
Virginia's Pharmacist Workforce: 2016

Healthcare Workforce Data Center

February 2017

Virginia Department of Health Professions
Healthcare Workforce Data Center
Perimeter Center
9960 Mayland Drive, Suite 300
Richmond, VA 23233
804-367-2115, 804-527-4466(fax)
E-mail: HWDC@dhp.virginia.gov

Follow us on Tumblr: www.vahwdc.tumblr.com

12,840 Pharmacists 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 Pharmacy express our sincerest appreciation for your ongoing cooperation.

Thank You!

Virginia Department of Health Professions

David E. Brown, D.C.
Director

Lisa R. Hahn, MPA
Chief Deputy Director

Healthcare Workforce Data Center Staff:

Dr. Elizabeth Carter, Ph.D.
Executive Director

Yetty Shobo, Ph.D.
Deputy Director

Laura Jackson
Operations Manager

Christopher Coyle
Research Assistant

The Board of Pharmacy

Chair

Rebecca Thornbury
Grundy

Vice-Chair

Ryan K. Logan
Fairfax

Members

Jody H. Allen
Midlothian

Melvin L. Boone, Sr.
Chesapeake

Freda Cathcart
Roanoke

Michael I. Elliott
Forest

Sheila K. W. Elliott
Hampton

Rafael Saenz
Crozet

Ellen B. Shinaberry
Harrisonburg

Cynthia Warriner
Chester

Executive Director

Caroline D. Juran
Richmond

Contents

Results in Brief.....	2
Summary of Trends	3
Survey Response Rates.....	4
The Workforce.....	5
Demographics.....	6
Background	7
Education	8
Credentials	10
Current Employment Situation	11
Employment Quality.....	12
Labor Market.....	13
Work Site Distribution	14
Establishment Type	15
Time Allocation	17
Retirement & Future Plans	18
Full-Time Equivalency Units.....	20
Maps	21
Council on Virginia’s Future Regions	21
Area Health Education Center Regions	22
Workforce Investment Areas	23
Health Services Areas	24
Planning District	25
Appendix	25
Weights	26

The Pharmacist Workforce: At a Glance:

