Virginia's Certified Nurse Aide Workforce: 2018

Healthcare Workforce Data Center

November 2018

Virginia Department of Health Professions
Healthcare Workforce Data Center
Perimeter Center
9960 Mayland Drive, Suite 300
Henrico, VA 23233
804-367-2115, 804-527-4466(fax)

E-mail: *HWDC@dhp.virginia.gov*

Follow us on Tumblr: www.vahwdc.tumblr.com
Get a copy of this report from: https://www.dhp.virginia.gov/hwdc/findings.htm

20 652 Cortified Nurreina Aide valumtarily

30,653 Certified Nursing Aides voluntarily participated in this survey. Without their efforts, the work of the center would not be possible. The Department of Health Professions, the Healthcare Workforce Data Center, and the Board of Nursing express our sincerest appreciation for your ongoing cooperation.

Thank You!

Virginia Department of Health Professions

David E. Brown, DC

Director

Barbara Allison-Bryan, MD Chief Deputy Director

Healthcare Workforce Data Center Staff:

Elizabeth Carter, PhD *Director* Yetty Shobo, PhD Deputy Director Laura Jackson, MSHSA Operations Manager Christopher Coyle Research Assistant

Virginia Board of Nursing

President

Louise Hershkowitz, CRNA, MSHA Reston

Vice-Presidents

Jennifer Phelps, BS, LPN, QMHPA *Lynchburg* Marie Gerardo, MS, RN, ANP-BC *Midlothian*

Members

Mark Monson *Fairfax*

Ann T. Gleason, PhD Zion Crossroads

Joyce A. Hahn, PhD, RN, NEA-BC, FNAP Oak Hill Dixie L. McElfresh, LPN Richmond

Michelle D. Hereford, MSHA, RN, FACHE Glen Allen Margaret Joan Friedenberg Richmond

Trula E. Minton, MS, RN
Richmond

Meenakshi Shah, BA, RN Roanoke

Laura F. Cei, BS, LPN, CCRP Richmond Ethlyn McQueen-Gibson, DNP, MSN, RN-BC Yorktown

Grace Thapa, DNP, FNP-BC, AE-C Woodbridge

Executive Director

Jay P. Douglas, MSM, RN, CSAC, FRE

Contents

Results in Brief	2
Summary of Trends	2
Survey Response Rates	3
The Workforce	4
Demographics	5
Background	6
Education	8
Current Employment Situation	9
Employment Quality	10
Location Tenure	11
Work Site Distribution	12
Establishment Type	13
Full-Time Equivalency Units	14
Maps	15
Virginia Performs Regions	
Area Health Education Center Regions	
Workforce Investment Areas	
Health Services Areas	
Planning Districts	19
Appendices	20
Appendix A: Weights	20

The Certified Nurse Aide Workforce: At a Glance:

The Workforce

Licensees: 60,295 Virginia's Workforce: 57,072 FTEs: 51,167

Survey Response Rate

All Licensees: 51% Renewing Practitioners: 79%

Demographics

Female: 94% Diversity Index: 58% Median Age: 38

Background

Rural Childhood: 49% HS Degree in VA: 71% Prof. Degree in VA: 88%

Education

RMA Certification: 7% Advanced CNA Cert.: 1%

Finances

Med. Income: \$12-\$13/hr. Health Benefits: 55% Retirement Benefits: 43%

Source: Va. Healthcare Workforce Data Cente

Current Employment

Employed in Prof.: 86% Hold 1 Full-time Job: 57% Satisfied?: 94%

Job Turnover

New Location: 39% Employed over 2 yrs: 48%

Establishment Type

Nursing Home: 30% Home Health Care: 16% Assisted Living: 15%

Full Time Equivalency Units Provided by Certified Nurse Aides per 1,000 Residents by Virginia Performs Region Source: Va Healthcare Work force Data Center FTEs per 1,000 Residents 3.81 5.90 - 7.56 Valley 9.09 10.33 - 10.97 Central West Central Southwest lampton Roads Southside Annual Estimates of the Resident Population: July 1, 2017 Source: U.S. Census Bureau, Population Division 50 100 150 200 Miles

More than 30,000 Certified Nurse Aides (CNAs) voluntarily took part in the 2018 Certified Nurse Aide Workforce Survey. The Virginia Department of Health Professions' Healthcare Workforce Data Center (HWDC) administers this survey every year on the license issuance month of each respondent. These survey respondents represent 51% of the 60,295 CNAs who are licensed in the state and 79% of renewing practitioners.

The HWDC estimates that 57,072 CNAs participated in Virginia's workforce during the survey period, which is defined as those who worked at least a portion of the year in the state or who live in the state and intend to return to work as a CNA at some point in the future. Virginia's CNA workforce provided 51,167 "full-time equivalency units", which the HWDC defines simply as working 2,000 hours a year (or 40 hours per week for 50 weeks with 2 weeks off).

