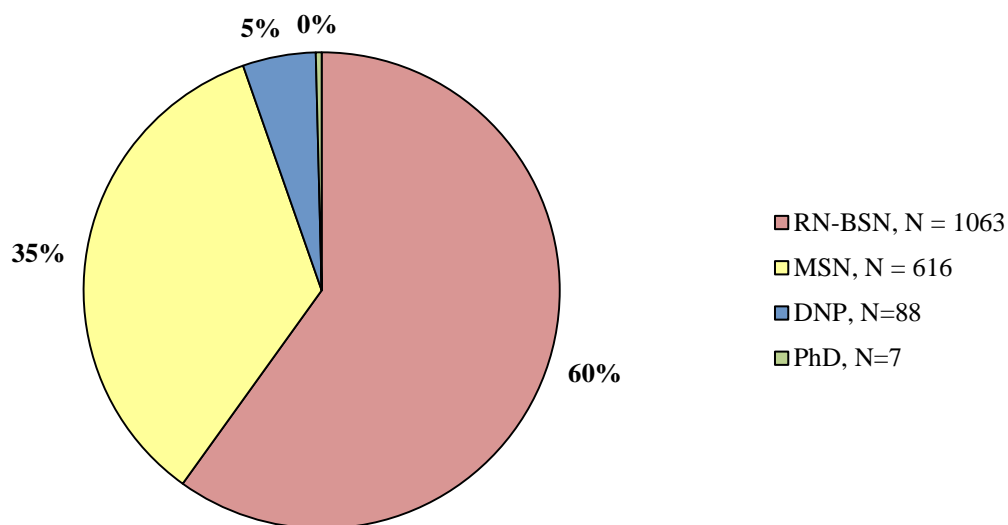


Table 2-M. Post-Licensure Student Demographics

	RN to BSN N = 2402	MSN Clinical N = 1144	MSN Non-Clinical N = 653	DNP N = 713	PhD N = 58
Gender					
Female	2134 (89%)	1029 (91%)	579 (89%)	610 (86%)	55 (95%)
Male	268 (11%)	108 (9%)	74 (11%)	103 (14%)	3 (5%)
Did not Disclose	0 (0%)	7 (1%)	0 (0%)	0 (0%)	0 (0%)
Race/Ethnicity					
American Indian	1 (0%)	4 (0%)	1 (0%)	1 (0%)	0 (0%)
Asian	193 (8%)	168 (15%)	37 (6%)	114 (16%)	3 (5%)
Black/African American	276 (11%)	168 (15%)	52 (8%)	157 (22%)	3 (5%)
Hawaiian/Pacific Islander	20 (1%)	9 (1%)	6 (1%)	0 (0%)	0 (0%)
White/Caucasian	1301 (54%)	554 (49%)	259 (40%)	320 (45%)	47 (81%)
Hispanic/Latino	265 (11%)	116 (10%)	51 (8%)	65 (9%)	5 (9%)
Other	10 (0%)	0 (0%)	2 (0%)	0 (0%)	0 (0%)
Two or More Races	22 (1%)	22 (2%)	10 (2%)	15 (2%)	0 (0%)
Did not Disclose	314 (13%)	103 (9%)	235 (36%)	41 (6%)	0 (0%)
Age					
17-20	52 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
21-25	230 (10%)	219 (19%)	40 (6%)	87 (12%)	0 (0%)
26-30	548 (23%)	245 (22%)	77 (12%)	198 (28%)	12 (21%)
31-40	689 (29%)	347 (31%)	89 (14%)	195 (27%)	30 (52%)
41-50	508 (21%)	263 (23%)	141 (22%)	145 (20%)	11 (19%)
51-60	314 (13%)	64 (6%)	99 (15%)	73 (10%)	3 (5%)
61+	37 (2%)	3 (0%)	14 (2%)	13 (2%)	2 (3%)
Did not Disclose	24 (1%)	3 (0%)	193 (30%)	2 (0%)	0 (0%)

Table 2-N. Post-Licensure Demographic Characteristics Trends 2013-2016

	2013	2014	2015	2016
	N = 8383	N = 8908	N = 6337	N = 4970
Post-Licensure Total Enrollment by Program 2013-2016				
RN to BSN	5225 (62%)	5727 (64%)	3600 (57%)	2604* (52%)
MSN Clinical	1635 (20%)	1324 (15%)	1268 (20%)	1064* (21%)
MSN Non-Clinical	935 (11%)	1083 (12%)	792 (12%)	541* (11%)
DNP	418 (5%)	629 (7%)	589 (9%)	677* (14%)
PhD	170 (2%)	145 (2%)	88 (1%)	84* (2%)
Race/Ethnicity of Post-Licensure Enrollees 2012-2016				
American Indian	16 (0%)	16 (0%)	9 (0%)	7 (0%)
Asian	773 (9%)	869 (10%)	671 (11%)	515 (10%)
Black/African American	1240 (15%)	1262 (14%)	938 (15%)	656 (13%)
Hawaiian/Pacific Islander	91 (1%)	80 (1%)	47 (1%)	35 (1%)
White/Caucasian	4639 (55%)	4898 (55%)	3370 (53%)	2481 (50%)
Hispanic/Latino	770 (9%)	817 (9%)	545 (9%)	502 (10%)
Other	-	65 (1%)	29 (0%)	12 (0%)
Two or More Races	-	70 (1%)	55 (1%)	69 (1%)
Did not Disclose	854 (10%)	831 (9%)	673 (11%)	693 (14%)
Age of Post-Licensure Enrollees 2012-2016				
17-20	7 (0%)	19 (0%)	8 (0%)	52 (1%)
21-25	470 (6%)	429 (5%)	433 (7%)	576 (12%)
26-30	1401 (17%)	1282 (14%)	1163 (18%)	1080 (22%)
31-40	2315 (28%)	2467 (28%)	2042 (32%)	1350 (27%)
41-50	2369 (28%)	2310 (26%)	1635 (26%)	1068 (21%)
51-60	1382 (16%)	1359 (15%)	887 (14%)	553 (11%)
61+	208 (2%)	204 (2%)	89 (1%)	69 (1%)
Did not Disclose	231 (3%)	838 (9%)	80 (1%)	222 (4%)

*Program enrollment rates were erroneously inflated beyond the number of students reported in each race and age category. Thus, we imputed the enrollment rates to match proportionally.



New Jersey RN Nursing Programs

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

*Schools did not participate in this survey period

Section 2: Educational Capacity Report - LPN

New Jersey LPN Program Characteristics

Figure 2-E. Geographic Distribution of LPN Programs

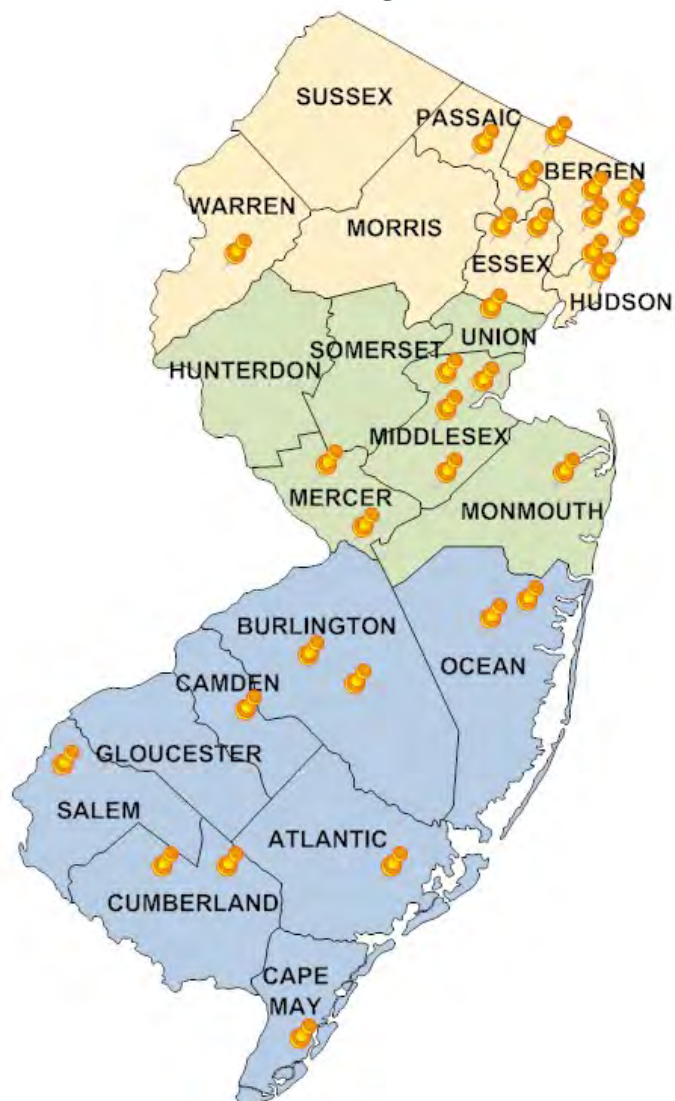


Table 2-O. Program Distribution by County

1	Atlantic County	4	Middlesex County
5	Bergen County	1	Monmouth County
2	Burlington County	1	Morris County
1	Camden County	2	Ocean County
1	Cape May	2	Passaic County
2	Cumberland County	1	Salem County
2	Essex County	1	Union County
2	Hudson County	1	Warren County
2	Mercer County		

Table 2-P. Federal Tax Classification of LPN Programs - 2016

Public	20
Private/For-Profit	10
Private/Non-Profit	1
Total	31

Table 2-Q. Distribution of Clinical Hands-on Practice Time (%) - 2016

Skill Lab	22.2
Simulation Lab	11.5
Hands-on	65.1
Other	1.2
Total	100.0

LPN Application, Admission, and Enrollment

Table 2-R. Practical Nursing Application, Admission, and Enrollment Rates - 2016

Available Seats	Qualified Applicants	Admitted Applicants	Enrollees	Enrollees %
2862	2882	2265	1882	83%

Table 2-S. Practical Nursing Admission, Enrollment, and Graduation Trends

	2013	2014	2015	2016
Available Seats	3870	3569	3515	2862
Qualified Applicants	3218	3406	3286	2882
Admitted Applicants	2866	2617	2530	2265
Enrollees	2376	2368	2117	1882
Enrolled (%)	83%	90%	84%	83%
Graduates	1777	1575	1543	1247

Practical Nursing Program data 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.

Table 2-T. Practical Nursing Student Demographics

Gender		N = 2146
Female	1862	(87%)
Male	282	(13%)
Did not Disclose	2	(0%)
Race/Ethnicity		
American Indian	3	(0%)
Asian	107	(5%)
Black/African American	1075	(50%)
Hawaiian/Pacific Islander	31	(1%)
White/Caucasian	420	(20%)
Hispanic/Latino	330	(15%)
Other	32	(1%)
Two or More Races	18	(1%)
Did not Disclose	130	(6%)
Age		
17-20	98	(5%)
21-25	516	(24%)
26-30	534	(25%)
31-40	595	(28%)
41-50	255	(12%)
51-60	111	(5%)
61+	9	(0%)
Did not Disclose	28	(1%)

Table 2-U. Practical Nursing Demographic Characteristics Trends 2013-2016

	2013	2014	2015	2016
Race/Ethnicity				
American Indian	5 (0%)	5 (0%)	5 (0%)	3 (0%)
Asian	103 (4%)	231 (9%)	142 (5%)	107 (5%)
Black/African American	1374 (53%)	1378 (54%)	1408 (52%)	1075 (50%)
Hawaiian/Pacific Islander	126 (5%)	0 (0%)	25 (1%)	31 (1%)
White/Caucasian	440 (17%)	380 (15%)	531 (20%)	420 (20%)
Hispanic/Latino	370 (14%)	372 (15%)	369 (14%)	330 (15%)
Other	-	-	29 (1%)	32 (1%)
Two or More Races	-	-	111 (4%)	18 (1%)
Did not Disclose	186 (6%)	171 (7%)	89 (3%)	130 (6%)
Age				
17-20	137 (5%)	132 (5%)	122 (5%)	98 (5%)
21-25	581 (22%)	562 (22%)	604 (22%)	516 (24%)
26-30	659 (25%)	649 (26%)	652 (24%)	534 (25%)
31-40	754 (29%)	748 (29%)	833 (31%)	595 (28%)
41-50	342 (13%)	336 (13%)	382 (14%)	255 (12%)
51-60	80 (3%)	79 (3%)	104 (4%)	111 (5%)
61+	4 (0%)	4 (0%)	5 (0%)	9 (0%)
Did not Disclose	29 (1%)	27 (1%)	7 (0%)	28 (1%)

LPN Nursing Programs

Atlantic County Institute of Technology

Avtech Institute of Technology

Best Care Training Institute

Berkeley College

Brooks Alternative Technical School*

Burlington County Institute of Technology

Camden County College

Cape May County Technical School

Cumberland County College

Cumberland County Technical Education Center

Eastwick College, Ramsey

Eastwick College, Hackensack

Essex County College

Holy Name Medical Center School for Nursing

Hudson County Community College

Jersey College – Ewing

Jersey College – Teterboro

Lincoln Technical Institute – Edison

Lincoln Technical Institute – Moorestown

Lincoln Technical Institute - Paramus

Morris County Vocational School

Mercer County Technical School

Merit Technical Institute

Middlesex County Vocational School

Monmouth County Vocational School District

Ocean County Vocational Technical School

Passaic County Technical Institute

Pinelands School of Practical Nursing

Prism Career Center

Salem Community College

Sierra Allied Health Academy

Warren County Technical School

Union County College

Universal Training Institute

*Schools did not participate in this survey period



Section 3: New Jersey Nursing Faculty Report

RN Faculty Employment

The following two tables describe the number of full-time and part-time faculty positions RN nursing schools. More than half (59%) of the Nursing Faculty Workforce comprises part-time instructors. Baccalaureate and higher education schools account for the greatest portion of the Nursing Faculty Workforce.

Table 2-V. RN Nursing Faculty Positions and Vacancies 2016

	Diploma	Associate	Baccalaureate & Graduate	Total
Total Faculty Positions	N = 189	N = 483	N = 961	N = 1633
Full-Time Position Vacancies	2 (1%)	1 (0%)	36 (4%)	39 (2%)
Full-Time Faculty Employed	72 (38%)	163 (34%)	354 (37%)	589 (36%)
Part-Time Position Vacancies	0 (0%)	16 (3%)	19 (2%)	35 (2%)
Part-Time Faculty Employed	115 (61%)	303 (63%)	552 (58%)	970 (59%)

Table 2-W. Nursing Faculty Vacancy Trend

	2013		2014		2015		2016	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
Diploma	5	2	4	10	1	1	2	0
Associate	10	2	9	12	5	6	1	16
Baccalaureate & Graduate	18	6	23	14	30	25	36	19
Total	33	10	36	36	36	32	39	35

Trending shows an increase in vacancies in baccalaureate and higher education faculty positions. Over 53% of full-time baccalaureate and higher education faculty are over the age of 56. The vacancy rate has doubled for this group since 2013.

