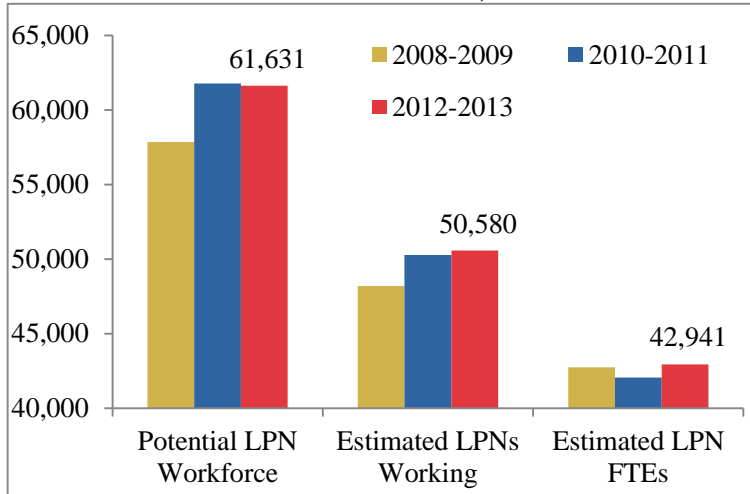


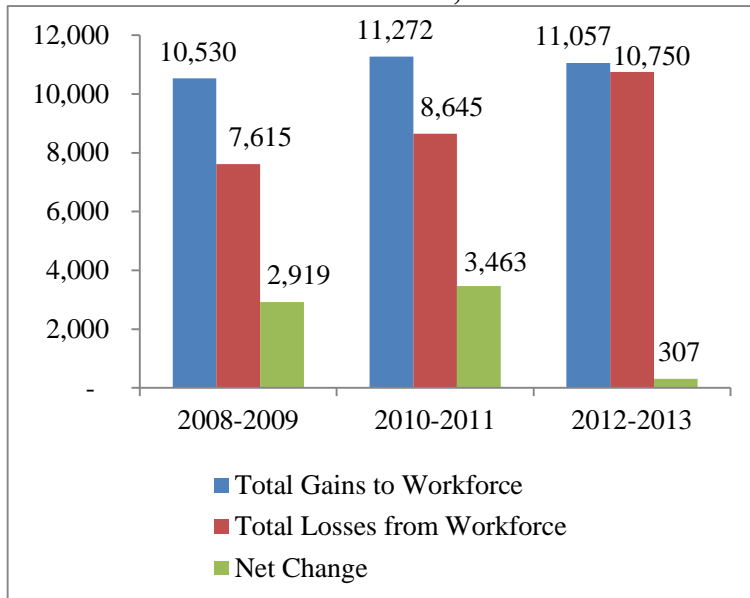
The information below represents the **key findings** on Licensed Practical Nurse supply and workforce in Florida. Trend analysis is provided for 2007 through 2013 when available.

Trends in Potential LPN Workforce, 2008-09 to 2012-13



- Florida's potential LPN workforce increased from 2008-09 to 2010-11, but remained flat from 2010-11 to 2012-13.
- LPN workforce gains were flat 2010 to 2013, but the losses increased by over 2,000 people.
- The top 4 employment settings – employing 78% of the LPNs - are Long-Term Care, Home Health Care, Health Provider Offices, and Hospitals.
- The number of LPNs employed in hospitals has decreased, while employment in home health has increased.
- 29% of LPNs work in geriatrics for their clinical practice, 12% in home health, and 9% in adult/family health.
- The average age of LPNs is 45.6 years, and 37% are age 51 or older.
- FL has an estimated 264 LPNs employed per 100,000 population.

LPN Workforce Gains and Losses, 2008-09 to 2012-13



Recommendations

1. Encourage academic and industry collaboration to assure appropriate curriculum content in preparation for industry needs.
2. Monitor the increasing trend of losses from the LPN workforce. Information is needed about the reasons LPNs are leaving the profession, in order to improve retention and help strategically plan and recruit LPNs for the future workforce.
3. Identify reasons for the discrepancy between the number of graduates of LPN programs, and the number of LPNs passing the licensure exam and entering Florida's workforce.
4. Support the Center's research effort to assure collection, analysis and reporting of data to maximize use of Florida's resources.

LPN Employment Settings

	2008-09		2010-11		2012-13	
	%	Estimated #	%	Estimated #	%	Estimated #
Long-term Care	36.5	17,607	40.8	20,480	40.6	20,541
Home Health Care	15.1	7,281	16.0	8,043	17.0	8,614
Health Provider Office	9.9	4,765	9.9	4,981	10.3	5,220
Hospital	14.8	7,127	12.4	6,231	10.1	5,088
Other	8.9	4,293	7.1	3,560	7.8	3,920

Florida's Licensed Practical Nurse Supply: 2012-2013 Demographics, Employment Characteristics and Trends

Background

This report provides information on Florida's licensed practical nurse (LPN) population using data collected during the license renewal cycle, January 2012 – December 2013. Characteristics of the LPN workforce, such as size, demographics, and employment information, are described herein. The report also tracks changes in the growth of the LPN population since the 2006-2007 renewal cycle, and trends data from previous license renewal cycles when possible.

Data on the state's supply of nurses provides valuable information to nurse employers, nursing schools, nurse faculty, workforce planners, and policy makers. The Florida Center for Nursing (Center), in partnership with the Florida Board of Nursing and Florida Department of Health, Division of Medical Quality Assurance, has collected nurse workforce data since January 2008 via a voluntary Workforce Survey integrated into the online license renewal process for nurses. More information about the nursing license renewal process and the Workforce survey can be found in the Center's technical report.¹ Separate reports provide results for Registered Nurses and Advanced Practice Nurses.^{2,3}

Florida's LPN Supply as of December, 2013

LPNs renew their licenses in odd years, with the last LPN renewal in 2013. The Center used a data extract from late December 2013 to represent the current population of licensees.

With online license renewal, nurses have the option to participate in the Center's Workforce Survey. The Workforce Survey response rate among all LPNs was 88.5 percent (n=54,533) during the 2012-2013 renewal cycle, 94 percent (n=49,111) of those renewing and 57 percent (n=5,422) of the new licensees took the survey. LPNs newly licensed in Florida during the same period have the option to participate in the survey, but to do so requires extra effort as it is not incorporated in the application process.

The Center uses responses to the workforce survey to estimate the number of nurses working in Florida. Because response rates were lower than 100 percent, this estimate was calculated by extrapolating survey results for certain questions to nurses who did not respond to the Workforce Survey. More information about the data processes can be found in the Center's technical report.¹

Trends in Florida's LPN Workforce

About 78,000 LPN licenses populated the nurse licensure database as of December 2013, but far fewer are actually in Florida's LPN workforce (Figure 1). About 61,000 (79%) met the criteria for being counted as part of the *potential* nurse workforce: an active license, Florida address, and no disciplinary restrictions. This group of nurses is capable of providing nursing labor in Florida, however some are working in other fields or not working at all. We estimate that about 82 percent of the potential LPN workforce, or 50,000, are *actually* working as LPNs in Florida.

Finally, since some nurses work part-time, Florida’s number of full-time equivalent (FTE) LPNs is lower still at an estimated 43,000. Although the total number of LPN licenses in the state’s database increased by about 3,000 people, the potential LPN workforce, estimated number of LPNs working, and estimated FTEs has remained about the same for the past two renewal cycles.