More than 90% of all CNAs are female, and the median age of the CNA workforce is 38. In a random encounter between two CNAs, there is a 58% chance that they would be of different races or ethnicities, a measure known as the diversity index. This makes Virginia's CNA workforce more diverse than the state's overall population, where there is a 56% chance that two randomly chosen people would be of different races or ethnicities. Nearly half of all CNAs grew up in a rural area, and 29% of these professionals currently work in a non-metro area of the state. In total, 19% of all CNAs work in non-metro areas of Virginia. With respect to education, 10% of all CNAs are currently enrolled in a nursing program, including 6% who are enrolled in a RN program.

While 86% of CNAs are currently employed in the profession, another 4% of CNAs are involuntarily unemployed. Among those CNAs who are employed, 57% hold one full-time position and 39% work between 40 and 49 hours per week. Nursing homes employ 30% of all CNAs in the state, while another 16% work in home health care establishments. The median hourly wage for Virginia's CNA workforce is between \$12.00 and \$13.00. In addition, 74% receive at least one employer-sponsored benefit, including 55% who receive health insurance. Most CNAs are satisfied with their current employment situation, including 65% who indicate they are "very satisfied".

Summary of Trends

Over the past year, there was a small decline in the number of respondents to the CNA workforce survey (30,653 vs. 31,266). This decline occurred even though the number of licensees increased over the same time period (60,295 vs. 60,026). At the same time, the size of Virginia's CNA workforce increased as well (57,072 vs. 56,680). In addition, there was a significant increase in the number of FTEs provided by these professionals (51,167 vs. 49,992).

Since 2014, Virginia's CNAs have become more likely to earn their high school degree in the state (71% vs. 66%). The same is also true for their initial professional degree (88% vs. 86%). CNAs are also slightly more likely to have earned a Registered Medication Aide certification (7% vs. 6%). In addition, CNAs are more likely to have earned their professional degree in a public school (27% vs. 23%) as opposed to a nursing home/hospital (30% vs. 34%).

Relative to 2014, CNAs are more likely to be employed in the profession (86% vs. 84%), and the percentage of CNAs who are involuntarily unemployed has fallen considerably (4% vs. 9%). At the same time, CNAs are more likely to hold multiple work positions (20% vs. 16%) and work between 40 and 49 hours per week (39% vs. 34%). In addition, more CNAs have been at their primary work location for more than two years (48% vs. 45%). Meanwhile, CNAs are slightly less likely to participate in clinical or patient care activities (93% vs. 94%) as opposed to non-clinical activities. With respect to establishment types, CNAs are now less likely to be employed in nursing homes (30% vs. 33%) and home health care organizations (16% vs. 19%) but more likely to work at assisted living facilities (15% vs 13%) and the inpatient department of hospitals (12% vs 10%).

The median hourly wage for Virginia's CNA workforce has also increased from \$11-\$12 to \$12-\$13, and CNAs are more likely to receive at least one employer-sponsored benefit (74% vs 70%). This is particularly true for certain employer benefits such as health insurance (55% vs 47%) and retirement plans (43% vs. 32%). Finally, Virginia's CNAs also indicate that they are more satisfied with their current employment situation (94% vs. 91%).

Licensees				
License Status	#	%		
Renewing Practitioners	40,613	67%		
New Licensees	6,791	11%		
Non-Renewals	7,915	13%		
Renewal Date Not in Survey Period	4,976	8%		
All Licensees	60,295	100%		

Source: Va. Healthcare Workforce Data Center

HWDC surveys tend to achieve very high response rates. 79% of renewing CNAs submitted a survey. These represent 51% of CNAs who held a license at some point during the licensing period.

Response Rates					
Statistic	Non Respondents	Respondent	Response Rate		
By Age					
Under 30	11,270	6,331	36%		
30 to 34	4,426	3,612	45%		
35 to 39	2,832	3,561	56%		
40 to 44	2,186	3,230	60%		
45 to 49	2,158	3,198	60%		
50 to 54	2,012	3,361	63%		
55 to 59	1,917	3,264	63%		
60 and Over	2,841	4,096	59%		
Total	29,642	30,653	51%		
New Licenses					
Issued in Past Year	6,791	0	0%		
Metro Status					
Non-Metro	5,530	6,319	53%		
Metro	20,416	22,639	53%		
Not in Virginia	3,696	1,695	31%		

Source: Va. Healthcare Workforce Data Center

Definitions

- 1. The Survey Period: The survey was conducted between October 2017 and September 2018 on the month of initial licensure of each renewing practitioner.
- **2. Target Population:** All CNAs who held a Virginia license at some point during the survey time period.
- 3. Survey Population: The survey was available to CNAs who renewed their licenses online. It was not available to those who did not renew, including CNAs newly licensed in the past two years.