RN Faculty Demographics

Table 2-X. RN Faculty Demographics

	Diploma		Associate		Baccalaureate & Higher	
	N = 72	N = 115	N = 163	N = 303	N = 354	N = 552
Gender	FT	PT	FT	PT	FT	PT
Female	70 (97%)	109 (95%)	151 (93%)	242 (80%)	316 (89%)	504 (91%)
Male	2 (3%)	6 (5%)	9 (6%)	17 (6%)	21 (6%)	48 (9%)
Did not Disclose	0 (0%)	0 (0%)	3 (2%)	44 (15%)	17 (5%)	0 (0%)
Race/Ethnicity						
American Indian	0 (0%)	2 (2%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)
Asian	2 (3%)	11 (10%)	6 (4%)	23 (8%)	15 (4%)	39 (7%)
Black/African American	14 (19%)	22 (19%)	19 (12%)	49 (16%)	25 (7%)	55 (10%)
Hawaiian/Pacific Islander	1 (1%)	2 (2%)	1 (1%)	2 (1%)	3 (1%)	3 (1%)
White/Caucasian	51 (71%)	64 (56%)	120 (74%)	181 (60%)	274 (77%)	315 (57%)
Hispanic/Latino	3 (4%)	14 (12%)	3 (2%)	11 (4%)	13 (4%)	19 (3%)
Other	0 (0%)	0 (0%)	2 (1%)	1 (0%)	0 (0%)	0 (0%)
Two or More Races	0 (0%)	0 (0%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)
Did not Disclose	1 (1%)	0 (0%)	11 (7%)	36 (12%)	24 (7%)	119 (22%)
Age						
30 or younger	0 (0%)	0 (0%)	1 (1%)	4 (1%)	0 (0%)	18 (3%)
31-40	12 (17%)	16 (14%)	11 (7%)	36 (12%)	21 (6%)	85 (15%)
41-50	26 (36%)	44 (38%)	25 (15%)	64 (21%)	51 (14%)	159 (29%)
51-55	9 (13%)	19 (17%)	27 (17%)	53 (17%)	57 (16%)	84 (15%)
56-60	10 (14%)	15 (13%)	33 (20%)	48 (16%)	69 (17%)	76 (14%)
61-65	11 (15%)	12 (10%)	39 (24%)	39 (13%)	66 (19%)	46 (8%)
66-70	3 (4%)	5 (4%)	18 (11%)	12 (4%)	40 (11%)	13 (2%)
71+	1 (1%)	4 (3%)	2 (1%)	6 (2%)	20 (6%)	11 (2%)
Did not Disclose	0 (0%)	0 (0%)	7 (4%)	41 (14%)	30 (8%)	60 (11%)

Table 2-Y. RN Faculty Age and Race Trends

Race/Ethnicity	2013		2014		2015		2016	
	N = 543	N = 781	N = 602	N = 886	N = 601	N = 1089	N = 354	N = 552
	FT	PT	FT	PT	FT	PT	FT	PT
American Indian	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)
Asian	29 (5%)	54 (7%)	28 (5%)	5 (6%)	28 (5%)	79 (7%)	15 (4%)	39 (7%)
Black/African American	53 (10%)	116 (15%)	61 (10%)	134 (15%)	63 (10%)	165 (15%)	25 (7%)	55 (10%)
Hawaiian/Pacific Islander	-	-	3 (0%)	12 (1%)	3 (0%)	12 (1%)	3 (1%)	3 (1%)
White/Caucasian	440 (81%)	574 (74%)	470 (78%)	559 (63%)	479 (80%)	623 (57%)	274 (77%)	315 (57%)
Hispanic/Latino	20 (4%)	35 (4%)	22 (4%)	31 (3%)	20 (3%)	37 (3%)	13 (4%)	19 (3%)
Other	-	-	4 (1%)	2 (0%)	0 (0%)	3 (0%)	0 (0%)	0 (0%)
Two or More Races	-	-	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Did not Disclose	0 (0%)	0 (0%)	14 (2%)	93 (10%)	8 (1%)	170 (16%)	24 (7%)	119 (22%)
Age								
30 or younger	2 (0%)	3 (0%)	5 (1%)	28 (3%)	6 (1%)	22 (2%)	0 (0%)	18 (3%)
31-40	45 (8%)	91 (12%)	47 (8%)	103 (12%)	39 (6%)	158 (14%)	21 (6%)	85 (15%)
41-50	117 (22%)	271 (35%)	113 (19%)	184 (21%)	113 (19%)	261 (24%)	51 (14%)	159 (29%)
51-55	96 (18%)	204 (26%)	105 (17%)	167 (19%)	112 (19%)	191 (18%)	57 (16%)	84 (15%)
56-60	118 (22%)	134 (17%)	130 (22%)	108 (12%)	134 (22%)	180 (17%)	69 (17%)	76 (14%)
61-65	101 (19%)	48 (6%)	105 (17%)	72 (8%)	114 (19%)	112 (10%)	66 (19%)	46 (8%)
66-70	43 (8%)	23 (3%)	45 (7%)	29 (3%)	52 (9%)	40 (4%)	40 (11%)	13 (2%)
71+	21 (4%)	7 (1%)	21 (3%)	10 (1%)	19 (3%)	12 (1%)	20 (6%)	11 (2%)
Did not Disclose	0 (0%)	0 (0%)	31 (5%)	185 (21%)	12 (2%)	113 (10%)	30 (8%)	60 (11%)

LPN Faculty Employment

The following two tables describe the number of full-time and part-time faculty positions at LPN nursing schools. More than half (65%) of the Nursing Faculty Workforce comprises part-time instructors.

Table 2-Z. LPN Nursing Faculty Positions and Vacancies 2016

Total Faculty Positions	N = 446
Full-Time Position Vacancies	8 (2%)
Full-Time Faculty Employed	150 (34%)
Part-Time Position Vacancies	25 (6%)
Part-Time Faculty Employed	263 (59%)

Table 2-AA. LPN Nursing Faculty Vacancy Trend

2013		2014		2015		2016	
Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
12	17	6	22	9	28	8	25

*LPN Faculty Demographics***Table 2-BB. Practical Nursing Faculty Demographics**

	N = 150	N = 263
Gender	Full-Time	Part-Time
Female	133 (89%)	133 (89%)
Male	17 (11%)	24 (9%)
Did not Disclose	0 (0%)	0 (0%)
Race/Ethnicity	Full-Time	Part-Time
American Indian	0 (0%)	0 (0%)
Asian	13 (9%)	31 (12%)
Black/African American	45 (30%)	71 (27%)
Hawaiian/Pacific Islander	2 (1%)	12 (5%)
White/Caucasian	83 (55%)	134 (51%)
Hispanic/Latino	7 (8%)	14 (5%)
Other	0 (0%)	0 (0%)
Two or More Races	0 (0%)	0 (0%)
Did not Disclose	0 (0%)	0 (0%)
Age	Full-Time	Part-Time
30 or younger	1 (1%)	7 (3%)
31-40	20 (13%)	40 (15%)
41-50	27 (18%)	77 (29%)
51-55	34 (23%)	53 (29%)
56-60	28 (19%)	41 (16%)
61-65	24 (16%)	25 (10%)
66-70	5 (3%)	12 (5%)
71+	5 (3%)	2 (1%)
Did not Disclose	6 (4%)	6 (2%)

Table 2-CC. Practical Nursing Faculty Age and Race Trends 2014-2016

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

Chapter 3: Workforce Supply Data

This chapter is divided into three sections (RN, APN, and LPN), each describing a portion of the New Jersey Nursing Workforce. The data for this chapter was acquired from the New Jersey Board of Nursing license renewal survey.

Section 1: Registered Nurse (RN) Profile

Demographics

In the 2016-2017 survey periods, there were 96,113 RN respondents.

Table 3-A. RN Demographic Characteristics

	N = 96,113	%
Gender		
Female	86,639	90%
Male	7,878	8%
Transgender	23	0%
Choose not to answer	114	0%
Missing/No Data	1,459	2%
Race/Ethnicity		
American Indian	104	0%
Asian	14,429	15%
Black/African American	9,183	10%
White/Caucasian	61,562	64%
Hispanic/Latino	3,933	4%
Other	336	0%
Two or More Races	3,453	4%
Did not Disclose	3,113	3%

Figure 3-A. RN Initial Pre-Licensure Education

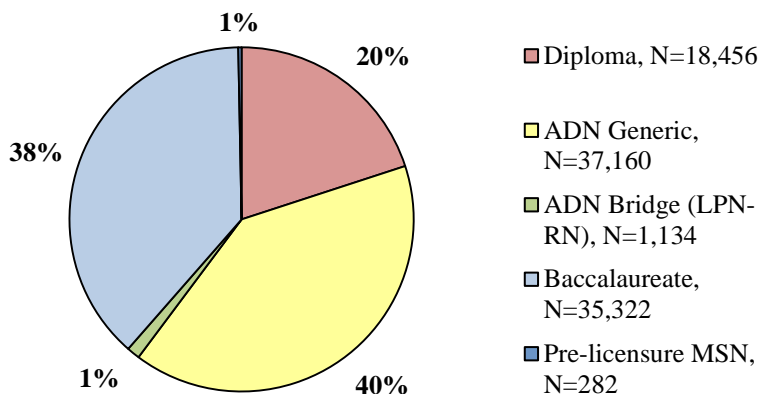
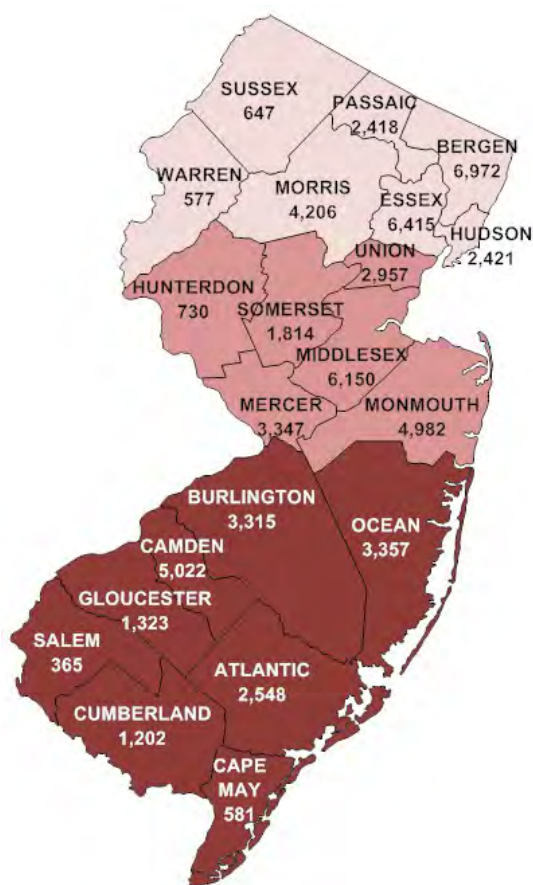


Figure 3-A shows the type of educational program that led to respondents' initial NCLEX examination and licensure. Of all RN respondents, 3,758 did not report the level of their initial pre-licensure education.

RN Geographic Distribution
Figure 3-B. Distribution of RNs by County



Figures 3-B and 3-C describe the employment of RNs geographically. Figure 3-B sorts RNs according to the zip code of their primary employer. Of the 96,113 RN survey respondents, 34,754 did not report their employer's zip code, so they are not included on this map.

Figure 3-C. Distribution of RNs by Region

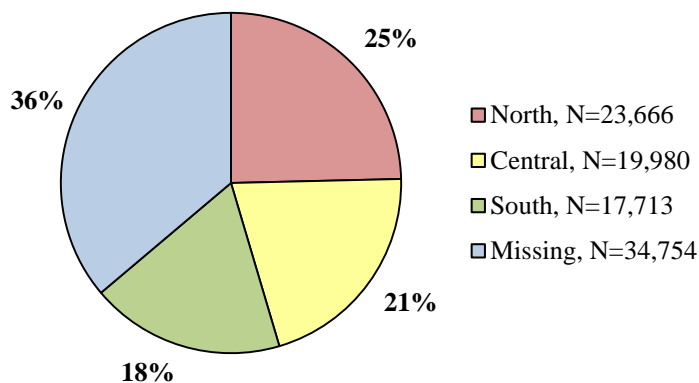
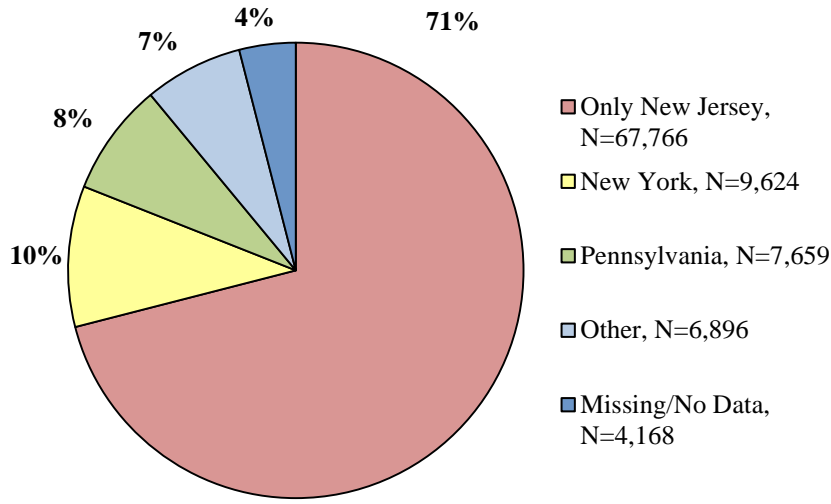


Figure 3-D. RN Licensure in States other than NJ



Approximately 25% (24,179) of RNs have an active licensure in one or more other states. These data do not show whether these RNs are practicing in these other states; it only shows whether they are licensed.

RN Employment Characteristics

Table 3-B shows details of the licensed RNs who are employed in a profession that utilizes their license.

Table 3-B. RN Nursing Employment Status

	N = 96,113	%
Employed as an RN		
Yes	83,969	87%
No	6,816	7%
Missing/No Data	5,328	6%
Hours per Week		
34 hours or less	21,208	22%
35-40 hours	58,343	61%
41-50 hours	1,542	2%
51 or more hours	1,733	2%
Missing/No Data	13,247	14%
Number of Positions		
1	54,845	57%
2	23,234	24%
3	4,309	4%
4	448	0%
5	334	0%
Missing/No Data	12,943	13%



Figures 3-E and 3-F describe RNs according to employment setting. Employment setting refers to the type of agency or department in which a nurse is working. According to Figure 3-E, nearly 50% of RNs are employed in a department within a hospital.

Figure 3-E. RN Primary Employment Setting

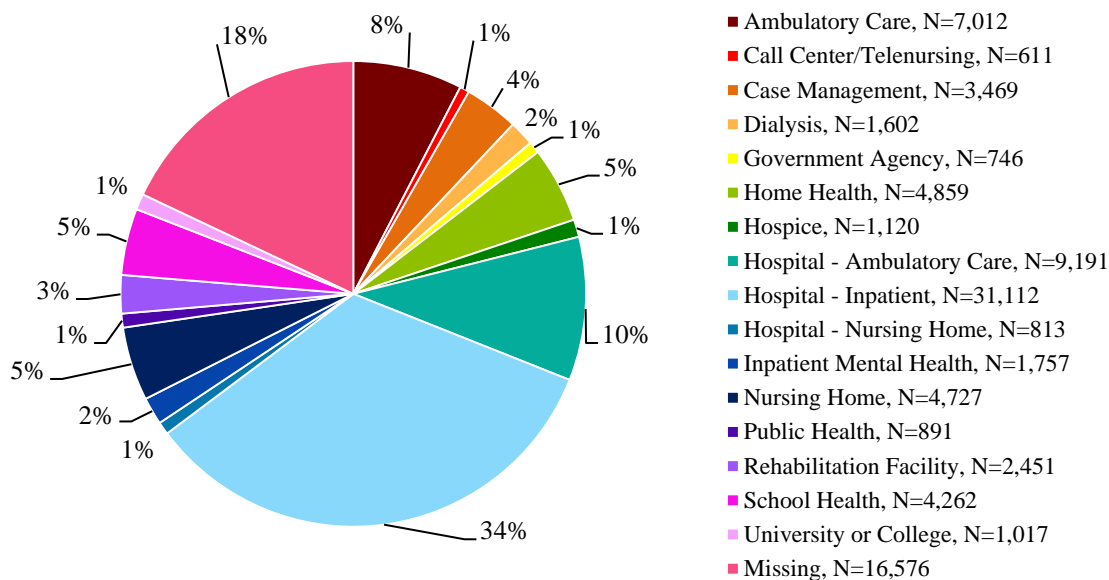
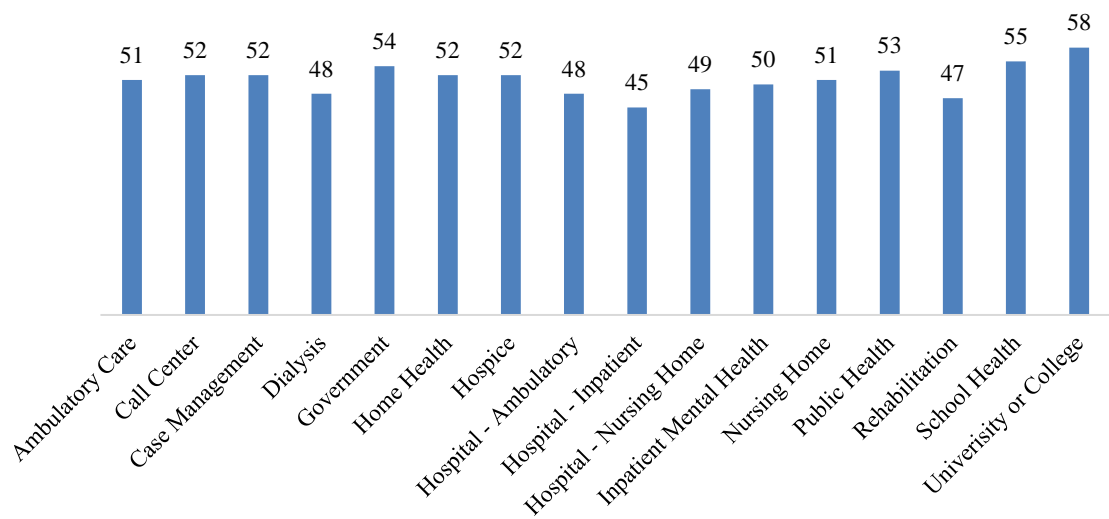


Figure 3-F shows the average age of RNs in each employment setting. The average age of RNs across all employment settings is 48.

Figure 3-F. Average Age of RNs According to Primary Employment Setting



Figures 3-G and 3-H describe RNs according to employment position. Employment position refers to a nurse’s job title. According to Figure 3-G, nearly 50% of RNs are employed as staff nurses. This corresponds to the number of RNs in Figure 3-E who are employed in hospital settings.

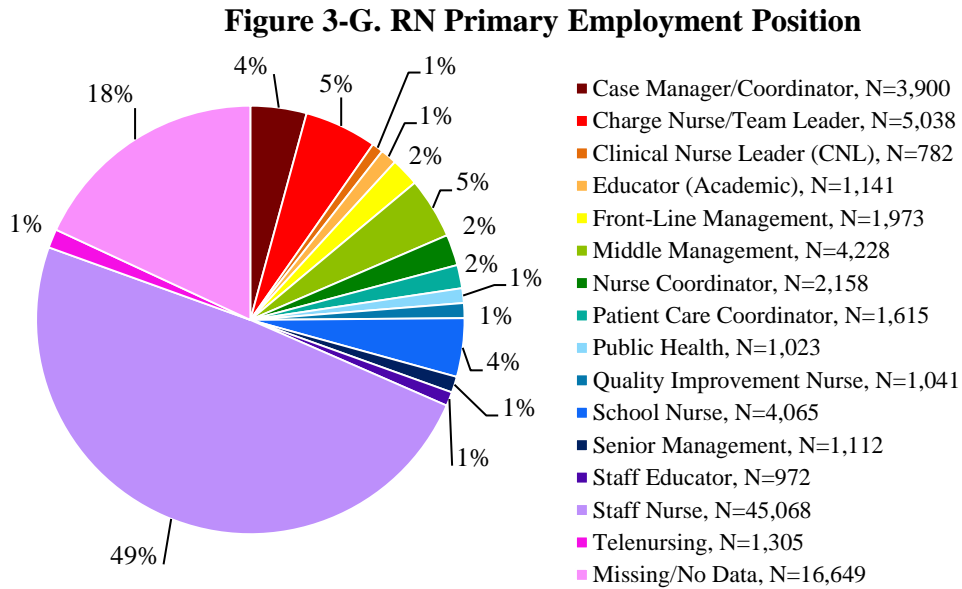


Figure 3-G shows the average age of RNs in each employment position. The average age of RNs across all employment positions is 48.

