Chapter 3: Workforce Demand Data

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

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

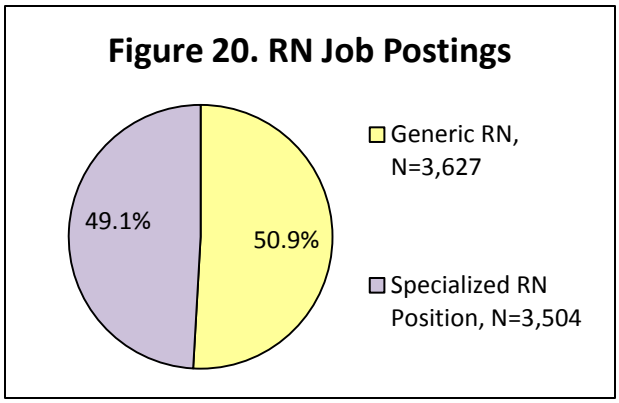
Table 67. Summary Demand and Requirements Table by Occupation - 2017

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

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

Section 1: RN Demand Profile

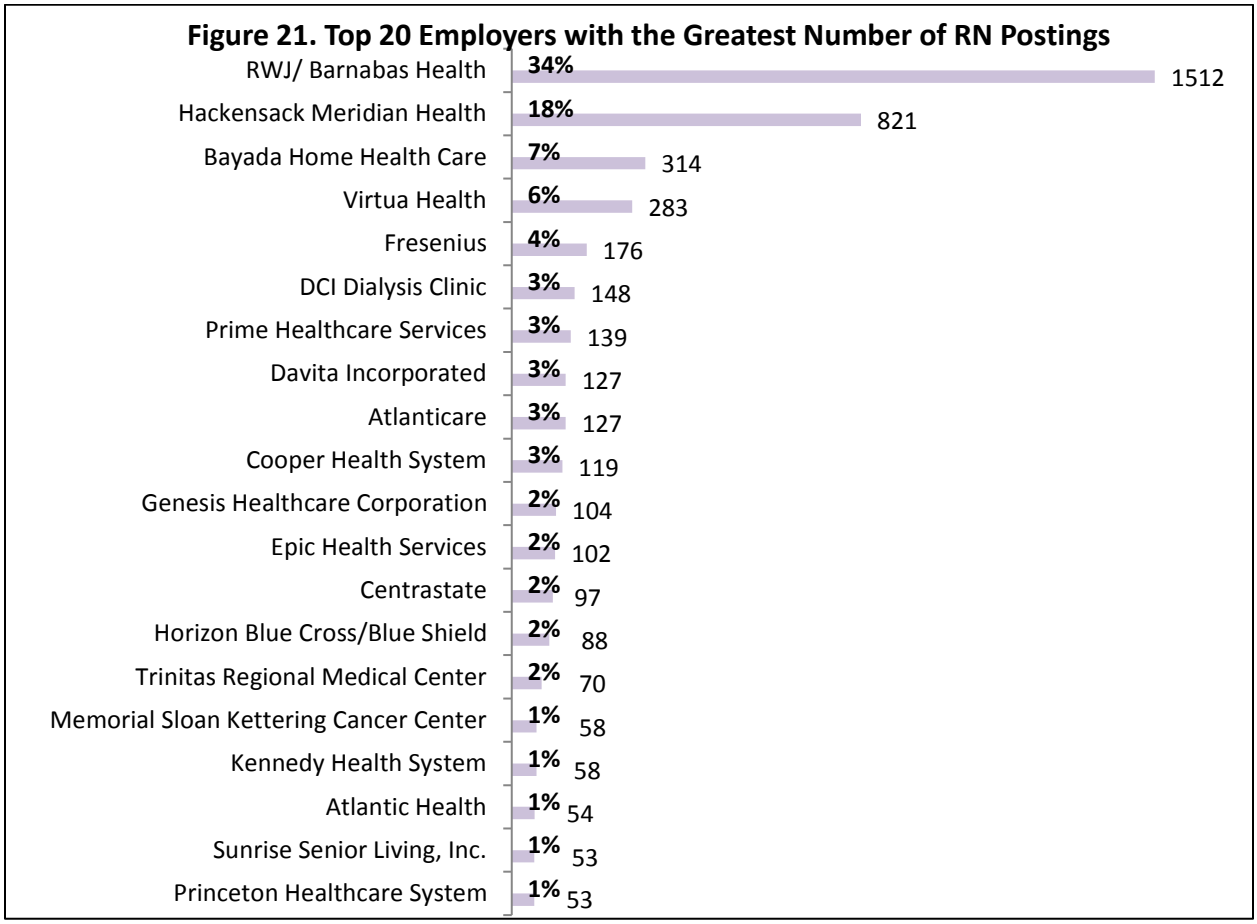
Highest Demand



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

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

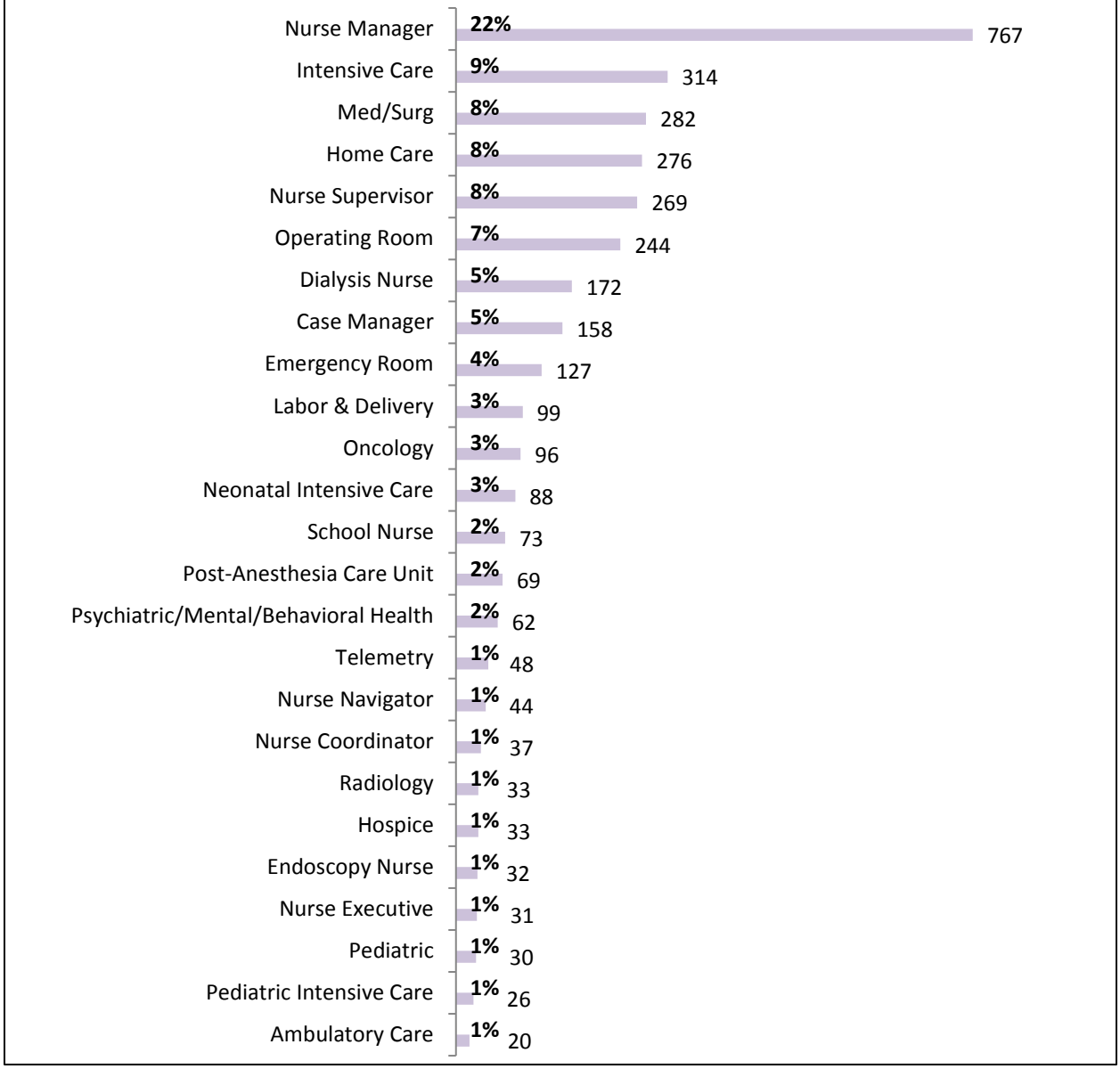
Exclusion criteria included staffing agencies, non-nursing employers, and out-of-state employers. Where applicable, hospitals were combined under their healthcare system. The 20 employers/ health systems with the greatest number of postings were then selected for **Figure 21**. These top 20 employers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



