

2012 Indiana Licensed Practical Nurse Licensure Survey Report

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Executive Summary

Introduction

This is the first technical report describing the licensed practical nurse (LPN) workforce in Indiana. In addition to describing the LPN workforce, this report compared LPNs to Indiana's registered nurse (RN) workforce. The data in this report will serve as a baseline for future analyses of the LPN workforce in Indiana. In the 2012 LPN licensure period, there were 26,755 total LPNs currently licensed in Indiana. The overall response rate for the 2012 Indiana LPN Licensure Survey was 94.2 percent. Of the 26,755 licensed LPN's, individuals included for analysis: (1) actively working in nursing; (2) responded to the electronic survey, and (3) gave an Indiana practice address on their survey. A total of 16,937 LPNs included in the sample for analysis met these three criteria. Therefore, the sample analyzed (16,937 LPNs) in this report represents 63.3 percent of the total number of active LPN licenses in Indiana (26,755 LPNs). When the mean age and length of licensure was compared between LPNs included in the sample and those who listed an Indiana address on their license but did not respond to the survey it was found that individuals in the sample were younger ($p < 0.001$) and had been licensed for a shorter period of time ($p < 0.001$).

Responses to the 2012 LPN Licensure Survey

The majority of the sample was white (86.0%), non-Hispanic (97.8%), and female (94.5%). LPNs were evenly distributed between the ages of 26 and 65, but were slightly skewed toward younger respondents (49.2% were between 26 and 45 years old and 45.2% were between 46 and 65). The most common work setting identified by LPNs was in the long-term/extended care environment. Most LPNs reported working 40 or more hours per week.


Maps of LPN Distribution by County

The most populated counties also tended to have the highest numbers of LPN FTEs as measured by the principal practice location provided by LPNs' survey responses. However, less populated, rural counties had a higher ratio of LPNs to population. Comparing practice locations that LPNs reported in their survey responses and addresses listed on LPNs' licenses revealed that there was a 64.0 percent agreement between the counties of each address.

Maps that displayed the distribution of LPN license addresses resulted in different numbers of providers, but the overall distribution trend remained similar to that of the sample that was analyzed using survey data.

Conclusion

The high response rate (94.2%) to the report indicates that a large sample of the LPN workforce was captured by the survey. However, only 63.3 percent of all licensed LPNs in Indiana were included in the analysis. LPNs were mostly white, non-Hispanic females who worked 40 or more hours per week in a long-term care environment. The data presented in this report will serve as a baseline for future comparisons with Indiana's LPN and RN workforces.

 **Chapter 1: Introduction**

Understanding the status of Indiana’s healthcare workforce is critical to ensuring that Indiana residents have access to high quality care, developing programs that train practitioners to meet future needs, and recruiting and retaining healthcare professionals in Indiana. The purpose of this report is to provide a description of Indiana’s licensed practical nurse (LPN) workforce. This is the first such report on the status of Indiana’s LPN workforce and will serve as a baseline to measure changes in the LPN workforce moving forward.

The Indiana Professional Licensing Agency (IPLA) implements the Indiana LPN Licensure Survey as part of its biennial renewal process. All LPNs that renewed their license electronically were asked to complete a voluntary survey instrument. A copy of the survey instrument can be found in *Appendix I*. This report summarizes the responses to the 2012 Indiana LPN Licensure Survey.

The sample of the Indiana LPN workforce that is analyzed in this report represents only a portion of the full LPN workforce in Indiana. Furthermore, the sample analyzed in this report may not be representative of the LPN workforce as a whole.

There were 26,755 total LPN license renewals completed in 2012. Of these renewal applicants, 25,197 responded to the licensure survey. Of the 25,197 who completed the survey, 21,822 provided an Indiana practice address on the survey. From the 21,822 LPNs that responded to the survey and listed an Indiana practice address, 16,937 (77.6%) were included in the analysis in this report. Those who were not included in the report indicated that they were not currently working in a paid position in nursing (refer to Table 1.4). Therefore, the sample represents 63.3 percent of the total LPN workforce which practices in Indiana.

Although data gathered from survey questions were not available for individuals who did not respond to the survey, some data were still available for non-responders based on licensing information. Licensee data contained both LPNs’ age and length of licensure. Both of these data points were compared between individuals who were included in the sample and those who listed an Indiana address on their license, but did not respond to the survey.

Table 1.1 shows the mean age for LPNs included in the analysis sample and those who had an Indiana license address, but did not respond to the survey. Individuals who responded to the survey were younger than non-responders (p-value < 0.001).

Table 1.1 Comparison of Mean Age of Survey Responders and Non-Responders

Age	N	Mean	Std. Dev.
Sample	16,319	45.0	11.6
Non-responders	7,937	49.1	14.2
P-value	< 0.001		

Table 1.2 shows the average time licensed for individuals included in the analysis sample and those who had an Indiana license address, but did not respond to the survey. Survey non-responders had been licensed longer than LPNs included in the analysis sample (p-value < 0.001).

Table 1.2 Comparison of Mean Time of Licensure of Survey Respondents and Non-Respondents

Time Licensed	N	Mean	Std. Dev.
Sample	16,331	14.1	11.0
Non-responders	7,228	18.4	13.2
P-value	< 0.001		

Nomenclature

There are several terms that have specific definitions within the context of this report. “2012 Indiana LPN Licensure Survey” refers to the survey that LPNs are offered during the license renewal process and from which the data presented in this report were extracted. “Respondents” refers to LPNs that responded to the licensure survey and met the inclusion criteria for analysis (listed above). “Licensees” refers to *all* licensed LPNs regardless of their inclusion in the analysis dataset.

Methods

The data used to generate this report were extracted from the 2012 Indiana LPN Licensure Survey dataset collected by the IPLA and the LPN license dataset maintained by the IPLA. The 2012 Indiana LPN Licensure Survey instrument included questions on current work status, principle practice location, activities performed in the principle practice location, position title, principal practice setting, average hours worked, and demographic information. The data provided by the IPLA included the date of birth for all LPNs who were practicing in Indiana at the time of the survey. The datasets were merged in order to match the respondents' approximate age to his or her survey responses. The datasets were merged by matching the license number of each LPN using SAS 9.3 and age was calculated using September 30, 2012 as a reference point since surveys were completed from August 31, 2012 through October 31, 2012. The merged dataset was then used to filter the records to include only the respondents who met the inclusion criteria.

Inclusion and Exclusion Criteria

The merged dataset was filtered initially to include only LPNs with an active or probationary license and who reported an Indiana zip code for their primary practice location. Almost all of the respondents who reported Indiana as their primary practice location held an active Indiana license (refer to Table 1.3).

Table 1.3 Current License Status

LPN License Status	Number	Percent
Active	21,501	98.5
Probation	239	1.1
Other	82	0.4
Total	21,822	100.0

The dataset was further refined by work status. Only those LPNs who were currently practicing in Indiana were included in the analysis. LPNs who were actively working in a position other than nursing, working only on a non-paid basis, retired, temporarily inactive, currently unemployed, or practicing outside Indiana were excluded from the analyses. A total of 16,937 LPNs (77.6%) were selected for inclusion (refer to Table 1.4).

Table 1.4 Current Work Status

LPN Work Status	Number	Percent
Excluded from Dataset		
Temporarily inactive as a nurse	1,414	6.5
Unemployed and seeking work as a nurse in Indiana	1,040	4.8
Retired or permanently inactive as a nurse	707	3.2
Actively working in a paid position in health care but not in nursing	543	2.5
Actively working, but not as a nurse or in health care	339	1.6
Working in nursing, but ONLY on a non-paid basis (volunteer or religious)	246	1.1
Actively working in a paid position related to nursing, but primarily outside of Indiana	146	0.7
Did not respond to this survey question	450	2.1
Total Excluded from Dataset	4,885	22.4
Included in Dataset		
Actively working in a paid position related to nursing and primarily practicing in Indiana	16,937	77.6
Total Included in Dataset	16,937	77.6
Total Indiana-based Survey Respondents	21,822	100.0

Maps of Indiana Licensed Practical Nurse Workforce

Chapter 4 contains maps that display the distribution of the LPN workforce in Indiana. Maps 4.1 and 4.2 utilize data gathered from the licensure survey to estimate the number of LPN FTEs in each county. Because these maps are drawn from survey data, they only contain LPNs who responded to the survey and met the inclusion criteria for the analysis. Therefore, these maps display only a portion of the Indiana LPN workforce. Maps 4.1 and 4.2 display LPN FTEs rather than a simple headcount because not all respondents indicated that they worked full-time in patient care activities. Thus, measuring the number of LPN FTEs per county provides a more accurate picture of the availability of LPNs for the communities of each county. Each respondent had an FTE assigned to them based on their survey response indicating the average number of weekly hours spent in all nursing related activities (refer to Table 1.5). LPNs who worked more than 40 hours per week were still only given an FTE of 1.0 to maintain consistency with other workforce studies reports. Individuals who did not indicate the average number of hours worked per week were assigned an FTE of 1.0.

Maps 4.3 and 4.4 also show the distribution of Indiana LPNs, but instead of using the principal practice location provided in the licensure survey these maps were drawn from licensure data. Because this information is available for *all* LPNs these maps show the distribution of all licensed LPNs with an Indiana address. However, it should be noted that the license address listed for each LPN may not be their practice location (some licensees listed their home address). Therefore, the counts of LPNs in each county are only estimates of the actual number of LPNs. Furthermore, since there is no information on hours spent in patient care for LPNs who did not respond to the survey, Maps 4.3 and 4.4 show the headcount, not FTE's of LPNs in each county. For more information on the agreement between survey and licensure data please see the tables in Chapter 4.

Table 1.5 FTE Definition for LPNs

Average Weekly Hours Spent in Nursing	FTE
1 - 9	0.25
10 - 19	0.50
20 - 29	0.75
30 - 39	1.00
40 - 49	1.00
50 - 59	1.00
60 or more	1.00

Response Rate

Although only LPNs who met the inclusion criteria were included in the analysis of this report, the denominator used for determining the survey response rate was based on the total number of LPNs who renewed their licenses from August 31, 2012 to October 31, 2012 (refer to Table 1.6). The response rate for the survey was calculated by dividing the number of LPNs who renewed their license electronically and responded to at least one question on the survey by the total number of renewals. The response rate was 94.2 percent.