The Workforce

Licensees:	14,409
Virginia's Workforce:	8,443
FTEs:	6,976

Background

Rural Childhood:	33%
HS Degree in VA:	46%
Prof. Degree in VA:	48%

Current Employment

Employed in Prof.:	93%
Hold 1 Full-time Job:	73%
Satisfied?:	90%

Survey Response Rate

All Licensees:	89%
Renewing Practitioners:	98%

Education

Baccalaureate:	41%
Pharm.D./Professional:	59%

Job Turnover

Switched Jobs in 2016:	6%
Employed over 2 yrs:	61%

Demographics

Female:	64%
Diversity Index:	50%
Median Age:	45

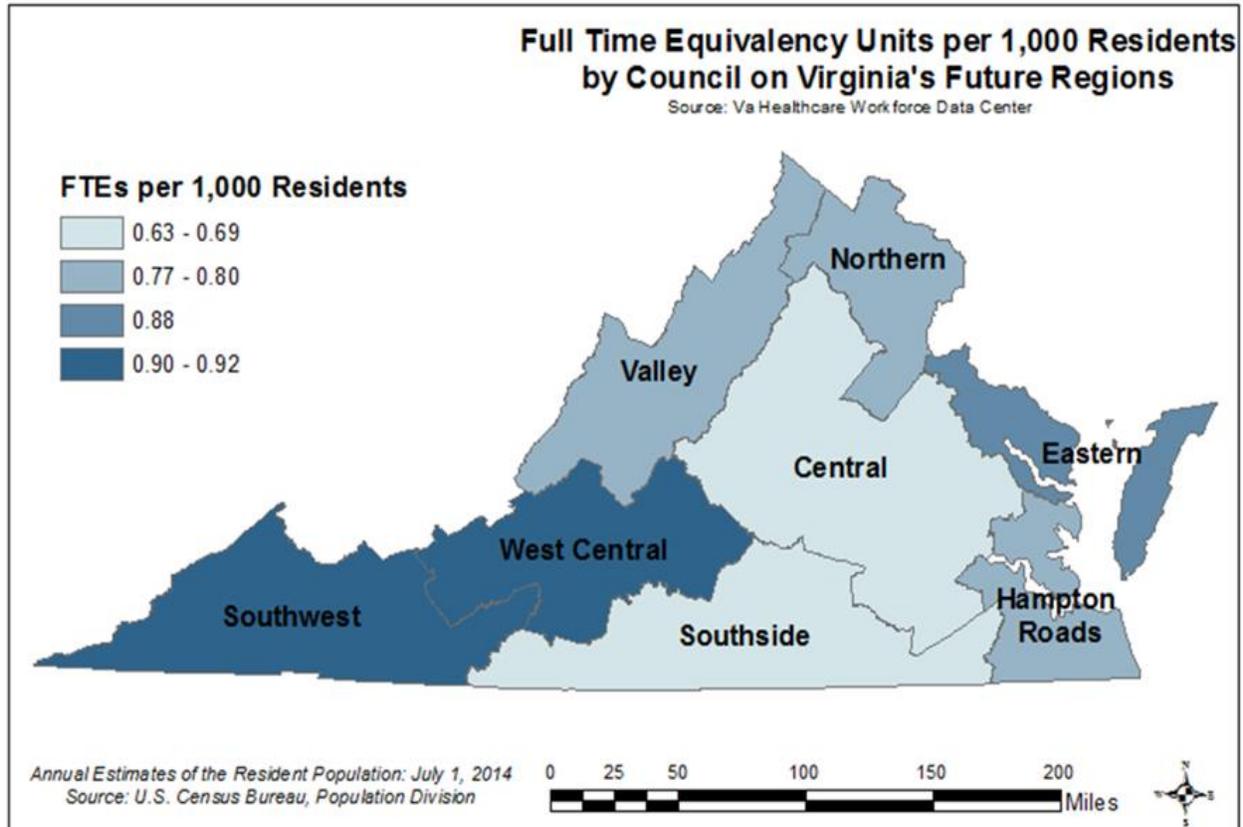
Finances

Median Inc.:	\$120k-\$130k
Health Benefits:	72%
Under 40 w/ Ed debt:	77%

Primary Roles

Patient Care:	75%
Administration:	7%
Education:	1%

Source: Va. Healthcare Workforce Data Center



12,840 pharmacists voluntarily took part in the 2016 Pharmacist Workforce Survey. The Virginia Department of Health Professions' Healthcare Workforce Data Center (HWDC) administers the survey during the license renewal process, which takes place every December for pharmacists. These survey respondents represent 89% of the 14,409 pharmacists who are licensed in the state and 98% of renewing practitioners.

The HWDC estimates that 8,443 pharmacists 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 pharmacist at some point in the future. During 2016, Virginia's pharmacists provided 6,976 "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).

A majority of pharmacists are female, and the median age among those in the workforce is 45. In a random encounter between two pharmacists, there is a one-in-two chance that they would be of different races or ethnicities, a measure known as the diversity index. This makes Virginia's pharmacists slightly less diverse than the state's overall population, where there is a 55% chance that two randomly chosen people would be of different races or ethnicities.

One-third of pharmacists grew up in a rural area, and nearly one-quarter of these professionals currently work in non-Metro areas of the state. Meanwhile, 46% of Virginia's pharmacists graduated from high school in Virginia, and 48% of pharmacists earned their initial professional degree in the state. In total, 55% of Virginia's pharmacists have some educational background in the state.

A slight majority of Virginia's pharmacist workforce has earned a doctoral or other professional degree as their highest level of educational attainment. 41% of pharmacists currently carry educational debt, including more than three-quarters of those under the age of 40. The median debt burden for those pharmacists with educational debt is between \$100,000 and \$110,000.