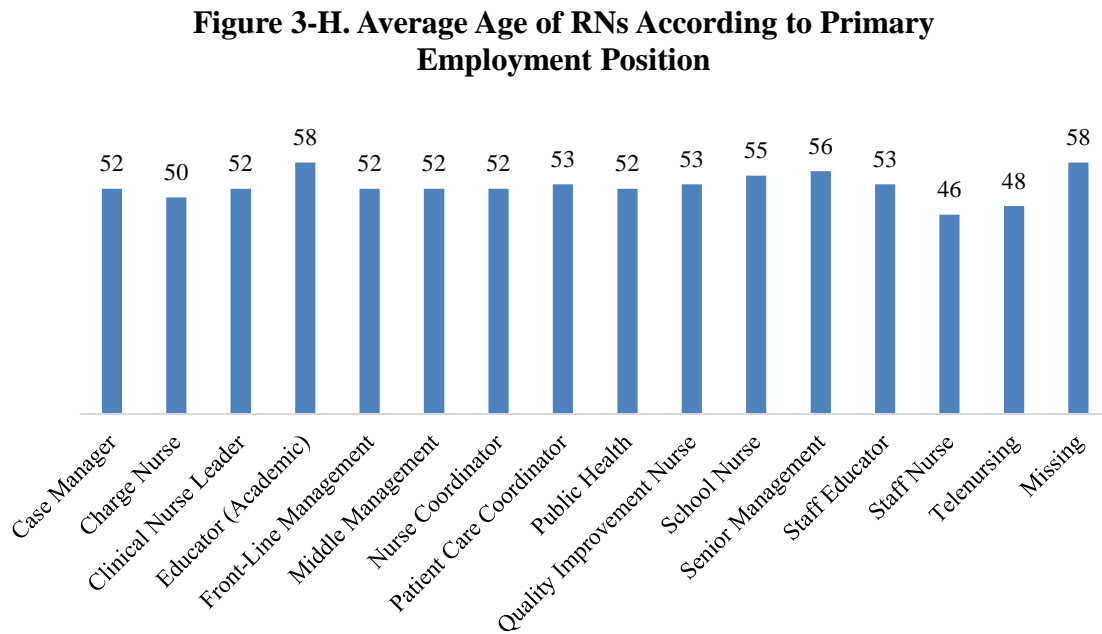
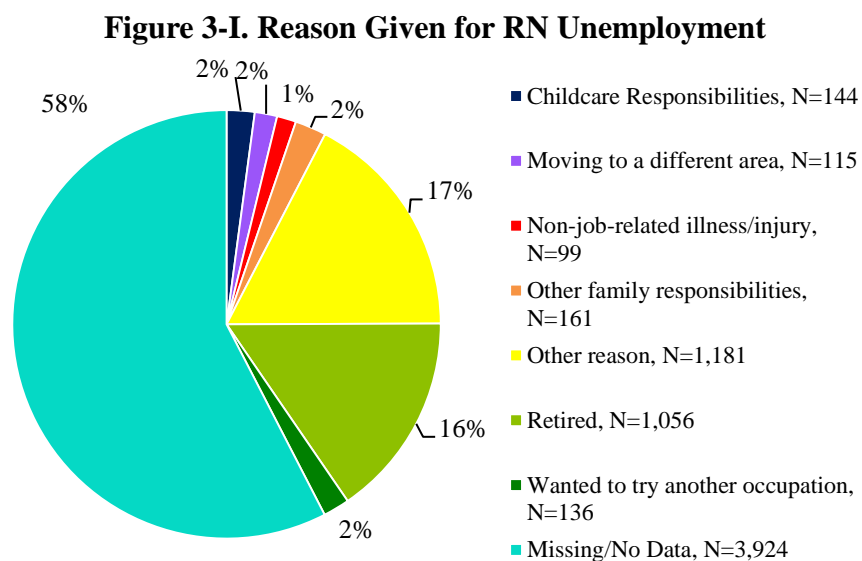


Figure 3-I shows the reasons given by the 6,816 RNs who reported that they were not employed. This is the first attempt to include the option to declare retired status in the survey.



Section 2: Advanced Practice Nurse (APN) Profile

In the 2016-2017 survey period, there were 5,293 APN respondents.

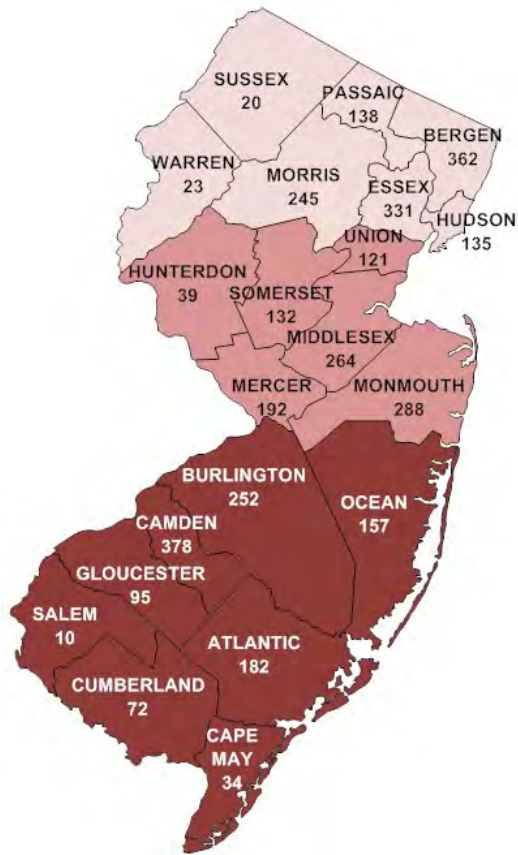
APN Demographics

Table 3-C. APN Demographic Characteristics

	N = 5,293	%
Gender		
Female	4,613	87%
Male	495	9%
Choose not to answer	25	0%
Missing/No Data	160	3%
Race/Ethnicity		
American Indian	7	0%
Asian	480	9%
Black/African American	475	9%
White/Caucasian	3,625	68%
Hispanic/Latino	218	4%
Other	15	0%
Two or More Races	135	3%
Did not Disclose	338	6%

APN Geographic Distribution

Figure 3-J. Distribution of APNs by County



Figures 3-J and 3-K describe the employment of APNs geographically. Figure 3-J sorts APNs according to the zip code of their primary employer. Of the 5,523 APN survey respondents, 2,053 did not report their employer's zip code, so they are not included on this map.

Figure 3-K. Distribution of APNs by Region

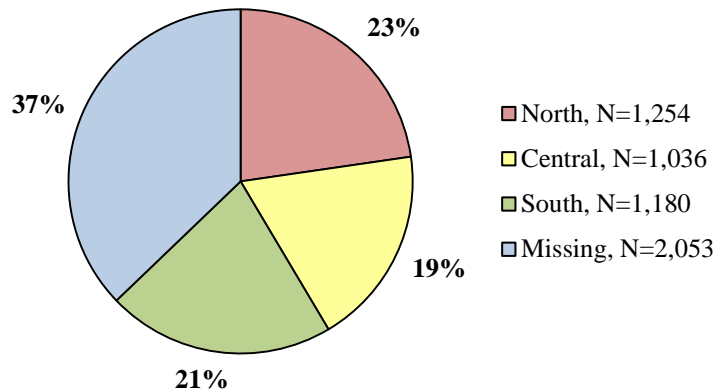
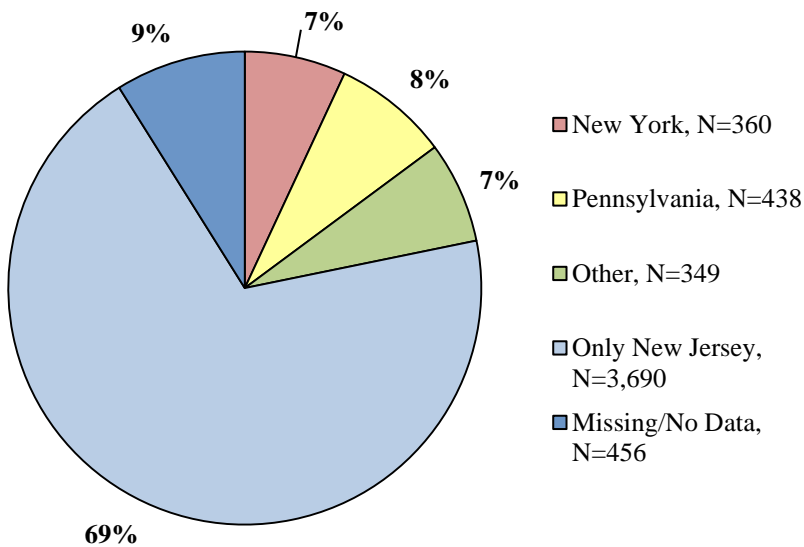


Figure 3-L. APN Licensure in States other than NJ



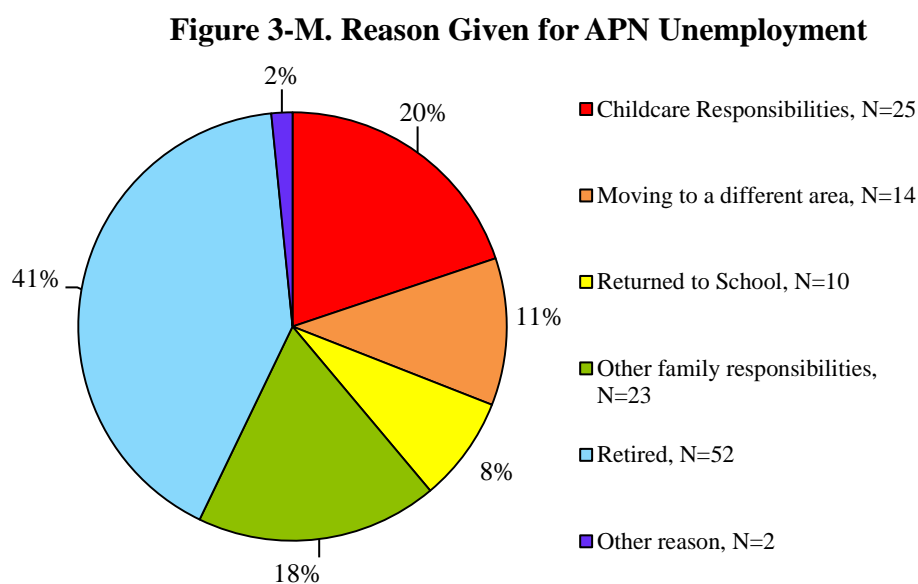
Approximately 22% (1,147) of APNs have an active licensure in one or more other states. These data do not show whether these APNs are practicing in these other states; it only shows whether they are licensed.

APN Employment Characteristics

The following table shows details of the licensed APNs who are employed in a profession that utilizes their license. The majority are full-time employees and report that they work in more than one position as an APN.

Table 3-D: APN Nursing Employment Status		
	N = 5,293	%
Employed as an APN		
Yes	4,701	88%
No	126	2%
Missing/No Data	466	9%
Hours per Week		
34 hours or less	1,270	24%
35-40 hours	3,046	58%
41-50 hours	280	5%
51 or more hours	103	2%
Missing/No Data	77	1%
Employed in More than 1 Position as an APN		
No	748	14%
Yes	4,161	79%
Missing/No Data	712	13%

Figure 3-M shows the reasons given by the 126 APNs who reported that they were unemployed.



Figures 3-N and 3-O describe APNs according to employment setting. Employment setting refers to the type of agency or department in which a nurse is working.

Figure 3-N. APN Primary Setting

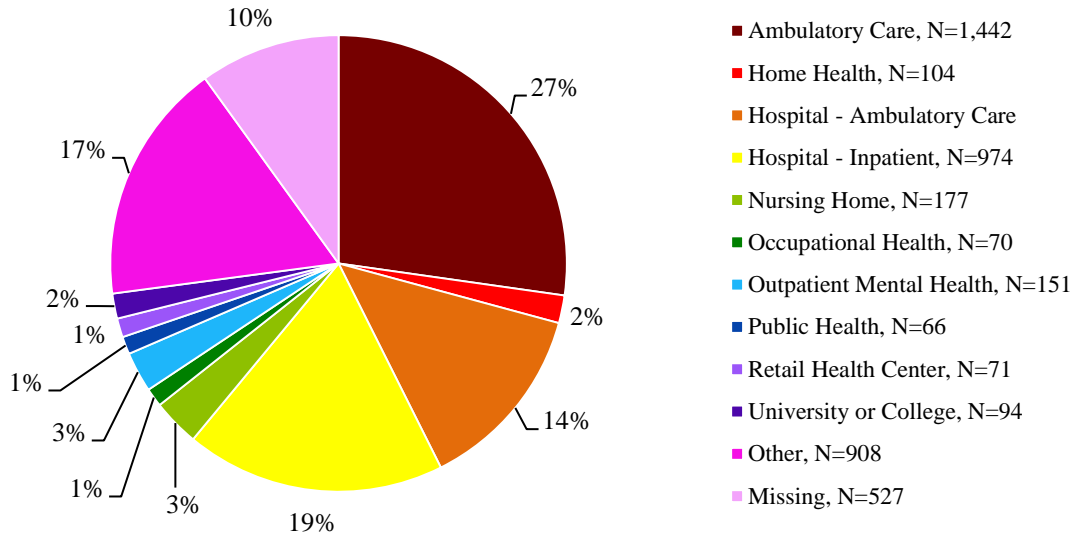
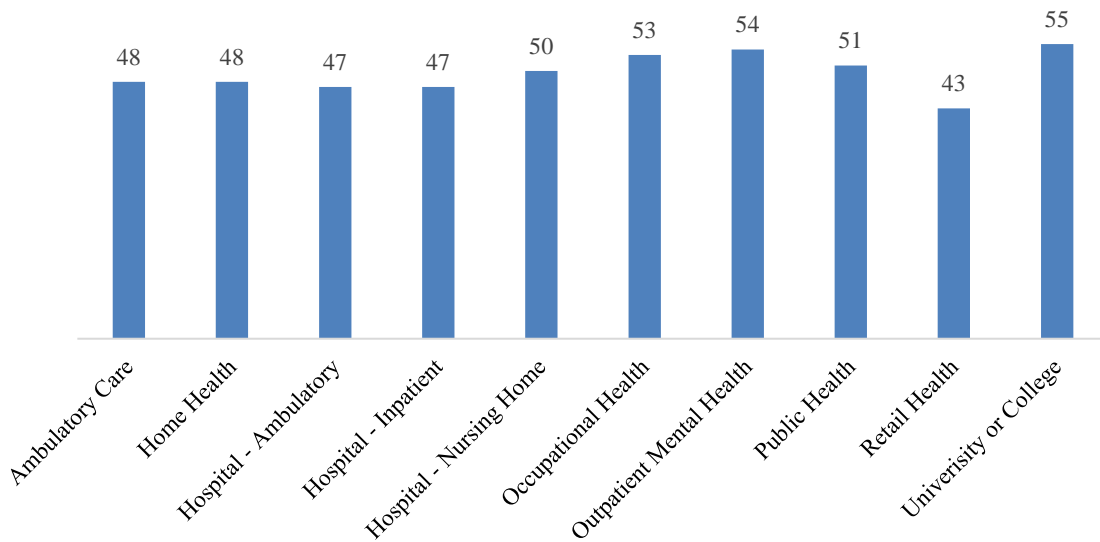


Figure 3-G shows the average age of APNs in each employment setting. The average age of APNs across all employment settings is 48.

Figure 3-O. Average Age of APNs According to Primary Employment Setting



Figures 3-P and 3-Q describe APNs according to employment position. Employment position refers to a nurse’s job title. Of the nurse who supplies employment position data, the two greatest categories are Nurse Practitioner and Staff Nurse.