Table 1.6 Survey Response Rate

Survey Response Rate	Number	Percent
Renewed electronically and responded to the survey	25,197	94.2
Total LPN license renewals in 2012	26,755	

Data Analysis

Frequency and cross-tabulation analyses were performed to describe the characteristics of LPNs within Indiana. The data were coded in Microsoft Excel 2007[®] and analyzed using SAS 9.3 and IBM SPSS Statistics 20. Graphic Information Systems (GIS) maps were developed to illustrate the estimated number of LPN FTEs per Indiana county, the ratio of LPN FTEs per 100,000 residents, and delineate rural and non-rural counties. Rural counties were defined by the United States Department of Agriculture as non-metropolitan counties and were designated by hash marks on the map. The GIS maps were designed in ArcGIS[™] 9.3.

Chapter 2: Responses to the 2012 Indiana Licensed Practical Nurse Survey

This chapter summarizes responses to items on the 2012 Indiana LPN Licensure Survey. Caution should be taken when making generalizations about all Indiana LPNs. The data shown may not be representative of all LPNs in Indiana since LPNs that renewed their license by paper, as well as those who did not respond to the electronic survey or did not meet inclusion criteria, are not included in analysis sample. Each table shows the number of valid and missing responses to each survey item and the percentage of valid responses. The tables and text describe the responses to the survey.

Demographic Composition

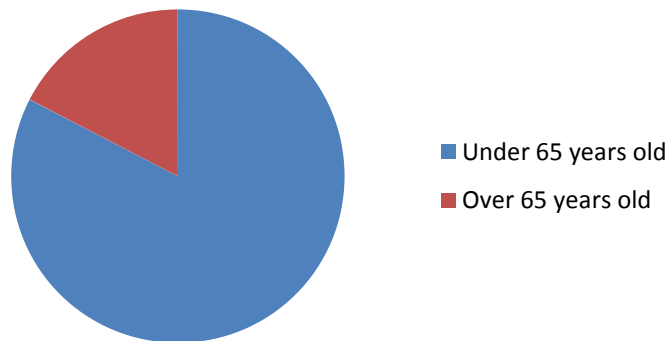
The demographics shown include age, gender, race, and ethnicity of survey respondents. Race and ethnicity are considered separately in this analysis because an individual of any race can be considered Hispanic. The ages of survey respondents are shown in Table 2.1 distributed into 10 year categories. Respondents' ages were evenly distributed between 26 and 65 years old (with a slightly higher proportion of respondents in the middle of this age range). Very few respondents were less than 25 or greater than 65 years of age.

Table 2.1 Age of Respondents

Age Groups	Number	Percent
Under 25	397	2.3
26 - 35	3,651	21.6
36 - 45	4,677	27.6
46 - 55	4,236	25.0
56 - 65	3,414	20.2
66 or older	550	3.2
Total	16,925	100.0
No Response Given	12	

Figure 2.1 displays the proportion of survey respondents who will be over age 65 in the year 2020. The purpose of this figure is to estimate the percentage of the current LPN workforce that will be reaching retirement age by 2020. Less than one-fifth (17.4%) of respondents will be over age 65 in the year 2020. This segment of the LPN workforce will need to be replaced by newly trained LPNs over the next decade.

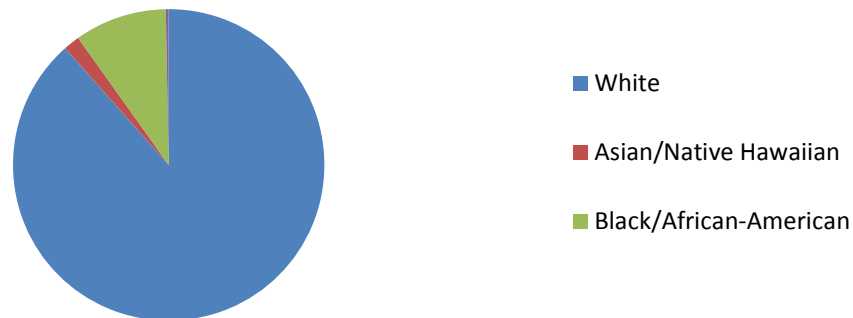
Figure 2.1 Age of Respondents in 2020*



**This data is available in tabular format in Appendix II.*

The racial distribution of Indiana's population is shown in Figure 2.2 as a comparison with the demographics from the analysis sample. Indiana population demographics are taken from the 2010 US census which is conducted every 10 years.¹ In addition to the racial distribution shown below, six percent of the population is of Hispanic ethnicity. These individuals are distributed across all races shown.

Figure 2.2 Racial Distribution of Indiana's Population*

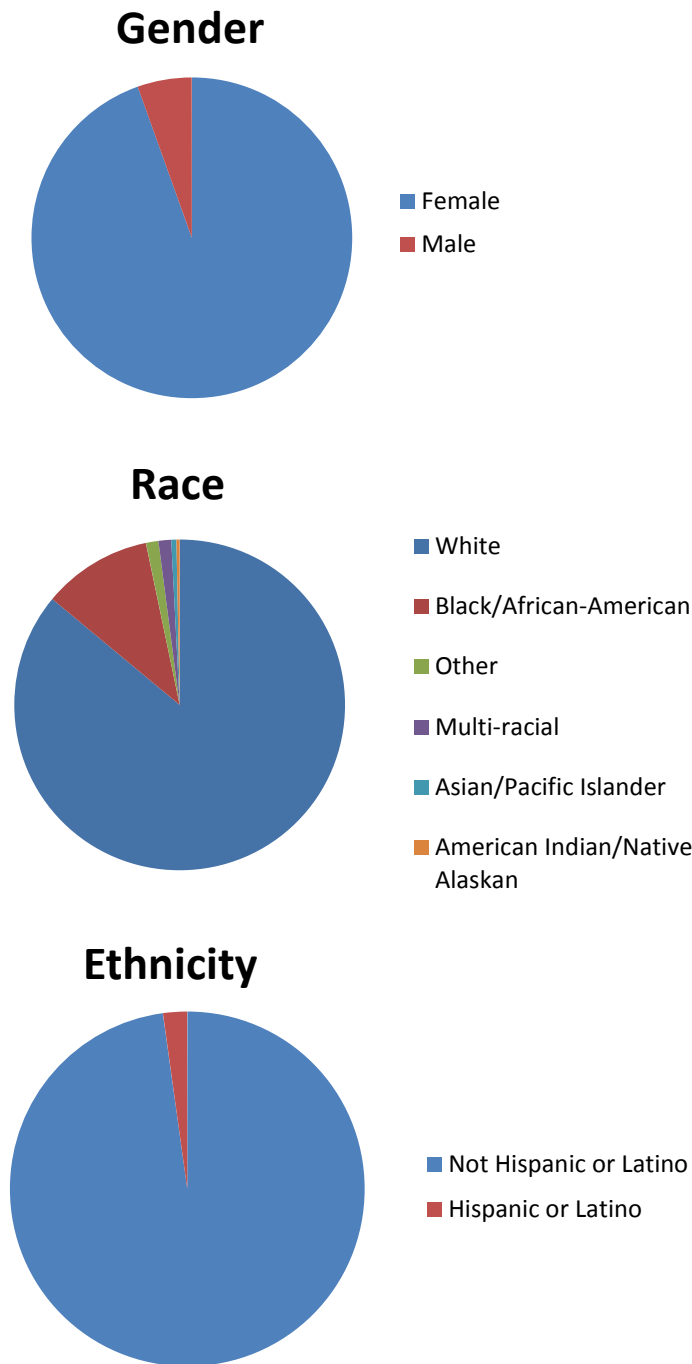


**This data is available in tabular format in Appendix II.*

¹ Source: 2010 US Census data. <http://2010.census.gov/2010census/>

The gender, racial, and ethnic distributions of respondents are provided in Figure 2.3. The majority of respondents to the 2012 Indiana LPN Licensure Survey were female (94.5%), white (86.0%), and non-Hispanic (97.8%).

Figure 2.3 Gender, Race, and Ethnicity of Survey Respondents*



**This data is available in tabular format in Appendix II.*

Table 2.2 shows the distribution of ethnicity among the races of survey respondents. Only a small proportion of survey respondents (2.2%) indicated that they were of Hispanic origin. Individuals of any race can be of Hispanic origin. Two-thirds (66.2%) of respondents who indicated that their race was “Other” were of Hispanic origin and over one-third (35.1%) of individuals who indicated that they were “Multi-racial” were of Hispanic origin.

Table 2.2 Ethnicity by Race of Survey Respondents

Race	Hispanic		Non-Hispanic		Total	
	Number	Percent	Number	Percent	Number	Percent
White	143	1.0	14,332	99.0	14,475	100.0
Black/African-American	19	1.1	1,775	98.9	1,794	100.0
Other	135	66.2	69	33.8	204	100.0
Multi-racial	72	35.1	133	64.9	205	100.0
Asian/Pacific Islander	0	0.0	85	100.0	85	100.0
American Indian/Native Alaskan	2	3.8	50	96.2	52	100.0
Total	371	2.2	16,444	97.8	16,815	100.0
No Response Given					122	

Education Characteristics

No information was collected on respondents’ current education level, but respondents were asked to indicate what (if any) nursing degrees they plan to pursue in the future (refer to Table 2.3). Respondents were allowed to list multiple degrees if they planned to pursue more than one degree so percents may not sum to 100. Respondents were most interested in earning a Bachelor’s degree in the future.

Table 2.3 Future Nursing Degrees Respondents Plan to Pursue

Future Degrees to be Pursued by Respondents	Number	Percent
Diploma	369	2.2
Associate	5,755	34.3
Bachelor's	6,376	38.0
Master's	2,057	12.3
Doctorate	349	2.1
I do not intend to pursue further nursing education	6,200	37.0
No Response Given	170	

Professional Characteristics

The information displayed in Table 2.4 shows the average number of hours respondents spent weekly in nursing related activities. The majority of respondents (57.2%) worked between 40 or more hours per week. Less than six percent (5.4%) of respondents worked under 20 hours per week.