93% of pharmacists are currently employed in the profession. 73% of all pharmacists hold one full-time position, and more than half of all professionals work between 40 and 49 hours per week. Over the past year, only 1% of pharmacists have been involuntarily unemployed, while another 3% have been underemployed.

The typical pharmacist earned between \$120,000 and \$130,000 last year. In addition, 86% of pharmacists who are compensated with either an hourly wage or salary at their primary work location also receive at least one employer-sponsored benefit, including 72% who receive health insurance. 90% of all pharmacists are satisfied with their current employment situation, including 50% who indicate they are "very satisfied".

More than 90% of all pharmacists work in the private sector, including 69% who work at a for-profit organization. Large community pharmacies (i.e. pharmacies with more than 10 locations) were the most common working establishment type for Virginia's pharmacist workforce, employing nearly one-third of all professionals. Hospital systems and smaller pharmacies were also common employers of Virginia's pharmacist workforce.

A typical pharmacist spends most of her time treating patients. Three quarters of all pharmacists serve a patient care role, meaning that at least 60% of their time is spent in patient care activities. Meanwhile, another 7% of pharmacists served an administrative role at their primary work location.

40% of pharmacists expect to retire by the age of 65. Just 7% of the current workforce expects to retire in the next two years, while half of the current workforce expects to retire by 2041. Over the next two years, only 1% of Virginia's current pharmacist workforce expects to leave the profession, while 3% expect to leave the state entirely. Meanwhile, 9% of pharmacists plan on increasing patient care activities over the next two years, and 10% expect to pursue additional educational opportunities.

Summary of Trends

There are no significant differences in the survey responses obtained in the 2016 survey compared to the previous years. The number of licensed pharmacists, the state workforce, and the full time equivalency (FTE) units provided by the state pharmacists have all increased slightly over time. For example, there were 12,732 licensees in the 2013 survey compared to 13,998 in 2015 and 14,409 in 2016. Similarly, there were 6,846 FTEs in 2013, compared to 6,932 and 6,976 in 2015 and 2016, respectively. Survey response rates have held steady and high between 2015 and 2016.

The pharmacist workforce has become more racially and ethnically diverse, with its diversity index increasing from 47% in 2013 to 50% in 2016. For those under age 40, the index increased from 57% to 59%. However, the workforce has less gender diversity as the percent female has inched up by a percent every year from 62% in 2013 to 64% in 2016. Median age, by contrast, has been relatively stable between 44 to 45 years of age in the past four surveys. Although the median age has been stable, the percent under age 40 has increased from 37% in 2013 to 40% in 2016.

Educational attainment has increased among the pharmacist workforce. In 2013, only 51% had a pharmacy doctorate compared to 59% in 2016. This increase may also be the reason why a higher proportion of pharmacists reported educational debt. 36% had educational debt in 2013 compared to 41% in 2016. The amount of debt also increased from a median of \$90K-\$100K to \$100K-\$110K. Meanwhile, the percent reporting residency or specialization has declined slightly. Twenty-four percent reported at least one residency in 2013 compared to 20% in 2016; 25% also had an immunization specialty in 2013 compared to 18% in 2016.

The market has not changed much for pharmacists; only about 1% reported being involuntarily employed in nearly all the surveys and over 92% report being employed in the profession. Median income has increased slightly from \$110K-\$120K in 2013 to \$120K-\$130K in the most recent survey. Along the same line, the percent receiving at least one employer sponsored benefit has increased from 83% in 2013 to 86% in 2016. About 9 out of 10 pharmacists report they are satisfied with their current employment situation in all the surveys.

The geographical distribution of the pharmacist workforce has held constant. However, 12% report working in two or more work locations in 2016 compared to 17% in 2013. The work section, establishment, role, and time allocation have also held constant for pharmacists over the years. Retirement plans have also remained stable among pharmacists.