Response Rates	
Completed Surveys	30,653
Response Rate, All Licensees	51%
Response Rate, Renewals	79%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Licensed CNAs

 Number:
 60,295

 New:
 11%

 Not Renewed:
 13%

Response Rates

All Licensees: 51% Renewing Practitioners: 79%

Workforce

Virginia's CNA Workforce: 57,072 FTEs: 51,167

Utilization Ratios

Licensees in VA Workforce: 95% Licensees per FTE: 1.18 Workers per FTE: 1.12

Source: Va. Healthcare Workforce Data Center

Virginia's CNA Workforce			
Status	#	%	
Worked in Virginia in Past Year	55,423	97%	
Looking for Work in Virginia	1,649	3%	
Virginia's Workforce	57,072	100%	
Total FTEs	51,167		
Licensees	60,295		

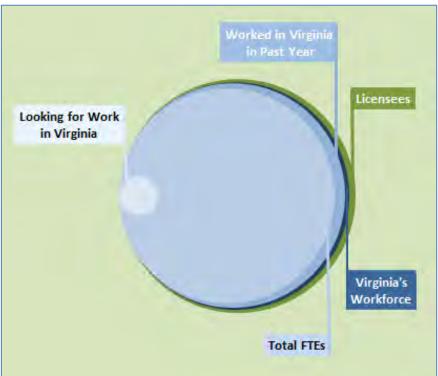
Source: Va. Healthcare Workforce Data Center

This report uses weighting to estimate the figures in this report. Unless otherwise noted, figures refer to the Virginia Workforce only. For more information on HWDC's methodology visit:

www.dhp.virginia.gov/hwdc

Definitions

- Virginia's Workforce: A licensee with a primary or secondary work site in Virginia at any time during the survey timeframe or who indicated intent to return to Virginia's workforce at any point in the future.
- **2. Full Time Equivalency Unit (FTE):** The HWDC uses 2,000 (40 hours for 50 weeks) as its baseline measure for FTEs.
- **3.** Licensees in VA Workforce: The proportion of licensees in Virginia's Workforce.
- **4.** Licensees per FTE: An indication of the number of licensees needed to create 1 FTE. Higher numbers indicate lower licensee participation.
- **5. Workers per FTE:** An indication of the number of workers in Virginia's workforce needed to create 1 FTE. Higher numbers indicate lower utilization of available workers.



	Age & Gender					
	Male		Female		Total	
Age	#	% Male	#	% Female	#	% in Age Group
Under 30	875	6%	14,963	95%	15,838	30%
30 to 34	444	6%	6,807	94%	7,250	14%
35 to 39	360	6%	5,396	94%	5,756	11%
40 to 44	299	6%	4,530	94%	4,829	9%
45 to 49	321	7%	4,447	93%	4,768	9%
50 to 54	269	6%	4,419	94%	4,688	9%
55 to 59	241	5%	4,254	95%	4,494	8%
60 +	323	6%	5,519	95%	5,842	11%
Total	3,131	6%	50,334	94%	53,464	100%

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity					
Race/	Virginia*	Virginia* CNAs CNAs under		der 40	
Ethnicity	%	#	%	#	%
White	62%	20,436	37%	12,329	42%
Black	19%	28,468	52%	14,031	48%
Asian	6%	1,546	3%	578	2%
Other Race	1%	533	1%	246	1%
Two or more races	3%	1,239	2%	950	3%
Hispanic	9%	2,298	4%	1,348	5%
Total	100%	54,520	100%	29,482	100%

*Population data in this chart is from the US Census, Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: July 1, 2017.

Source: Va. Healthcare Workforce Data Center

54% of all CNAs are under the age of 40. 94% of these professionals are female. In addition, the diversity index among CNAs who are under the age of 40 is 60%.

At a Glance:

Gender

% Female: 94% % Under 40 Female: 94%

Age

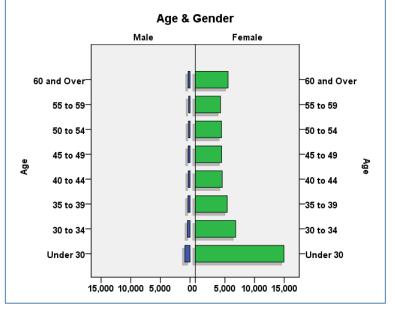
Median Age: 38 % Under 40: 54% % 55+: 19%

Diversity

Diversity Index: 58% Under 40 Div. Index: 60%

Source: Va. Healthcare Workforce Data Cente

In a chance encounter between two CNAs, there is a 58% chance they would be of a different race/ethnicity (a measure known as the Diversity Index), compared to a 56% chance for Virginia's population as a whole.



Childhood

Urban Childhood: 29% Rural Childhood: 49%

Virginia Background

HS in Virginia: 71%
Prof. Training in VA: 88%
HS or Prof. Train. in VA: 90%

Location Choice

% Rural to Non-Metro: 29%

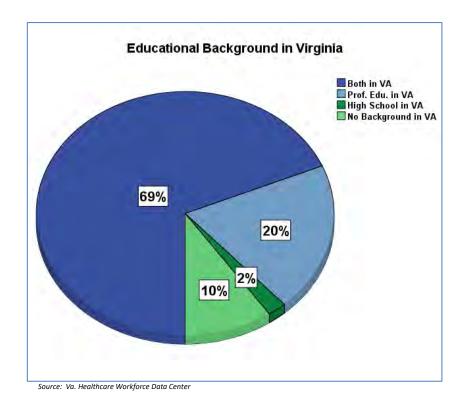
% Urban/Suburban to Non-Metro: 9%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