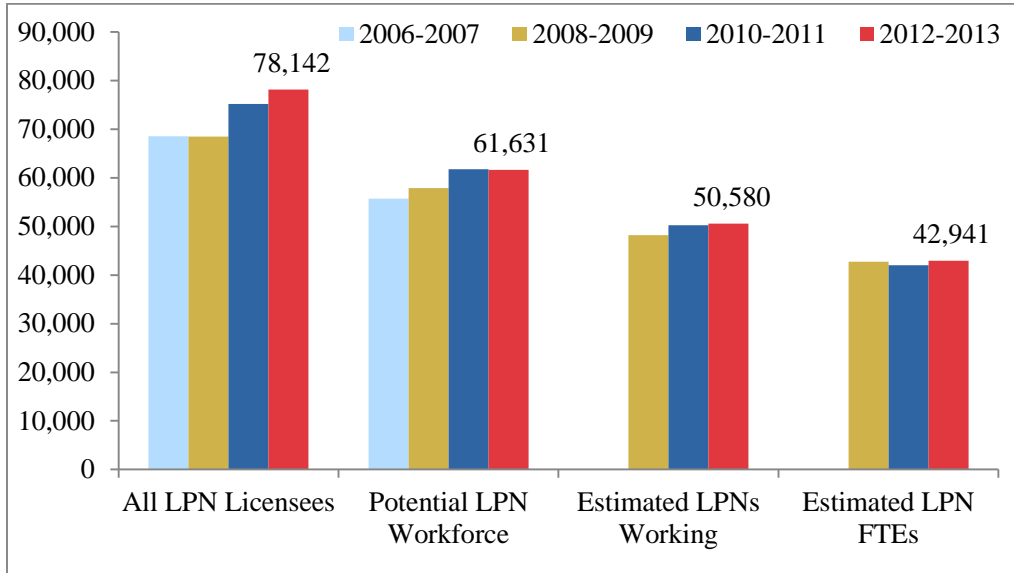


Figure 1. Florida’s LPN Supply Trend, 2006-07 to 2012-13

Florida’s potential LPN workforce gained 300 nurses between December 2011 and December 2013, a 0.5 percent increase over two years (Table 1). This is the slowest rate of growth since the Center began tracking the LPN workforce.

Table 1. Growth in the Potential LPN Workforce, 2006-07 to 2012-13

Growth in the Potential LPN Workforce			
2006-07 Potential Workforce	54,942		
2008-09 Potential Workforce	57,861	% change 2006-07 to 2008-09	5.3%
2010-11 Potential Workforce	61,324	% change 2008-09 to 2010-11	6.0%
2012-13 Potential Workforce	61,631	% change 2010-11 to 2012-13	0.5%

To investigate net change in the potential LPN workforce, the Center tracked individual licensees into and out of the workforce over the two-year period. We found that the potential LPN workforce actually gained more than 11,000 LPNs, but during the same time 10,750 – almost all of the total gains – were lost from the potential LPN workforce to create the net change (Figure 2, Appendix Table A1). Compared to the 2010-2011 licensure cycle, workforce gains remained about the same but losses increased by over 2,000 people.

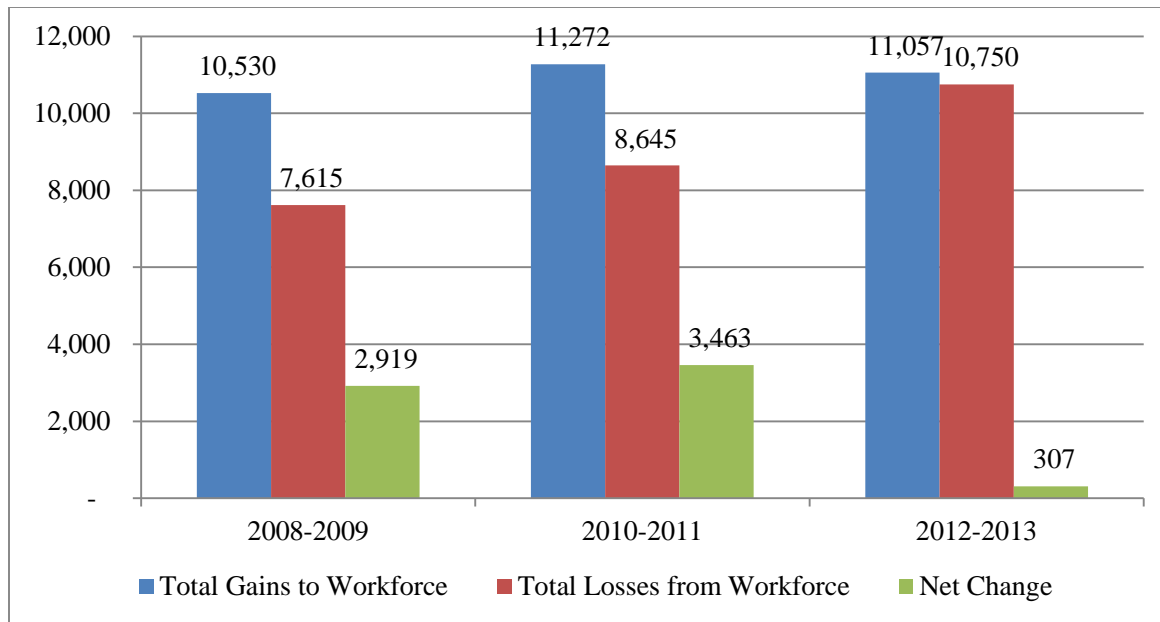


Figure 2. Florida’s LPN Workforce Gains and Losses, 2008-09 to 2012-13

Table 2 shows the causes of gains and losses from the potential LPN workforce during 2012-13. The most common reason a nurse joined the potential LPN workforce was licensure by examination, but there were about 300 fewer nurses added by exam compared to the last renewal cycle. Interestingly, 5,136 LPNs graduated in 2011-12 and 4,277 graduated in 2012-13,⁴ thus we would have expected closer to 9,400 new LPN graduates to join the workforce through “new licensees by exam”. Instead, 7,519 LPNs were new licensees by exam, about 1,900 fewer than expected. The second most common reason for gaining new LPNs was endorsement into Florida with a nursing license from another state, about the same as last cycle. Over 300 LPNs moved into Florida with an existing Florida nursing license, and about 1,000 made a license status change rendering them eligible to practice nursing in the state.

Table 2. Additions to and Subtractions from the Potential LPN Workforce, 2012-13

Reason for New Additions	# of LPNs	Reason for Losses	# of LPNs
New Licensee by Exam	7,519	Failed to Renew	8,759
New Licensee by Endorsement	2,105	No longer working in FL	1,147
New Florida Address	362	License Went Null and Void	450
Changed to eligible status	1,053	Changed to Inactive Status	116
Changed to active status	17	Retired	175
Unknown	1	Disciplinary Action	34
		Other	69
Total New Licensees	11,057	Total Attrition	10,750

The most common cause for attrition from the potential LPN workforce was failure to renew a nursing license as scheduled in 2013, which was an increase of about 2,000 more people than in 2011. Unfortunately, when nurses do not renew their nursing license, we do not learn whether they did so because they no longer practice in Florida, work outside the field of nursing, retire, or for another reason. It is also possible that LPNs did not renew their license because they upgraded to RN, but this information could not be tracked in the database. Over 1,100 LPNs changed their address to outside of Florida, but still maintain their license in the state.

Characteristics of LPNs Working in Nursing, December 2013

Of the almost 54,000 LPNs responding to the survey, 83 percent indicated that they are working as LPNs in Florida (Figure 3). In addition, 6.4 percent are seeking nursing employment, about the same as in 2010-11. Only 5 percent are not seeking work, and 2 percent are retired but still have an active license. The “Not applicable” is an artifact of the questionnaire and may indicate that someone is employed outside of nursing. Overall, LPNs are working in the field at a slightly lower rate as are Florida’s RNs (86%). The workforce participation rate for LPNs has remained steady over the past renewal cycles.