A Closer Look:

Licensee Counts		
License Status	#	%
Renewing Practitioners	12,958	90%
New Licensees	901	6%
Non-Renewals	550	4%
All Licensees	14,409	100%

Source: Va. Healthcare Workforce Data Center

HWDC surveys tend to achieve very high response rates. 98% of renewing pharmacists submitted a survey. These represent 89% of pharmacists who held a license at some point in 2016.

Statistic	Response Rates		Response Rate
	Non Respondents	Respondent	
By Age			
Under 30	113	943	89%
30 to 34	220	2,075	90%
35 to 39	192	1,792	90%
40 to 44	153	1,628	91%
45 to 49	167	1,656	91%
50 to 54	124	1,405	92%
55 to 59	124	1,210	91%
60 and Over	476	2,131	82%
Total	1,569	12,840	89%
New Licenses			
Issued in 2016	214	687	76%
Metro Status			
Non-Metro	149	952	86%
Metro	701	7,330	91%
Not in Virginia	721	4,558	86%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Licensed Pharmacists

Number: 14,409
 New: 6%
 Not Renewed: 4%

Survey Response Rates

All Licensees: 89%
 Renewing Practitioners: 98%

Source: Va. Healthcare Workforce Data Center

Response Rates	
Completed Surveys	12,840
Response Rate, all licensees	89%
Response Rate, Renewals	98%

Source: Va. Healthcare Workforce Data Center

Definitions

- The Survey Period:** The survey was conducted in December 2016.
- Target Population:** All pharmacists who held a Virginia license at some point in 2016.
- Survey Population:** The survey was available to those who renewed their licenses online. It was not available to those who did not renew, including some pharmacists newly licensed in 2016.

At a Glance:

Workforce

Pharmacist Workforce: 8,443
 FTEs: 6,976

Utilization Ratios

Licensees in VA Workforce: 59%
 Licensees per FTE: 2.07
 Workers per FTE: 1.21

Source: Va. Healthcare Workforce Data Center

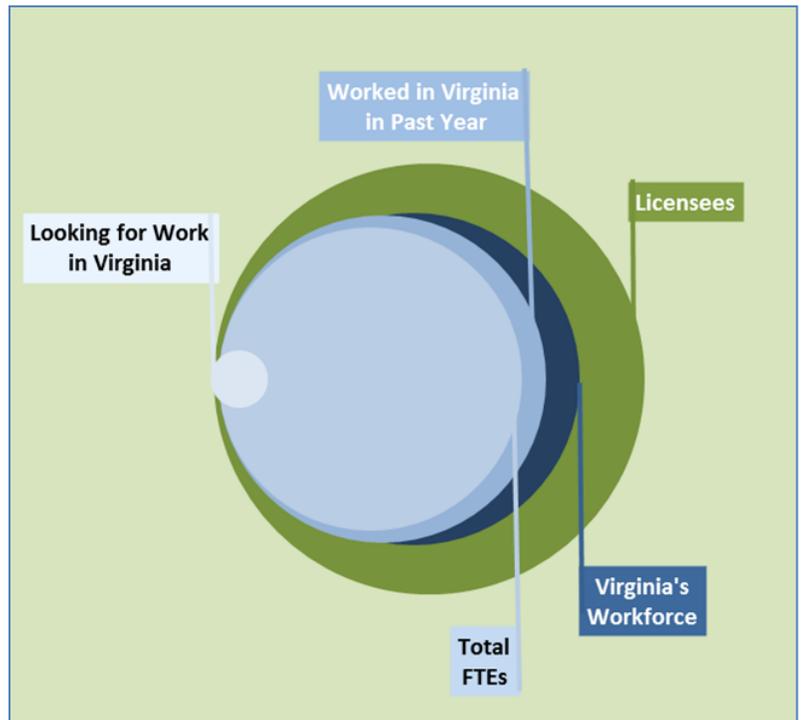
Virginia's Pharmacist Workforce		
Status	#	%
Worked in Virginia in Past Year	8,214	97%
Looking for Work in Virginia	229	3%
Virginia's Workforce	8,443	100%
Total FTEs	6,976	
Licensees	14,409	

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

- 1. Virginia's Workforce:** A licensee with a primary or secondary work site in Virginia at any time in the past year 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.