Table 2.4 Average Number of Weekly Hours Worked by Respondents

Average Weekly Hours Spent in Nursing	Number	Percent
Less than 20	876	5.4
20 - 29	1,291	8.0
30 - 39	4,747	29.4
40 or more	9,232	57.2
Total	16,146	100.0
No Response Given	791	

Table 2.5 shows the number of LPN positions held by each respondent. The majority of respondents (89.6%) worked in only one position as an LPN. Almost 10 percent (9.7%) of respondents worked in two positions as an LPN.

Table 2.5 Number of Paid LPN Positions Held by Each Respondent

Number of Paid LPN Positions Held by Each Respondent	Number	Percent
1 paid position	15,126	89.6
2 paid positions	1,640	9.7
3 paid positions	104	0.6
4 or more paid positions	11	0.1
Total	16,881	100.0
No Response Given	56	

The principal position held by each respondent is displayed in Table 2.6. The most commonly held position was long-term care nurse (34.6%). Office nurses (14.8%) and staff/general nurses (11.6%) were the next most common positions held by respondents.

Table 2.6 Principal Work Position of Respondents

Principal Position	Number	Percent
Long-term Care Nurse	5,837	34.6
Office Nurse	2,502	14.8
Staff/General Nurse	1,952	11.6
Charge Nurse/Team Leader	1,926	11.4
Home Care Nurse	1,299	7.7
Other	686	4.1
Psychiatric Nurse	374	2.2
Case Manager/Care Coordinator	312	1.9
School Nurse	242	1.4
Head Nurse/Assistant Head Nurse	239	1.4
Prison Nurse	225	1.3
Hospice Nurse	130	0.8
Nurse Clinician	113	0.7
Continuing Education/Staff Development Nurse	103	0.6
Quality Assurance/Utilization Review Nurse	103	0.6
Occupational Health Nurse	101	0.6
Administrator	90	0.5
Critical Care Nurse	86	0.5
Operating Room Nurse	82	0.5
ER/ED Nurse	78	0.5
Public Health Nurse	66	0.4
Private Duty Nurse	59	0.4
Dialysis Nurse	58	0.3
Temporary Nurse Staffing Service	56	0.3
Researcher	43	0.3
Nursing Consultant	39	0.2
Faculty in a Nursing Program	33	0.2
Infection Control Nurse	19	0.1
Diabetes Educator	2	0.0
Total	16,855	100.0
No Response Given	82	

Table 2.7 displays the principal work setting of respondents. Long-term extended care facilities were the most common work setting (38.7%) by a large margin. Long-term acute care facilities were the second most common work setting (9.2%), followed by physician/dentist private offices (8.4%). Of the 36 different types of work settings listed by respondents, 21 had less than one percent of respondents.

Table 2.7 Principal Practice Setting of Respondents

Principal Practice Work Setting	Number	Percent
Long-term extended care facility	5,775	38.7
Long-term acute care facility	1,380	9.2
Physician/dentist private office	1,247	8.4
Home health care agency	1,175	7.9
Assisted living facility	835	5.6
Hospital (in-patient)	799	5.4
Primary care center	644	4.3
Other	324	2.2
Hospital (in & out patient)	320	2.1
Community health center/clinic	265	1.8
Prison	240	1.6
Ambulatory/outpatient care setting	234	1.6
School/college setting	232	1.6
Psychiatric in-patient facility	182	1.2
Hospital (out-patient)	177	1.2
Mental retardation facility	131	0.9
Mental health/addictions facility	118	0.8
Hospice	116	0.8
Private duty nursing	111	0.7
Occupational health setting	90	0.6
Hospital ER/ED	67	0.4
Urgent care center	59	0.4
Community mental health clinic	52	0.3
Federal agency	49	0.3
Insurance company	47	0.3
Hospital operating room	35	0.2
Adult day care	34	0.2
Public health department	28	0.2
Community substance abuse agency	27	0.2
State agency (other than health department)	27	0.2
Drug company	23	0.2
Research setting	23	0.2
Nursing education program	16	0.1
Continuing education/staff development	14	0.1
Non-residential care facility	14	0.1
Supplemental staffing agency	11	0.1
Total	14,921	100.0
No Reponse Given	2,016	

Chapter 3: Comparison of Registered Nurses and Licensed Practical Nurses

The LPN and RN workforces fulfill distinct roles within Indiana’s healthcare landscape, but are sufficiently related to warrant some comparisons. RNs renew their licenses in odd years and LPNs renew their licenses in even years, so the data presented in this chapter for Indiana licensed RNs was collected in 2011 and the data for LPNs was collected in 2012. The data presented for RNs can be found in more detail in the 2011 Indiana Registered Nurse Licensure Survey Report and only contains RNs who were included in the analysis in that report. The survey instrument for the 2011 Indiana Registered Nurse Licensure Survey Report can be found in *Appendix I*.

Demographic Comparison

The demographics of the samples of the LPN and RN workforces are presented in Tables 3.1, 3.2, and 3.3. The age distributions of RN respondents and LPN respondents are very similar. While both groups are evenly distributed from 26 to 65 years old, LPN respondents are concentrated in the middle of that age span and RN respondents are concentrated at the upper end of the span.

Table 3.1 Age Distribution of RNs and LPNs

Age Groups	LPNs		RNs	
	Number	Percent	Number	Percent
Under 25	397	2.3	1,966	3.7
26 - 35	3,651	21.6	11,212	21.0
36 - 45	4,677	27.6	12,829	24.0
46 - 55	4,236	25.0	14,817	27.7
56 - 65	3,414	20.2	11,057	20.7
66 or older	550	3.2	1,598	3.0
Total	16,925	100.0	53,479	100.0
No Response Given	12		112	

Table 3.2 shows the demographic distribution of Indiana's general population as a comparison with the demographics of the samples of the LPN and RN workforces. This data was collected during the most recent (2010) US census.

Table 3.2 Demographics of Indiana's Population (2010)

Indiana Demographic Information	Number	Percent
White	5,467,906	84.3
Asian/Native Hawaiian	104,822	1.6
Black/African-American	591,397	9.1
American Indian/Native Alaskan	18,462	0.3
Hispanic or Latino (of any race)	389,707	6.0
Total Population	6,483,802	

Table 3.3 shows the racial distribution of RN respondents and LPN respondents. LPN respondents were more racially diverse than RN respondents. Less than five percent (4.9%) of RN respondents were of a race other than white, while 14.0 percent of LPN respondents were non-white.

Table 3.3 Racial Distribution of RNs and LPNs

Race	LPNs		RNs	
	Number	Percent	Number	Percent
White	14,531	86.0	48,980	95.1
Black/African-American	1,807	10.7	1,758	3.4
Other	207	1.2	N/A	N/A
Multi-racial	207	1.2	564	1.1
Asian/Pacific Islander*	85	0.5	75	0.1
American Indian/Native Alaskan	53	0.3	111	0.2
Total	16,890	100.0	51,488	100.0
No Response Given	47		1,489	

The ethnicity of RN respondents and LPN respondents is presented in Table 3.4. Both groups had very low proportions of Hispanic or Latino respondents.

Table 3.4 Ethnicity of RNs and LPNs

Ethnicity	LPNs		RNs	
	Number	Percent	Number	Percent
Hispanic or Latino	371	2.2	889	1.8
Not Hispanic or Latino	16,459	97.8	49,700	98.2
Total	16,830	100.0	50,589	100.0
No Response Given	107		3,002	

Professional Comparison

The professional characteristics of LPN respondents and RN respondents include factors such as practice setting, principle work position, and average weekly hours spent in nursing activities. Unfortunately, the survey instruments for RNs and LPNs differed enough for questions regarding practice setting and average weekly hours spent in nursing that direct comparison in side-by-side tables could be misleading or simply incorrect. However, some general trends can still be drawn between the samples of the RN and LPN workforces regarding these questions.

The most commonly reported work setting among RN respondents was a short-term, non-federal, non-psychiatric hospital while the most commonly reported work setting among LPN respondents was a long-term/extended care facility. In general, RN respondents tended to work in acute care settings and LPN respondents tended to work in extended care facilities. The number of weekly hours spent in nursing activities was not notably different for RNs and LPNs; the majority of both professions work at or near full-time (40 hours per week).

The job titles of RN respondents and LPN respondents at their primary work position are listed in Table 3.5 (on the next page). While some positions were exclusive to either RNs or LPNs, there were many jobs in which both professions practiced. The most common position held by LPN respondents was long-term care nurse while the most common position held by RN respondents was staff nurse or direct care nurse.

Table 3.5 Primary Work Position Held by LPNs and RNs

Primary Work Position	LPNs		RNs	
	Number	Percent	Number	Percent
Long term care nurse	5,837	34.6	0	0.0
Office nurse	2,502	14.8	0	0.0
Staff Nurse or direct care nurse	1,952	11.6	28,943	54.6
Charge nurse/team leader	1,926	11.4	4,562	8.6
Home care nurse	1,299	7.7	0	0.0
Other	686	4.1	2,404	4.5
Psychiatric nurse	374	2.2	0	0.0
Case manager/care coordinator	312	1.9	1,980	3.7
School Nurse	242	1.4	1,063	2.0
Head nurse or assistant head nurse	239	1.4	1,254	2.4
Prison nurse	225	1.3	0	0.0
Hospice nurse	130	0.8	0	0.0
Nurse clinician	113	0.7	0	0.0
Continuing education/staff development nurse	103	0.6	0	0.0
Quality assurance/utilization review nurse	103	0.6	751	1.4
Occupational health nurse	101	0.6	0	0.0
Administrator	90	0.5	0	0.0
Critical Care Nurse	86	0.5	0	0.0
Operating room nurse	82	0.5	0	0.0
ER/ED Nurse	78	0.5	0	0.0
Public Health Nurse	66	0.4	329	0.6
Private duty nurse	59	0.4	0	0.0
Dialysis nurse	58	0.3	0	0.0
Temporary nurse staffing service	56	0.3	0	0.0
Researcher	43	0.3	212	0.4
Nursing consultant	39	0.2	361	0.7
Faculty in a nursing program	33	0.2	972	1.8
Infection control nurse	19	0.1	141	0.3
Diabetes educator	2	0.0	0	0.0
Advice/triage nurse	0	0.0	574	1.1
Certified Nurse-Midwife	0	0.0	60	0.1
Certified Registered Nurse Anesthetist (CRNA)	0	0.0	246	0.5
Clinical nurse specialist	0	0.0	608	1.1
Community Health Nurse	0	0.0	391	0.7
Informatics nurse	0	0.0	303	0.6
Instructor/lecturer	0	0.0	341	0.6
Legal nurse	0	0.0	83	0.2
Middle management/administration	0	0.0	2,278	4.3
No position title	0	0.0	1,011	1.9
Nurse Practitioner	0	0.0	1,970	3.7
Patient Educator	0	0.0	325	0.6
Senior management/administration	0	0.0	996	1.9
Staff development director	0	0.0	124	0.2
Staff educator or instructor in clinical setting	0	0.0	524	1.0
Surveyor/auditor/regulator	0	0.0	161	0.3
Total	16,855	100.0	52,967	100.0
No Response Given	82		624	