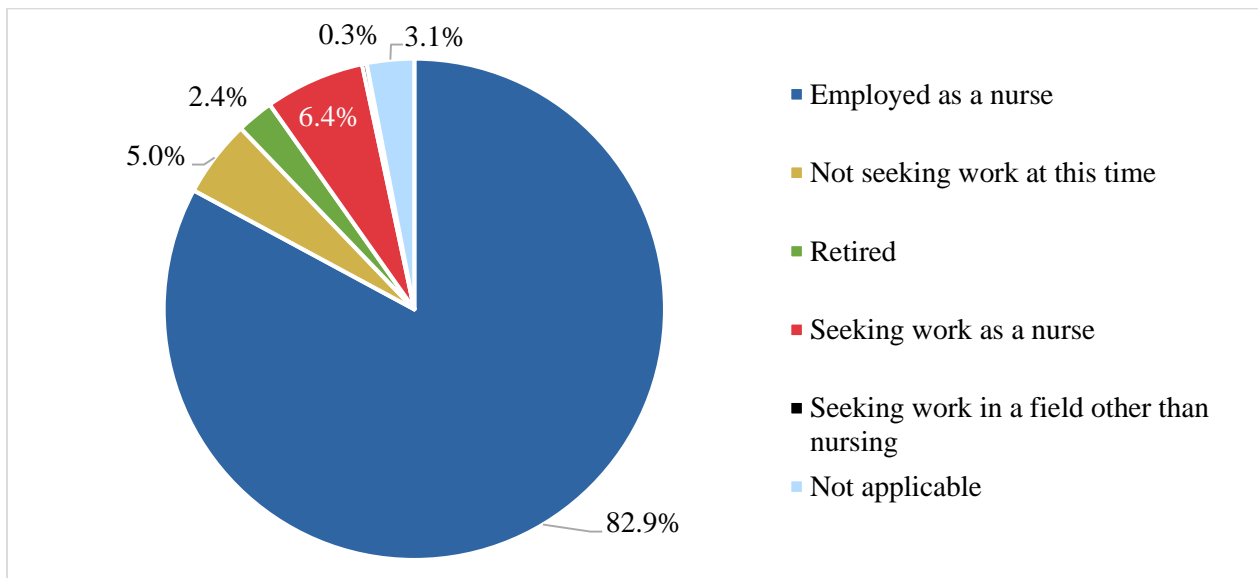


Figure 3. Work Status of LPNs

We took a closer look at those LPNs who were not currently employed (i.e., they responded to the employment status question as not seeking work at this time, seeking work as a nurse, seeking work in a field other than nursing), with a survey question that asked those who were not currently working to indicate their reasons (more than one response was possible). This group consisted of 6,729 LPNs. Within this group, the reasons for unemployment were varied. About one-third of this group indicated they were taking care of home or family, the same percentage as last survey (Figure 4). Twenty-five percent of the unemployed LPNs indicated they had difficulty finding a nursing position, four percent fewer than last survey. Eighteen percent of LPNs responded that school responsibilities were the reason they were not currently employed, a

three percent increase from last survey, and 14 percent indicated illness or disability prevented them from working.

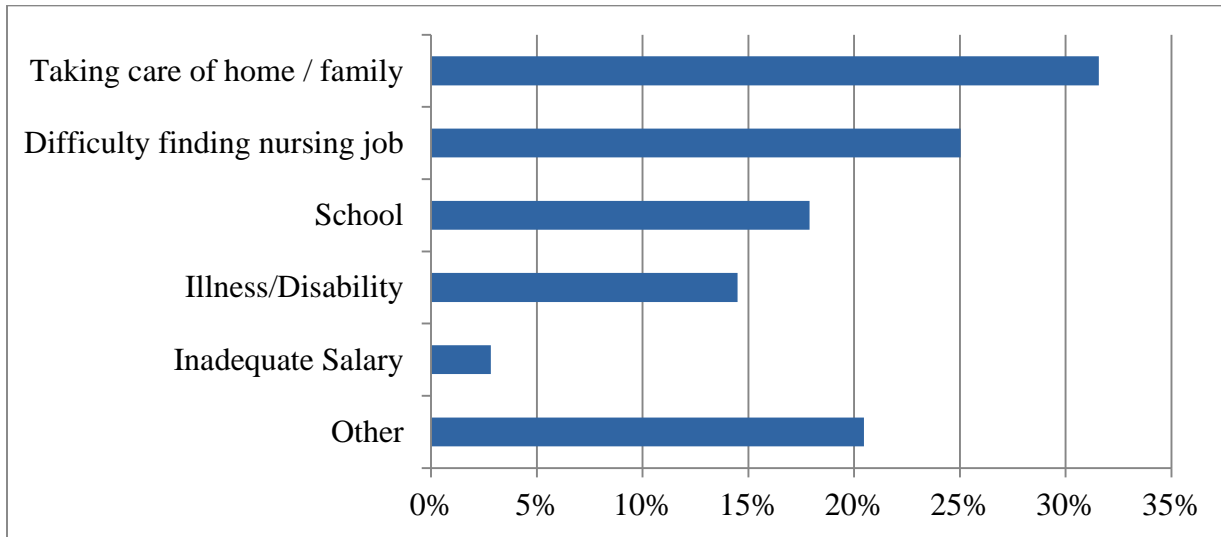


Figure 4. Reasons LPNs are not working

The percentage distribution of LPNs employed in various industries is shown in Table 3. The largest employment setting for LPNs is long term care, where 40.6 percent of LPNs are employed. LPNs are also commonly employed in home health care (17%), hospitals (10.1%), and physician or health provider offices (10.3%). Employment distribution by setting has remained relatively stable with the notable exception of decreasing LPN employment in hospitals (from 12.4 percent in the last survey to 10.1 percent in this survey). LPNs are more likely to work in long-term care or home health care, compared with RNs, who are more likely to work in hospitals.

Table 3. Percentage by Employment Setting for LPNs Working in Nursing

LPN Change in Employment Percentage	2008-09	2010-11	2012-13
Long Term Care	36.5	40.8	40.6
Home Health Care	15.1	16.0	17.0
Hospital	14.8	12.4	10.1
Physician or other Health Provider Office	9.9	9.9	10.3
Other	8.9	7.1	7.8
Corrections Facility	4.4	4.4	4.4
Ambulatory Care	2.7	2.1	2.2
Public/Community Health	2.5	2.3	2.4
School Health	1.9	2.1	2.3
Temporary Agency	1.3	0.9	0.8
Insurance Company	1.3	1.1	1.3
Occupational Health	0.4	0.3	0.2
Healthcare Consulting / Product Sales	0.2	0.3	0.3
Nursing Education - Academic Setting	0.2	0.3	0.3

Table 4 shows the number of LPNs employed in each setting and the difference from the previous survey. LPNs have increased in home health and health provider offices, but the number employed by long-term care has remained steady. The number of LPNs employed by hospitals has decreased by over 1,100 people.

Table 4. Number of LPNs Working in Nursing by Employment Setting

LPN Change in Employment Numbers	2008-09	2010-11	2012-13	Difference
Long Term Care	17,607	20,480	20,541	61
Home Health Care	7,281	8,043	8,614	570
Hospital	7,127	6,231	5,088	(1,142)
Physician or other Health Provider Office	4,765	4,981	5,220	239
Other	4,293	3,560	3,920	360
Corrections Facility	2,120	2,194	2,241	47
Ambulatory Care	1,282	1,029	1,128	99
Public/Community Health	1,200	1,165	1,214	49
School Health	901	1,069	1,148	79
Temporary Agency	631	462	420	(42)
Insurance Company	602	547	652	105
Occupational Health	173	141	111	(29)
Healthcare Consulting / Product Sales	111	141	142	1
Nursing Education - Academic Setting	92	146	142	(4)

The Workforce Survey also included questions about nurses’ clinical area of practice and position titles. The most common clinical practice area for LPNs is geriatrics (29%), followed by home health (12%), adult/family health (9.5%) and rehabilitation (7.5%) (Figure 5). Seventy-seven percent of LPNs have the title of staff nurse, and five percent had the title of nurse manager.