Source: Va. Healthcare Workforce Data Center

A Closer Look:

Age & Gender						
Age	Male		Female		Total	
	#	% Male	#	% Female	#	% in Age Group
Under 30	219	31%	478	69%	697	9%
30 to 34	360	29%	870	71%	1,229	17%
35 to 39	277	28%	715	72%	992	13%
40 to 44	230	28%	598	72%	828	11%
45 to 49	250	28%	657	72%	907	12%
50 to 54	258	34%	499	66%	757	10%
55 to 59	237	37%	408	63%	645	9%
60 +	821	63%	478	37%	1,300	18%
Total	2,653	36%	4,702	64%	7,355	100%

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity					
Race/ Ethnicity	Virginia*	Pharmacists		Pharmacists Under 40	
	%	#	%	#	%
White	63%	4,944	68%	1,740	60%
Black	19%	803	11%	380	13%
Asian	6%	1,205	16%	590	20%
Other Race	0%	115	2%	49	2%
Two or more races	2%	152	2%	87	3%
Hispanic	9%	100	1%	46	2%
Total	100%	7,319	100%	2,891	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, 2014. Source: Va. Healthcare Workforce Data Center

At a Glance:

Gender

% Female: 64%
% Under 40 Female: 71%

Age

Median Age: 45
% Under 40: 40%
% 55+: 26%

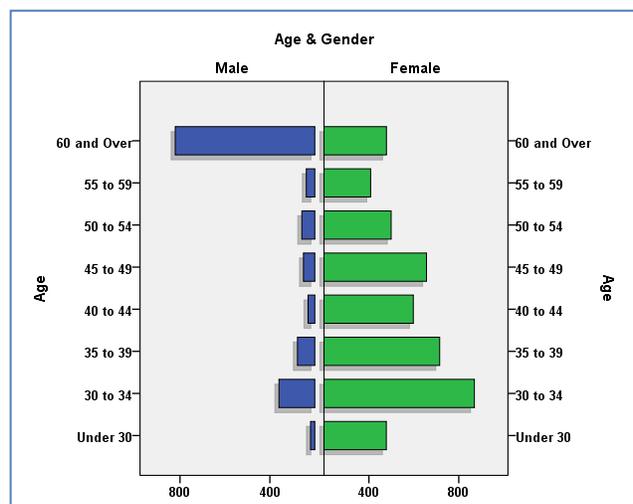
Diversity

Diversity Index: 50%
Under 40 Div. Index: 58%

Source: Va. Healthcare Workforce Data Center

In a chance encounter between two pharmacists, there is a 50% chance that they would be of a different race/ethnicity (a measure known as the Diversity Index). For Virginia's population as a whole, the comparable number is 55%.

40% of pharmacists are under the age of 40, and 71% of these professionals are female. In addition, pharmacists who are under the age of 40 are slightly more diverse than Virginia's overall population.



Source: Va. Healthcare Workforce Data Center

At a Glance:

Childhood

Urban Childhood: 17%
 Rural Childhood: 33%

Virginia Background

HS in Virginia: 46%
 Prof. Education in VA: 48%
 HS/Prof. Educ. in VA: 55%

Location Choice

% Rural to Non-Metro: 22%
 % Urban/Suburban to Non-Metro: 6%

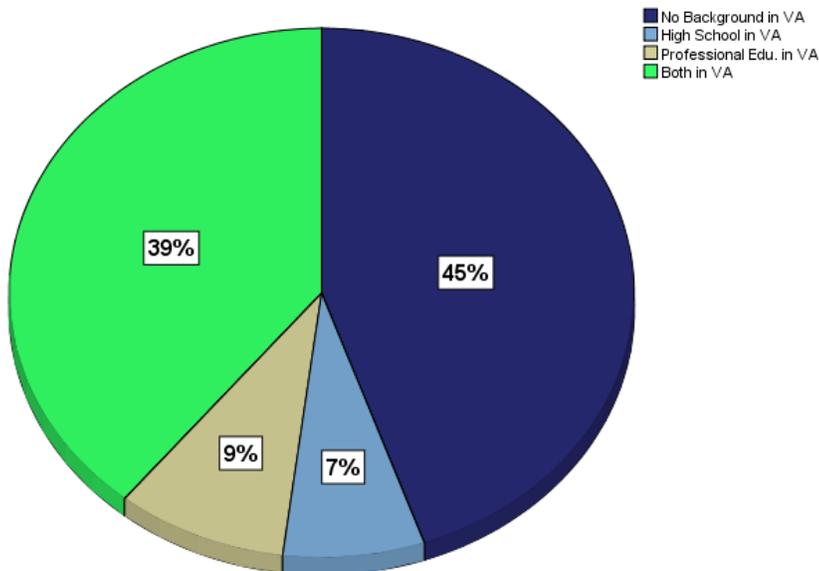
Source: Va. Healthcare Workforce Data Center

A Closer Look:

Primary Location: USDA Rural Urban Continuum		Rural Status of Childhood Location		
Code	Description	Rural	Suburban	Urban
Metro Counties				
1	Metro, 1 million+	23%	57%	21%
2	Metro, 250,000 to 1 million	52%	41%	8%
3	Metro, 250,000 or less	44%	45%	11%
Non-Metro Counties				
4	Urban pop 20,000+, Metro adj	50%	36%	14%
6	Urban pop, 2,500-19,999, Metro adj	58%	30%	12%
7	Urban pop, 2,500-19,999, nonadj	82%	14%	5%
8	Rural, Metro adj	62%	34%	3%
9	Rural, nonadj	58%	30%	12%
Overall		33%	50%	17%

Source: Va. Healthcare Workforce Data Center

Educational Background in Virginia



33% of pharmacists grew up in self-described rural areas, and 22% of these professionals currently work in non-Metro counties. Overall, 11% of Virginia's pharmacist workforce currently works in non-Metro counties.

Source: Va. Healthcare Workforce Data Center

Top Ten States for Pharmacy Recruitment

Rank	All Pharmacists			
	High School	#	Professional School	#
1	Virginia	3,381	Virginia	3,457
2	Outside U.S./Canada	832	Pennsylvania	528
3	Pennsylvania	473	Outside U.S./Canada	309
4	New York	377	New York	284
5	Maryland	216	North Carolina	282
6	West Virginia	211	Massachusetts	225
7	North Carolina	193	Washington, D.C.	222
8	New Jersey	162	Maryland	214
9	Ohio	150	West Virginia	208
10	Florida	108	Ohio	163

Source: Va. Healthcare Workforce Data Center

46% of Virginia's pharmacists received their high school degree in Virginia, and 48% received their initial professional degree in the state.

Among pharmacists who have been licensed in the past five years, 40% received their high school degree in Virginia, and 44% received their initial professional degree in the state.

Rank	Licensed in the Past 5 Years			
	High School	#	Professional School	#
1	Virginia	767	Virginia	831
2	Outside U.S./Canada	211	Pennsylvania	137
3	Pennsylvania	138	New York	103
4	New York	133	North Carolina	84
5	Maryland	74	Maryland	82
6	North Carolina	62	Massachusetts	61
7	Florida	44	Outside U.S./Canada	60
8	New Jersey	43	West Virginia	57
9	Ohio	42	Tennessee	57
10	West Virginia	40	Ohio	46

Source: Va. Healthcare Workforce Data Center

Nearly 41% of Virginia's licensed pharmacists did not participate in Virginia's workforce in 2016. 91% of these professionals worked at some point in the past year, including 84% who currently work as pharmacists.