Chapter 4: Location of Licensed Practical Nurses by County in Indiana

The following maps display the *estimated* number of LPNs by county. Maps 4.1 and 4.2 utilize data drawn from the licensure survey question regarding an LPNs' principal practice location. These maps display LPN FTEs rather than a simple headcount because not all LPNs indicated that they spent all of their time in patient care. LPNs who work full time in patient care were considered one FTE, whereas LPNs who work less than full-time are given an appropriate proportion of a full FTE. FTEs in this report are based off of a LPNs' response to the survey question, "How many hours per week on average do you spend in all nursing related activities?" Table 4.1 shows how FTEs were assigned to LPN respondents based on the average number of hours worked per week.

Table 4.1 FTE Calculation for LPNs

Average Number of Weekly Hours	FTE
1 - 9	0.25
10 - 19	0.50
20 - 29	0.75
30 - 39	1.00
40 or more	1.00

Maps 4.3 and 4.4 also display the estimated number of LPNs by county, but are drawn from licensing information rather than survey response. The benefit of this approach is that all LPN licensees provide an address on their license and, therefore, information on the location of each LPN licensee can be shown rather than just a sample of the Indiana LPN workforce. However, some of the addresses listed on LPNs' licenses may not be their practice location, so these maps are still only estimates of the total number of LPNs in each county. Since these addresses were not taken from the survey (and some individuals did not respond to the survey), there was no information available on the number of hours each LPN licensee spent in patient care. Therefore, Maps 4.3 and 4.4 list the raw number of LPNs in each county rather than the number of LPN FTEs.

Since individuals who responded to the licensure survey had a principal practice location (from their survey) and a license address (listed on their licensing information), Table 4.2 shows

the agreement between the addresses provided in survey responses and those provided on licensure information.

The proportion of individuals included in the sample whose county of principal practice address (taken from survey data) matched the county of the address listed on their license is displayed in Table 4.2. Overall, 64.0 percent of individuals in the sample had a principal practice address that was in the same county as their license address.

Table 4.2 Comparison of Address between Survey and License Information

County Match	Number	Percent
Yes	10,454	64.0
No	5,877	36.0
Total	16,331	100.0
No Response Given	0	

The number of LPN FTEs and LPN FTEs per 100,000 population for each Indiana county is listed in Table 4.3. This table follows Maps 4.1 and 4.2. The number of LPN licensees and LPN licensees per 100,000 population for each Indiana county is listed in Table 4.4. This table follows Maps 4.3 and 4.4. Tables 4.3 and 4.4 indicate which counties are considered urban and rural. County rurality was determined by the US Department of Agriculture's Rural-Urban Continuum Score which ranks counties from 1 to 9. Counties with a ranking of 1 through 3 are considered urban and counties with a ranking of 4 or higher are considered rural. Table 4.5 compares the number of LPN respondents located in each county based on survey information and the number of LPN licensees in each county based on licensing information.

Table 4.5 compares the address data gathered from the 2012 LPN Licensure Survey and the address data taken from licensing data. The 'Sample' column shows the headcount of LPN respondents in each county according to the principal practice location indicated in survey responses. This information differs from the information displayed in Maps 4.1 and 4.2 and the information listed in Table 4.3 because it provides a count of LPN respondents in each county, not LPN respondent FTEs. The 'License' column shows the headcount of LPN licensees in each county according to the address listed on each LPN's license information.

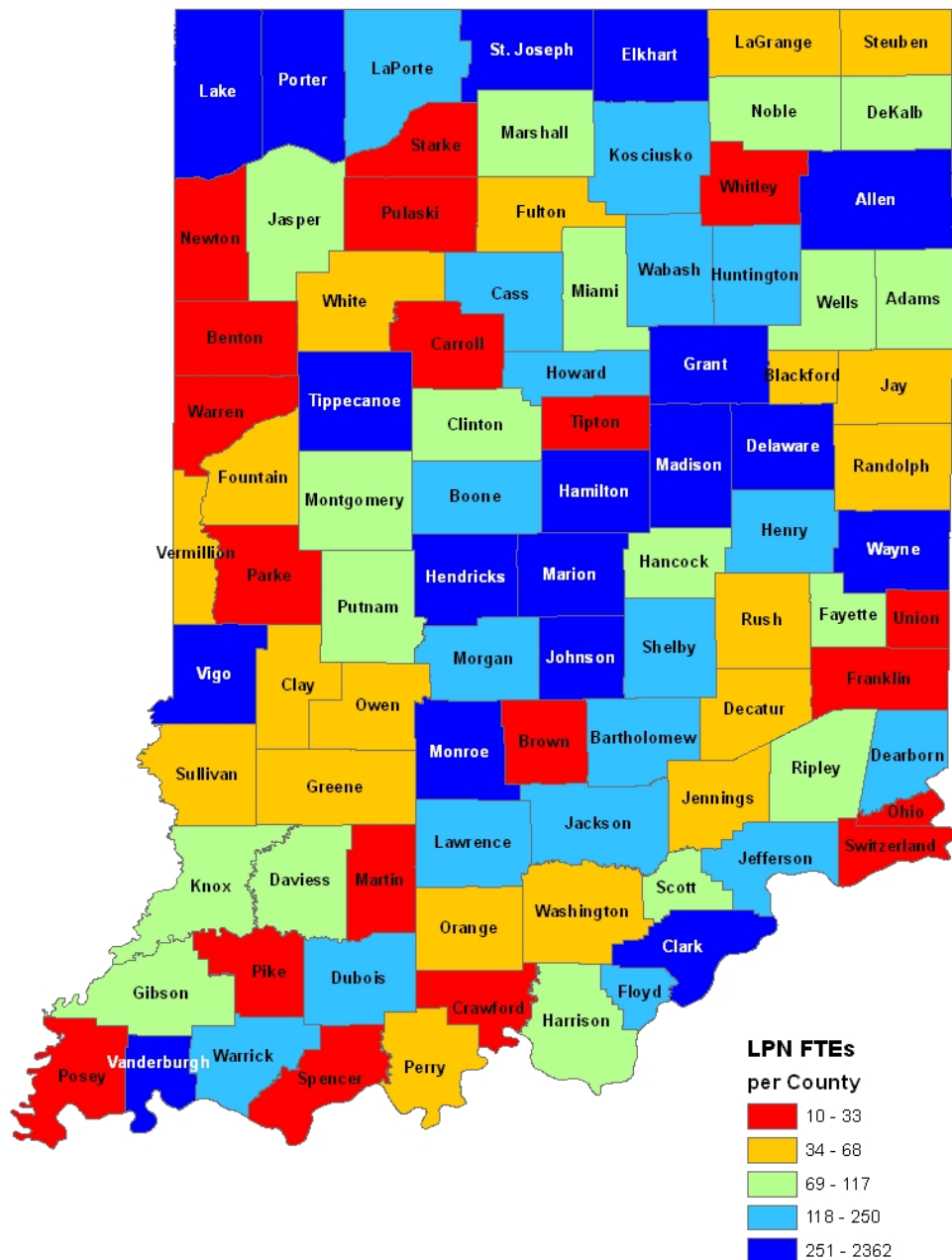
The 'Difference' column subtracts the 'Sample' column from the 'License' column. Therefore, counties with a positive value in the 'Difference' column had more LPN licensees in

the county than survey respondents who indicated that they practiced in the county; counties with a negative number had a higher number of survey respondents indicate that they practiced in that county than LPN licensees whose license listed an address for that county; and counties with a zero in the 'Difference' column had the exact same number of licensed LPNs and surveyed LPNs.

The 'Sample Percent of License' column displays the percentage of each county's licensed LPNs that are accounted for by the surveyed LPNs. Therefore, counties with less than 100 percent had less LPN survey respondents than LPN licensees and counties with greater than 100 percent had more surveyed LPNs than licensed LPNs.

Map 4.1 shows the estimated number of LPN survey respondent FTEs in Indiana counties. The most populated urban counties had a higher number of LPN FTEs, but some less populated, rural counties also had high numbers of LPN FTEs. Counties with the highest number of LPN FTEs included Allen, Clark, Delaware, Elkhart, Hamilton, Hendricks, Lake, Madison, Marion, Monroe, Porter, St. Joseph, Tippecanoe, Vanderburgh, Vigo, and Wayne Counties.

Map 4.1 Estimated FTEs of LPNs in Indiana Counties



Map 4.2 shows the estimated number of LPN survey respondent FTEs per 100,000 population by county. Counties with the highest ratios per 100,000 included Allen, Cass, Dearborn, Delaware, Dubois, Elkhart, Fayette, Floyd, Grant, Henry, Huntington, Jackson, Jefferson, Scott, Vanderburgh, Vigo, and Wayne counties. This distribution is surprising as some of the most populated counties such as Lake, Marion, and St. Joseph are not among the counties with the highest ratios of LPN FTEs per population.