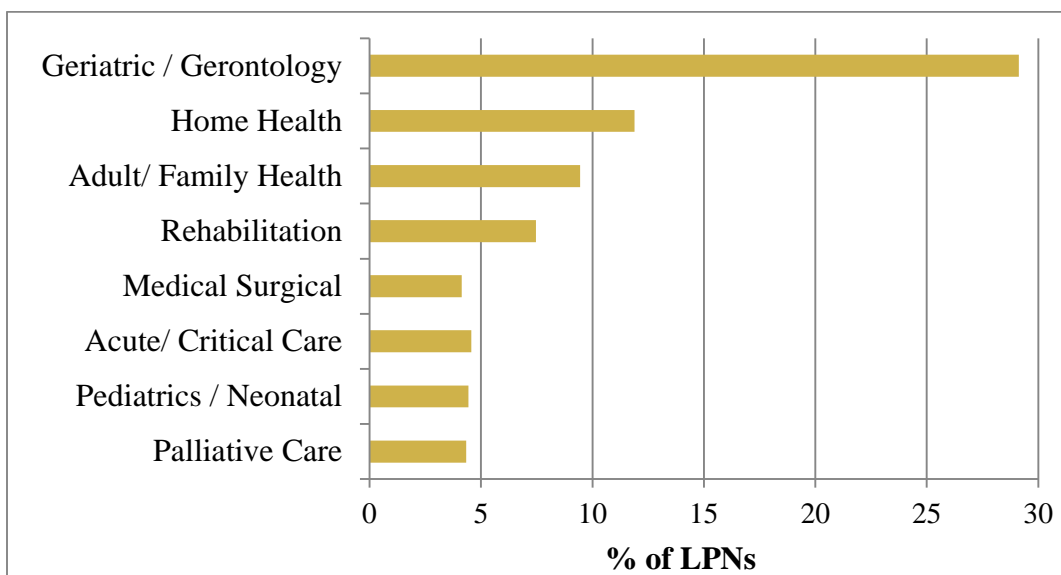


Figure 5. Clinical Practice Area of LPNs Employed in Nursing

The majority of LPNs are working full-time (78%), which is a 1.5 percent decrease from the previous survey (Table 5). About 10 percent of LPNs reported working for a temp agency or in a per diem position, and 11.8 percent reported working part-time. LPNs in Florida are working a large number of hours: 16.7 percent are working more than 40 hours per week, and the percentage of LPNs working 35 or fewer hours per week is shifting higher. The average FTE has decreased from 0.88 to 0.85.

Table 5. Employment Detail for LPNs Working in Nursing

	2008-09	2010-11	2012-13
Hours Per Week	%		%
20 or fewer	5.8	8.0	8.7
21-30	6.9	8.0	8.3
31-35	7.7	8.6	8.7
36-40	46.0	58.0	57.7
41-50	28.3	12.8	12.4
51 or more	5.4	4.6	4.3
Average FTE*	0.89	0.88	0.85
Employment Status	%	%	%
FT	79.7	79.6	78.1
PT	10.1	11.1	11.8
Per Diem/Agency	10.2	9.3	10.1
Multiple Jobs?	%		%
Yes	21.1	13.0	12.9
No	78.9	87.0	87.1

*FTE = Full-time Equivalent

Demographic characteristics of working LPNs in comparison to the Florida population are shown in Table 6. The percentage of employed LPNs in the youngest age group increased by 3.5 percent since the last survey. Compared to Florida’s population, employed LPNs are more commonly Black, female, and more heavily representative of ages 31-60. The LPN profession is also more racially and ethnically diverse when compared with RNs. About 53 percent of LPNs are white and 31 percent black, in contrast about 66 percent of RNs are white and 13 percent are black. About 90 percent of LPNs are female, the same percentage as RNs.

Appendix Table A2 compares demographics of LPNs working and not working in nursing. LPNs not working in nursing are more likely to be white, female, and age 61 or older. Appendix Table A3 shows race/ethnicity of LPNs by age group, showing that younger LPNs are more racially/ethnically diverse than older LPNs. Appendix Table A4 shows trends in demographic characteristics for the LPN workforce based on licensure data. The percentage of LPNs in the 18-30 age group has increased from 10.2 percent to 13.1 percent, and the percentage of men in the potential LPN workforce continues to edge upward.

Table 6. Demographic Characteristics of LPNs Employed in Nursing and FL Population

Employed LPNs		FL Population
Race/Ethnicity	%	% ^a
White	52.8	57.9
Black	31.0	15.2
Hispanic	10.5	22.5
Asian	2.4	2.4
Native American	0.3	0.3
Other	3.1	1.9
Gender	%	% ^a
Female	89.9	51
Male	10.1	49
Age	%	% ^b
21-30	13.1	16.7
31-40	23.0	15.8
41-50	26.8	18.5
51-60	24.8	17.8
61 or older	12.2	31.1
Average Age	45.6	N/A

Florida Population Data: 2010 Census Data from the Office of Economic and Demographic Research. Accessed May 27, 2014.

^a [Table 3C - Total Population by Race and Hispanic or Latino: April 1, 2010; All Places by County in Florida.](#)

^b Florida Population by Age Group, http://edr.state.fl.us/Content/population-demographics/data/Medium_Projections_ARSH.pdf. Age groups of FL data were slightly different: 18-29, 30-39, 40-49, 50-59, 60+ years.

The LPN workforce may be trending younger, given the increased percentage of younger LPNs and a younger average age of 45.6 years, a decrease of about one year since the last survey. A shift towards younger LPNs is important for the long-term health of the workforce, as 12 percent of working LPNs are age 61 or older and can be expected to retire in about 5 years or less. A quarter of the LPN workforce is between age 51-60, and this very large group can be expected to retire within the next 15 years. The exodus of older, experienced nurses will reduce the size of the workforce, and result in a loss of highly skilled mentors with years of organizational and experiential knowledge. The youngest age group of LPNs is of adequate replacement size for the oldest age group; however, the younger LPNs won't be able to replace all of the LPNs age 51 or older who are potentially leaving the workforce in the next 5-15 years.

Figure 6 graphically depicts the age distribution of employed LPNs and contrasts it with the age distribution of employed RNs. LPNs are more evenly distributed across the age categories when compared with RNs. About 46 percent of the RNs are age 51 or older, whereas 37 percent of the LPN workforce is over the age of 51 years as of December 2013. The percentage of LPNs age 61 and older in the workforce decreased from 14.4 percent in 2011 to 12.2 percent in 2013,

indicating the older LPN potential workforce may be retiring their licenses and permanently leaving the workforce (Appendix Table A4).