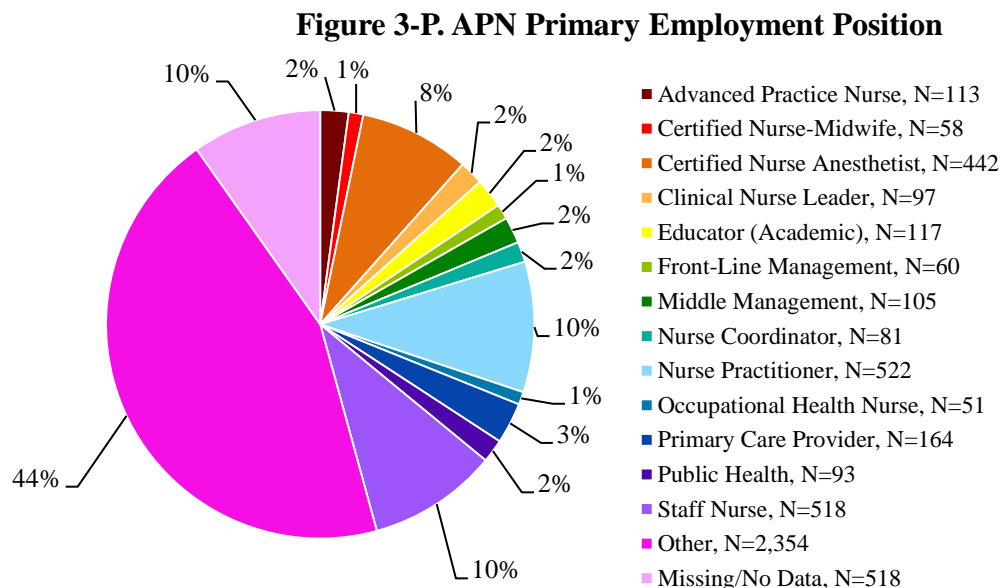
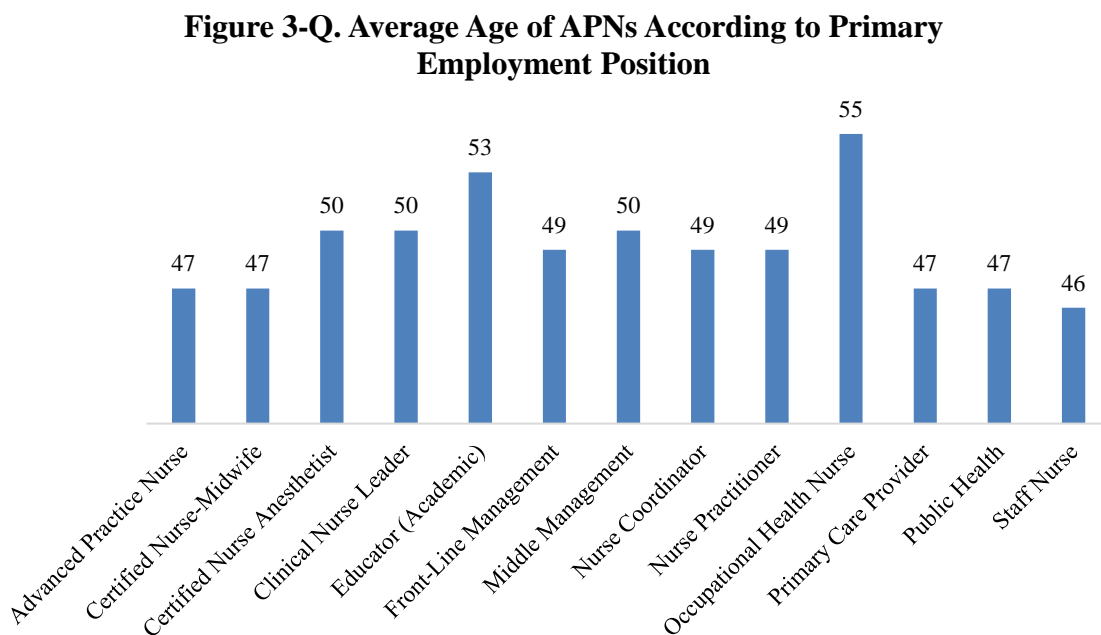


Figure 3-Q shows the average age of APNs in each employment position. The average age of APNs across all employment positions is 48.



Section 3: Licensed Practical Nurse (LPN) Profile

In the 2016-2017 survey period, there were 16,831 LPN respondents.

LPN Demographics

Table 3-E. LPN Demographic Characteristics

	N = 16,831	%
Gender		
Female	14,606	87%
Male	1,675	10%
Transgender	2	0%
Choose not to answer	31	0%
Missing/No Data	517	3%
Race/Ethnicity		
American Indian	27	0%
Asian	1,194	7%
Black/African American	5,349	32%
White/Caucasian	7,366	44%
Hispanic/Latino	1,278	8%
Other	89	1%
Two or More Races	859	5%
Did not Disclose	669	4%

Figure 3-R. LPN Initial Pre-Licensure Education

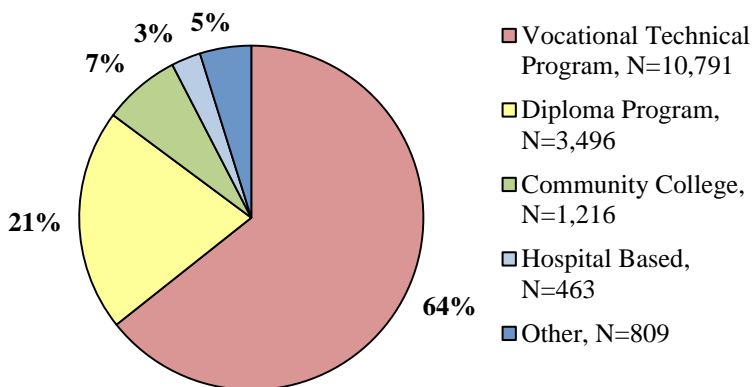
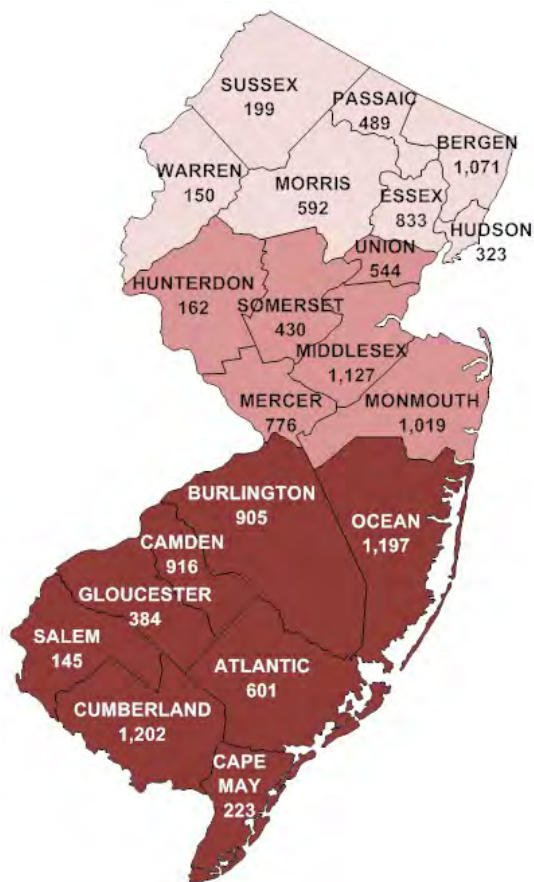


Figure 3-R shows the type of educational program that led to respondents' initial NCLEX-PN examination and licensure. Of all LPN respondents, 11 did not report the level of their pre-licensure education.

LPN Geographic Distribution

Figure 3-S. Distribution of LPNs by County



Figures 3-S and 3-T describe the employment of LPNs geographically. Figure 3-S sorts LPNs according to the zip code of their primary employer. Of the 16,831 survey respondents, 4,282 did not report their employer’s zip code, so they are not included on this map.

Figure 3-T. Distribution of LPNs by Region

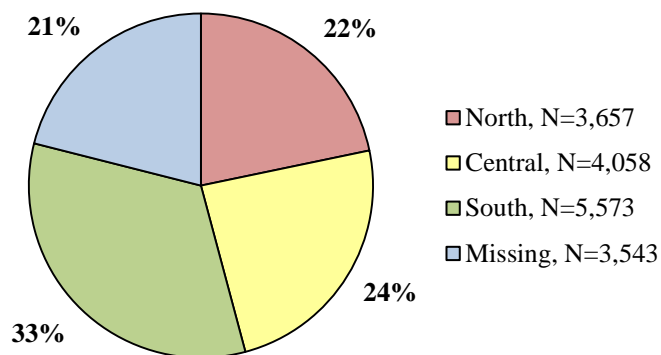
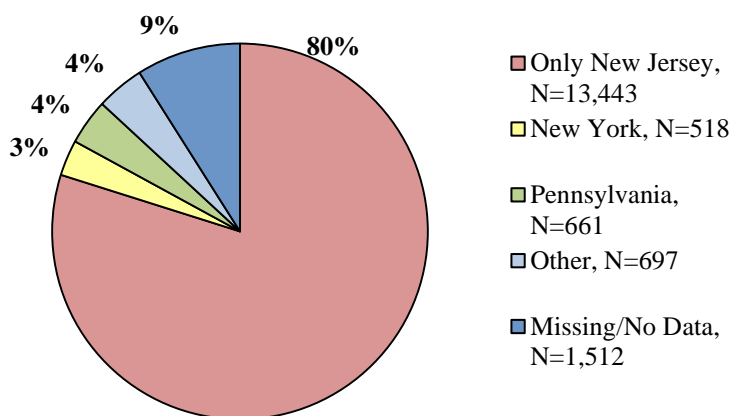


Figure 3-U. LPN Licensure in States other than NJ



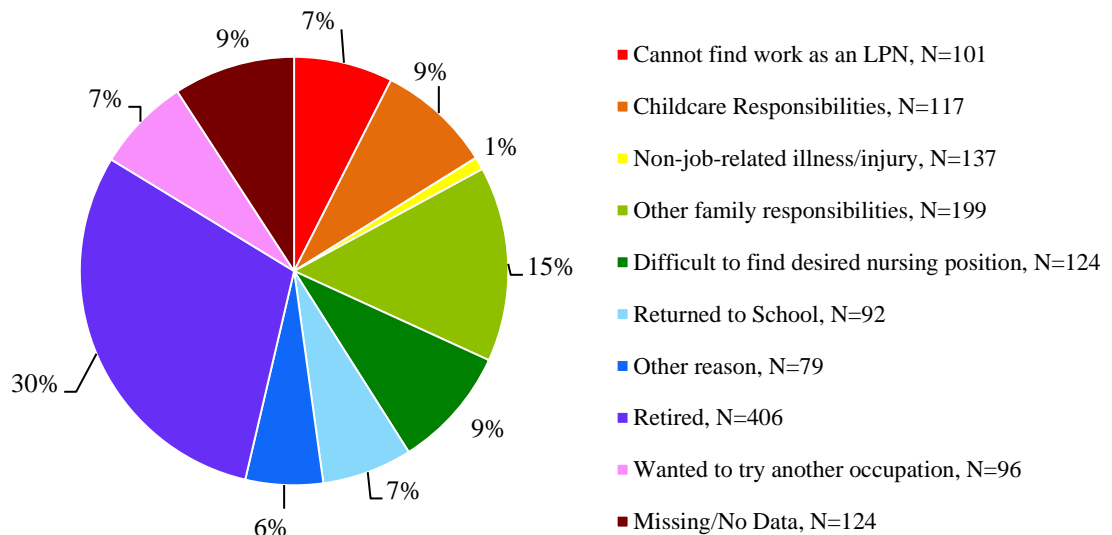
Approximately 11% (1,876) of LPNs have an active licensure in one or more other states. These data do not show whether these LPNs are practicing in these other states; it only shows whether they are licensed. Licensure in other states is proportionally much less common in LPNs than in RNs or APNs.

LPN Employment Characteristics

The following table shows details of the licensed LPNs who are employed in a profession that utilizes their license.

Table 3-F. LPN Nursing Employment Status		
	N = 16,831	%
Employed as an LPN		
Yes	14,502	86%
No	1,351	8%
Missing/No Data	978	6%
Hours per Week		
34 hours or less	4,017	24%
35-40 hours	8,351	50%
41-50 hours	347	2%
51 or more hours	238	1%
Missing/No Data	3,878	23%
Number of Positions		
1	9,301	55%
2	4,090	24%
3	806	5%
4	83	0%
5	22	0%
Missing/No Data	2,529	15%

Figure 3-V. Reason Given for LPN Unemployment



Figures 3-W and 3-X describe LPNs according to employment setting. Employment setting refers to the type of agency or department in which a nurse is working. According to Figure 3-W, LPNs are heavily concentrated in long-term care settings, with 31% of LPNs are working in Nursing Homes and 15% working in Home Health.

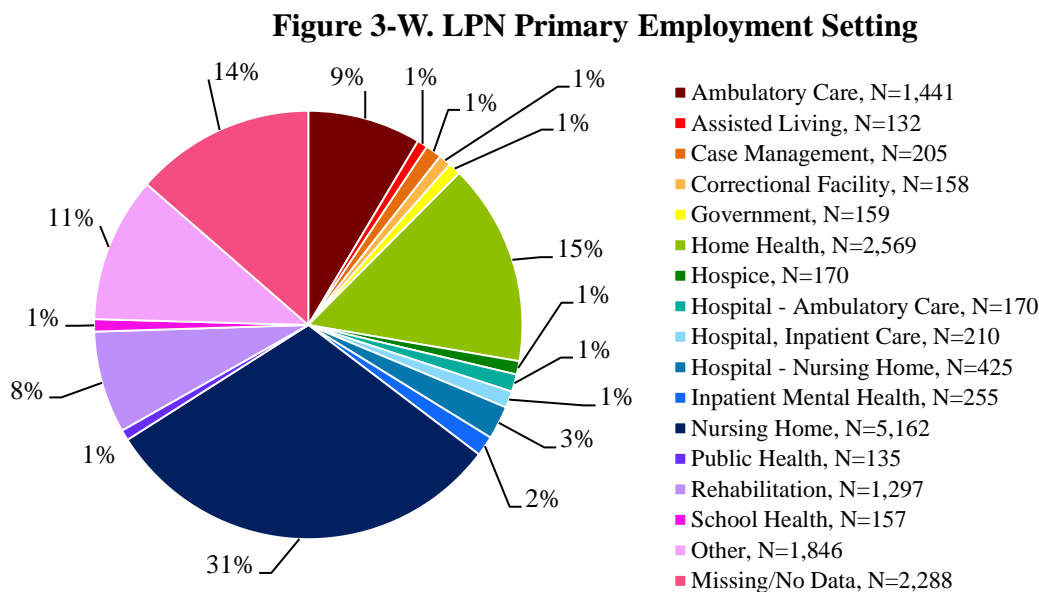
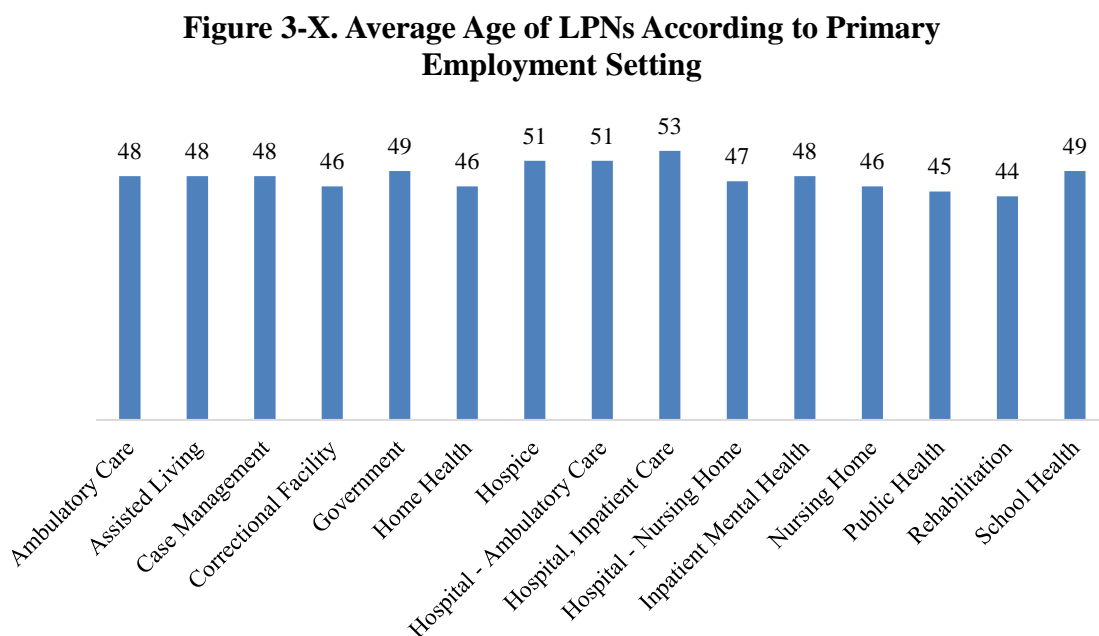


Figure 3-X shows the average age of LPNs in each employment setting. The average age of LPNs across all employment settings is 47.



Figures 3-Y and 3-Z describe LPNs according to employment position. Employment position refers to a nurse’s job title. According to Figure 3-Y, 52% of LPNs are employed as staff nurses.