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

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

Figure 22. Top 25 RN Positions

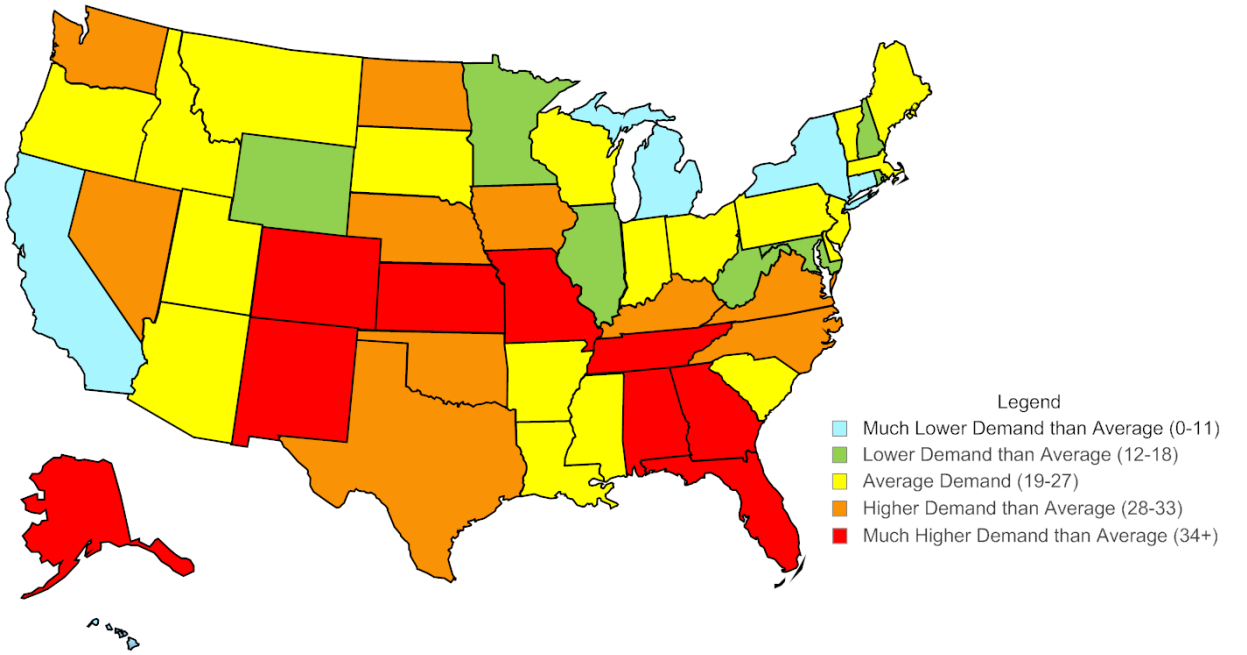


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

National Demand Comparison

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

Figure 23. National Demand for RNs



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

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

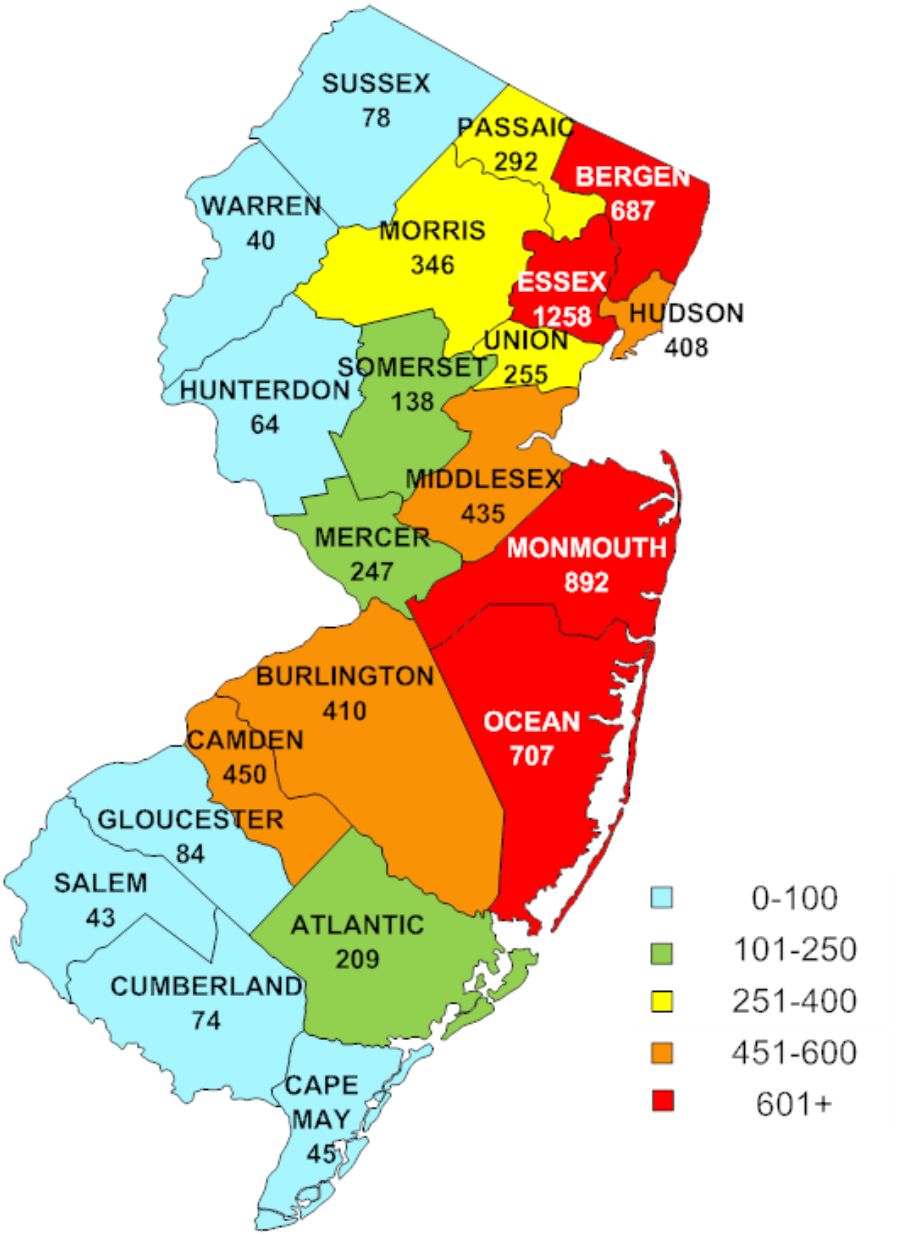