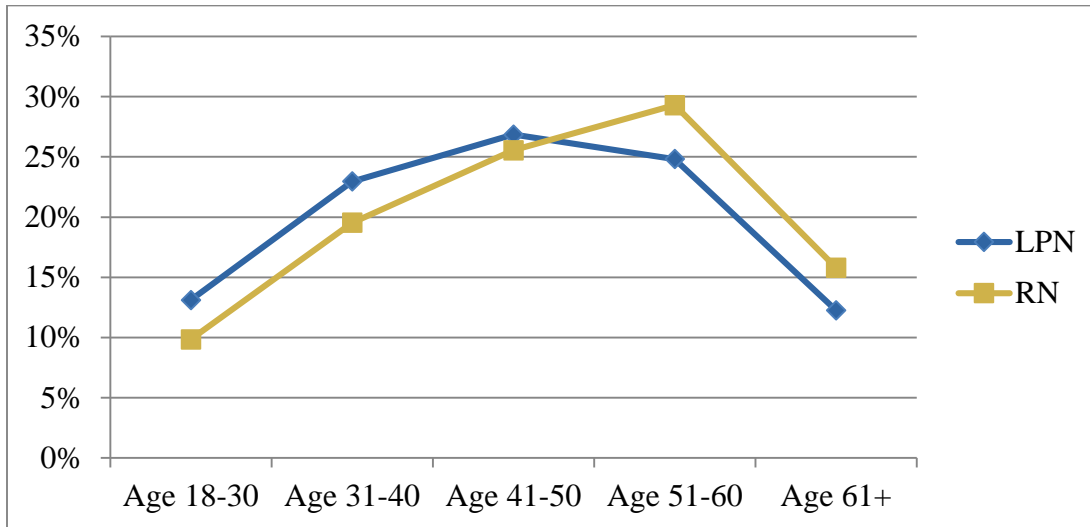


Figure 6. Age Distribution for LPNs and RNs Working in Nursing

The educational preparation of LPNs employed in nursing is shown in Figure 7. As expected, the vast majority of LPNs hold the LPN Certificate as their highest degree. Eleven percent had a diploma in nursing, 6 percent had an Associate’s in Nursing, 0.8 percent had a Bachelor’s in Nursing and 0.1 percent had a Master’s or Doctorate in Nursing. It is unclear why these nurses would be working as an LPN but also have a higher nursing degree, there may be some errors in the data reporting. Since a number of LPNs upgrade their licenses to RN each year, it is likely that some LPNs were in the process of (but had not yet completed) upgrading their licenses during the 2013 LPN renewal cycle when survey data were provided. Or perhaps these LPNs have not successfully passed the RN licensure exam. Twelve percent reported having an associate’s degree in a field outside of nursing, five percent reported having a bachelor’s degree outside of nursing, and one percent reported a master’s or doctorate outside of nursing.

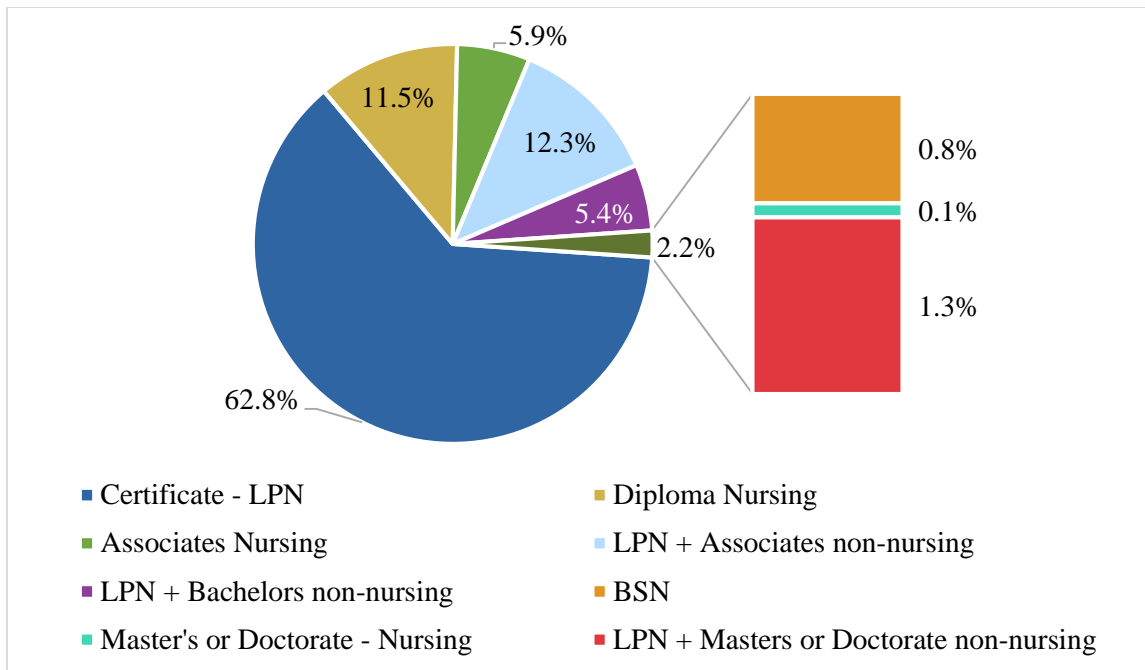


Figure 7. Highest Educational Degree by LPNs Employed in Nursing

FTEs by Age and Employment Setting

Average FTE varies substantially by age, as shown in Figure 8. The average FTE worked increases in every age group and peaks at 0.89 – 0.90 from ages 41-60 years. LPNs age 61-65 are still working at an average 0.86 FTE. After age 65, the average FTE declines precipitously as nurses retire and stop working full-time. The LPN workforce by age group presents an interesting picture. The 5,450 LPNs age 61 and older will most likely retire and leave the workforce over the next 5 years. Over the next decade, the 11,000 LPNs currently age 51-60 will begin to retire, with the likely result of reduced working hours and reduced workforce participation for this large cohort. Fortunately the age 41-50 cohort has about 1,000 more nurses than the age 51-60 cohort. The small size of the age 18-30 LPN cohort should be watched closely over the next license renewal cycle. It is possible that the smaller size is in response to a decreasing demand for LPNs as seen in the Center’s research indicating weak estimated LPN growth in all industries except home health care and possibly long-term care.⁵

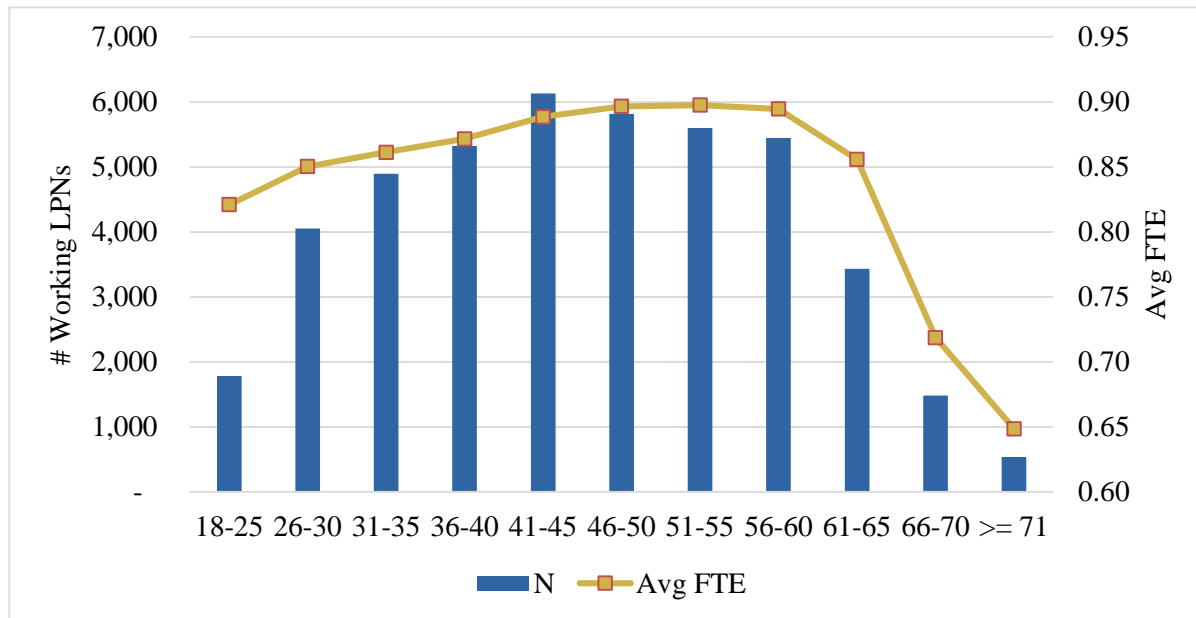


Figure 8. Number of LPNs Working and Average FTE by Age Category

Table 7 shows the estimated number of FTEs as well as the average proportion of an FTE worked by LPNs in each healthcare setting. The largest number of LPN FTEs can be found in long term care (an estimated 17,600 FTEs), followed by home health, physicians’ offices, and hospitals. LPNs working for insurance companies worked the most hours per week as evidenced by their larger average FTE (.96). LPNs working for temporary agencies (.64), academic settings (0.77), and school health (.78) worked the fewest hours per week. Appendix Table A5 shows the age distribution of LPNs by setting. Academics, ambulatory care, and occupational health tend to employ a larger percentage of nurses over age 50, whereas corrections, long-term care, and physicians’ offices tend to employ a larger proportion of younger nurses. Strong LPN employment in the home health and long-term care industries should continue as the older Florida population grows in size.