At a Glance:

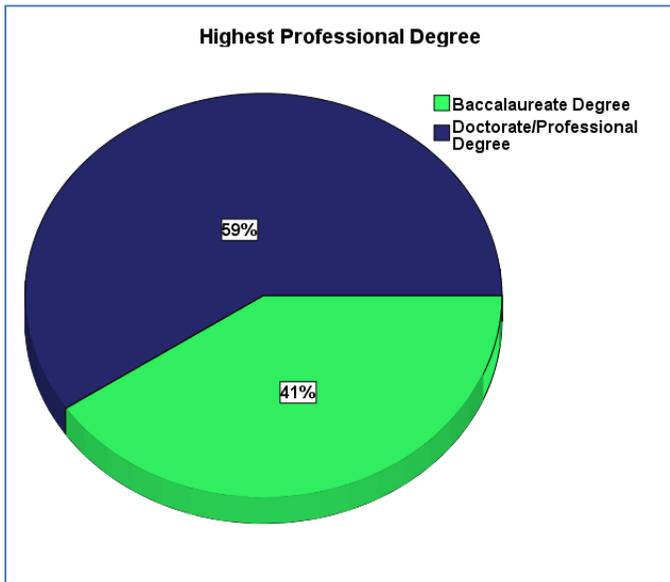
Not in VA Workforce

Total:	5,965
% of Licensees:	41%
Federal/Military:	8%
VA Border State/DC:	18%

A Closer Look:

Highest Professional Degree		
Degree	#	%
B.S. Pharmacy	2,891	41%
Pharm.D.	4,233	59%
Total	7,123	100%

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

41% of pharmacists currently have educational debt, including 77% of those under the age of 40. For those with educational debt, the median debt load is between \$100,000 and \$110,000. Among those under the age of 40 with debt, median is \$120,000 to \$130,000.

At a Glance:

Education

B.S. Pharmacy: 41%

Pharm.D.: 59%

Educational Debt

Carry debt: 41%

Under age 40 w/ debt: 77%

Median debt: \$100k-\$110k

Source: Va. Healthcare Workforce Data Center

59% of pharmacists hold a Doctorate in Pharmacy as their highest professional degree, while all remaining professionals have earned a Bachelor's degree in Pharmacy.

Amount Carried	Educational Debt			
	All Pharmacists		Pharmacists Under 40	
	#	%	#	%
None	3,592	59%	561	23%
\$20,000 or less	211	3%	113	5%
\$20,001-\$40,000	211	3%	124	5%
\$40,001-\$60,000	243	4%	153	6%
\$60,001-\$80,000	255	4%	151	6%
\$80,001-100,000	255	4%	173	7%
\$100,001-\$120,000	248	4%	199	8%
\$120,001-\$140,000	205	3%	160	7%
\$140,001-\$160,000	187	3%	158	7%
\$160,001-\$180,000	143	2%	129	5%
\$180,001-\$200,000	124	2%	111	5%
Over \$200,000	440	7%	399	16%
Total	6,114	100%	2,431	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Top Specialties

Immunization:	18%
Community Pharmacy:	9%
Ambulatory Care:	4%

Top Board Certifications

BPS - Pharmacotherapy:	5%
CCGP - Geriatrics:	1%
BPS - Ambulatory Care:	1%

Top Residencies (PGY1)

Pharmacy Practice (Post 1993):	9%
Community Pharmacy:	6%
Pharmacy Practice (Pre 1993):	4%

Source: Va. Healthcare Workforce Data Center

PGY1		
Residency	#	%
Pharmacy Practice (Post 1993)	760	9%
Community Pharmacy	486	6%
Pharmacy Practice (Pre 1993)	365	4%
Managed Care Pharmacy	41	0%
Other	0	0%
Total	1,651	20%
PGY2		
Ambulatory Care	100	1%
Drug Information	61	1%
Internal Medicine/Cardiology	46	1%
Critical Care	43	1%
Health-system Pharmacy Administration	42	0%
Pediatrics	27	0%
Infectious Disease	25	0%
Geriatrics	21	0%
Oncology	20	0%
Psychiatry	20	0%
Managed Care Pharmacy Systems	18	0%
Pharmacotherapy	13	0%
Nuclear	10	0%
Other	188	2%
Total	632	7%