In New Jersey, there was only a **1% change in employment** between 2016-2017 for the top occupations in this set of postings. Nationally, there was a **2% change in employment** between 2016-2017 for the top occupations in this set of postings.

Job Postings by County

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

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

Figure 24. RN Job Postings per County 2017



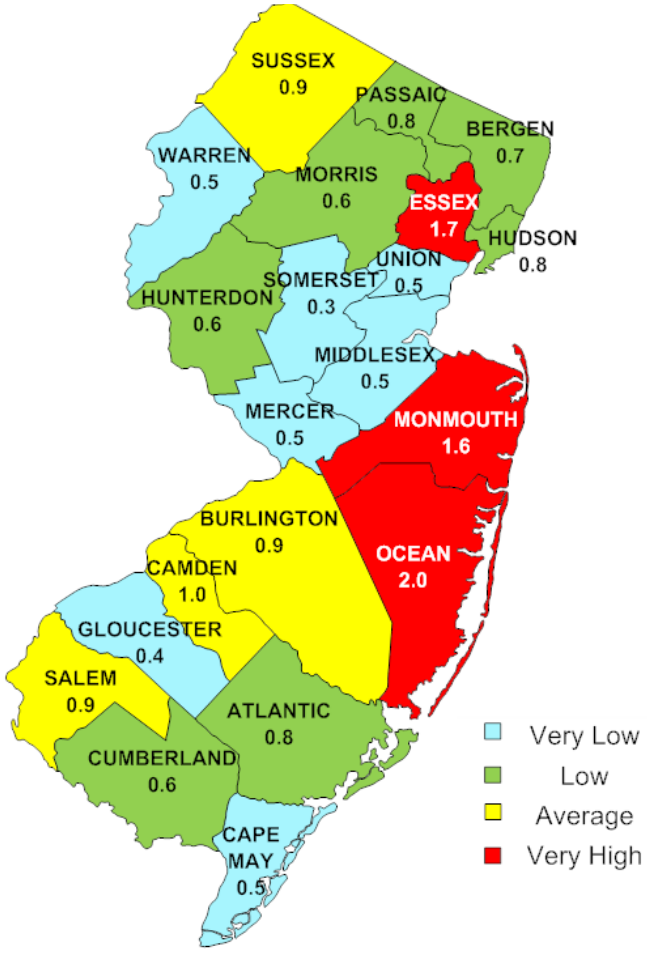
(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Location Quotient