	Primary Location:		atus of Child	dhood	
USE	PA Rural Urban Continuum		Location		
Code	Description	Rural	Suburban	Urban	
	Metro Cou	nties			
1	Metro, 1 million+	33%	28%	39%	
2	Metro, 250,000 to 1 million	57%	20%	23%	
3	Metro, 250,000 or less	67%	18%	15%	
	Non-Metro Counties				
4	Urban pop 20,000+, Metro adjacent	61%	19%	20%	
6	Urban pop, 2,500-19,999, Metro adjacent	76%	11%	14%	
7	Urban pop, 2,500-19,999, non adjacent	86%	7%	7%	
8	Rural, Metro adjacent	84%	8%	9%	
9	Rural, non adjacent	77%	11%	13%	
	Overall	49%	22%	29%	

Source: Va. Healthcare Workforce Data Center



49% of all CNAs grew up in selfdescribed rural areas, and 29% of these professionals currently work in non-metro counties. Overall, 19% of all CNAs currently work in nonmetro counties.

6

Top Ten States for Certified Nursing Aide Recruitment

Donk		All (CNAs	
Rank	High School	#	Init. Prof Degree	#
1	Virginia	38,146	Virginia	47,935
2	Outside U.S./Canada	7,451	North Carolina	984
3	New York	1,236	New York	651
4	North Carolina	921	Maryland	522
5	Maryland	702	West Virginia	480
6	West Virginia	685	Pennsylvania	341
7	Pennsylvania	623	New Jersey	303
8	New Jersey	517	California	264
9	Florida	367	Georgia	222
10	Georgia	308	Tennessee	198

71% of Virginia's licensed CNAs earned their high school degree in Virginia, while 88% received their initial CNA training in the state.

Source: Va. Healthcare Workforce Data Center

Among CNAs who received their license in the past five years, 71% received their high school degree in Virginia, while 87% received their initial CNA training in the state.

Rank	Lice	nsed in th	e Past 5 Years	
Maiik	High School	#	Init. Prof Degree	#
1	Virginia	11,447	Virginia	14,032
2	Outside	2,032	North Carolina	287
	U.S./Canada			
3	New York	268	Maryland	168
4	North Carolina	245	West Virginia	165
5	Maryland	227	New York	164
6	Pennsylvania	217	Pennsylvania	127
7	West Virginia	176	Georgia	83
8	Florida	128	New Jersey	81
9	New Jersey	127	California	77
10	California	113	Florida	73

Source: Va. Healthcare Workforce Data Center

5% of Virginia's licensees did not participate in Virginia's CNA workforce during the past year. 85% of these licensees worked at some point in the past year, including 70% who worked in a CNA-related capacity.

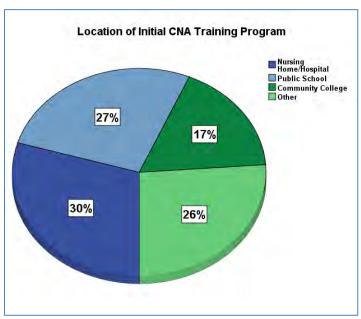
At a Glance:

Not in VA Workforce

Total: 3,171 % of Licensees: 5% Va. Border State/DC: 39%

Highest Credential			
Credential	#	% of Workforce	
Registered Medication Aide (RMA)	4,092	7%	
Advanced Practice CNA	436	1%	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

At a Glance: Education RMA: 7% Advanced Practice CNA: 1% Educational Advancement RN Program: 6% LPN Program: 4% Source: Va. Healthcare Workforce Data Center

CNA Training Location			
Location	#	%	
Nursing Home/Hospital	15,889	30%	
Public School (High/Vocational)	14,423	27%	
Community College	9,321	17%	
Other	14,051	26%	
Total	53,685	100%	

Source: Va. Healthcare Workforce Data Center

Educational Advancement						
Program Enrollment	#	%				
None	45,617	90%				
RN Program 3,118 6%						
LPN Program 1,895 4%						
Total	50,631	100%				

Source: Va. Healthcare Workforce Data Center

10% of CNAs are currently enrolled in a nursing program, including 6% who are enrolled in a RN program.

Employment

Employed in Profession: 86% Involuntarily Unemployed: 4%

Positions Held

1 Full-time: 57% 2 or More Positions: 20%

Weekly Hours:

40 to 49: 39% 60 or more: 6% Less than 30: 19%

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours Hours # 0 hours 2,309 4% 1,730 1 to 9 hours 3% 2,685 5% 10 to 19 hours 20 to 29 hours 5,438 11% 30 to 39 hours 14,940 29% 19,945 39% 40 to 49 hours 50 to 59 hours 1,740 3% 60 to 69 hours 851 2% 70 to 79 hours 816 2% 1,197 2% 80 or more hours **Total** 100% 51,651

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status						
Status	#	%				
Employed, capacity unknown	17	< 1%				
Employed in a CNA-related capacity	46,911	86%				
Employed, NOT in a CNA-related capacity	5,065	9%				
Not working, reason unknown	0	0%				
Involuntarily unemployed	2,186	4%				
Voluntarily unemployed	123	< 1%				
Retired	14	< 1%				
Total	54,316	100%				

Source: Va. Healthcare Workforce Data Center

86% of CNAs are currently employed in their profession. 57% of CNAs have one fulltime job, and 39% of CNAs work between 40 and 49 hours per week.