Map 4.2 Estimated FTEs of LPNs per 100,000 Population in Indiana Counties

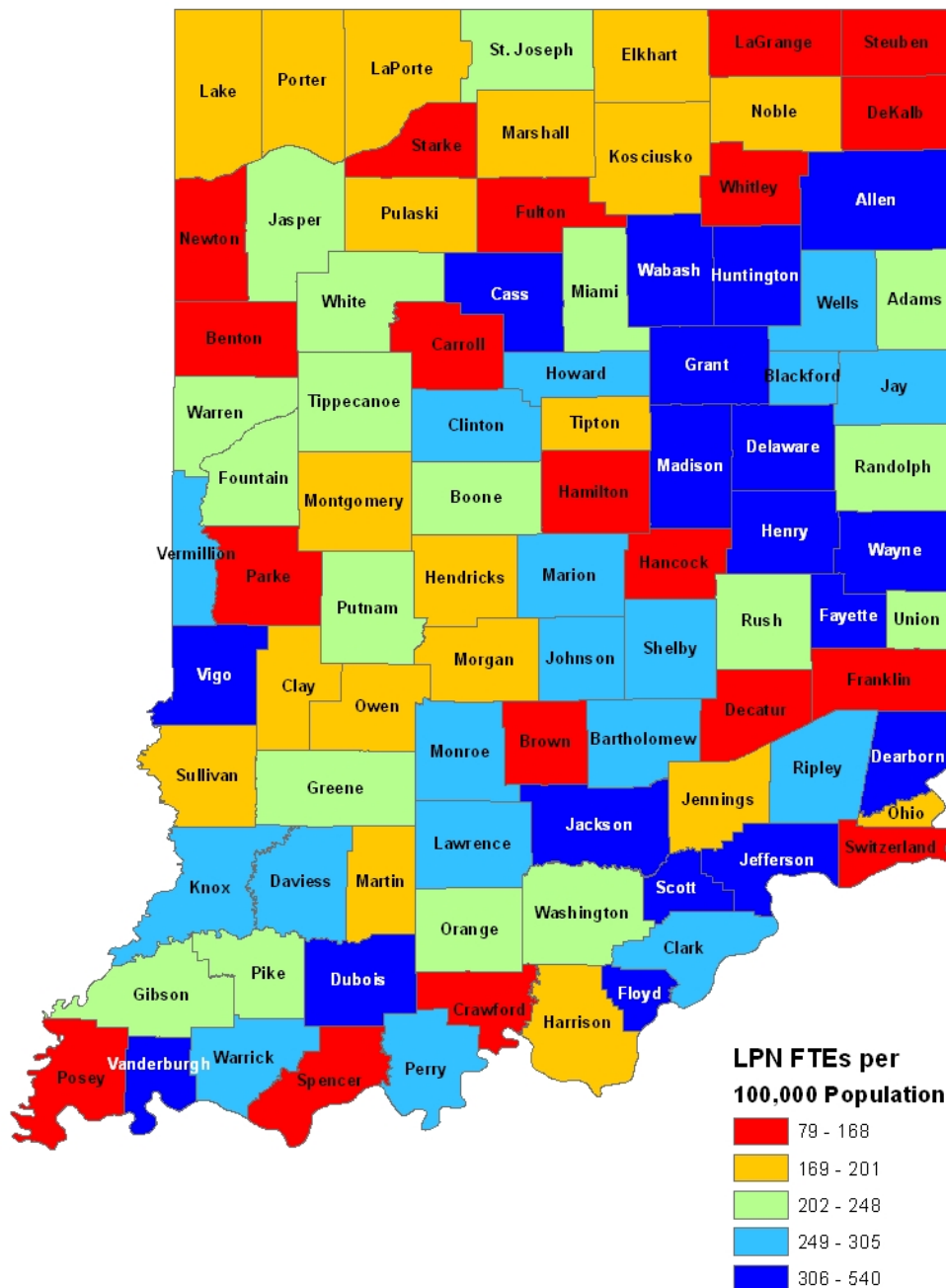


Table 4.3 LPN FTEs by Indiana County

County	Rurality	LPN FTEs	2010 Population	FTEs per 100,000 Population
Adams	Rural	76.25	34,387	221.7
Allen	Urban	1,181.75	355,329	332.6
Bartholomew	Urban	219.50	76,794	285.8
Benton	Urban	11.00	8,854	124.2
Blackford	Rural	34.00	12,766	266.3
Boone	Urban	132.75	56,640	234.4
Brown	Urban	24.75	15,242	162.4
Carroll	Urban	16.00	20,155	79.4
Cass	Rural	137.75	38,966	353.5
Clark	Urban	328.75	110,232	298.2
Clay	Urban	53.25	26,890	198.0
Clinton	Rural	88.50	33,224	266.4
Crawford	Rural	15.75	10,713	147.0
Daviess	Rural	79.75	31,648	252.0
DeKalb	Rural	81.75	50,047	163.3
Dearborn	Urban	129.75	25,740	504.1
Decatur	Rural	67.00	42,223	158.7
Delaware	Urban	426.50	117,671	362.5
Dubois	Rural	150.25	41,889	358.7
Elkhart	Urban	343.75	197,559	174.0
Fayette	Rural	89.50	24,277	368.7
Floyd	Urban	250.25	74,578	335.6
Fountain	Rural	38.00	17,240	220.4
Franklin	Urban	33.75	23,087	146.2
Fulton	Rural	34.25	20,836	164.4
Gibson	Urban	72.50	33,503	216.4
Grant	Rural	283.00	70,061	403.9
Greene	Urban	68.25	33,165	205.8
Hamilton	Urban	448.75	274,569	163.4
Hancock	Urban	117.75	70,002	168.2
Harrison	Urban	71.50	39,364	181.6
Hendricks	Urban	276.00	145,448	189.8
Henry	Rural	155.50	49,462	314.4
Howard	Urban	230.00	82,752	277.9
Huntington	Rural	129.50	37,124	348.8
Jackson	Rural	133.25	42,376	314.4
Jasper	Urban	81.00	33,478	241.9
Jay	Rural	65.00	21,253	305.8
Jefferson	Rural	140.00	32,428	431.7
Jennings	Rural	51.00	28,525	178.8
Johnson	Urban	374.00	139,654	267.8
Knox	Rural	107.00	38,440	278.4
Kosciusko	Rural	145.00	77,358	187.4

Table 4.3 LPN FTEs by Indiana County (Cont'd.)

County	Rurality	LPN FTEs	2010 Population	FTEs per 100,000 Population
LaPorte	Urban	193.50	111,467	173.6
LaGrange	Rural	55.00	37,128	148.1
Lake	Urban	841.25	496,005	169.6
Lawrence	Rural	136.50	46,134	295.9
Madison	Urban	442.25	131,636	336.0
Marion	Urban	2,361.50	903,393	261.4
Marshall	Rural	92.50	47,051	196.6
Martin	Rural	20.75	10,334	200.8
Miami	Rural	89.00	36,903	241.2
Monroe	Urban	360.25	137,974	261.1
Montgomery	Rural	74.75	38,124	196.1
Morgan	Urban	122.50	68,894	177.8
Newton	Urban	15.50	14,244	108.8
Noble	Rural	90.75	47,536	190.9
Ohio	Urban	10.75	6,128	175.4
Orange	Rural	48.50	19,840	244.5
Owen	Urban	41.00	21,575	190.0
Parke	Rural	14.25	17,339	82.2
Perry	Rural	54.50	19,338	281.8
Pike	Rural	26.50	12,845	206.3
Porter	Urban	296.25	164,343	180.3
Posey	Urban	26.25	25,910	101.3
Pulaski	Rural	25.50	13,402	190.3
Putnam	Urban	81.75	37,963	215.3
Randolph	Rural	65.00	26,171	248.4
Ripley	Rural	83.00	28,818	288.0
Rush	Rural	42.25	17,392	242.9
Scott	Rural	81.75	24,181	338.1
Shelby	Urban	134.00	44,436	301.6
Spencer	Rural	31.00	20,952	148.0
St. Joseph	Urban	586.50	266,931	219.7
Starke	Rural	23.25	23,363	99.5
Steuben	Rural	51.00	34,185	149.2
Sullivan	Urban	43.25	21,475	201.4
Switzerland	Rural	15.00	10,613	141.3
Tippecanoe	Urban	367.50	172,780	212.7
Tipton	Urban	30.50	15,936	191.4
Union	Rural	18.25	7,516	242.8
Vanderburgh	Urban	565.50	179,703	314.7
Vermillion	Urban	40.75	16,212	251.4
Vigo	Urban	480.50	107,848	445.5
Wabash	Rural	136.50	32,888	415.0

Table 4.3 LPN FTEs by Indiana County (Cont'd.)

County	Rurality	LPN FTEs	2010 Population	FTEs per 100,000 Population
Warren	Rural	20.00	8,508	235.1
Warrick	Urban	164.75	59,689	276.0
Washington	Urban	65.50	28,262	231.8
Wayne	Rural	371.75	68,917	539.4
Wells	Urban	72.75	27,636	263.2
White	Rural	52.75	24,643	214.1
Whitley	Urban	33.75	33,292	101.4

Map 4.3 contains data taken from LPN licensing information. It shows the number of LPN licensees in each Indiana county. Though the number of LPN licensees in each county did not match the number of survey respondents who indicated that their practice was in each county (refer to Table 4.5), the relative distribution (shown by the color differentiations) of LPNs in each county was similar to the distribution shown in Map 4.1: urban, highly populated counties had higher numbers of LPN licensees than rural, less populated counties.

Map 4.3 Licensed LPNs by County, 2012



Map 4.4 shows the ratio of LPN licensees to population in each Indiana county. Many of the most populated, urban counties that had the highest number of LPN licensees do not have the highest ratio of LPN licensees to population. This matches the overall trend seen in the map of LPN survey respondents' addresses by population (Map 4.2). Allen, Elkhart, Lake, LaPorte, Marion, Porter, St. Joseph, Vanderburgh, and Vigo Counties had high ratios of LPNs to population when measured using practice addresses gathered from the survey (refer to Map 4.2), but there were notably lower numbers of LPN licensees who listed a license address within these counties.