Table 7. Estimated Total and Average LPN FTEs by Setting

Setting	Average FTE Worked	Estimated Number of FTEs
Nursing Home / Extended Care / Assisted Living Facility	0.88	17,588
Home Health	0.79	6,619
Physician's Office	0.92	4,694
Hospital	0.91	4,542
Other	0.87	3,331
Correctional Facility	0.91	1,979
Ambulatory Care Setting	0.91	1,002
School Health Service	0.78	870
Community Health	0.90	687
Insurance Claims / Benefits	0.96	613
Public Health	0.91	387
Temporary Agency	0.64	262
Healthcare Consulting / Product Sales	0.91	129
Academic Setting	0.77	106
Occupational Health	0.91	102
Total FTEs		42,941

Regional LPN Growth and Supply

Florida’s LPN supply varies in size across the eight regions of the state used for Center analysis. Appendix B shows the county composition of each region. All regions except North Central gained a few hundred LPNs in the potential nurse workforce (Table 8). The North Central region’s decrease may be an artifact of the data. Tallahassee in Leon County appears to be a default address code for nurses who are not working in Florida, as many records had a Leon County zip code and an address indicator that they were not working in Florida. These records were therefore removed from the data if they had no other county placement information, or were re-distributed to another county if additional county placement information was available.

Table 8. Trends in Potential LPN Workforce Growth by Region, 2006-07 to 2012-13

Region	2006-07 Potential LPN Workforce	2008-09 Potential LPN Workforce	2010-11 Potential LPN Workforce	2012-13 Potential LPN Workforce	Net Change, 2010-11 to 2012-13
Northwest	4,056	4,193	4,020	4,253	233
North Central	4,847	5,194	7,334	5,237	-2,097
Northeast	3,386	3,485	3,477	3,681	204
West Central	15,831	16,254	16,541	16,974	433
East Central	8,971	9,203	9,156	9,676	520
Southwest	3,215	3,424	3,476	3,726	250
Southeast	5,016	5,497	5,703	6,012	309
South	9,600	10,604	11,616	12,072	456

Accordingly, the rate of growth in the LPN workforce varies substantially across regions (Figure 9). Statewide, the potential LPN workforce grew by 0.5 percent over the two-year period. This percentage is heavily influenced by the decrease in the North Central region, which as previously stated may be an artifact of the data. On a regional basis, the Southwest region had the largest percentage growth at 7.2 percent.

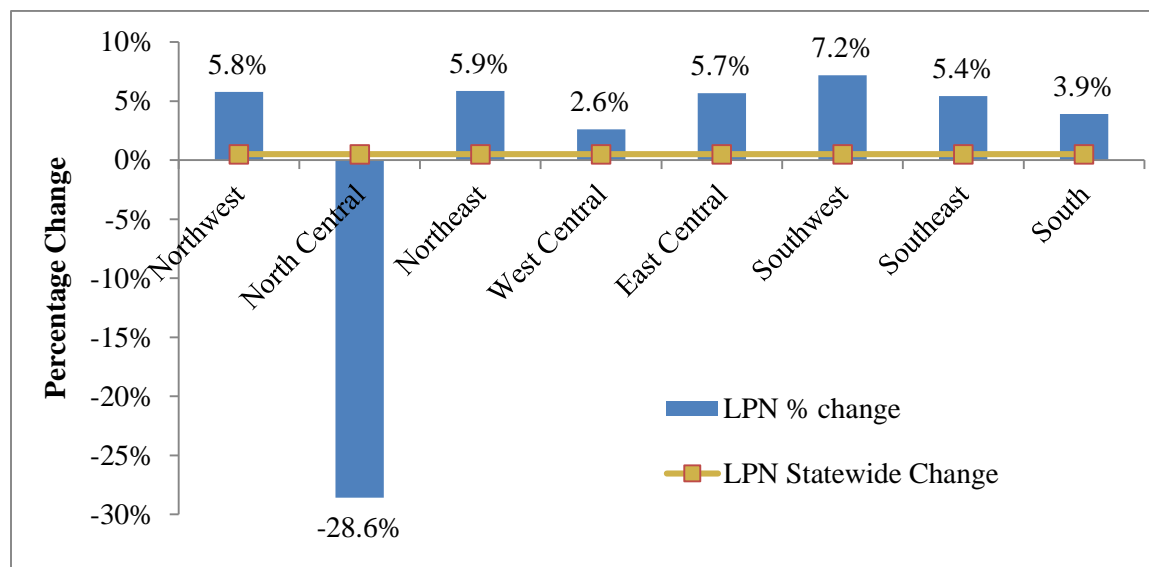


Figure 9. Growth in LPN Supply, 2010-11 to 2012-13, by Region

Growth in the number of nurses does not take into account the changing patient population driving the demand for healthcare. To better understand the nurse supply in relation to the population, we compared the number of working nurses (as of December 2013) to the size of the general population⁶ and the number of skilled nursing facility beds⁷ statewide and in each region.

We estimate that Florida has 264 LPNs employed in nursing for every 100,000 members of the general population as of December 2013, which is basically unchanged from the Center’s last

report. As Figure 10 shows, there is substantial regional variation. The Northwest, North Central, and West Central regions consistently have more employed LPNs per 100,000 (possibly influenced by higher employment at state correctional facilities) while the Northeast, East Central, and South regions are consistently below average.

When the number of LPNs is viewed in relation to the number of skilled nursing facility (SNF) beds, the variation is smaller. Statewide, there were 60.7 employed LPNs for every 100 SNF beds. This number varied from a low of 46 in the Northeast to a high of 75 in the South region, which was almost the same as our 2012 report.⁸ Note that the “LPNs per 100 SNF beds” metric does not account for the acuity of patients or the settings in which LPNs work in each region.