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

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

Figure 25. RN Location Quotient by County 2017



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

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

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

Table 68. NJ County Demand Comparison

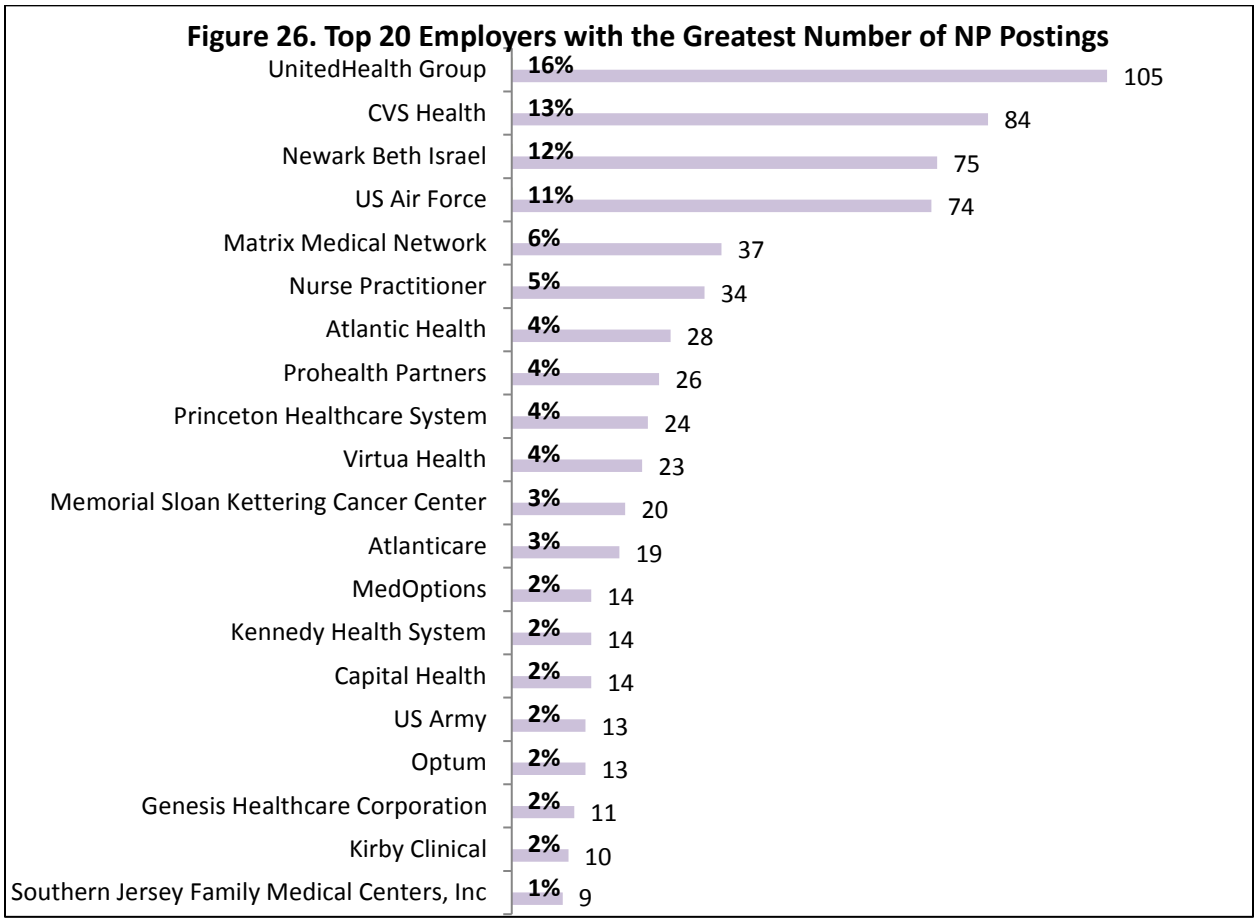
County	Raw Job Postings	% Job Postings	Location Quotient
Atlantic	209	2.9	0.8
Bergen	687	9.6	0.7
Burlington	410	5.7	0.9
Camden	450	6.3	1.0
Cape May	45	0.6	0.5
Cumberland	74	1.0	0.6
Essex	1,258	17.6	1.7
Gloucester	84	1.2	0.4
Hudson	408	5.7	0.8
Hunterdon	64	0.9	0.6
Mercer	247	3.4	0.5
Middlesex	435	6.1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