Map 4.4 Licensed LPNs per 100,000 Population by County, 2012

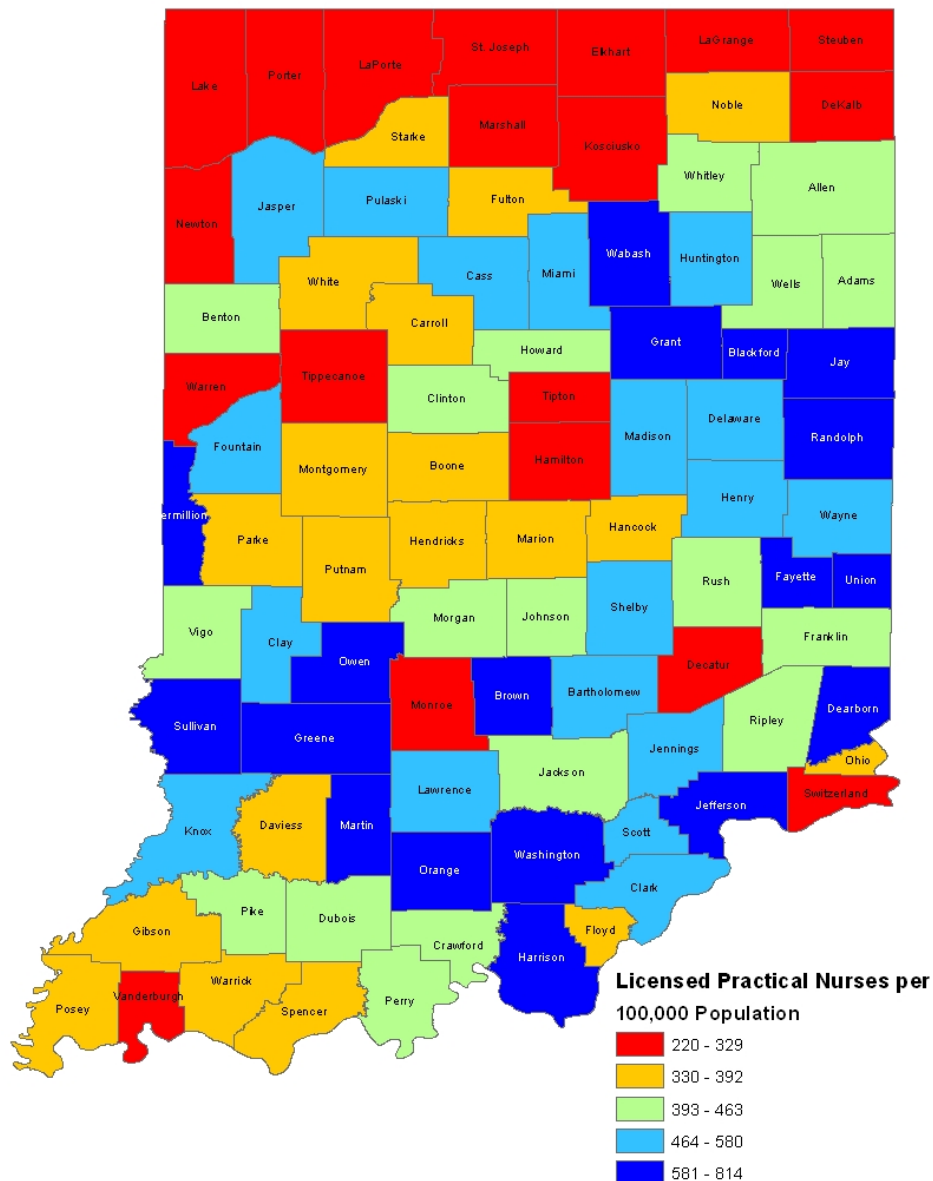


Table 4.4 Licensed LPNs by Indiana County

County	Rurality	LPNs	2010 Pop	LPNs per 100,000 Population
Adams	Rural	137	34,387	398.4
Allen	Urban	1496	355,329	421.0
Bartholomew	Urban	359	76,794	467.5
Benton	Urban	38	8,854	429.2
Blackford	Rural	76	12,766	595.3
Boone	Urban	189	56,640	333.7
Brown	Urban	93	15,242	610.2
Carroll	Urban	78	20,155	387.0
Cass	Rural	190	38,966	487.6
Clark	Urban	549	110,232	498.0
Clay	Urban	150	26,890	557.8
Clinton	Rural	133	33,224	400.3
Crawford	Rural	43	10,713	401.4
Daviess	Rural	111	31,648	350.7
DeKalb	Rural	165	50,047	329.7
Dearborn	Urban	151	25,740	586.6
Decatur	Rural	113	42,223	267.6
Delaware	Urban	568	117,671	482.7
Dubois	Rural	170	41,889	405.8
Elkhart	Urban	435	197,559	220.2
Fayette	Rural	150	24,277	617.9
Floyd	Urban	250	74,578	335.2
Fountain	Rural	100	17,240	580.0
Franklin	Urban	106	23,087	459.1
Fulton	Rural	71	20,836	340.8
Gibson	Urban	128	33,503	382.1
Grant	Rural	505	70,061	720.8
Greene	Urban	203	33,165	612.1
Hamilton	Urban	654	274,569	238.2
Hancock	Urban	264	70,002	377.1
Harrison	Urban	235	39,364	597.0
Hendricks	Urban	485	145,448	333.5
Henry	Rural	268	49,462	541.8
Howard	Urban	347	82,752	419.3
Huntington	Rural	191	37,124	514.5
Jackson	Rural	196	42,376	462.5
Jasper	Urban	157	33,478	469.0
Jay	Rural	128	21,253	602.3
Jefferson	Rural	199	32,428	613.7
Jennings	Rural	137	28,525	480.3
Johnson	Urban	551	139,654	394.5
Knox	Rural	181	38,440	470.9
Kosciusko	Rural	193	77,358	249.5

Table 4.4 Licensed LPNs by Indiana County (Cont'd.)

County	Rurality	LPNs	2010 Pop	LPNs per 100,000 Population
LaPorte	Urban	340	111,467	305.0
LaGrange	Rural	82	37,128	220.9
Lake	Urban	1163	496,005	234.5
Lawrence	Rural	249	46,134	539.7
Madison	Urban	721	131,636	547.7
Marion	Urban	3008	903,393	333.0
Marshall	Rural	119	47,051	252.9
Martin	Rural	61	10,334	590.3
Miami	Rural	192	36,903	520.3
Monroe	Urban	401	137,974	290.6
Montgomery	Rural	130	38,124	341.0
Morgan	Urban	307	68,894	445.6
Newton	Urban	45	14,244	315.9
Noble	Rural	168	47,536	353.4
Ohio	Urban	23	6,128	375.3
Orange	Rural	132	19,840	665.3
Owen	Urban	134	21,575	621.1
Parke	Rural	61	17,339	351.8
Perry	Rural	84	19,338	434.4
Pike	Rural	59	12,845	459.3
Porter	Urban	493	164,343	300.0
Posey	Urban	91	25,910	351.2
Pulaski	Rural	69	13,402	514.8
Putnam	Urban	149	37,963	392.5
Randolph	Rural	213	26,171	813.9
Ripley	Rural	129	28,818	447.6
Rush	Rural	71	17,392	408.2
Scott	Rural	137	24,181	566.6
Shelby	Urban	224	44,436	504.1
Spencer	Rural	76	20,952	362.7
St. Joseph	Urban	798	266,931	299.0
Starke	Rural	80	23,363	342.4
Steuben	Rural	95	34,185	277.9
Sullivan	Urban	162	21,475	754.4
Switzerland	Rural	34	10,613	320.4
Tippecanoe	Urban	406	172,780	235.0
Tipton	Urban	41	15,936	257.3
Union	Rural	54	7,516	718.5
Vanderburgh	Urban	579	179,703	322.2
Vermillion	Urban	102	16,212	629.2
Vigo	Urban	477	107,848	442.3
Wabash	Rural	214	32,888	650.7

Table 4.4 Licensed LPNs by Indiana County (Cont'd.)

County	Rurality	LPNs	2010 Pop	LPNs per 100,000 Population
Warren	Rural	24	8,508	282.1
Warrick	Urban	227	59,689	380.3
Washington	Urban	166	28,262	587.4
Wayne	Rural	378	68,917	548.5
Wells	Urban	128	27,636	463.2
White	Rural	96	24,643	389.6
Whitley	Urban	136	33,292	408.5

Table 4.5 Comparison of License and Survey Address for LPNs by County

County	Rurality	Sample	License	Difference	Sample Percent of License
Adams	Rural	80	137	57	58.4
Allen	Urban	1,247	1,496	249	83.4
Bartholomew	Urban	235	359	124	65.5
Benton	Urban	12	38	26	31.6
Blackford	Rural	37	76	39	48.7
Boone	Urban	137	189	52	72.5
Brown	Urban	27	93	66	29.0
Carroll	Urban	16	78	62	20.5
Cass	Rural	146	190	44	76.8
Clark	Urban	344	549	205	62.7
Clay	Urban	59	150	91	39.3
Clinton	Rural	93	133	40	69.9
Crawford	Rural	16	43	27	37.2
Daviess	Rural	84	111	27	75.7
DeKalb	Rural	85	165	80	51.5
Dearborn	Urban	139	151	12	92.1
Decatur	Rural	72	113	41	63.7
Delaware	Urban	453	568	115	79.8
Dubois	Rural	160	170	10	94.1
Elkhart	Urban	365	435	70	83.9
Fayette	Rural	96	150	54	64.0
Floyd	Urban	262	250	-12	104.8
Fountain	Rural	41	100	59	41.0
Franklin	Urban	35	106	71	33.0
Fulton	Rural	36	71	35	50.7
Gibson	Urban	77	128	51	60.2
Grant	Rural	296	505	209	58.6
Greene	Urban	73	203	130	36.0
Hamilton	Urban	470	654	184	71.9
Hancock	Urban	123	264	141	46.6
Harrison	Urban	76	235	159	32.3
Hendricks	Urban	286	485	199	59.0
Henry	Rural	164	268	104	61.2
Howard	Urban	240	347	107	69.2
Huntington	Rural	138	191	53	72.3
Jackson	Rural	140	196	56	71.4
Jasper	Urban	86	157	71	54.8
Jay	Rural	69	128	59	53.9
Jefferson	Rural	143	199	56	71.9
Jennings	Rural	53	137	84	38.7
Johnson	Urban	394	551	157	71.5
Knox	Rural	113	181	68	62.4
Kosciusko	Rural	154	193	39	79.8

Table 4.5 Comparison of License and Survey Address for LPNs by County (Cont'd.)