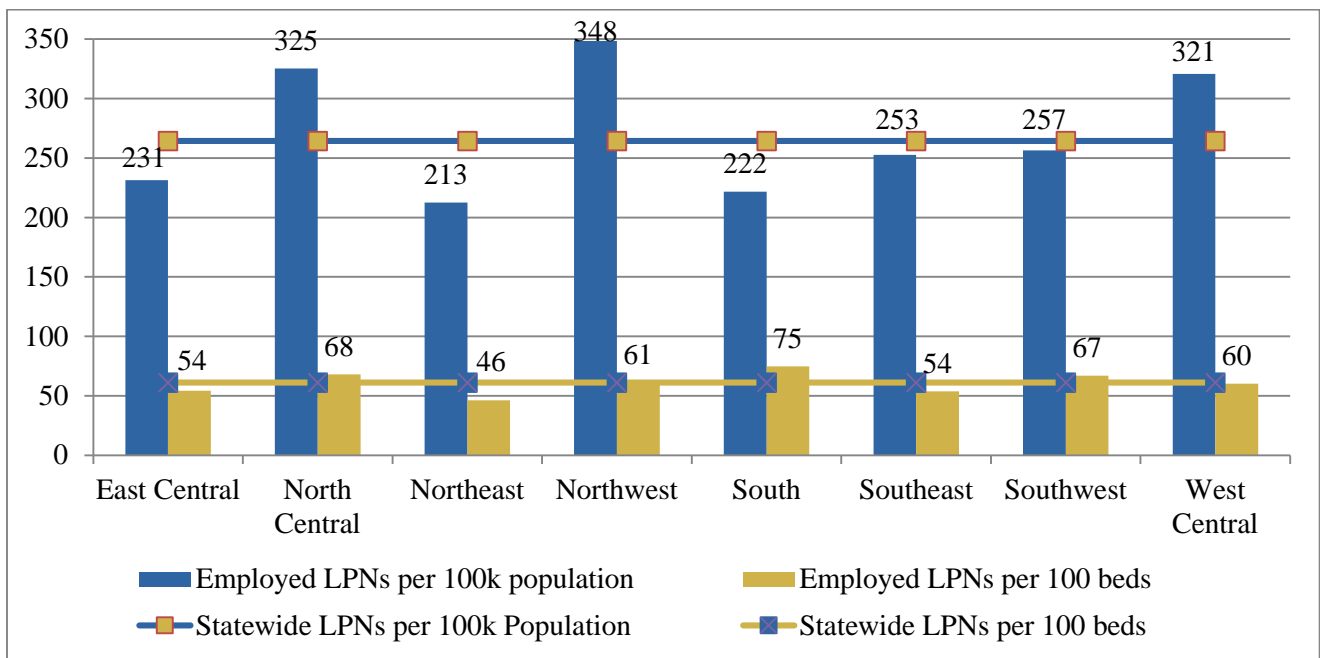


Figure 10. Employed LPNs per 100K Population and 100 SNF Beds

Conclusions and Recommendations

Florida’s LPN workforce trends are related to both the shifting workforce and population demographics, and to the continued economic difficulties facing the state. The supply of LPNs in Florida has essentially remained stagnant from 2011 to 2013. Florida’s LPNs have a workforce participation rate of 83 percent, about the same as in 2011, and six percent of LPNs reported trying to find a nursing job. About 78 percent of LPNs reported working full-time in 2013, and 13 percent reported working more than one job.

Florida’s LPN education programs have rapidly increased in number from 79 programs in 2007 to 154 in 2013, resulting in 9,413 new LPNs graduated in the past two academic years (2011-12 and 2012-13).^{4,9} As a result, we would have expected most of these new graduates to enter the LPN workforce as new licensees by exam. However, the data show that only about 80% or 7,500 LPNs applied for a license by exam from 2012-2013. The reasons are unclear why fewer LPNs

than expected entered the workforce, it is possible that some did not pass the NCLEX exam, and others may have applied for an LPN license in another state instead.

LPN attrition has increased by over 2,000 people during this last renewal cycle, and the overall number of LPNs who left the workforce is almost equal to the number who entered the workforce. The result was a net gain of only 307 new LPNs into the workforce, more than 3,000 fewer than the prior licensure cycle. Most of the attrition is from LPNs failing to renew their license, an increase of about 2,000 more people than in 2011. LPNs who failed to renew may have moved out of state or retired, but further information on why LPNs leave the workforce is not available.

The percentage of LPNs employed within each industry remained about the same as in 2011, although the number of LPNs employed at hospitals decreased by over 1,100 while Home Health Care saw an increase of more than 500. The Center's Workforce Demand Report⁵ indicates home health care and possibly long-term care are the two industries that will have strong growth for LPNs. With 30% of the LPN workforce specializing in geriatrics, a growing elderly population in Florida, and reduced length of stay in acute care settings, long-term care and home health employment settings appear to be able to sustain long-term growth.

The small proportion of the youngest age group in the LPN workforce indicates need for caution and research into the future LPN supply. Although the youngest age group of LPNs is of adequate replacement size for the oldest age group, the influx of younger LPNs won't be able to replace the LPNs age 51 and older who are potentially leaving the workforce in the next 5-15 years. Fortunately, the percentage of the potential LPN workforce age 18-30 has been increasing, and the percentage of LPNs age 31-50 has remained steady over the past three renewal cycles. However, the number of new LPN graduates has declined from a peak of 5,136 in 2011-12 to 4,277 in 2012-13.⁴ The slowdown in growth of LPN graduates is also reflected in the slow growth rate of LPNs during the last renewal cycle. The Center's 2013 demand report found an increased number of vacancies in home health and estimated that over 1,700 new LPN positions would be created in Florida's home health industry in 2014.⁵ It is anticipated that demand for LPNs will also remain strong in the long-term care industry. The LPN workforce supply, potential for workforce growth through education, and projected future LPN demand by employers should be monitored to ensure that supply and demand are in alignment.

Recommendation 1: Encourage academic and industry collaboration to assure appropriate curriculum content in preparation to meet industry needs, specifically in the geriatric/gerontological area of practice and home health.

Long-term care and home health settings have demonstrated stability and growth of LPN positions, as the Center's demand reports consistently find strong future growth for LPNs in these settings. Forty-one percent of LPNs reported working in long-term care and 17% in home health, while 30% of LPNs identified geriatric/gerontological as their clinical area of practice. Demand for LPNs in hospital settings is decreasing, as evidenced by a decrease in the percentage of LPNs employed in hospitals from 12.4% to 10.1%, and the employer surveys also found no increase in future demand for LPNs in hospitals. Alignment of LPN curriculum with the needs of the home health and long-term care

industries would benefit LPN students and employers by training students in the industry-desired skills. With the anticipated increase in Florida's older population, the need for this skill set is critical.

Recommendation 2: Monitor the increasing trend of losses from the LPN workforce. Information is needed about the reasons LPNs are leaving the profession, which can be used to improve retention and help strategically plan and recruit LPNs for the future workforce.

About 2,000 more LPNs left the workforce during the past two years, relative to the 2010-11 renewal cycle. Although the number of LPN programs has increased, LPN workforce growth is essentially flat. There is currently no information about why LPNs are leaving the profession. Identifying the reasons people are leaving could identify areas that need improvement in order to retain LPNs, and help to plan and recruit LPNs.

Recommendation 3: Identify reasons for the discrepancy between the number of graduates of LPN programs and the number of LPNs passing the licensure exam and entering Florida's workforce.

Florida had 154 LPN education programs in 2013, and 9,413 new LPNs graduated in the past two academic years (2011-12 and 2012-13). The Board of Nursing data show that 7,500 LPNs applied for a license by exam from 2012-2013. This represents a shortfall of about 1,900 new LPN graduates (20%) that were expected to enter the Florida workforce, but did not. It is important for both schools and employers to determine why these LPNs who were educated in Florida did not enter the workforce.

Recommendation 4: Support the Center's research effort and analysis of workforce trends to assure the Center attains the best data on the supply of all types of nurses, and to maximize the use of limited resources.

As this report demonstrates, the value of information is more meaningful when there is evidence of repeated demonstration of outcomes and the ability to identify trends. The Center's data collection, analysis, and reporting provides an extremely valuable source of information for use by legislators, academics, industry representatives, nurse executives, workforce policy supporters and researchers, and other stakeholders. However, fiscal support of the ongoing program is critical to sustain this rich resource for Florida. The Center's status as a state entity brings with it access to state data collected by other agencies and increased credibility that may not be available to an independent entity or one supported by a proprietary organization.

Acknowledgements:

The Florida Center for Nursing wishes to thank all of the nurses who took the time to complete the Center's survey. We also wish to thank our partner state entities, the Florida Board of Nursing and Medical Quality Assurance, for their assistance with the data collection. This research would not be possible without their valuable contributions.

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Appendix A: Data Tables

Table A1. Components of Net Change in the Potential LPN Workforce, 2012-2013

	# of LPNs
Total Gains to Potential Workforce	11,057
Total Losses from Potential Workforce	10,750
Net Change in the Potential Workforce	307

Note: The difference between gains and losses does not precisely equal net change due to the complexity of tracking individual nurses.