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

Section 2: Nurse Practitioner Demand Profile

Highest Demand

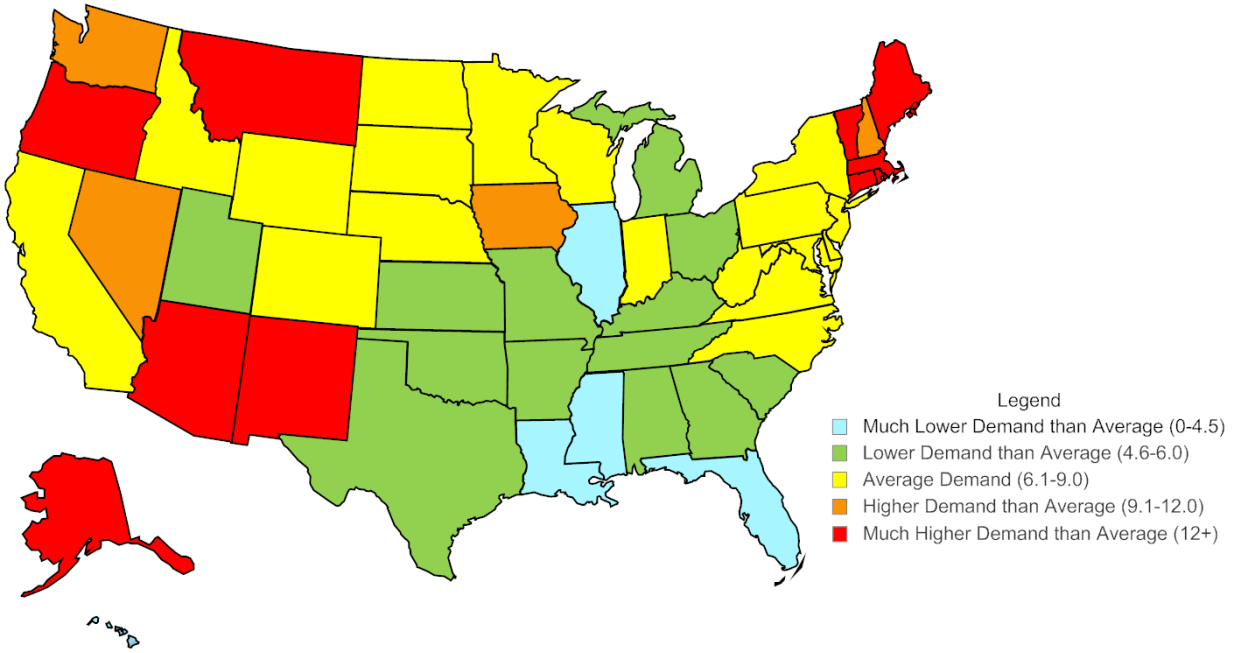
Figure 26 shows the companies that generate the greatest number of Nurse Practitioner (NP) job postings in New Jersey. Greater numbers of postings may reflect a high rate of turnover or a high demand for employees. Of the employers with the greatest number of NP postings, 29% are found in the insurance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



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

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

Figure 27. National Demand for NPs



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

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

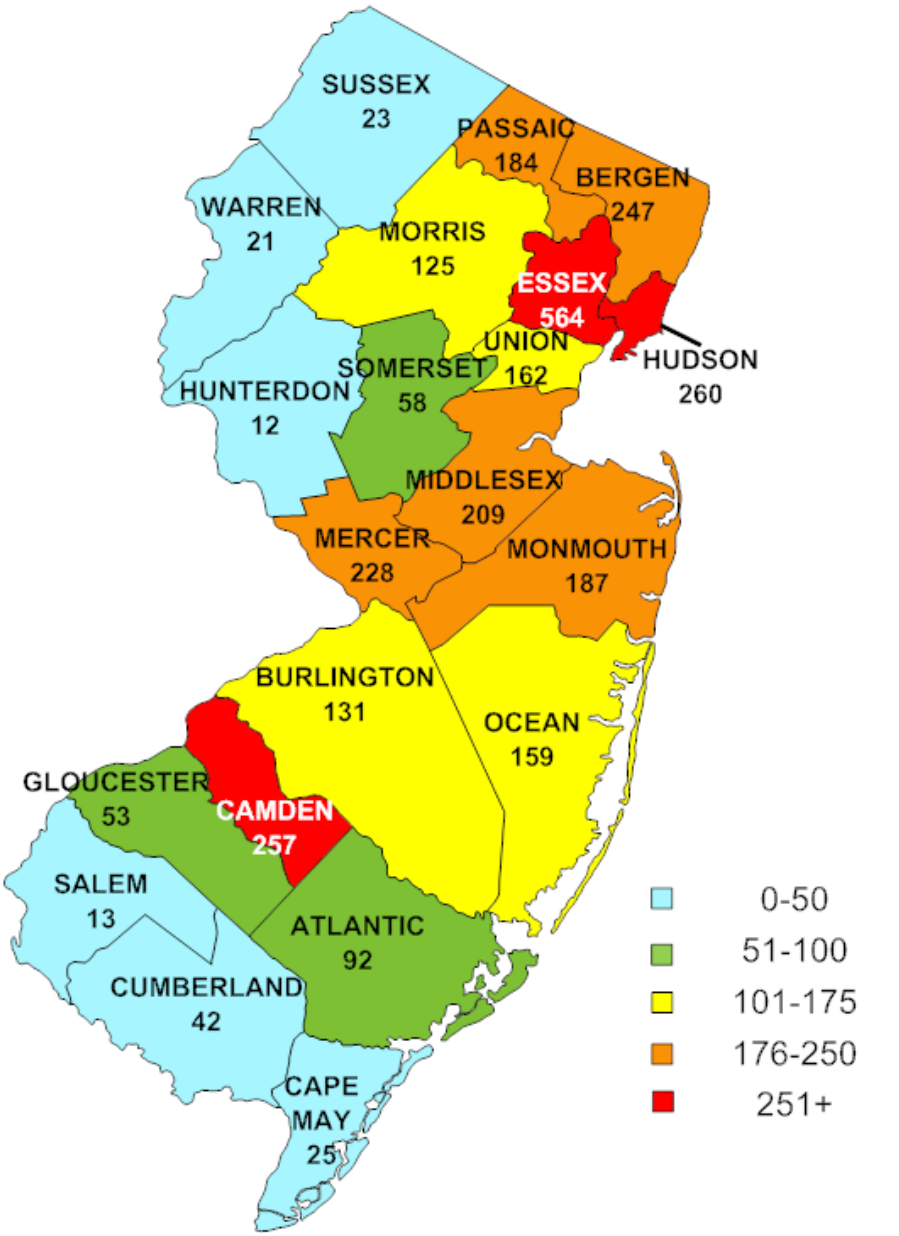
In New Jersey, there was a **26% change in employment** between 2016-2017 for the top occupations in this set of postings, while as there was a **11% change in employment** between 2016-2017 nationally.