County	Rurality	Sample	License	Difference	Sample Percent of License
La Porte	Urban	202	340	138	59.4
LaGrange	Rural	59	82	23	72.0
Lake	Urban	895	1,163	268	77.0
Lawrence	Rural	144	249	105	57.8
Madison	Urban	468	721	253	64.9
Marion	Urban	2,471	3,008	537	82.1
Marshall	Rural	95	119	24	79.8
Martin	Rural	21	61	40	34.4
Miami	Rural	91	192	101	47.4
Monroe	Urban	382	401	19	95.3
Montgomery	Rural	78	130	52	60.0
Morgan	Urban	128	307	179	41.7
Newton	Urban	17	45	28	37.8
Noble	Rural	98	168	70	58.3
Ohio	Urban	11	23	12	47.8
Orange	Rural	50	132	82	37.9
Owen	Urban	42	134	92	31.3
Parke	Rural	15	61	46	24.6
Perry	Rural	57	84	27	67.9
Pike	Rural	28	59	31	47.5
Porter	Urban	316	493	177	64.1
Posey	Urban	28	91	63	30.8
Pulaski	Rural	28	69	41	40.6
Putnam	Urban	87	149	62	58.4
Randolph	Rural	67	213	146	31.5
Ripley	Rural	86	129	43	66.7
Rush	Rural	44	71	27	62.0
Scott	Rural	87	137	50	63.5
Shelby	Urban	140	224	84	62.5
Spencer	Rural	34	76	42	44.7
St Joseph	Urban	628	798	170	78.7
Starke	Rural	25	80	55	31.3
Steuben	Rural	57	95	38	60.0
Sullivan	Urban	46	162	116	28.4
Switzerland	Rural	15	34	19	44.1
Tippecanoe	Urban	383	406	23	94.3
Tipton	Urban	32	41	9	78.0
Union	Rural	21	54	33	38.9
Vanderburgh	Urban	588	579	-9	101.6
Vermillion	Urban	45	102	57	44.1
Vigo	Urban	499	477	-22	104.6
Wabash	Rural	141	214	73	65.9

Table 4.5 Comparison of License and Survey Address for LPNs by County (Cont'd.)

County	Rurality	Sample	License	Difference	Sample Percent of License
Warren	Rural	22	24	2	91.7
Warrick	Urban	172	227	55	75.8
Washington	Urban	67	166	99	40.4
Wayne	Rural	383	378	-5	101.3
Wells	Urban	77	128	51	60.2
White	Rural	59	96	37	61.5
Whitley	Urban	36	136	100	26.5

Chapter 5: Conclusions

This report summarizes responses to the 2012 Indiana LPN Licensure Survey. Individuals who held an active or probationary Indiana license and who were currently practicing in Indiana were included in the analysis in this report. Almost all of the survey respondents held active licenses in 2012. The survey response rate was 94.2 percent, but the sample analyzed in this report only represents 63.3 percent of the total number of licensed LPNs in Indiana.

The demographic composition of this sample of Indiana's LPN workforce was predominantly white, non-Hispanic females. While the gender distribution of LPN respondents was heavily skewed toward females, the racial distribution of LPNs in the sample closely mirrored that of Indiana's population as a whole. A smaller proportion of the LPN workforce included in the analysis sample was Hispanic or Latino compared to Indiana's population as a whole. The ages of LPN respondents were evenly distributed from 26 to 65. This could indicate that newly trained LPNs are entering the workforce at the same rate that older LPNs are leaving the workforce for retirement.

A majority of the respondents reported their primary practice setting as long-term care. Most LPNs who responded to the survey indicated that they worked at least 40 hours per week. Unsurprisingly, the most common position held by LPNs who responded to the survey was in long-term care. Furthermore, the most commonly served age group of patients was the elderly. These data support the view that LPNs' primary role in the Indiana health care system is that of long-term care. Long-term care may be the most common work setting for LPNs because it requires a large amount of direct patient care.

The highest numbers of LPN respondents and licensees were found in highly populated, urban counties, the counties with the highest ratios of LPNs to population tended to be less populated, rural counties. This trend was seen when mapping practice locations from survey responses and when mapping addresses listed on LPN licenses. Addresses listed on LPN licenses matched the county of practice addresses listed on survey responses in 64.0 percent of cases. The discrepancy between license and survey addresses seemed to be most prominent in urban and suburban areas. The source of this discrepancy could be the use of home address on

license information leading to an overestimation of LPNs in suburban areas (where LPNs reside) and an underestimation in neighboring urban areas (where LPNs commute to work).

Limitations

This is the first time that the data collected by IPLA on LPNs had been reported. The analysis presented in this report was carried out on a sample of the Indiana LPN workforce. This sample may not be representative of the entire workforce. Approximately 63.3 percent of all LPNs who held an active license in Indiana were included in this sample. Based on information available for both survey responders and non-responders, it is known that individuals in the sample are younger and licensed for a shorter period of time than the total LPN workforce practicing in Indiana.

Additionally, the quality of the data collected by the survey instrument is not verified. Data presented in the analysis are based on self-reported information and may be subject to bias. Completion of the survey during licensure is not mandatory therefore some individuals may rush through without verifying the information they submit or may choose to only partially answer the survey. Differences between the practice address listed on LPNs' survey responses and their licenses may be due to incorrect addresses from either source. Furthermore, addresses listed on LPN licenses may be home or business addresses that do not represent where LPNs practice. Future reports will contain additional comparisons between the LPN and RN workforces as survey instruments are updated to ask questions in a more consistent manner as well as year-to-year comparisons of the LPN workforce.

Appendix I: Survey Instruments for 2012 Licensed Practical Nurse Report and 2011 Registered Nurse Report

2012 Indiana Licensed Practical Nurse Licensure Survey Instrument

1.) What is your current work status in nursing? Consider yourself actively working in nursing if you are involved in direct patient care, case management, nursing education, administration, or research.

PLEASE SELECT ONLY ONE

Actively working in a paid position in health care, but not in nursing

Actively working in a paid position related to nursing

Actively working, but not as a nurse or in health care

Retired or permanently inactive as a nurse

Temporarily inactive as a nurse

Unemployed and seeking work as a nurse in Indiana

Working in nursing, but ONLY on a non-paid basis (volunteer or religious organization)

2.) Please enter the 5-character ZIP CODE for your principal practice location (where you work the most hours as a nurse). If you work in multiple zip codes (for example, if you are a home care nurse and travel to different patients then choose the zip code in which you spend the majority of your time.)

3.) Do you hold more than one paid position as nurse (more than one employer)?

No

Yes, 2 paid positions

Yes, 3 paid positions

Yes, 4 or more paid positions

4.) Please choose the term that best describes your principal position as a nurse (the position in which you work the most hours). SELECT ONLY ONE

Administrator

Case manager/care coordinator

Charge nurse/team leader

Continuing education/staff development nurse

Critical care nurse

Diabetes educator

Dialysis nurse

ER/ED nurse

Faculty in a nursing program

Head nurse or assistant head nurse

Home care nurse

Hospice nurse

Infection control nurse

Long-term care nurse

Nurse clinician

Nursing consultant

Occupational health nurse

Office nurse

Operating room nurse

Other

Prison nurse

Private duty nurse

Psychiatric nurse

Public health nurse

Quality assurance/utilization review nurse

Researcher

School nurse

Staff/general nurse

Temporary nurse staffing service

5.) Do you spend most of your principal position time in the state of Indiana?

6.) Which of the following best describes the setting where you work at your principal position? SELECT ONLY ONE

Adult day care

Ambulatory/outpatient care setting (surg., dialysis, other)

Assisted living facility/unit

Community health center/clinic

Community mental health center

Community substance abuse agency

Continuing education/staff development

Drug company

Federal agency

Home health care agency

Hospice

Hospital (in- & out-patient)

Hospital (in-patient)

Hospital (out-patient)

Hospital ER/ED

Hospital operating room

Insurance company

Long term acute care facility/unit

Long term/extended care facility/unit

Mental health/addictions facility/unit

Mental retardation facility/unit

Non-residential care facility/unit (e.g. elder day care)

- Nursing education program
- Occupational health setting
- Other
- Physician/dentist private office
- Primary care center/clinic
- Prison
- Private duty nursing
- Psychiatric inpatient facility/unit
- Public health department (city, county, or state)
- Research setting
- School/college setting
- State agency (other than state public health department)
- Supplemental staffing agency
- Urgent care center/clinic

7.) Please describe the activities in which you spend time in your principal position. SELECT ALL THAT APPLY

- Administration
- Case management/care coordination
- Community health services
- Consulting with agencies/other professionals
- Continuing education/staff development
- Direct patient care
- Environmental health
- Financial management
- Infection control

Medication management

Other

Patient education/counseling

Policy and planning

Prenatal care coordination

Program management

Psychiatric nursing

Public health activities

Quality assurance/utilization review

Research

Staff supervision/management

Teaching nursing students

8.) Which patient age groups do you most frequently work with? Please select ALL that apply.

Infants (0 – 4)

Children (5 – 9)

Adolescents (10 – 14)

Youth (15 – 19)

Adults (20 – 64)

Elders (65 and older)

9.) How many hours per week on average do you spend in ALL activities in nursing? SELECT ONLY ONE

1 – 9

10 – 19

20 – 29

30 – 39

40 – 49

50 – 59

60 or more

10.) What other nursing degrees would you like to earn in the future? SELECT ALL THAT APPLY

Diploma

Associate

Bachelor's

Master's

Doctorate

I do not intend to pursue further nursing education

11.) Have you ever worked as any of the following?

Certified Home Health Aide

CNA (Certified Nurse Aide)

Emergency Medical Technician (EMT)

Nursing Assistant

Paramedic

13.) Are you fluent in any of the following languages? SELECT ALL THAT APPLY

African languages

Arabic

Burmese

Cambodian

Chinese

Filipino

French

German

Greek

Hindi

Italian

- Japanese
- Korean
- Pennsylvania Dutch
- Polish
- Portuguese
- Russian
- Sign language
- Spanish
- Tagalog
- Turkish
- Vietnamese
- No other languages spoken

14.) Which of the following best describes your race? PLEASE SELECT ONLY ONE

- American Indian/Native Alaskan
- Asian/Pacific Islander
- Black/African American
- Multi-racial
- Other
- White

15.) Are you of Hispanic origin?