Current Positions						
Positions	#	%				
No Positions	2,309	4%				
One Part-Time Position	9,912	18%				
Two Part-Time Positions	2,313	4%				
One Full-Time Position	30,561	57%				
One Full-Time Position & One Part-Time Position	7,399	14%				
Two Full-Time Positions	729	1%				
More than Two Positions	441	1%				
Total	53,664	100%				

Income						
Hourly Wage	#	%				
Less than \$7.50 per hour	337	1%				
\$7.50 to \$7.99 per hour	481	1%				
\$8.00 to \$8.99 per hour	1,274	3%				
\$9.00 to \$9.99 per hour	2,264	5%				
\$10.00 to \$10.99 per hour	4,870	11%				
\$11.00 to \$11.99 per hour	5,977	13%				
\$12.00 to \$12.99 per hour	8,368	18%				
\$13.00 to \$13.99 per hour	6,887	15%				
\$14.00 to \$14.99 per hour	5,607	12%				
\$15.00 or more per hour	9,919	22%				
Total	45,984	100%				

Source: Va. Healthcare Workforce Data Center

At a Glance:

Earnings

Median Income: \$12-\$13/hr.

Benefits

Health Insurance: 55% Retirement: 43%

Satisfaction

Satisfied: 94% Very Satisfied: 65%

Source: Va. Healthcare Workforce Data Cente

Job Satisfaction					
Level	#	%			
Very Satisfied	34,489	65%			
Somewhat Satisfied	15,823	30%			
Somewhat Dissatisfied	2,221	4%			
Very Dissatisfied 957 2%					
Total	53,490	100%			

Source: Va. Healthcare Workforce Data Center

The typical CNA earned between \$12 and \$13 per hour during the past year. In addition, 74% of CNAs receive at least one employer-sponsored benefit, including 55% who have access to health insurance.

Employer-Sponsored Benefits					
Benefit	#	% of Workforce			
Paid Vacation	29,901	64%			
Health Insurance	25,615	55%			
Paid Sick Leave	24,692	53%			
Dental Insurance	23,652	50%			
Retirement	20,149	43%			
Group Life Insurance	15,061	32%			
Received At Least One Benefit	34,890	74%			
*From any employer at time of survey.					

Location Tenure					
Tenure	Primary		Secor	Secondary	
renure	#	%	#	%	
Less than 6 Months	5,588	12%	3,221	21%	
6 Months to 1 Year	7,106	15%	2,984	20%	
1 to 2 Years	12,725	26%	3,643	24%	
3 to 5 Years	11,024	23%	3,020	20%	
6 to 10 Years	5,513	11%	1,220	8%	
More than 10 Years	6,465	13%	1,046	7%	
Subtotal	48,422	100%	15,135	100%	
Did not have location	3,339		39,176		
Item Missing	5,311		2,762		
Total	57,072		57,072		

At a Glance:

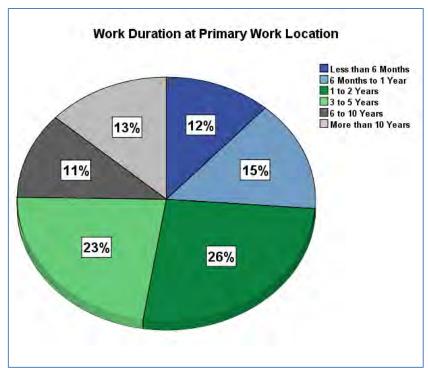
Turnover & Tenure

New Location: 39% Over 2 years: 48% Over 2 yrs, 2nd location: 35%

Source: Va. Healthcare Workforce Data Center

Source: Va. Healthcare Workforce Data Center

48% of CNAs have worked at their primary work location for more than two years.

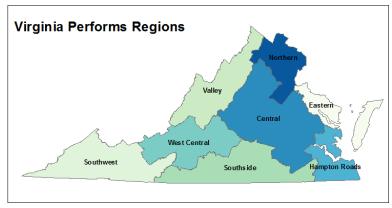


Concentration

Top Region: 22%
Top 3 Regions: 62%
Lowest Region: 3%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