Job Postings by County

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

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

Figure 28. NP Job Postings per County 2017



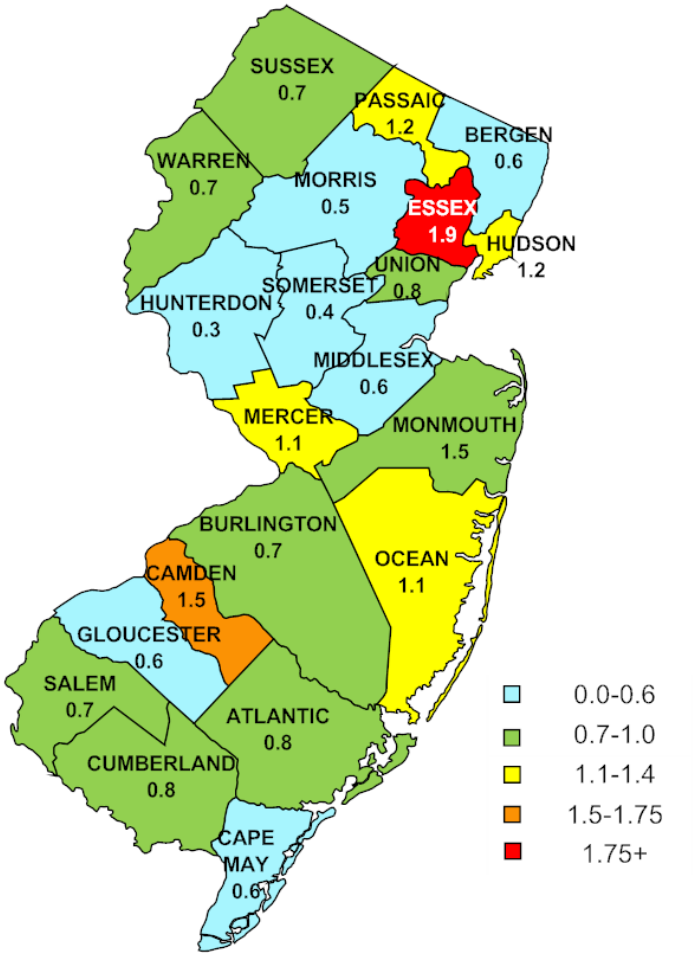
(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Location Quotient

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

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

Figure 29. NP Location Quotient by County 2017



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

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

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

Table 69. NJ County Demand Comparison

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

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

Section 3: LPN Demand Profile

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

National Demand Data for New Jersey

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

Table 70. New Jersey Demand for LPNs 2014-2030

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

(Source: HRSA, 2017)

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

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

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

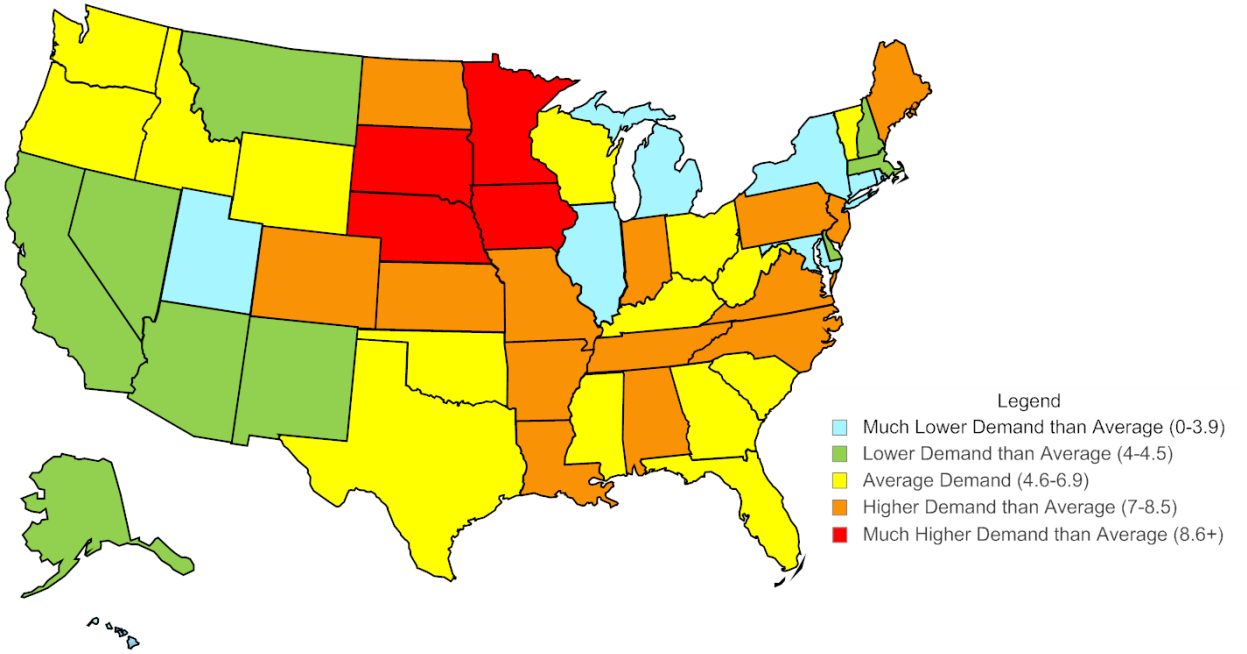
(Source: HRSA, 2017b)