16.) What is your gender?

17.) What is your current age?

2011 Indiana Registered Nurse E-Survey

Your answers to these questions are vital to help the Indiana State Department of Health respond to emergencies and identify health professional shortage areas. The survey is voluntary and will not affect the status of your license. Please complete the survey whether you are currently working as a nurse or not.

Thank you very much for your help.

1. What is your current work status in nursing? **Please select only one response.**

DROP-DOWN LIST

- a. Actively working in a paid position related to nursing (Consider yourself actively working in nursing if you are involved in a position where RN licensure is required)
- b. Actively working in a paid position in health care but not in nursing
- c. Actively working, but not as a nurse or in health care
- d. Working in nursing, but ONLY on a non-paid basis (volunteer or religious order)
- e. Unemployed and seeking work as a nurse in Indiana
- f. Temporarily inactive as a nurse
- g. Retired or permanently inactive as a nurse

If you checked responses b through g in Question 1, please SKIP to Q13.

2. Please type the street address of your principal practice location. “Principal practice location” is the location in which you work for the most hours as a nurse.

TEXT BOX.

3. What is your gender?

Male

Female

4. What is your racial background?

DROP-DOWN LIST

American Indian or Alaska Native
Asian
Black or African American
Native Hawaiian or Other Pacific Islander
White
Multiracial

5. What is your ethnic background?

DROP-DOWN LIST

Hispanic or Latino
Not Hispanic or Latino

6. Would you be willing to provide services in case of a bio-terrorism event or other public health emergency? If you answer "Yes," we may use your PLA contact information to contact you.

DROP-DOWN LIST

Yes
No

7. Do you hold more than one paid position as a nurse (more than one employer)?

DROP-DOWN LIST

Yes, 2 paid positions
Yes, 3 paid positions
Yes, 4 or more paid positions
No

8. Please choose the term that best describes your job title for the principal position as a nurse (the position in which you work the most hours). **Please select only one response.**

DROP-DOWN LIST

Advice/triage nurse
Certified Nurse-Midwife (CNM)
Certified Registered Nurse Anesthetist (CRNA)
Charge nurse or team leader
Clinical Nurse Specialist (CNS)

Community health nurse
Consultant
Faculty
First-line management (head nurse, floor supervisor)
Infection control
Informatics nurse
Instructor/lecturer
Legal nurse
Middle management/administration (assistant director, house supervisor, associate dean, department head)
Nurse Practitioner (NP)
Patient care coordinator, case manager, discharge planner
Patient educator
Public health nurse
Quality improvement nurse, utilization review nurse
Researcher
School nurse
Senior management/administration (CEO, vice president, nursing executive, dean)
Staff development director
Staff educator or instructor in clinical setting
Staff nurse or direct care nurse
Surveyor/ auditor/regulator
No position title
Other

9. In your principal position, in what type of clinical specialty did you spend most of your time in?

Please select only one response.

DROP-DOWN LIST

No patient care
Ambulatory care (including primary care, outpatient settings, except surgical)
Cardiac or cardiovascular care
Chronic care
Community health
Critical care

- Dermatology
- Education
- Emergency or trauma care
- Gastrointestinal
- General medical surgical
- Gynecology (women's health)
- Home health
- Hospice
- Infectious/ communicable disease
- Labor and delivery
- Long-term care/ nursing home
- Neurological
- Obstetrics
- Occupational health
- Oncology
- Pediatrics/ neonatal
- Primary care
- Psychiatric or mental health (substance abuse and counseling)
- Public health
- Pulmonary/ respiratory
- Radiology (diagnostic or therapeutic)
- Renal/ dialysis
- Surgery (including ambulatory, pre-operative, post-operative, post-anesthesia)
- No specific area
- Other specialty for a majority of my time

10. Which of the following best describes the setting where you work at your principal position?

Please select only one response.

DROP-DOWN LIST

Hospital (Exclude nursing home units and all off-site units of hospitals, but include all on-site clinics and other services of the hospitals.)

Non- Federal, short-term hospital, except psychiatric (for example, acute care hospital)

Non-Federal long-term hospital, except psychiatric

Non-Federal psychiatric hospital

Federal Government hospital

Other type of hospital

Nursing Home/Extended Care Facility

Nursing home unit in hospital

Free standing nursing home/extended care facility

Facility for mentally challenged

Other types of extended care facility

Nursing Education Program

LPN/LVN program

Diploma program (RN)

Associate degree program

Bachelor's degree

Higher degree nursing program

Other program

Public or Community Health Setting

Official State Health Department

Official State Mental Health Agency

Official City or County Health Department

Combination (official/voluntary) nursing service

Visiting nurse service (VNS/NA)

Home health service unit (hospital-based)

Home health agency (non-hospital based)

Community mental-health organization or facility (including freestanding psychiatric outpatient clinics)

Substance abuse center/clinic

Community/neighborhood health center

Planned Parenthood/family planning center

Day care center

Rural health care center

Retirement community center

Hospice

Other

School Health Service

Public school system

Private or parochial elementary or secondary school

College or university

Other

Occupational Health (Employee Health Service)

Private industry

Government

Other

Ambulatory Care Setting

Solo practice (physician)

Solo practice (nurse)

Partnerships (physicians)

Partnerships (nurses)

Group practice (physicians)

Group practice (nurses)

Partnership or group practice (mixed group of professionals)

Freestanding clinic (physicians)

Freestanding clinic (nurses)

Ambulatory surgical center

Dialysis center/clinic

Dental practice

Hospital owned off-site clinics

Health Maintenance Organization (HMO)

Other

Other

Correctional facility

Private duty in a home setting

Home-based self-employment

Other

11. What type of work setting best describes where you work for your other nursing position(s)? **Please select only one response.** (Refer to categories in Question 10 for further clarification.)

DROP-DOWN LIST

Hospital

Nursing Home/Extended Care Facility

Nursing Education Program

Public or Community Health Setting

School Health Service

Occupational Health (Employee Health Service)

Ambulatory Care Setting

Insurance Claims/Benefits

Policy, Planning, Regulatory, or Licensing Agency

Other

12. How many hours per week on average do you spend in ALL related nursing activities? **Please select only one response.**

DROP-DOWN LIST

1- 19

20-35

36-40

41 or more

13. Have you ever worked as any of the following? **Please select all that apply.**

DROP-DOWN LIST

Licensed Practice Nurse (LPN/LVN)

CNA (Certified Nurse Aide)

Nursing assistant

Paramedic

Emergency Medical Technician (EMT)

14. What is your highest degree in nursing? **Please select only one response.**

DROP-DOWN LIST

Diploma

Associate

Bachelor's

Master's

Doctorate

15. Since graduating from your initial nursing program, have you completed one of the following formal education programs preparing you for advanced practice nursing?

Yes

No

If you answered "yes," please select any one response.

DROP-DOWN LIST

Clinical Nurse Specialist

Nurse Practitioner

Nurse Anesthetist

Nurse-midwife

- 16a. Are you currently certified in any of the following Advanced Practice Nursing roles?

Yes

No

If you answered "yes," please select all that apply.

DROP-DOWN LIST

Clinical nurse specialist

Nurse anesthetist
Nurse-midwife
Nurse practitioner

- 16b. Are you currently working in any of the following Advanced Practice Nursing roles? **Please select any one response.**

DROP-DOWN LIST

Clinical nurse specialist
Nurse anesthetist
Nurse-midwife
Nurse practitioner- Primary care (for e.g., school based clinics, community health clinics)
Nurse practitioner- Other (for e.g., orthopedics, neurology, acute care, ER, cardiology)

17. What other nursing degrees do you plan to pursue in the next 2 years? **Please select all that apply.**

DROP-DOWN LIST

Bachelor's
Master's
Doctor of Nursing Practice (DNP)
PhD
I do not intend to pursue further nursing education in the next 2 years

18. Would you be interested in teaching in a nursing program? If you answer "Yes," we may share your name with Indiana Nursing Workforce Development Coalition?

DROP-DOWN LIST

Yes
No

19. How soon do you anticipate retirement?

DROP-DOWN LIST

Less than 1 year
2-3 years
4-9 years

10 or more years

20. If you are currently not working for pay in nursing, HOW LONG has it been since you stopped working in a paid position as a registered nurse? **Please select only one response.**

DROP-DOWN LIST

Never worked in a paid RN position

Less than 1 year

2-3 years

4-9 years

10 or more years

21. If you are currently not working for pay in nursing, what is the PRIMARY REASON(s) you do not actively working as a nurse? **Please select all that apply.**

DROP-DOWN LIST

I have never worked in a paid position as a registered nurse.

Burnout/stressful environment

Career advancement/promotion to a non-nursing position

Disability/illness

Family obligations

Pursuing a career in a different field

Laid off/downsizing of staff

Inadequate pay/benefits

Relocated

Retired

Other

Appendix II: Supplemental Tables for Figures

Corresponds to Figure 2.1

Respondents' Age in 2020	Number	Percent
Under 65 years old	13,978	82.6
Over 65 years old	2,948	17.4
Total	16,926	100.0
No Response Given	11	

Corresponds to Figure 2.2

Indiana Demographic Information	Number	Percent
White	5,467,906	84.3
Asian/Native Hawaiian	104,822	1.6
Black/African-American	591,397	9.1
American Indian/Native Alaskan	18,462	0.3
Hispanic or Latino (of any race)	389,707	6.0
Total Population	6,483,802	

Corresponds to Figure 2.3

Gender	Number	Percent
Female	15,645	94.5
Male	907	5.5
Total	16,552	100.0
No Response Given	385	

Corresponds to Figure 2.3

Race	Number	Percent
White	14,531	86.0
Black/African-American	1,807	10.7
Other	207	1.2
Multi-racial	207	1.2
Asian/Pacific Islander	85	0.5
American Indian/Native Alaskan	53	0.3
Total	16,890	100.0
No Response Given	47	

Corresponds to Figure 2.3

Ethnicity	Number	Percent
Hispanic or Latino	371	2.2
Not Hispanic or Latino	16,459	97.8
Total	16,830	100.0
No Response Given	107	