Figure 3-Y. LPN Primary Employment Position

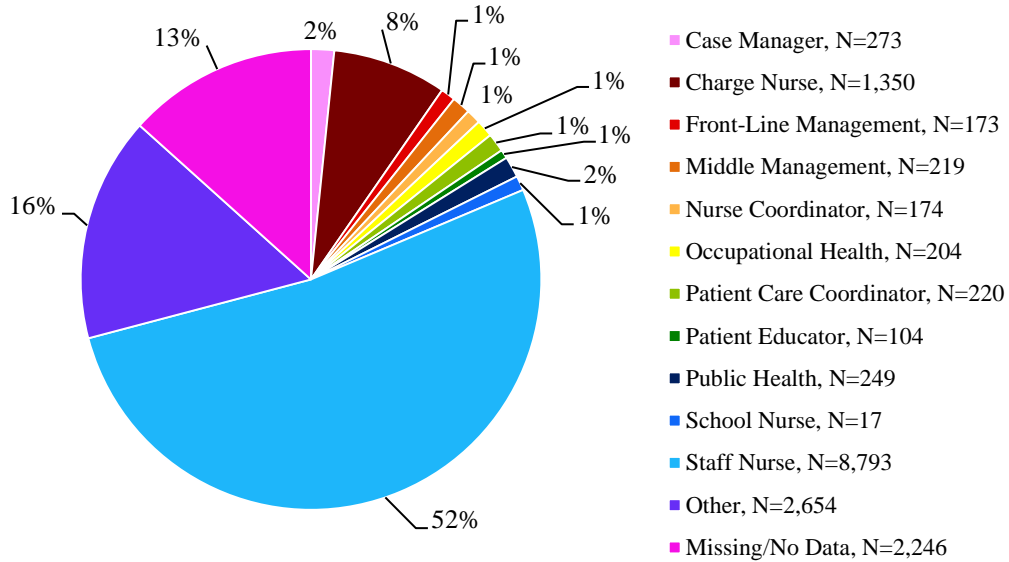
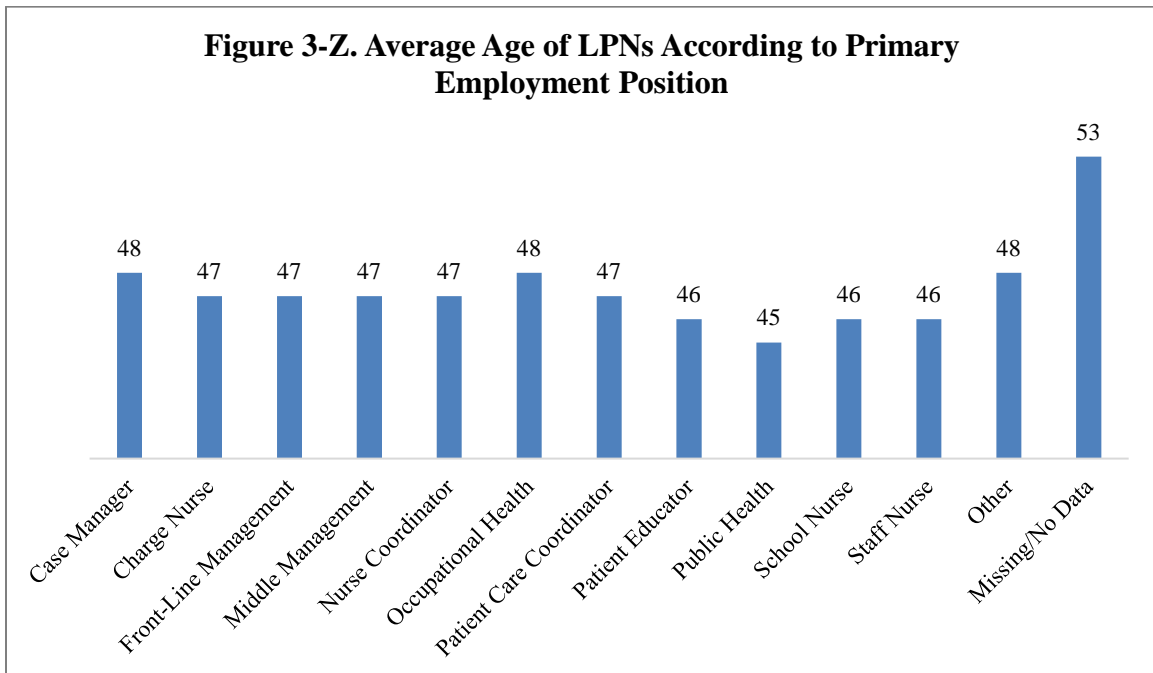


Figure 3-Z shows the average age of LPNs in each employment position. The average age of LPNs across all employment settings is 47.

Figure 3-Z. Average Age of LPNs According to Primary Employment Position



Chapter 4: Demand Data Report

The NJCCN used data mining from Burning Glass Technologies™ 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.

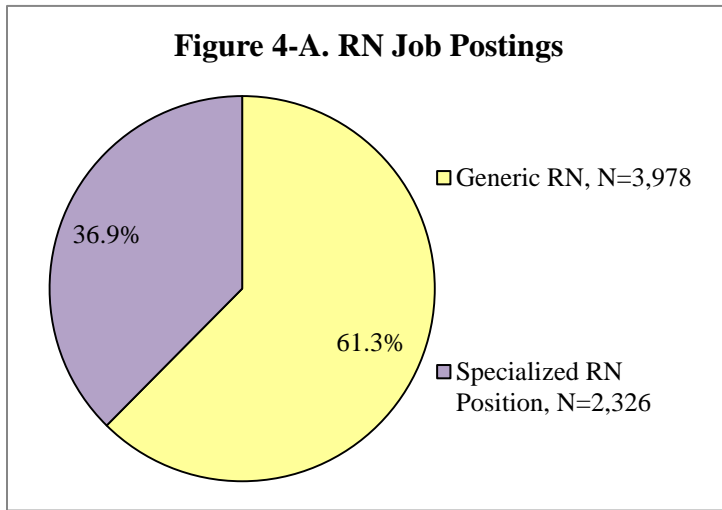
The following table shows employment, job posting, and salary data from Burning Glass Technologies. Definitions of terms may be found in the Glossary. It is important to note that this is a snapshot in time and cannot be used to compare previous years.

Category		Demand and Employment				Salary	
Source:		Burning Glass	BLS/OES 2016	BGT Projections		Burning Glass	BLS/OES 2016
SOC Code (ONET-6)	Occupation Title	Number of Job Postings	Number Employed 2016	% Change in Employment, 2015-2016	Projected Statewide Change in Employment, 2016-2026	Mean Advertised Salary	Mean Salary
29-1141	Registered Nurses	33455	79,400	1%	13.2%	\$83,289	80,580
29-2061	Licensed Practical and Licensed Vocational	5294	16,360	6%	14.6%	\$59,794	\$53,740
29-1171	Nurse Practitioners	2749	3,840	4%	28.2%	\$89,447	\$115,230

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

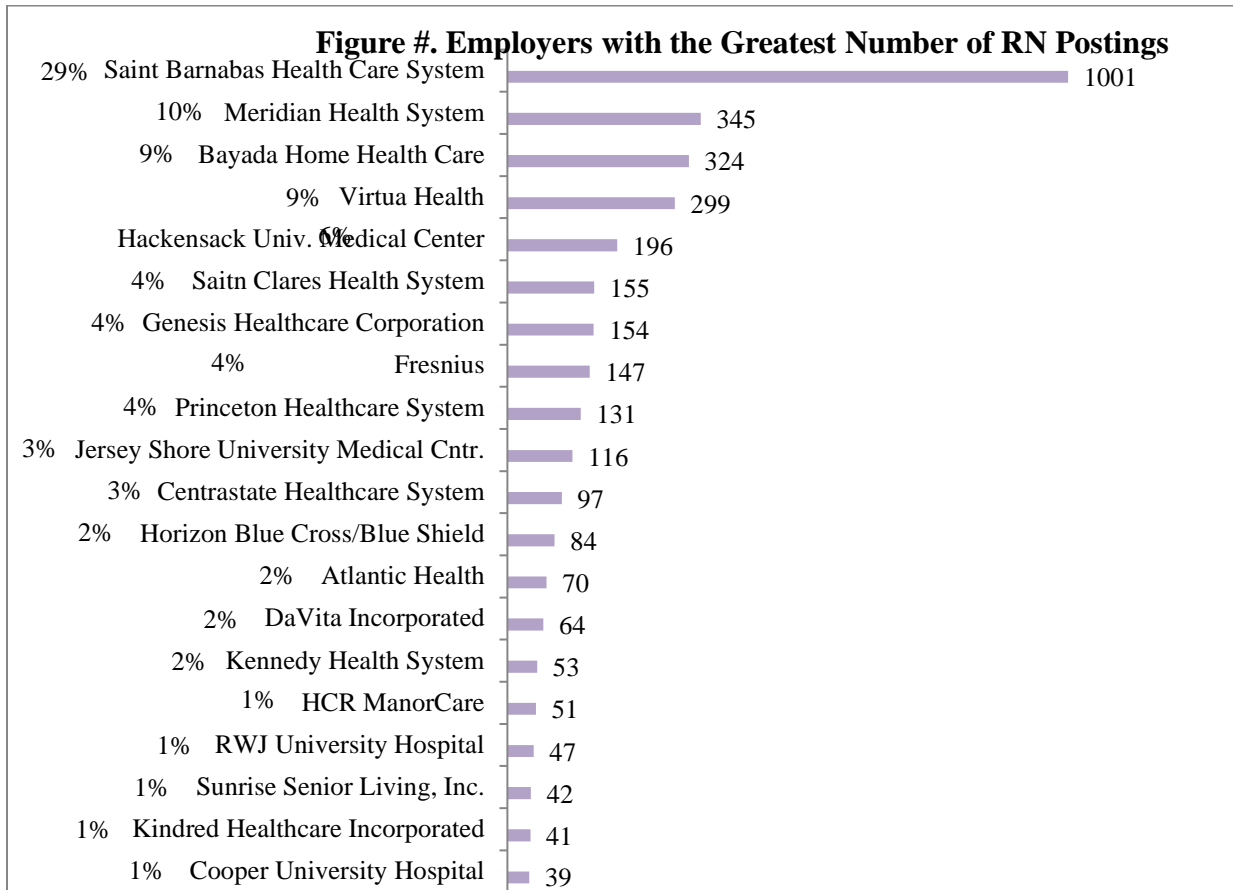
Section 1: RN Demand Profile

Highest Demand



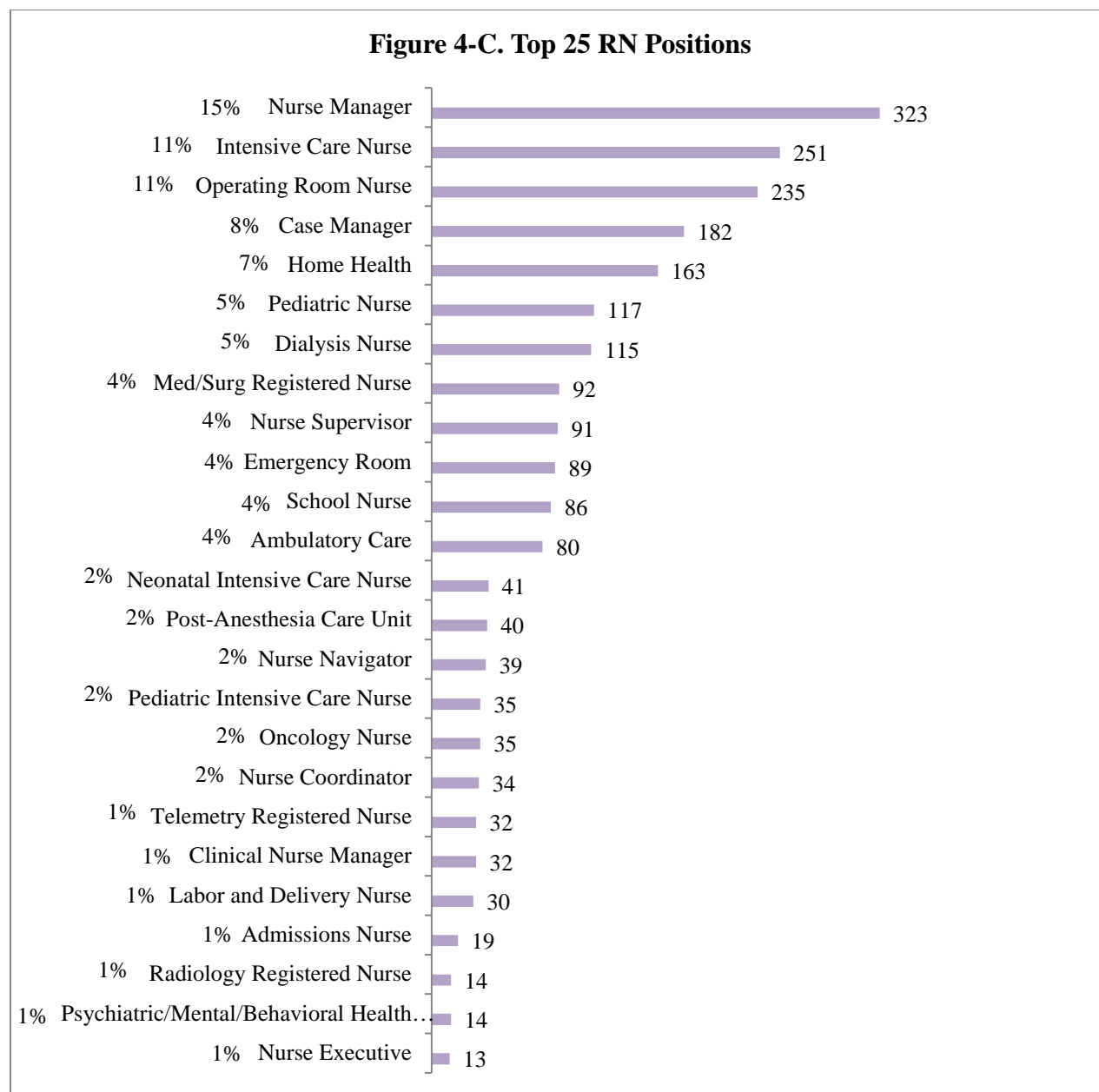
There were 6,304 RN job postings during the sampling period (January 1, 2016 – December 31, 2016). The most common posting was for a generic RN position, with 3,978 (63.1%) postings. Once those were excluded, the remaining postings were classified based on job titles and job settings. These are described here as “specialized RN positions,” as they generally require specialty skills and education (See Figure 4-C).

The following graph shows the companies that generate the greatest number of job postings in New Jersey. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees. The employers at the top of this list are primarily healthcare systems.



(Source: Burning Glass Technologies. “Labor Insight Real-Time Labor Market Information Tool.” <http://burning-glass.com>. 2017)

The following chart describes the breakdown of job posting for the top 25 specific RN positions. These highest demand positions comprise 2,188 job postings. (Only 138 job postings were for niche specialized positions that were in such low demand that they did not make it into the top 25.)

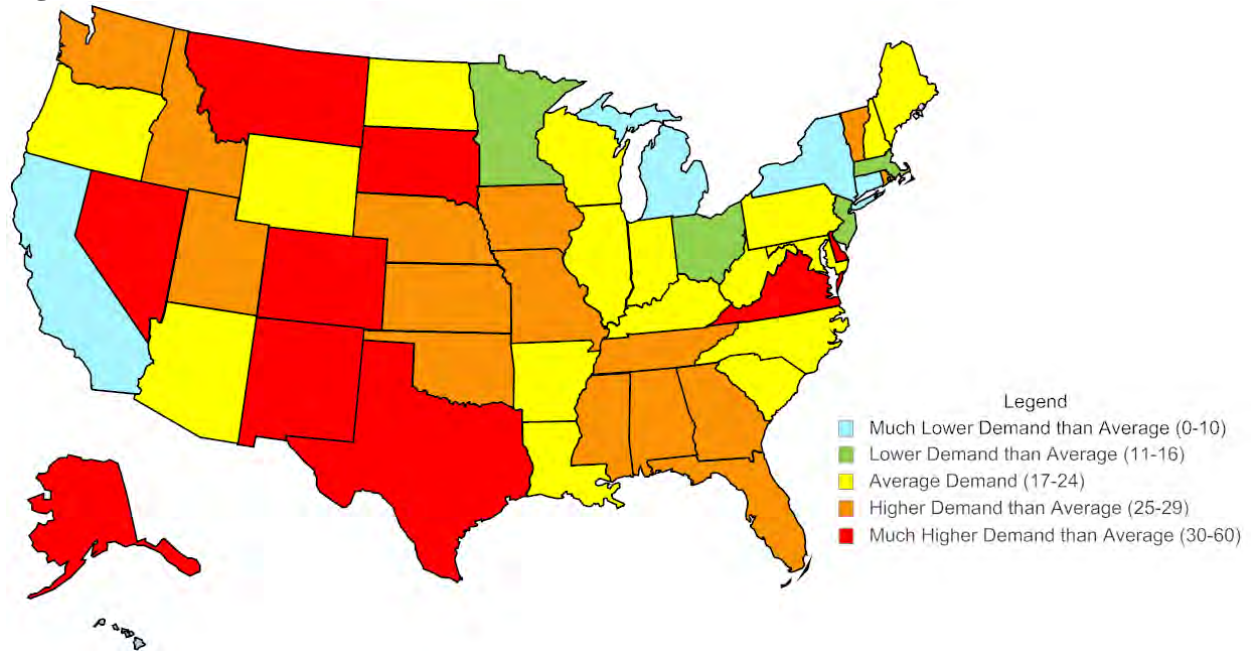


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

National Demand Comparison

The following figure shows level of demand for registered nurses across the United States from January 1, 2016 through December 31, 2016. The demand for RNs is identified here as the ratio of job postings per 10,000 employed persons.

Figure 4-D. National Demand for RNs



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

The average rate of demand for RNs nationally is 17-25 job postings per 10,000 employed persons. When compared to this rate, New Jersey has a **lower than average level of demand for nursing positions**, with a ratio of 15.92 job postings per 10,000 employed persons. The states with the highest demand are Alaska (60.37), Colorado (44.06) and New Mexico (41.13). The states with the lowest demand are Connecticut (4.26), California (4.51) and Michigan (5.55).

In New Jersey, there was a **2% change in employment** between 2014-2015 for the top nursing positions. This is concurrent with the national average.