Table A2. Comparison of Working and Not Working LPNs

	Working	Not Working
Race/Ethnicity	%	%
White	52.8	64.9
Black	31.0	19.6
Hispanic	10.5	9.5
Asian	2.4	2.0
Native American	0.3	0.4
Other	3.1	3.6
Gender	%	%
Female	89.9	91.2
Male	10.1	8.8
Age	%	%
18-30	13.1	11.6
31-40	23.0	16.0
41-50	26.8	19.9
51-60	24.8	24.7
61 or older	12.2	27.8

Table A3. Race/Ethnicity of Employed LPNs by Age Group

Race/Ethnicity	Age 18-30	Age 31-40	Age 41-50	Age 51-60	Age 61+
White	43.0%	41.5%	50.2%	62.9%	69.4%
Black	33.5%	39.2%	34.1%	24.1%	20.1%
Hispanic	17.6%	13.8%	10.5%	6.7%	4.6%
Asian/Pacific Islander	2.9%	2.3%	2.2%	2.5%	2.0%
Other	3.0%	3.2%	2.9%	3.9%	3.8%

Table A4. Trends in LPN Workforce Demographics, 2009-2013

	LPN Workforce			Florida Population
	2009	2011	2013	
Age Categories	%	% ^a	%	% ^a
18-30	10.2	10.6	13.1	16.7
31-40	23.1	22.4	23.0	15.8
41-50	26.7	26.5	26.8	18.5
51-60	26.5	26.1	24.8	17.8
61 or older	13.5	14.4	12.2	31.1
Average Age	46.7	46.8	45.6	N/A
Gender	%	%	%	% ^b
Female	91.0	90.5	89.9	51
Male	9.0	9.5	10.1	49
Race/Ethnicity	%	%	%	% ^b
White	58.8	55.4	52.8	57.9
Black	29.0	27.9	31.0	15.2
Hispanic	8.2	9.3	10.5	22.5
Asian	2.2	2.3	2.4	2.4
Native American	0.3	0.3	0.3	0.3
Others	1.6	4.8	3.1	1.9

Florida Population Data: 2010 Census Data from the Office of Economic and Demographic Research. Accessed May 27, 2014.

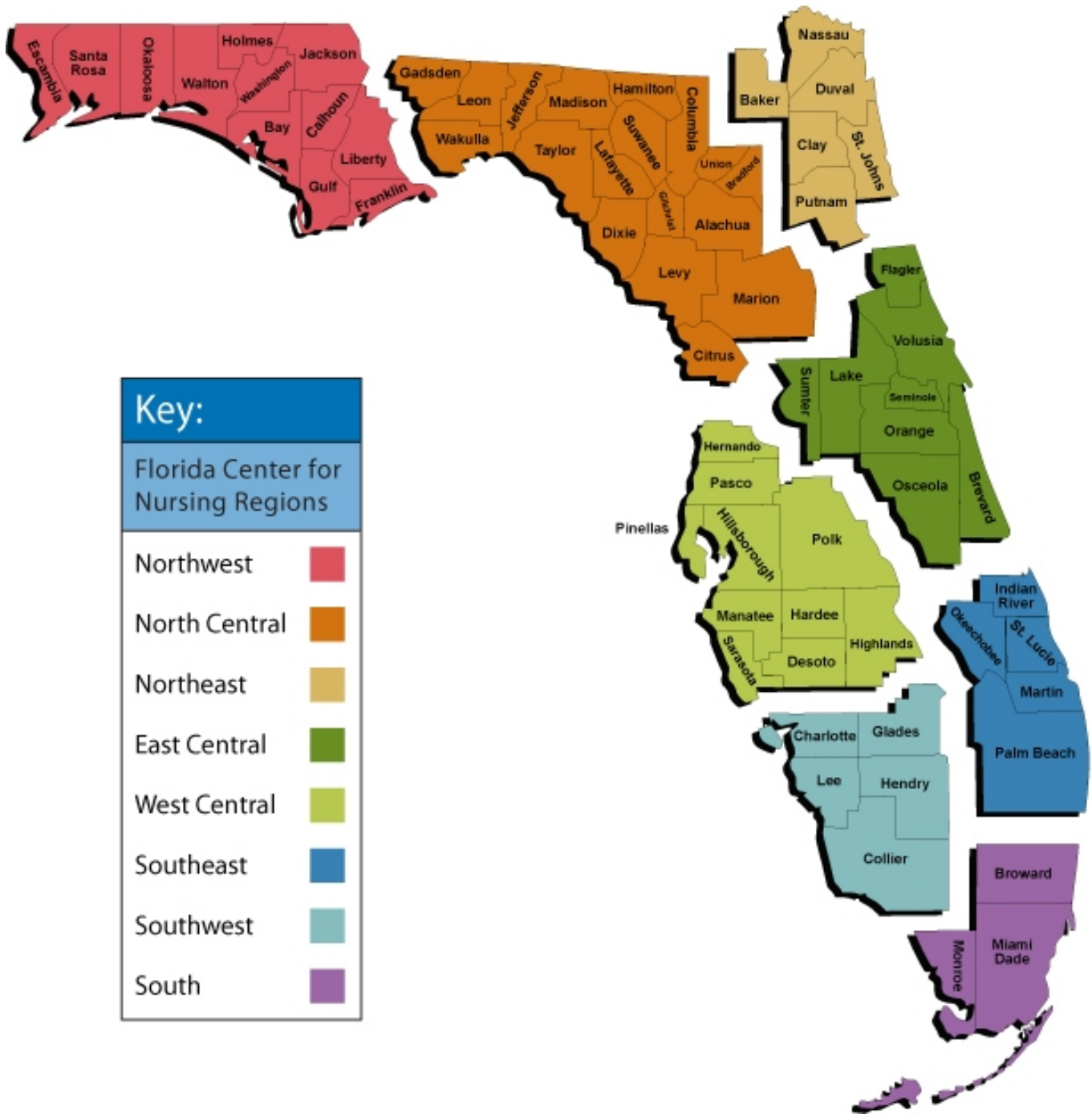
^a Florida Population by Age Group, http://edr.state.fl.us/Content/population-demographics/data/Medium_Projections_ARSH.pdf. Age groups of FL data were slightly different: 18-29, 30-39, 40-49, 50-59, 60+ years.

^b [Table 3C - Total Population by Race and Hispanic or Latino: April 1, 2010; All Places by County in Florida.](#)

Table A5. LPN Age Distribution (%) in Each Healthcare Setting

	18-30	31-40	41-50	51-60	61 or older
Academic Setting	6.5	17.1	33.3	27.6	15.4
Ambulatory Care Setting	9.7	20.0	27.5	30.6	12.2
Community Health	15.0	25.3	28.1	22.2	9.3
Correctional Facility	13.4	26.2	28.0	23.1	9.3
Consulting / Sales	7.1	22.2	34.9	27.0	8.7
Home Health	11.4	21.4	28.1	25.4	13.7
Hospital	10.9	20.5	27.0	28.4	13.2
Insurance	6.3	26.5	30.2	26.5	10.5
Long-Term Care	14.9	24.2	26.7	22.9	11.3
Occupational Health	7.1	20.2	25.3	37.4	10.1
Other	10.4	21.0	24.5	27.8	16.3
Physician's Office	15.6	23.4	25.6	24.5	11.0
Public Health	10.0	30.0	40.0	20.0	0.0
School Health Service	13.4	21.0	31.8	23.9	10.0
Temporary Agency	9.4	22.2	24.3	28.4	15.8

Appendix B: County Composition of FCN Regions



Key:	
Florida Center for Nursing Regions	
Northwest	■
North Central	■
Northeast	■
East Central	■
West Central	■
Southeast	■
Southwest	■
South	■