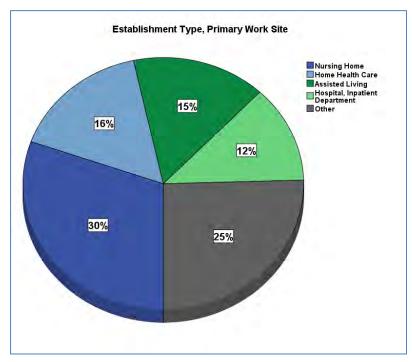


Source: Va. Healthcare Workforce Data Center

Regional Distribution of Work Locations						
Virginia Performs	Prim Loca			Secondary Location		
Region	#	%	#	%		
Central	10,096	22%	3,355	21%		
Eastern	1,412	3%	510	3%		
Hampton Roads	8,993	19%	3,272	21%		
Northern	9,372	20%	3,925	25%		
Southside	3,409	7%	1,029	7%		
Southwest	2,551	6%	603	4%		
Valley	3,715	8%	927	6%		
West Central	6,438	14%	1,936	12%		
Virginia Border State/DC	101	0%	80	1%		
Other US State	86	0%	120	1%		
Outside of the US	8	0%	8	0%		
Total	46,181	100%	15,765	100%		
Item Missing	7,553		2,131			

Source: Va. Healthcare Workforce Data Center

22% of all CNAs are employed in Central Virginia, the most of any region in the state. Another 20% of the state's CNA workforce is employed in Northern Virginia, while 19% is employed in Hampton Roads.



Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Activity

Clinical/Patient Care: 93% Non-Clinical: 7%

Top Establishments

Nursing Home: 30% Home Health Care: 16% Assisted Living: 15%

Source: Va Healthcare Workforce Data Center

Nursing homes employed 30% of all CNAs in the state, while another 16% of CNAs worked at home health care establishments.

Location Type					
	Prim		Secon		
Establishment Type	Loca	tion	Locat	ion	
	#	%	#	%	
Nursing Home	15,177	30%	2,970	18%	
Home Health Care	8,061	16%	4,095	25%	
Assisted Living	7,729	15%	2,391	14%	
Hospital, Inpatient Department	6,215	12%	729	4%	
Personal Care: Companion/ Sitter/Private Duty	2,307	5%	1,295	8%	
Mental Health Facility	1,165	2%	180	1%	
Hospice	1,079	2%	179	1%	
Physician's Office	1,056	2%	134	1%	
Group Home	1,031	2%	473	3%	
Hospital, Ambulatory Care	957	2%	178	1%	
Health Clinic	506	1%	166	1%	
Ambulatory or Outpatient Care	450	1%	142	1%	
Other Practice Setting	4,155	8%	3,733	22%	
Total	49,888	100%	16,665	100%	
Did Not Have a Location	3,339		39,176		

FTEs

Total: 51,167 FTEs/1,000 Residents¹: 6.04 Average: 0.95

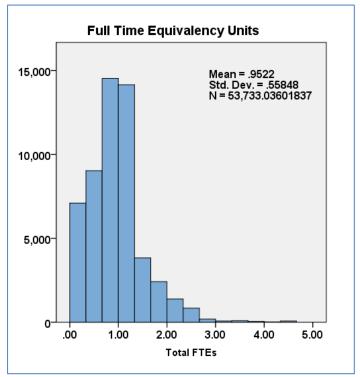
Age & Gender Effect

Age, Partial Eta²: Small Gender, Partial Eta²: Negligible

Partial Eta² Explained:
Partial Eta² is a statistical
measure of effect size.

Source: Va. Healthcare Workforce Data Center

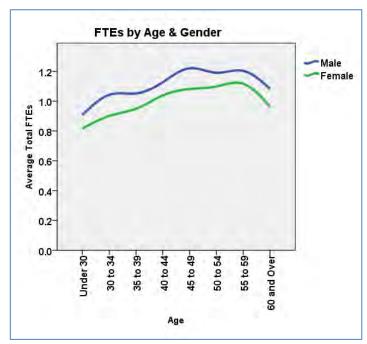
A Closer Look:



Source: Va. Healthcare Workforce Data Center

The typical (median) CNA provided 0.91 FTEs, or approximately 36 hours per week for 50 weeks. Although FTEs appear to vary by age and gender, statistical tests did not verify a difference exists.²

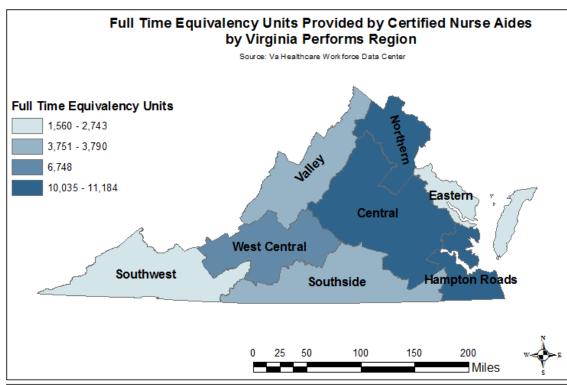
Full-Time Equivalency Units					
Age	Average	Median			
	Age				
Under 30	0.82	0.81			
30 to 34	0.90	0.90			
35 to 39	0.94	0.91			
40 to 44	1.03	0.95			
45 to 49	1.08	1.08			
50 to 54	1.10	1.08			
55 to 59	1.11	1.08			
60 and Over	0.95	0.91			
Gender					
Male	1.06	1.03			
Female	0.95	0.91			
Source: Va. Healthcare Wo	rkforce Data Center				