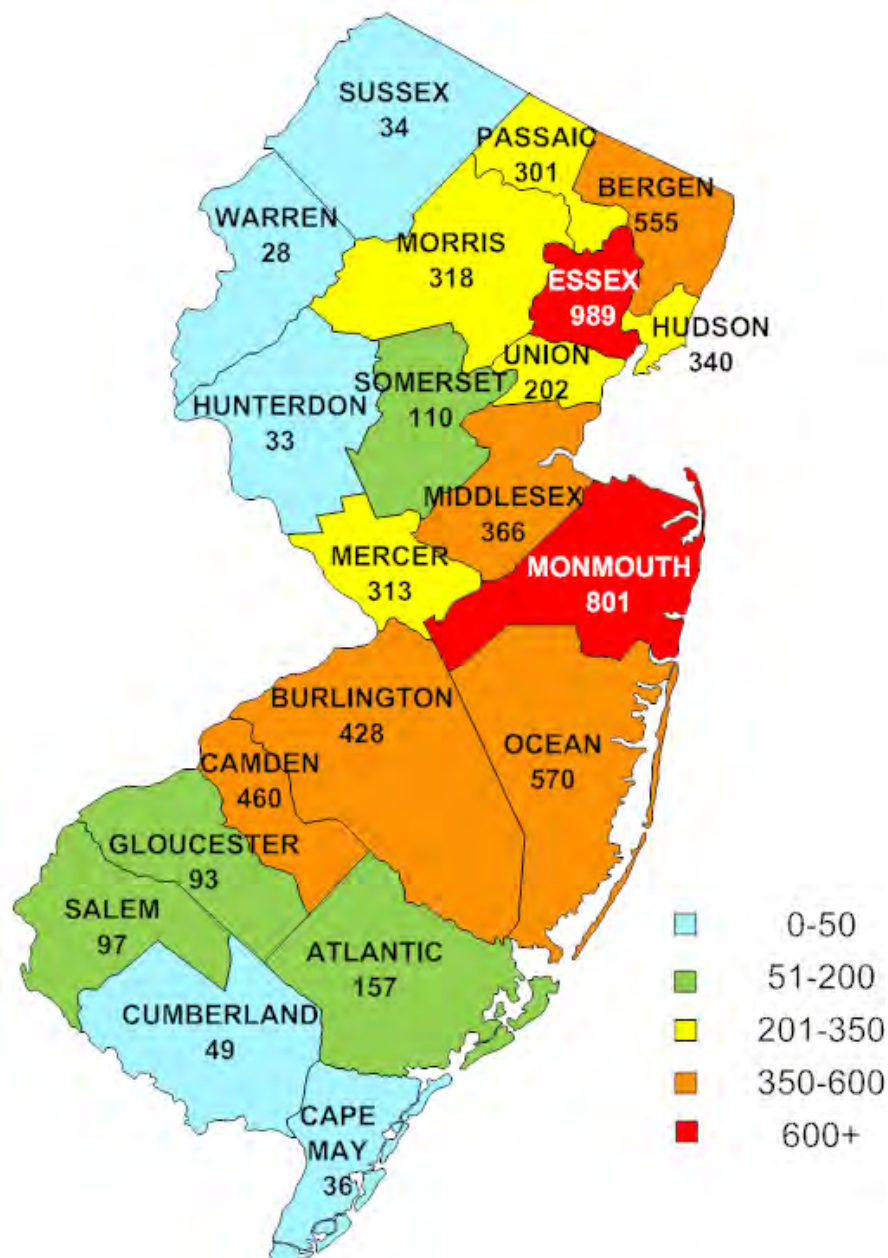
Job Postings by County

Jan. 01, 2016 - Dec. 31, 2016

There were 6,280 postings available with the current filters applied.

The New Jersey counties with the greatest **raw** number of job opportunities are Essex (n=989) and Monmouth (n=801).

Figure 4-E. RN Job Postings per County 2016

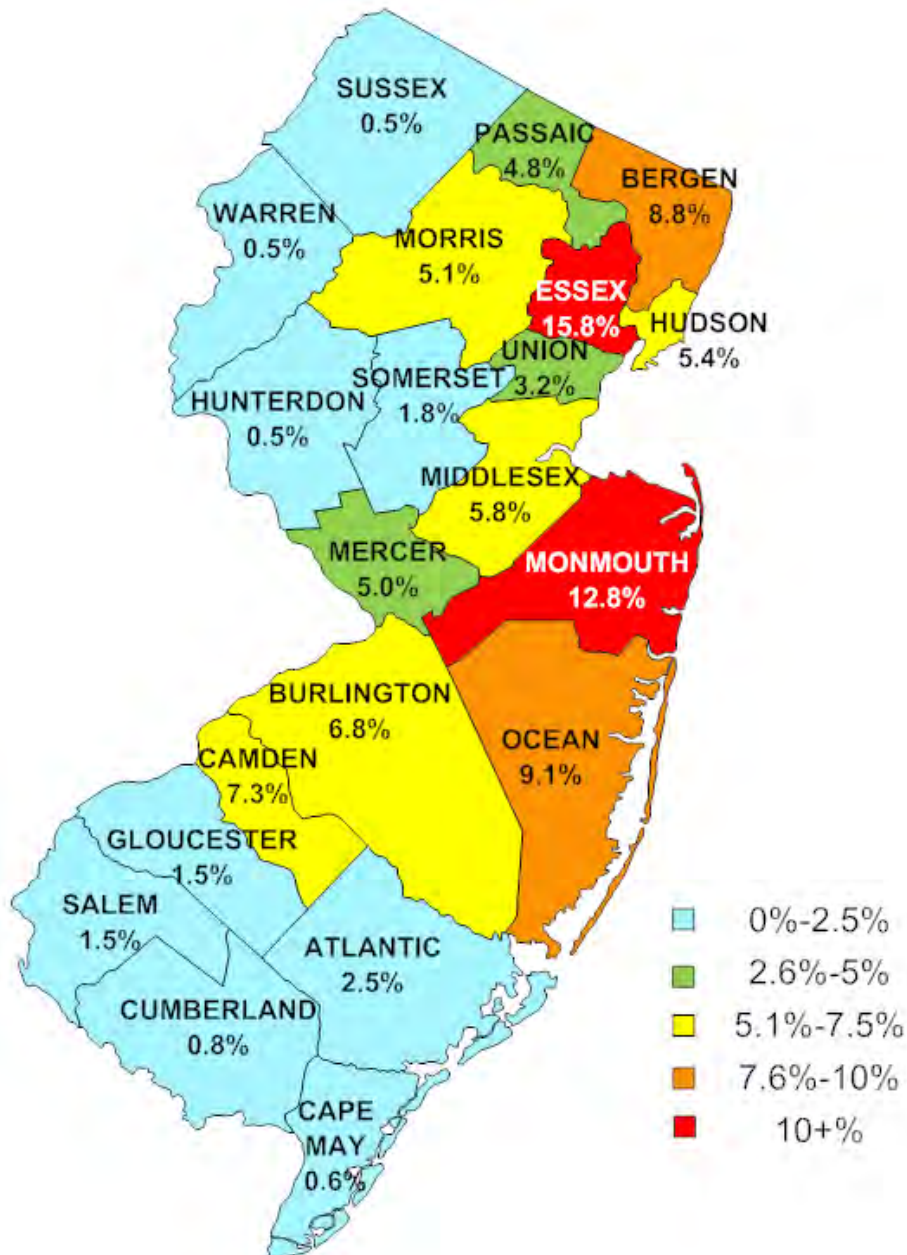


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Concentration of Job Postings by County

The figure below displays the **concentration** of demand for RNs as the percentage of total New Jersey RN job postings in each county. RN job postings are concentrated in Essex and Monmouth County.

Figure 4-F. Concentration of RN Job Postings in Counties 2016



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

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.

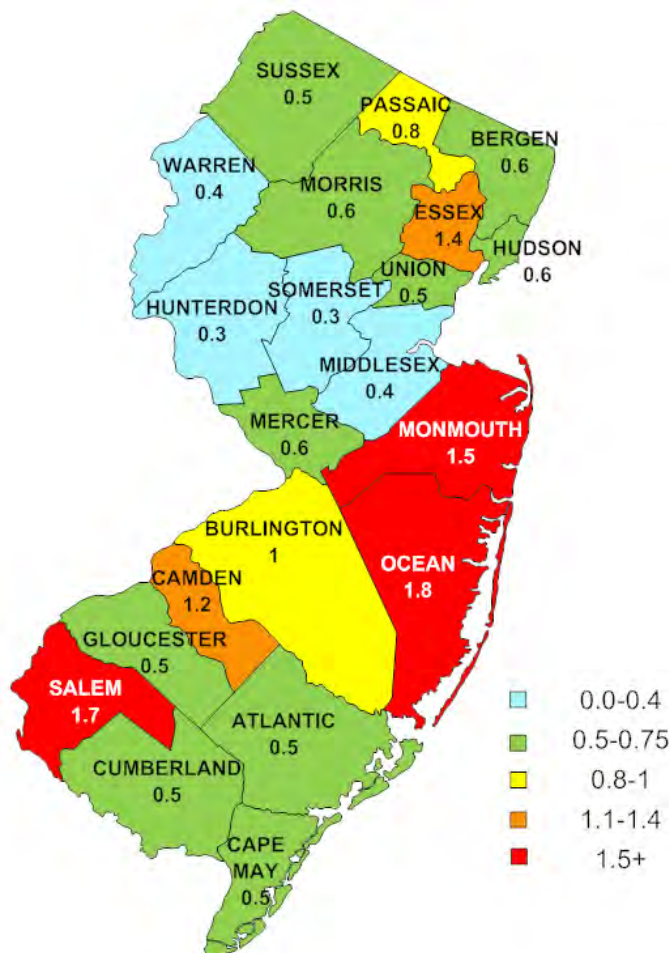
- A location quotient that is exactly equal to the national average would be 1.0. A location quotient greater than 1.0 would indicate that demand is greater than the national average (for example, 1.2 would indicate that demand is 20% higher than the national average).
- Likewise, a location quotient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

This figure shows the location quotient of RN job postings by county in 2016. **Most of the counties in New Jersey have a location quotient significantly lower than the national average.** The counties with the lowest location quotient are Somerset (0.3), Hunterdon (0.3), Middlesex (0.4), and Warren (0.4).

Burlington County has a location quotient of 1, equal to the national average. The counties with the highest location quotient are Monmouth (1.5), Salem (1.7), and Ocean (1.8).

Salem County, which had only 97 RN job posting, shows a high location quotient, but Gloucester County, which had 93 job postings, shows a very low location quotient. The high location quotient in Salem county reflects that although there are relatively few employed persons in the county, a relatively higher percentage of those employment opportunities are for RNs.

Figure 4-G. RN Location Quotient by County 2016

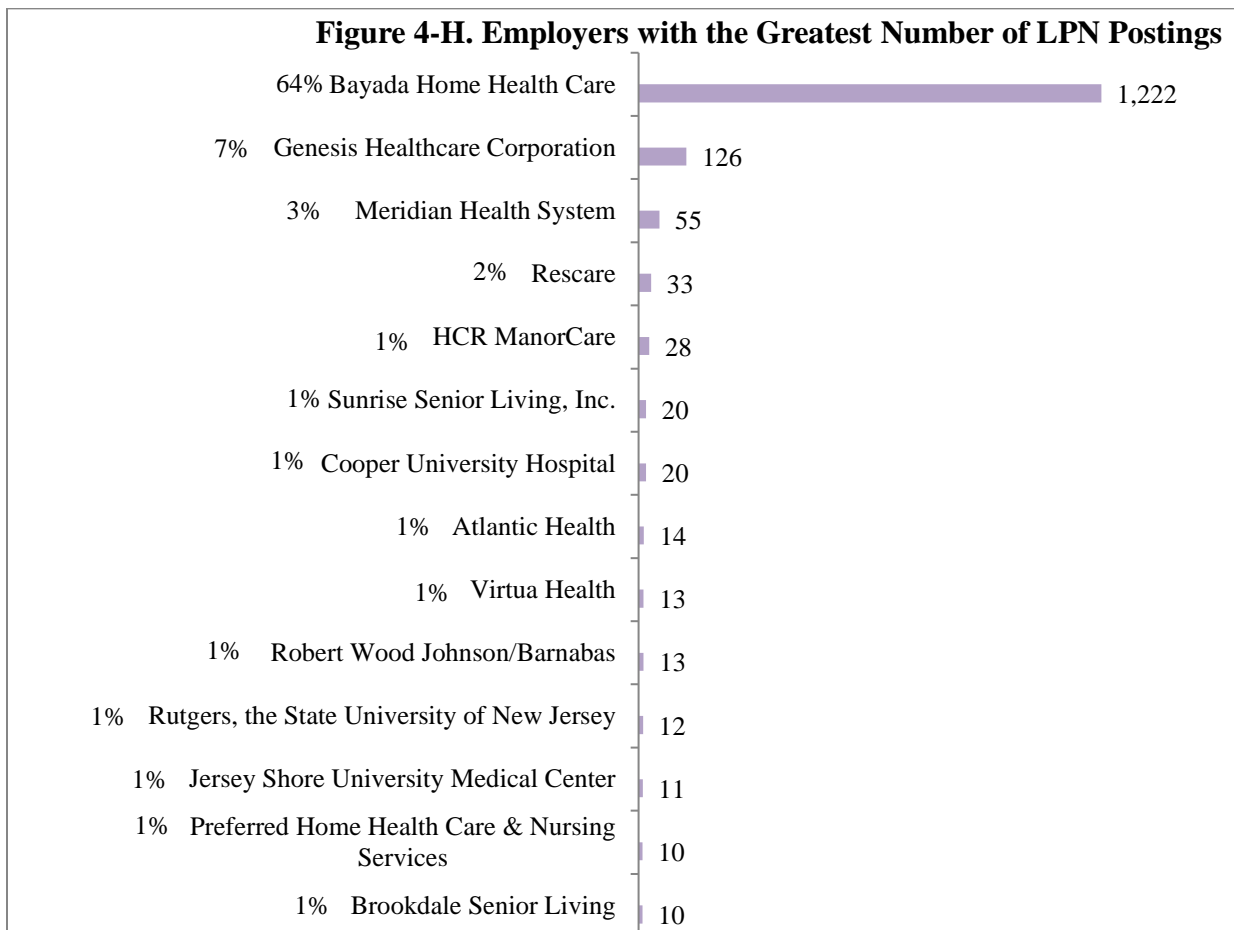


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Section 2: LPN Demand Profile

Highest Demand

The following graph shows the companies that generate the greatest number of Practical Nursing job postings in New Jersey. The majority (64%) of LPN job postings are listed by Bayada, in the field of Home Health Care. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees.

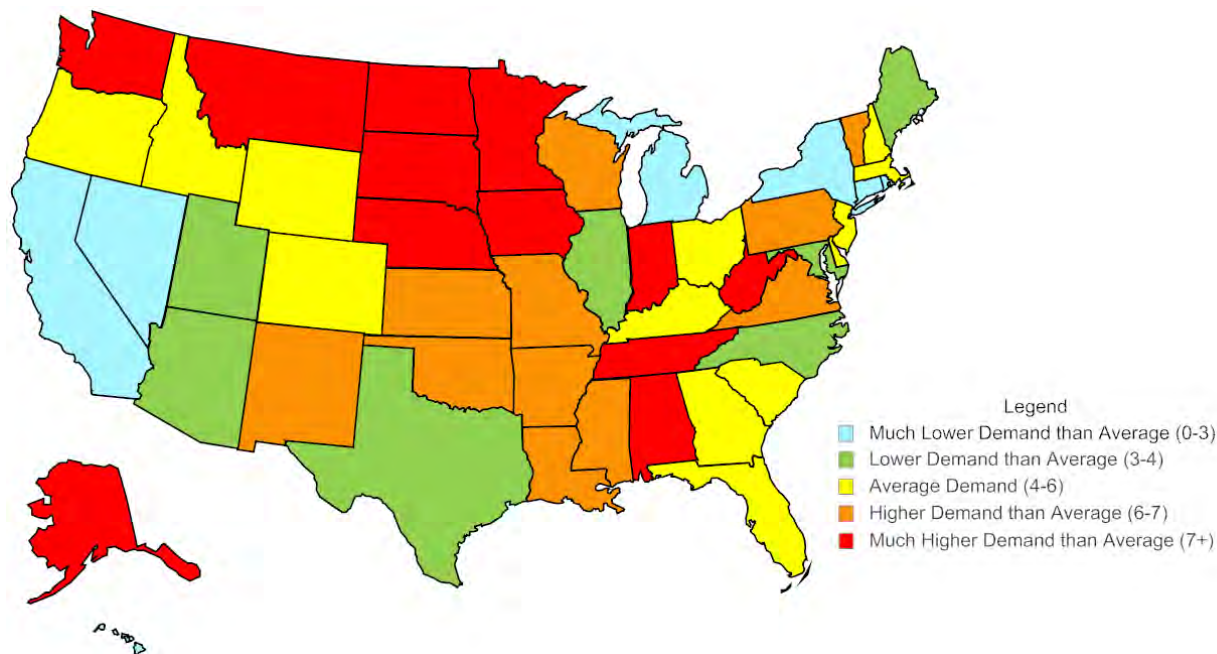


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

National Demand Comparison

The following figure shows level of demand for Licensed Practical nurses across the United States from January 1, 2016 through December 31, 2016. The demand for LPNs is identified here as the ratio of job postings per 10,000 employed persons.