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

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

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

Figure 30. National Demand for LPNs



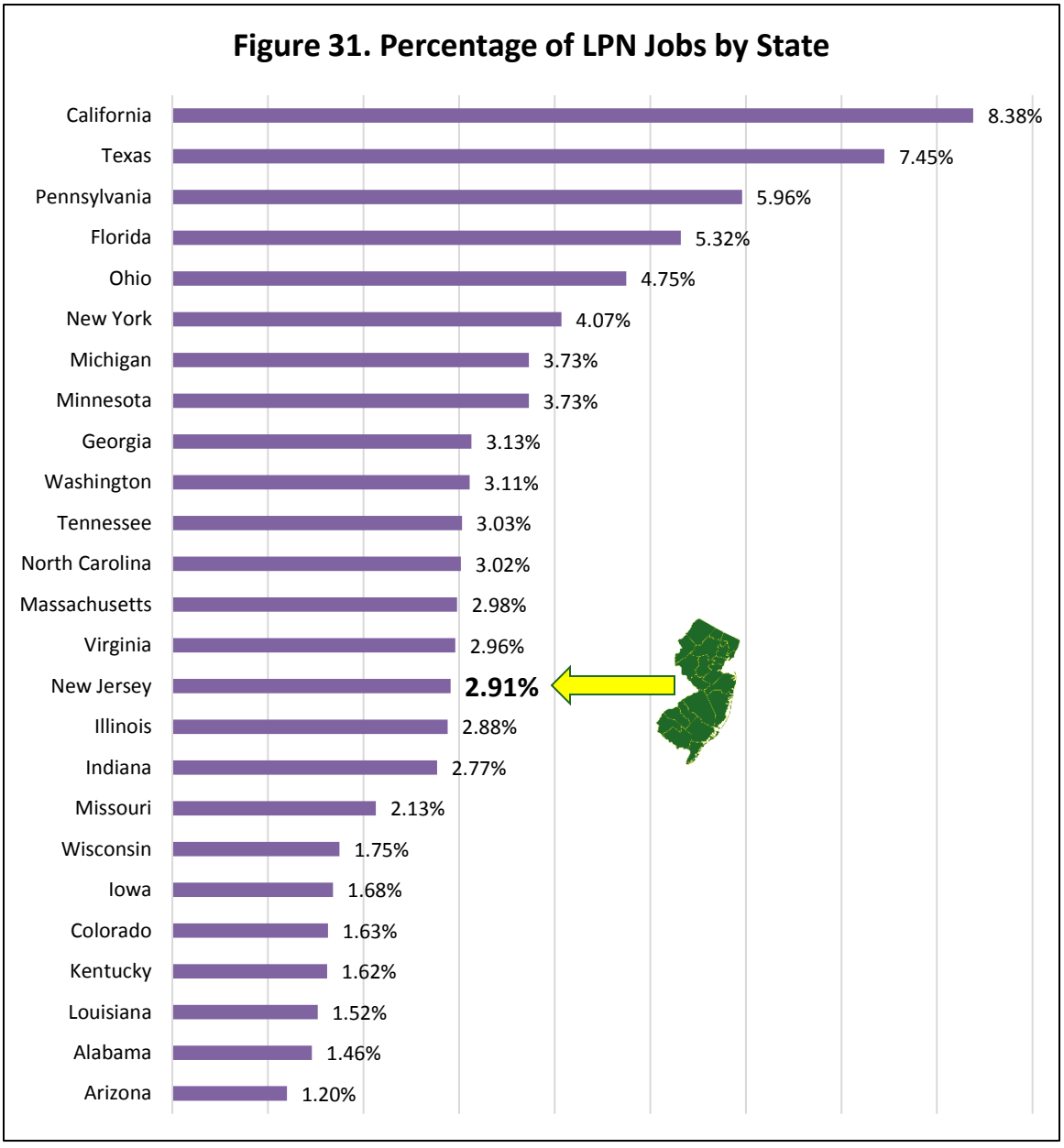
(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