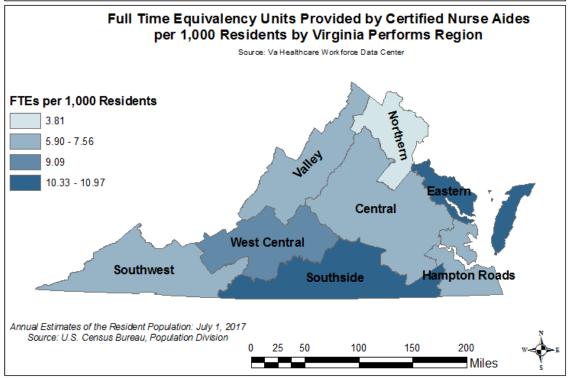


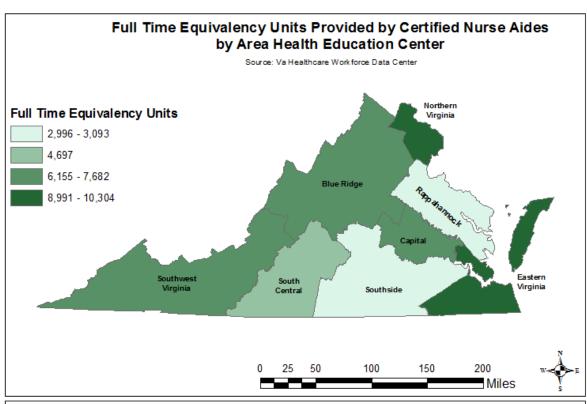
¹Number of residents in 2017 was used as the denominator.

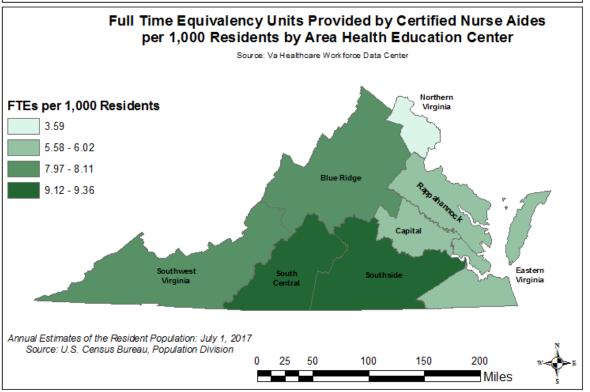
² Due to assumption violations in Mixed between-within ANOVA (Levene's Test is significant)