Figure 4-I. National Demand for LPNs



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

The average rate of demand for LPNs nationally is 3-5 job postings per 10,000 employed persons. When compared to this rate, New Jersey has an **average level of demand for LPN positions**, with a ratio of 5.13 job postings per 10,000 employed persons. The states with the highest demand are South Dakota (17.84), Minnesota (11.01) and Montana (10.36). The states with the lowest demand are Connecticut (1.06), Hawaii (1.33) and New York (1.38).

In New Jersey, there was a **-2% change in employment** between 2014-2015 for the top nursing positions. The national average was 0%.

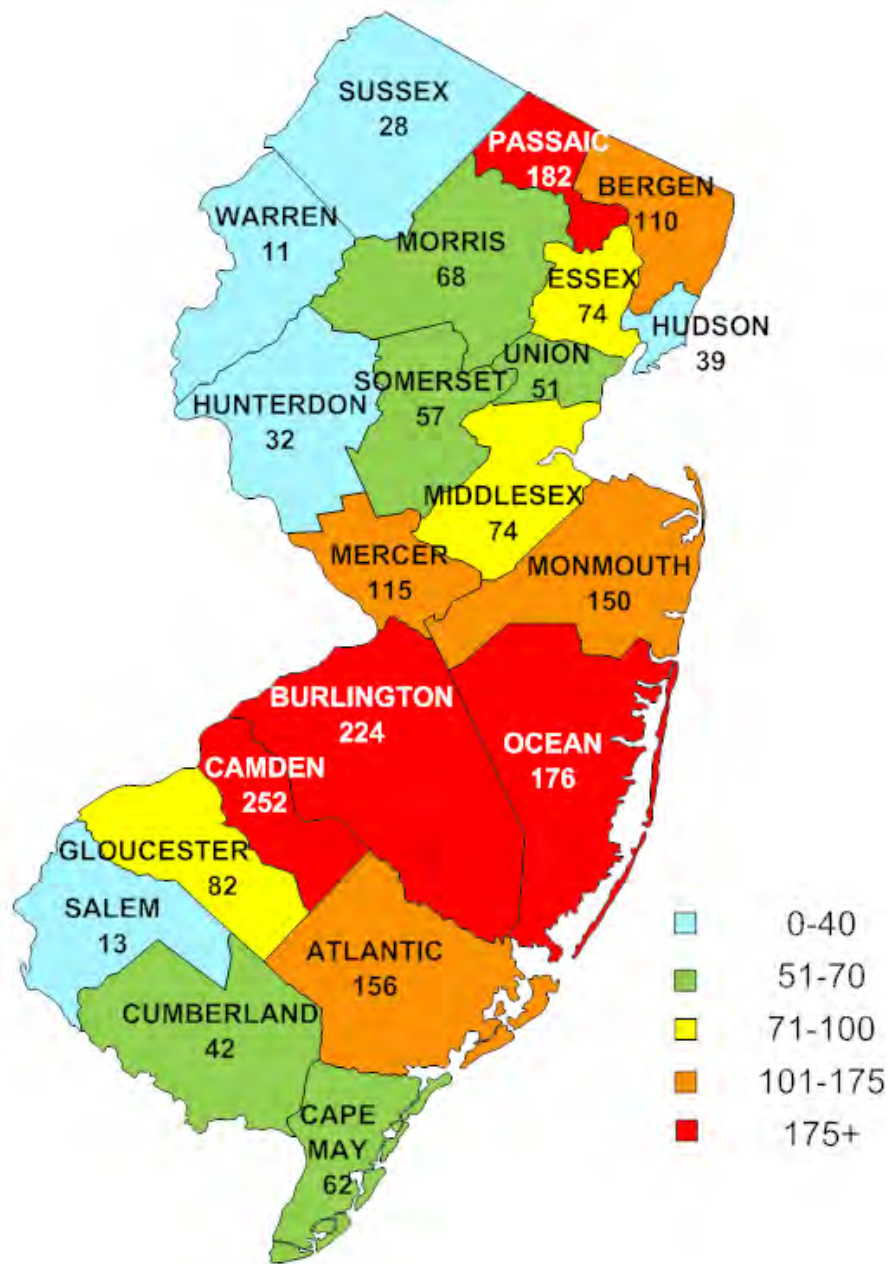
Job Postings by County

Jan. 01, 2016 - Dec. 31, 2016

There were 2,048 postings available with the current filters applied. There were 50 postings that did not have a location specified. This leaves 1,998 postings that are pictured in the figure below.

The New Jersey counties with the greatest **raw** number of job opportunities are Camden (n=252) and Burlington (n=224).

Figure 4-J. LPN Job Postings per County 2016

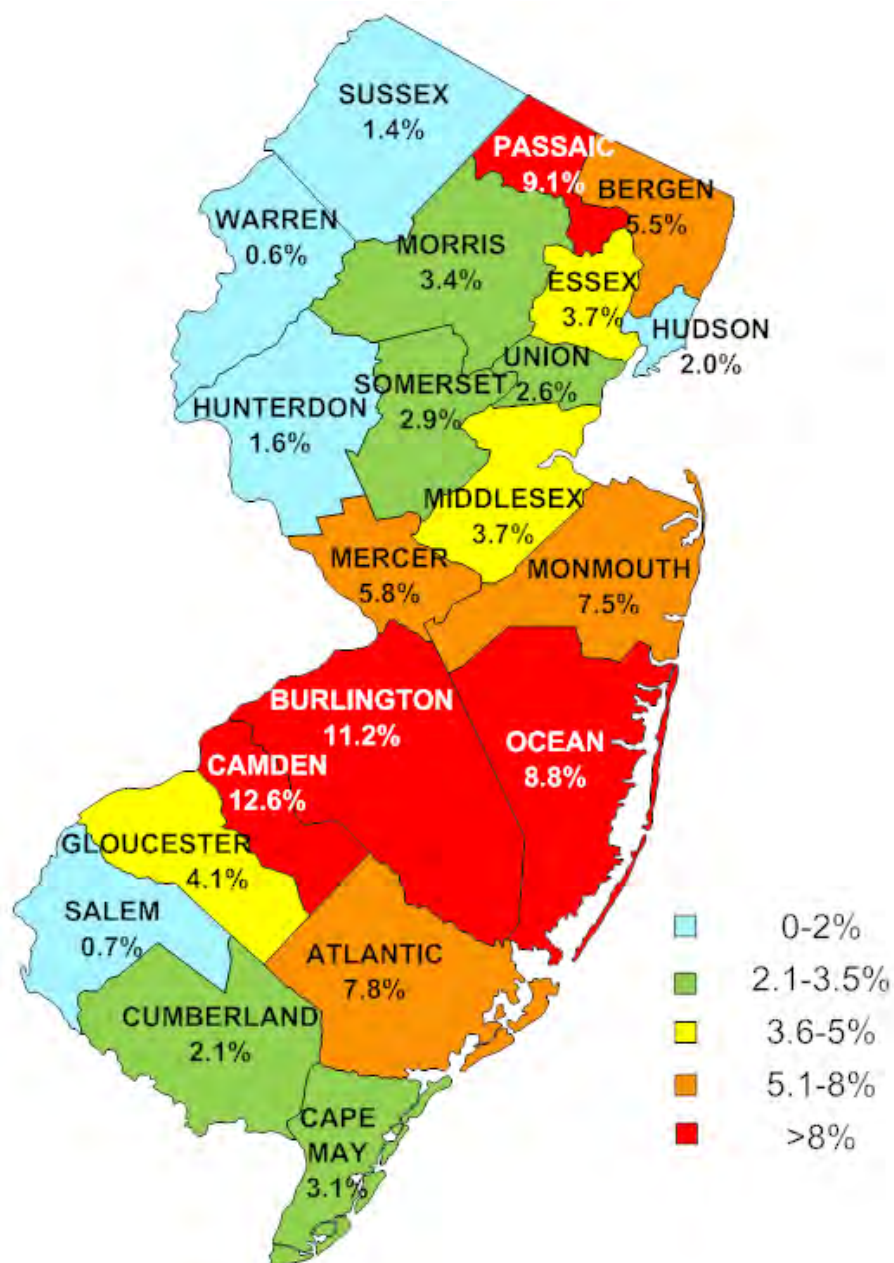


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Concentration of Job Postings by County

The figure below displays the **concentration** of demand for LPNs as the percentage of total New Jersey LPN job postings in each county. LPN job postings are largely concentrated in Central New Jersey.

Figure 4-K. Concentration of LPN Job Postings in Counties 2016



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Location Quotient

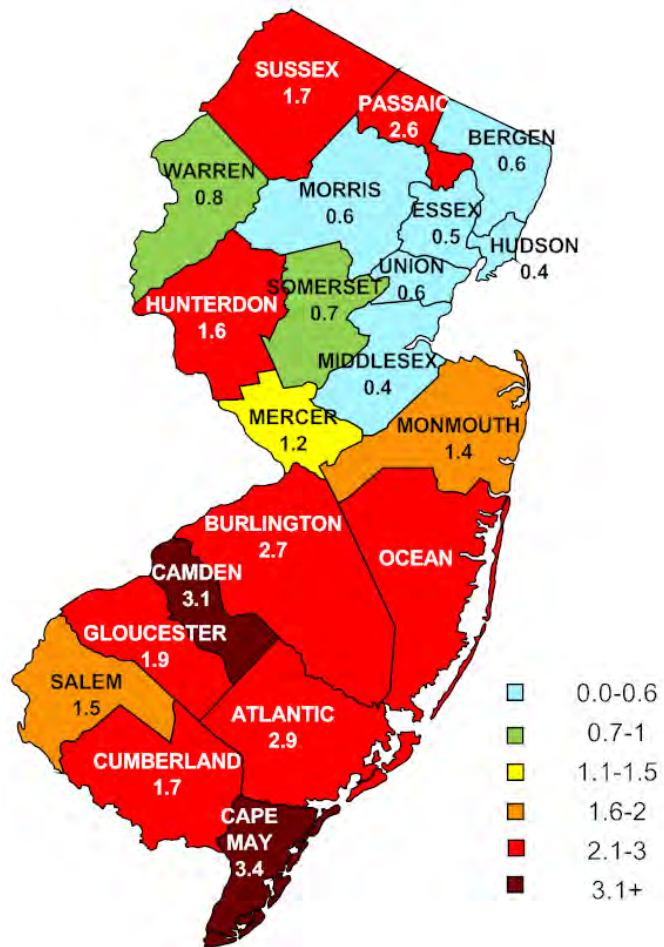
The Location Quotient (LQ) is a per capita measure that aims to show the concentration of a job in a given area compared to nationwide.

- 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).

This figure shows the location quotient of LPN job postings by county in 2016. **Most of the counties in New Jersey have a location quotient significantly higher than the national average.** The counties with the lowest location quotient are Hudson (0.4), Middlesex (0.4), and Essex (0.5). The counties with the highest location quotient are Camden (3.1) and Cape May (3.4)

Camden and Cape May Counties have the highest location quotients for LPN positions. Camden County has a high raw number of job postings, but Cape May County does not. Cape May County's high location quotient is reached because there are relatively few employed persons in the county, and a high percentage of those employment opportunities are for LPNs.

Figure 4-L. LPN Location Quotient by County

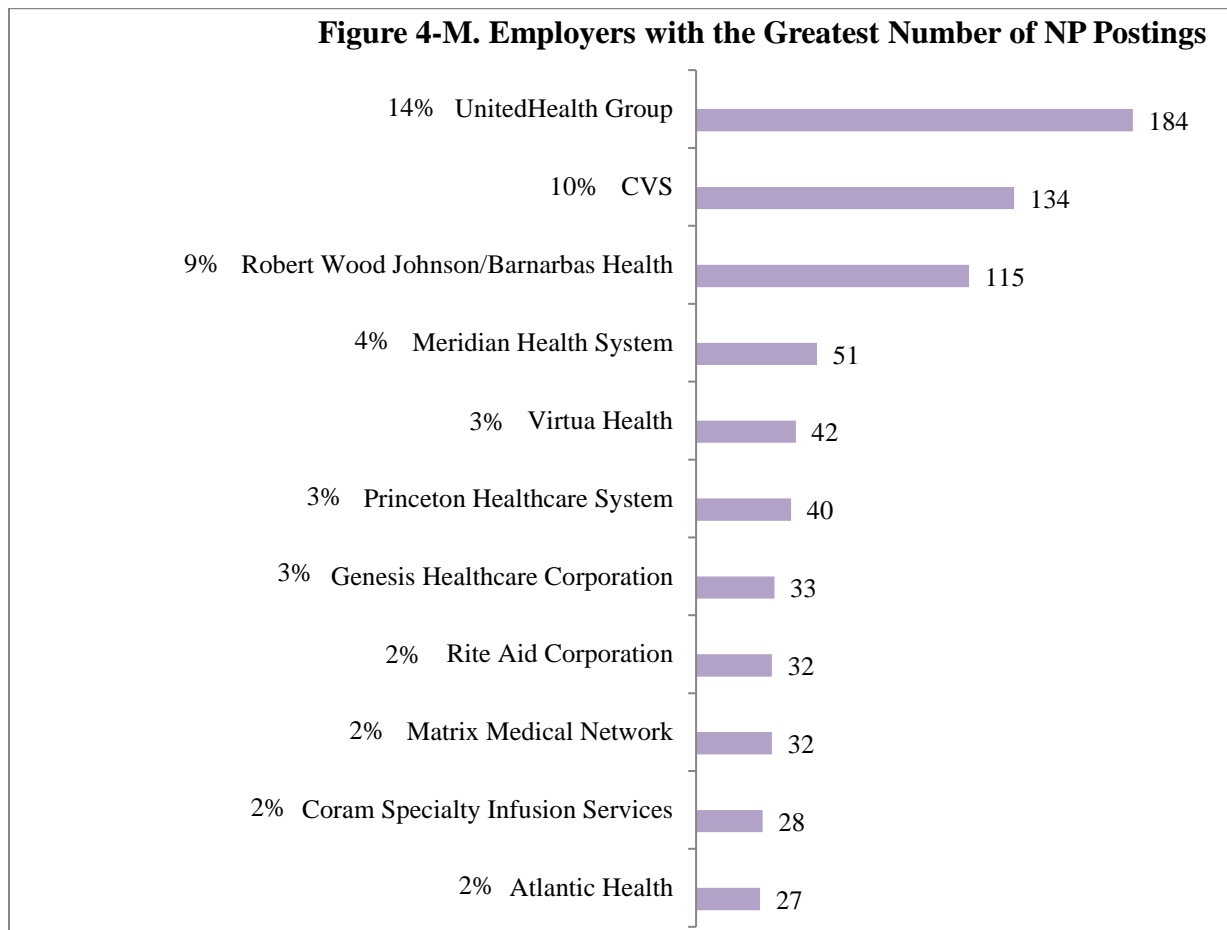


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Section 3: Nurse Practitioner Demand Profile

Highest Demand

The following graph 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.

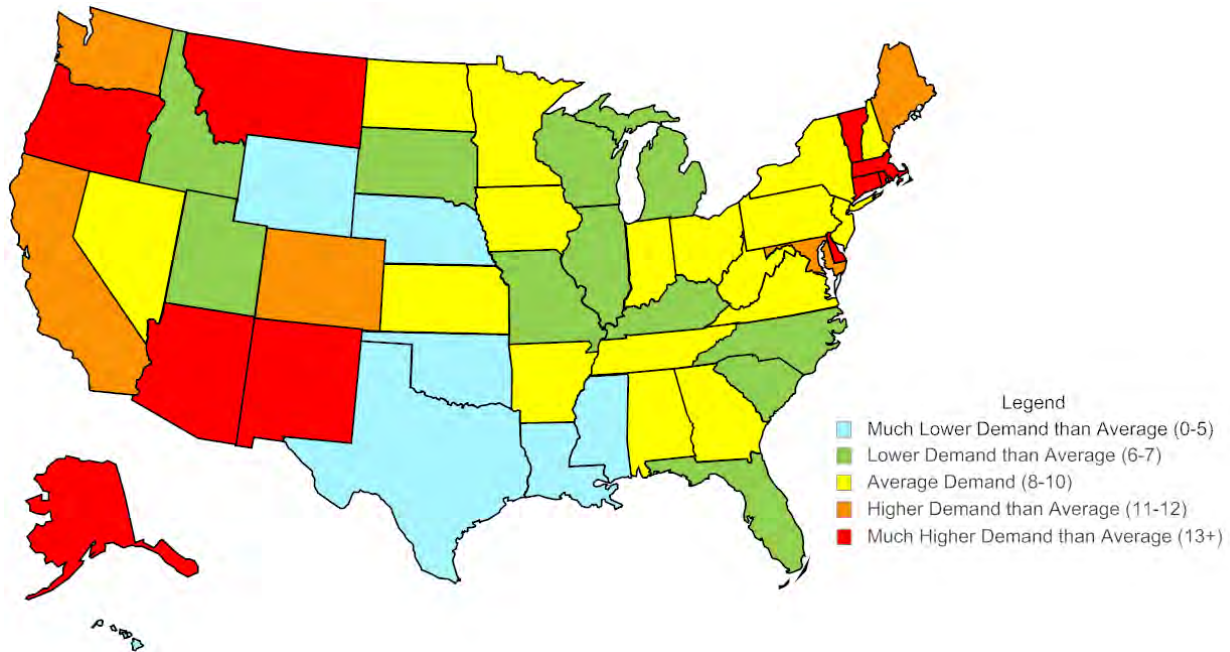


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

National Demand Comparison

The following figure shows level of demand for Nurse Practitioners across the United States from November 1, 2016 through November 31, 2017. The demand for Nurse Practitioners is identified here as the ratio of job postings per 10,000 employed persons.