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

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

LPN Jobs by State

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

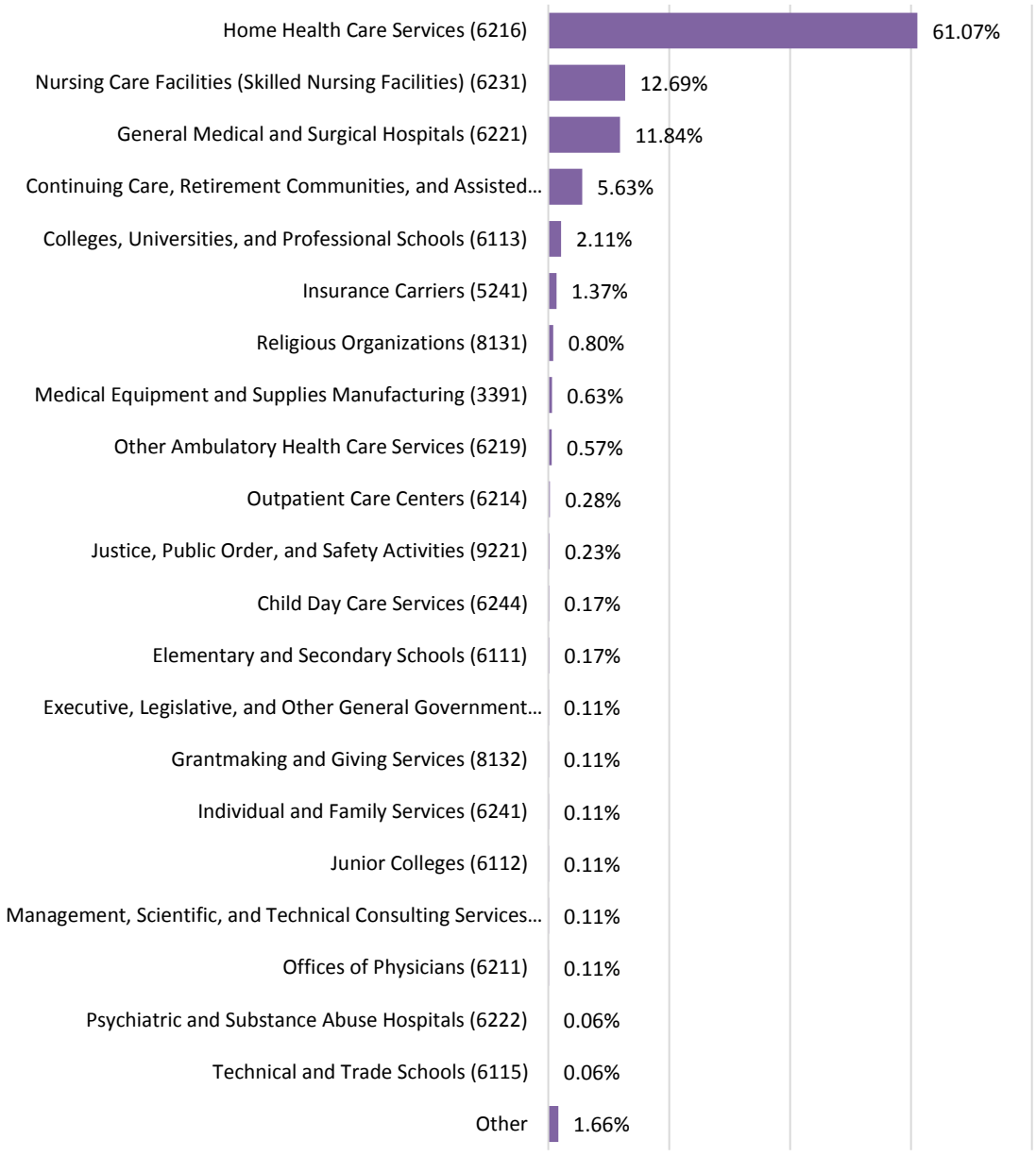


(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)

Industry Utilization in New Jersey

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

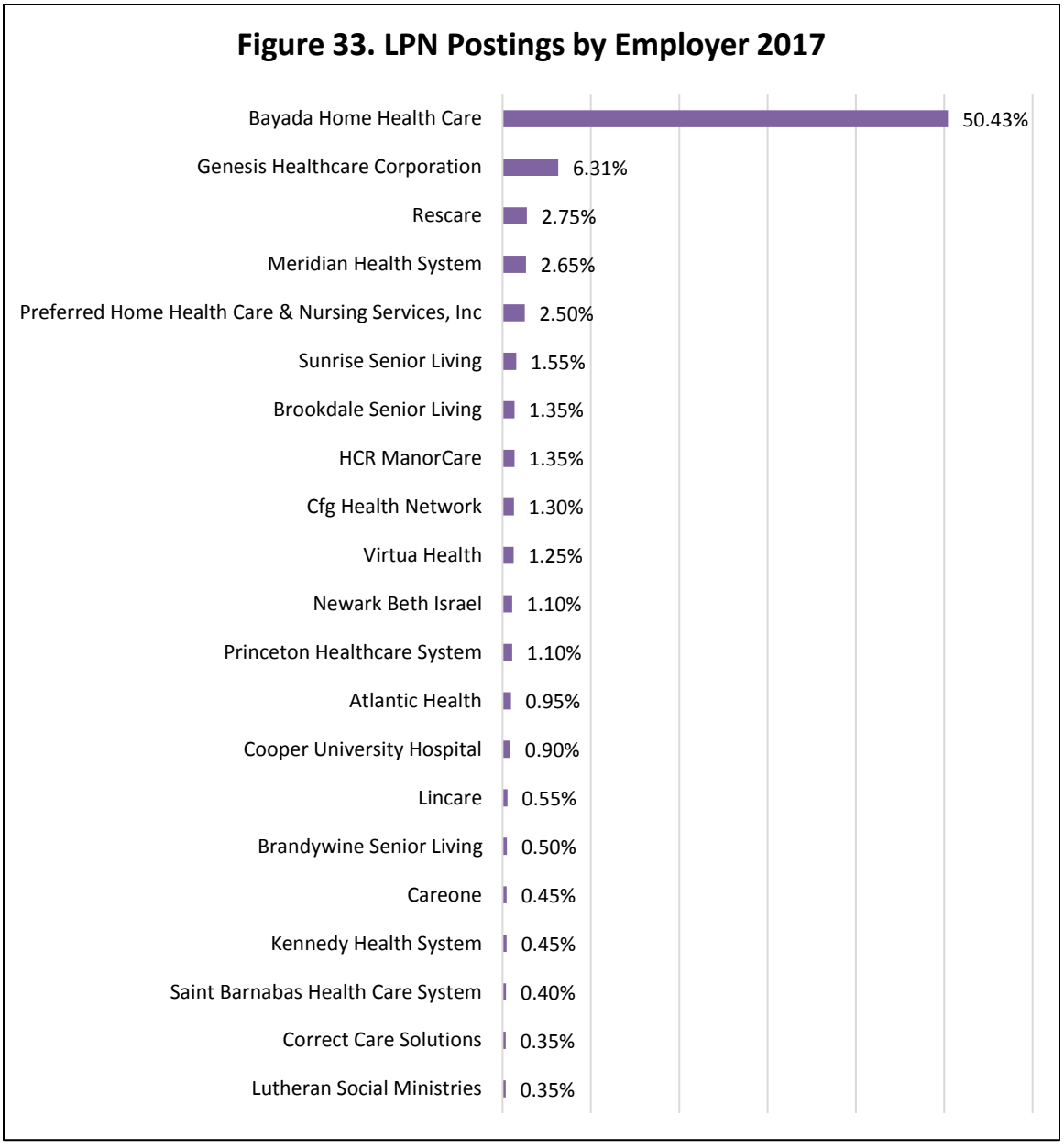
Figure 32. Detailed Industries of LPN in NJ



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

Employer Postings

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



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

Demand by Metropolitan Statistical Area (MSA)

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

Table 72. Location Quotient by MSA

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

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

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

Demand within Each NJ County

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

Table 73. Location Quotient by County

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

(Source: Burning Glass Technologies. "Labor Insight Real-Time Labor Market Information Tool." http://burning-glass.com. 2018)
* Additional counties are not shown due to low posting totals.

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