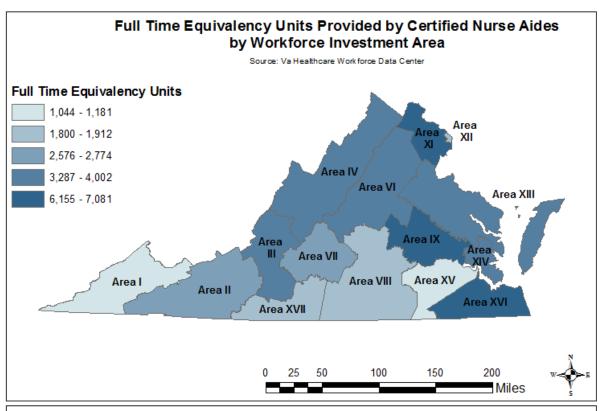
Virginia Performs Regions

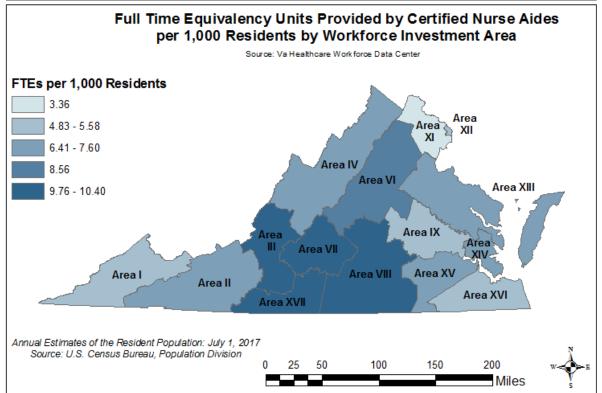


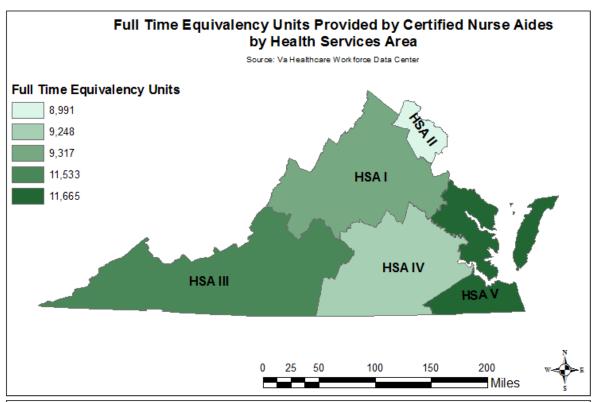


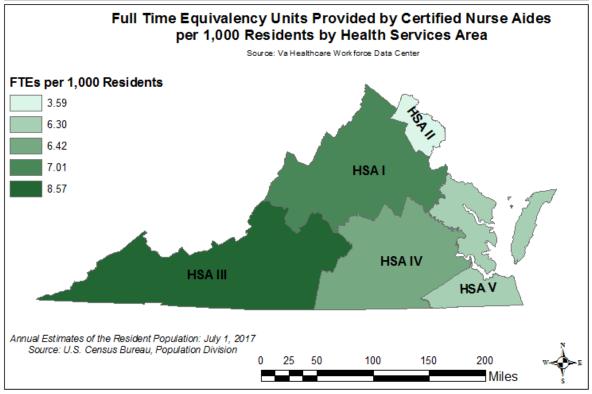


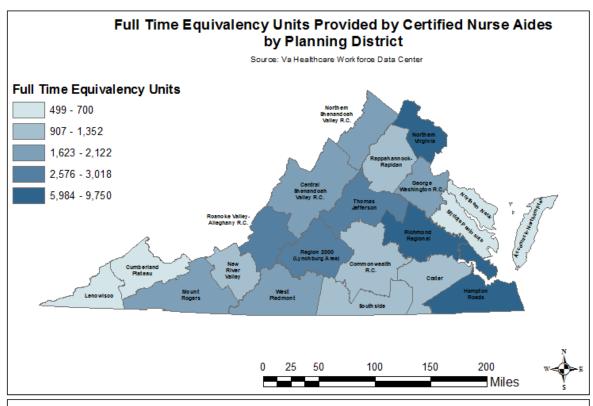


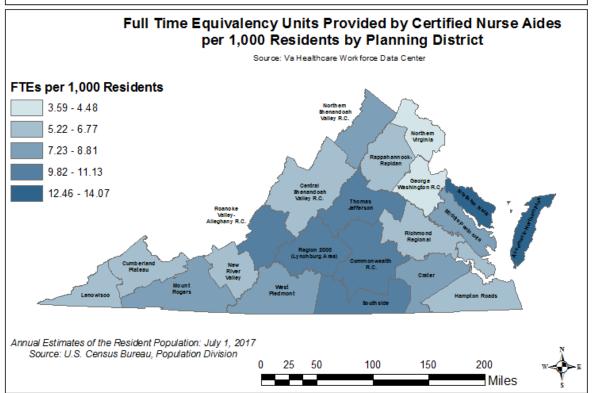












Appendix A: Weights

Rural		Location W	eight	Total \	Weight
Status	#	Rate	Weight	Min	Max
Metro, 1 million+	30,707	52.73%	1.896547	1.530449	2.680529
Metro, 250,000 to 1 million	6,393	52.35%	1.910069	1.54136	2.699639
Metro, 250,000 or less	5,955	52.07%	1.920348	1.549655	2.714168
Urban pop 20,000+, Metro adj	1,934	56.15%	1.780847	1.437083	2.517001
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500- 19,999, Metro adj	4,436	56.18%	1.780096	1.436477	2.51594
Urban pop, 2,500- 19,999, nonadj	2,056	48.59%	2.058058	1.660782	2.908803
Rural, Metro adj	2,383	50.94%	1.962932	1.584019	2.774355
Rural, nonadj	1,040	50.77%	1.969697	1.589478	2.783916
Virginia border state/DC	3,357	36.46%	2.742647	2.213222	3.876383
Other US State	2,034	23.16%	4.318471	3.484859	6.10361

Source: Va. Healthcare Workforce Data Center

Age		Age Weight		Total \	Weight
Age	#	Rate	Weight	Min	Max
Under 30	17,601	35.97%	2.78013	2.51594	6.10361
30 to 34	8,038	44.94%	2.22536	2.013889	4.885646
35 to 39	6,393	55.70%	1.795282	1.62468	3.941436
40 to 44	5,416	59.64%	1.67678	1.517439	3.681272
45 to 49	5,356	59.71%	1.674797	1.515644	3.676917
50 to 54	5,373	62.55%	1.598631	1.446717	3.5097
55 to 59	5,181	63.00%	1.587316	1.436477	3.484859
60 and Over	6,937	59.05%	1.693604	1.532664	3.718206

Source: Va. Healthcare Workforce Data Center

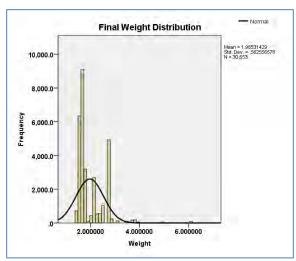
See the Methods section on the HWDC website for details on HWDC Methods:

www.dhp.virginia.gov/hwdc/

Final weights are calculated by multiplying the two weights and the overall response rate:

Age Weight x Rural Weight x Response Rate = Final Weight.

Overall Response Rate: 0.508384



Source: Va. Healthcare Workforce Data Center