Figure 4-N. National Demand for NPs



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2017)

The average rate of demand for Nurse Practitioners nationally is 7 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 7.46 job postings per 10,000 employed persons. The states with the highest demand are Alaska (27.26), Arizona (23.87) and Connecticut (23.51). The states with the lowest demand are Mississippi (3.26), Louisiana (4.58) and Nebraska (4.69).

In New Jersey, there was an **18% change in employment** between 2014-2015 for the top nursing positions. The national average was 11%.

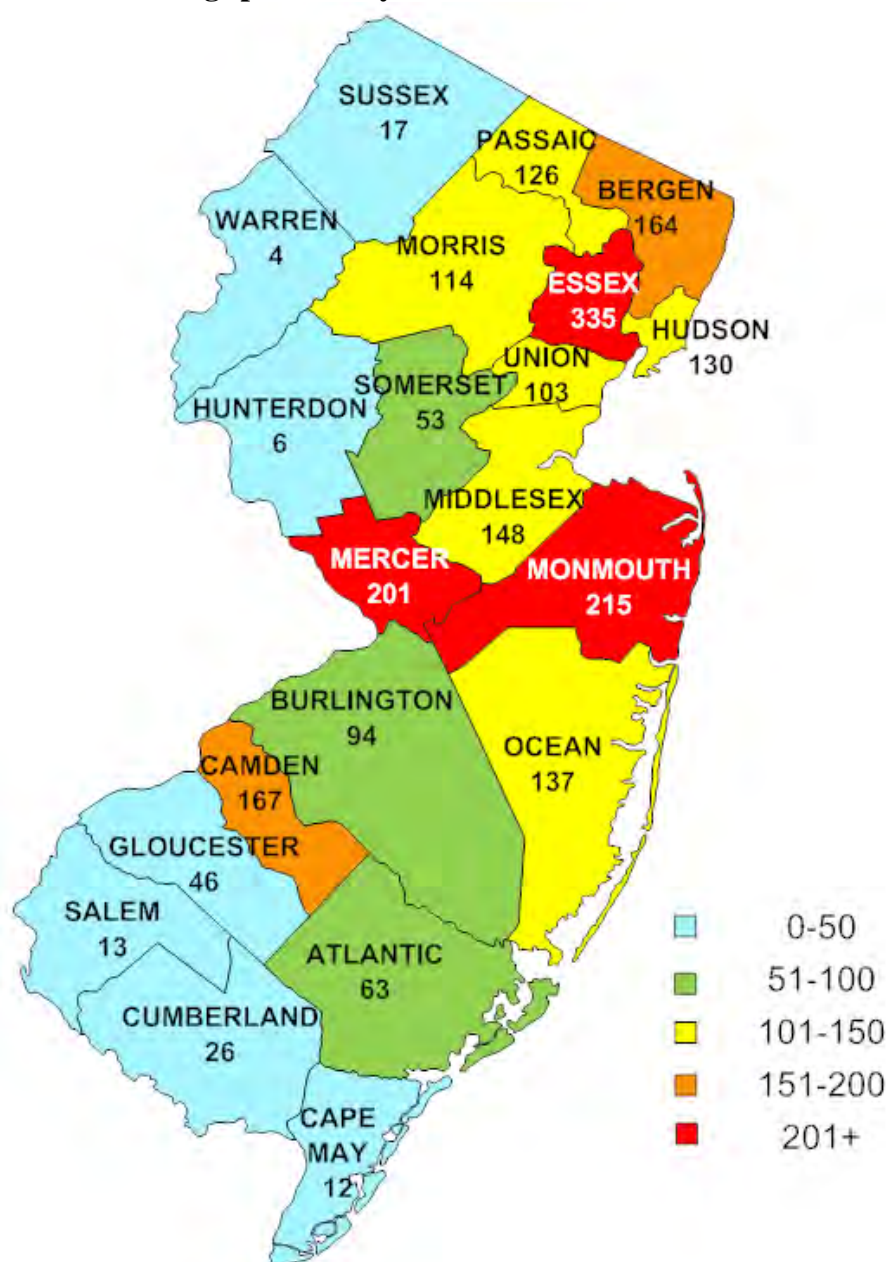
Job Postings by County

Jan. 01, 2016 - Dec. 31, 2016

There were 2,177 postings available with the current filters applied. There were 3 postings that did not have a location specified. This leaves 2,174 postings that are pictured in the figure below.

The New Jersey counties with the greatest **raw** number of job opportunities are Essex (335) and Monmouth (215).

Figure 4-O. NP Job Postings per County 2016

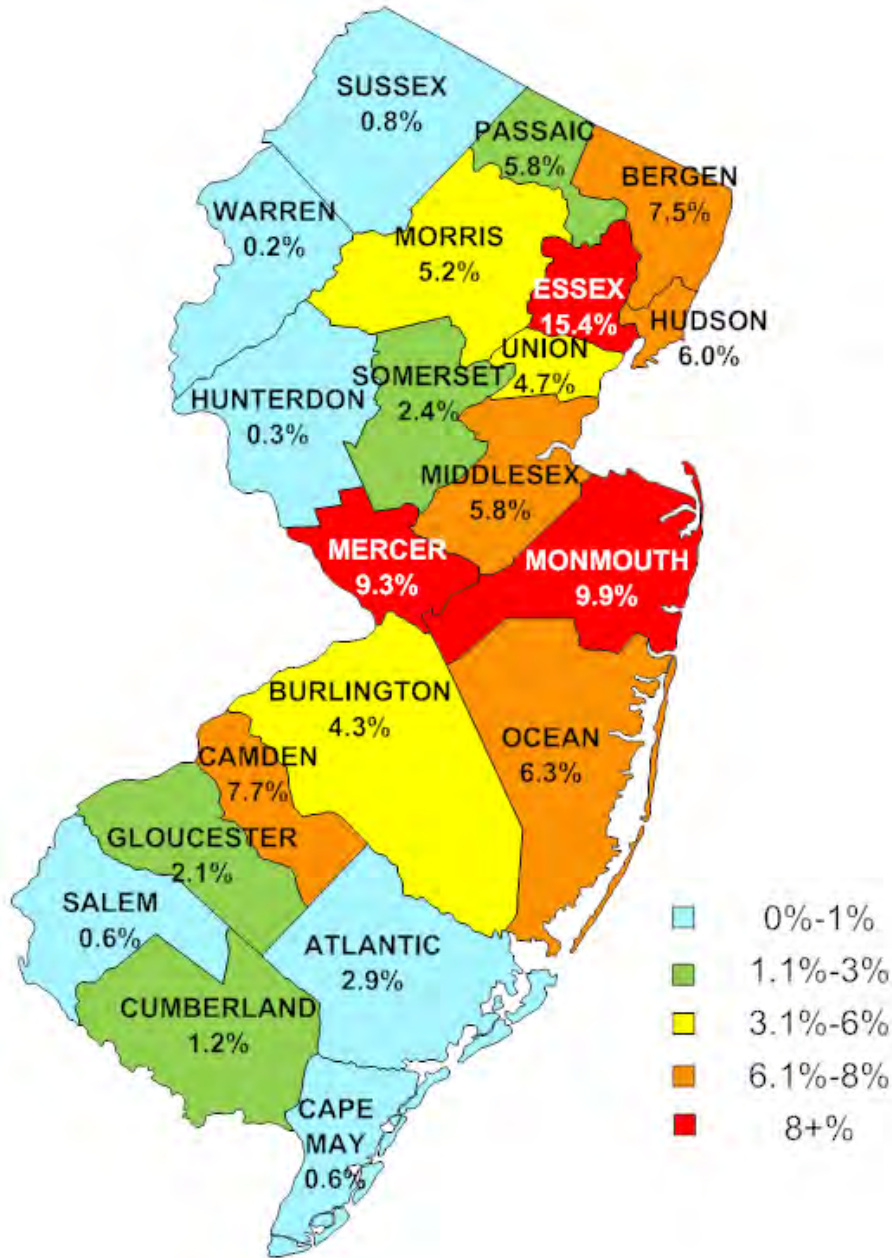


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Concentration of Job Postings by County

The figure below displays the **concentration** of demand for Nurse Practitioners as the percentage of total New Jersey NP job postings in each county. NP job postings are largely concentrated in Central New Jersey.

Figure 4-P. Concentration of NP Job Postings in Counties 2016



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

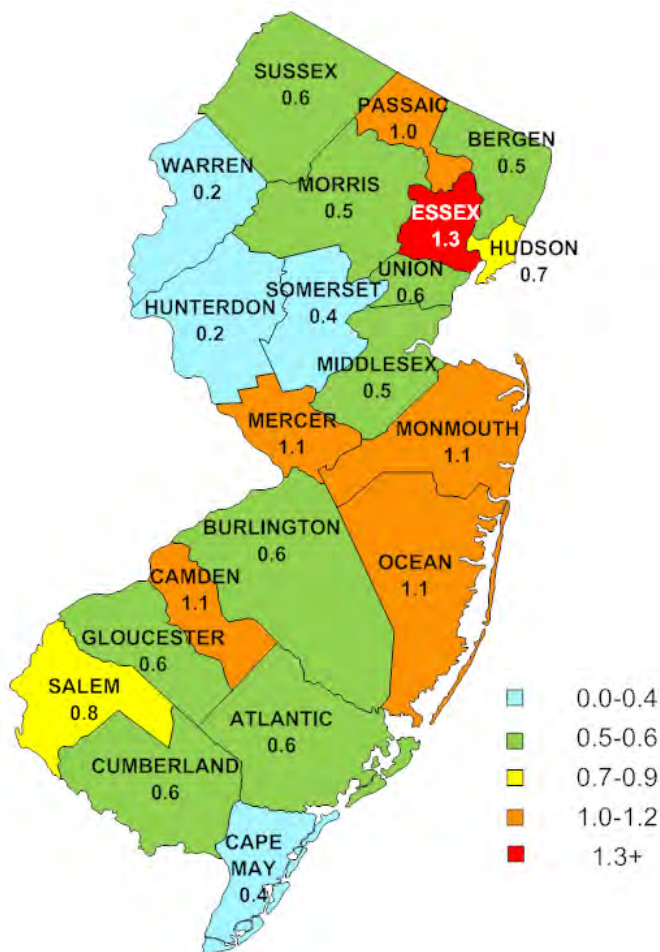
Location Quotient

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).

This figure shows the location quotient of NP job postings by county in 2016. **Most of the counties in New Jersey have a location quotient significantly lower than the national average.** The counties with the lowest location quotient are Warren (0.2) and Hunterdon (0.2). The county with the highest location quotient is Essex (1.3).

Figure 4-Q. NP Location Quotient by County



(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." <http://burning-glass.com>. 2016 - 2017)

Chapter 5: Key Trends

Highlight of Data in NJ

Environmental Scan

- Value-based payment models have resulted in consolidation of hospitals into larger systems. This has resulted in changes in care models and roles for nurses and other healthcare professionals.
- There is a greater focus being placed on the continuum of care with emphasis on post-acute and home services.
- There is an aging population in the state with a population that is more racially and ethnically diverse.
- In certain counties health rankings show disparities in health and socioeconomic indicators. For example, southern counties showed poorest health outcomes.
- Hospital employment has had slower growth rates while employments in ambulatory health and nursing and residential care facilities have nearly doubled 1990-2016. (N.J. Dept. of Labor and Workforce Development, 2016).

Supply

- The number of qualified applicants for RN programs has been steadily increasing. However, this number may be inflated due to the lack of unique identifiers. The number of enrollees and graduates have remained stable.
- Enrollment and graduation rates have decreased by 20% and 30% respectively for LPNs.
- There has been a 50% increase in RN to BSN graduations over four years.
- No significant changes in diversity in the RN population. This needs to have an intentional focus.
- First pre-licensure education continues to be at the Associate Degree level. (39%)
- The average age of RNs, LPNs, and APNs is 48.
- Compared to 2014-2015 data, the number of nurses not employed as an RN has more than doubled from previous year. Half of those responding identified being retired and the other half did not want to disclose reasons. These data needs to be tracked over times.
- Faculty vacancies (full-time) are trending upward, which is of concern (53% are over the age of 56, with an average age of 58). Reasons were not collected, however it is likely that retirements are starting to increase in baccalaureate and higher education programs.
- The main employer of RNs continues to be hospital settings, however this trend continues to decrease year after year in New Jersey.



- APNs are primarily practicing in ambulatory settings, whereas LPNs primarily practice in nursing homes and home health environments.

Demand

- Top 5 RN postings setting aside generic nurse postings include the following:
 - Nurse Managers
 - Intensive Care
 - Operating Room Nurses
 - Case Managers
 - Home Health
- These data are consistent with the prior year. Based on review of data from meetings with CNOs, a state wide Operating Room course was developed and implemented through Rutgers School of Nursing, Professional Development in 2017 to meet this gap.
- NJ has a lower than average level of demand for RN positions and an average level of demand for APNs and LPNs as compared to other states.

Summary

- Health care is shifting out of hospitals and acute care settings to community-based settings.
- Although the data continues to show there are enough nurses, the issues of distribution and specialization continue to be of concern and need to be tracked and trended.
- Educators need to realign curriculum and experience in post-acute and community care to prepare nurses for healthcare changes. Data continues to show hospitals as primary education sites, however, this is expected to change over time as the population ages out.
- Diversity of students needs to be addressed to mirror population data.
- Continuing focus on the RN to BSN completion is needed to meet recommendations of 80% BSN as identified in *IOM Future of Nursing: Leading Change Advancing Health*.
- The projection for APNs over the next 10 years shows significant growth based on demand data. These roles can help fill the gap in primary care.
- Faculty vacancies in baccalaureate and higher education programs are trending upward, which needs to be addressed.

Next Steps

In addition to tracking and trending data, the NJCCN recommends and directs interventions to help address gaps in the workforce. The NJCCN is strategically focusing on the following areas for 2018:

- LPN practices
- Access to care for consumers re: APNs
- Acute Care Nurse Residency standards
- School Nurse Practices
- Home Health Aide Trends

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Definitions

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.*

Available Seats: The number of seats that a School of Nursing has open for prospective students during the Reporting Period.

ADN/ASN Program, Generic: A program of instruction that requires at least two years of full-time equivalent college academic work generally within a junior or community college, the completion of which results in an associate degree with a major in nursing and eligibility to apply for licensure as an RN. This may also be called a “traditional” curriculum sequence.*

ADN/ASN Program, Bridge: A pre-licensure RN associate degree program with a curriculum sequence for students having *some* formal training in nursing or a related field. Bridge programs typically accelerate the degree completion for students who are licensed as an LPN or paramedic, for example. Completion results in an associate degree with a major in nursing and eligibility to apply for licensure as an RN.

Diploma Program: A program of instruction that requires two to three years of full-time equivalent 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.*

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.*

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.*

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.*

Fall Term Census Date: Point-in-time questions about faculty and student characteristics, as well as a count of total student enrollment, will use this date. Because these items are not related to a school's production cycle and require a point-in-time count, it is easier for respondents and more relevant for stakeholders if a very recent date is used. It will not be within the reporting period used for production cycle questions. States may select a date within the *most recently started* Fall Term that best suits the structure of their nursing programs. Popular examples include October 1st, October 15th, and the school-specific Fall Term census date at each institution. *The term need not have been completed when the survey is fielded.* For example, a survey fielded in November 2008 may use a fall term census date of October 15, 2008.

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.

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.

Number Employed 2016: the number of people employed in an occupation according to the Occupational Employment Survey (OES) data from 2016 from the <http://www.bls.gov/oes> website. The data are available for nationwide, statewide, and metropolitan statistical areas (MSAs)

Other doctoral program: Please combine information for any post-licensure doctoral programs conferring degrees other than the PhD or the DNP.

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, may or may not hold academic rank, carry responsibility for a specific area (e.g., teaching a single course), and may carry any number of titles (e.g., adjunct, clinical instructor). These faculty members are typically not eligible for tenure.*

Percent Change in Employment 2015-2016: the difference between the number of people employed for each occupation in 2015 compared to the number of people employed in 2016 for the respective occupation using the BLS OES 2015 data and 2016 data respectively. The difference is calculated as a % change. The data are available for nationwide, statewide, and Metropolitan Statistical Area (MSA).

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

Post-licensure BSN Program (RN-BSN Program): A program for students who are already licensed as RNs but whose highest nursing degree is a diploma or associate's degree. *Do not* include unlicensed students in these counts.

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 in a senior college or university.*

Pre-licensure BSN Program, Second 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.*

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. *Do not* include licensed students in these counts.*

Projected National Change in Employment 2016 to 2026: modeled from the BLS Employment Projections data for nationwide, 2014-2014 data: https://bls.gov/emp/ep_data_occupational_data.htm from the *Occupational Projections Data database*. The Burning Glass analytics team updated the data by forecasting out an additional two years, continuing the trajectory/rate of growth from the original data.

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.

Reporting Period: The most recently completed state-defined twelve-month reporting period. Questions about the production cycle of a nursing program, such as the number of qualified applicants or graduates, will use this one-year time frame. States may use a reporting period that best suits their needs. Many currently use the Academic Year, defined as Fall, Spring, and Summer semesters.

Seats for New Students: A count of the total number of seats available for *newly admitted students* 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. (Interagency Collaborative on Nursing Statistics, 2005)