Source: Va. Healthcare Workforce Data Center

Board Certifications		
Certification	#	%
BPS-Pharmacotherapy	436	5%
CCGP-Geriatrics	69	1%
BPS-Ambulatory Care	58	1%
BPS-Oncology	30	0%
BPS- Psychiatric	20	0%
BPS- Nutrition	14	0%
BPS-Nuclear Pharmacy	8	0%
ABAT-Applied Toxicology	2	0%
Other Board Certification	161	2%
At Least One Certification	732	9%

Source: Va. Healthcare Workforce Data Center

9% of pharmacists hold a board certification, including 5% who hold a certification in Pharmacotherapy. 36% also have a self-designated specialty area, including 18% who have a specialization in immunization.

At a Glance:

Employment

Employed in Profession: 93%
 Involuntarily Unemployed: 1%

Positions Held

1 Full-time: 73%
 2 or More Positions: 8%

Weekly Hours:

40 to 49: 53%
 60 or more: 4%
 Less than 30: 12%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	3	0%
Employed in a pharmacy-related capacity	6,642	93%
Employed, NOT in a pharmacy-related capacity	168	2%
Not working, reason unknown	0	0%
Involuntarily unemployed	65	1%
Voluntarily unemployed	161	2%
Retired	116	2%
Total	7,156	100%

Source: Va. Healthcare Workforce Data Center

93% of Virginia's pharmacists are currently employed in the profession, and only 1% of all pharmacy professionals are involuntarily unemployed at the moment. 73% of the state's pharmacist workforce has one full-time job, while just 8% of pharmacists have multiple positions. 53% of pharmacists work between 40 and 49 hours per week, while 4% of pharmacy professionals work at least 60 hours per week.

Current Positions		
Positions	#	%
No Positions	342	5%
One Part-Time Position	954	14%
Two Part-Time Positions	146	2%
One Full-Time Position	5,134	73%
One Full-Time Position & One Part-Time Position	401	6%
Two Full-Time Positions	13	0%
More than Two Positions	36	1%
Total	7,026	100%

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	342	5%
1 to 9 hours	181	3%
10 to 19 hours	235	3%
20 to 29 hours	420	6%
30 to 39 hours	1,249	18%
40 to 49 hours	3,741	53%
50 to 59 hours	544	8%
60 to 69 hours	142	2%
70 to 79 hours	88	1%
80 or more hours	55	1%
Total	6,997	100%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Income		
Annual Income	#	%
Volunteer Work Only	51	1%
\$50,000 or less	434	8%
\$50,001-\$60,000	109	2%
\$60,001-\$70,000	114	2%
\$70,001-\$80,000	157	3%
\$80,001-\$90,000	140	3%
\$90,001-\$100,000	257	5%
\$100,001-\$110,000	544	10%
\$110,001-\$120,000	800	15%
\$120,001-\$130,000	1,082	20%
\$130,001-\$140,000	831	15%
\$140,001-\$150,000	462	8%
More than \$150,000	510	9%
Total	5,490	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Annual Income
Median Income: \$120k-130k

Benefits
Employer Health Insurance: 72%
Employer Retirement: 72%

Satisfaction
Satisfied: 90%
Very Satisfied: 50%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
Very Satisfied	3,420	50%
Somewhat Satisfied	2,803	40%
Somewhat Dissatisfied	488	7%
Very Dissatisfied	193	3%
Total	6,903	100%

Source: Va. Healthcare Workforce Data Center

The typical pharmacist earned between \$120,000 and \$130,000 in 2016. Among pharmacists who received either an hourly wage or a salary as compensation at their primary work location, 72% received health insurance and 72% also had access to a retirement plan.

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
Paid Vacation Leave	5,195	78%	82%
Retirement	4,581	69%	72%
Health Insurance	4,540	68%	72%
Dental Insurance	4,348	65%	69%
Paid Sick Leave	4,047	61%	64%
Group Life Insurance	3,445	52%	55%
Signing/Retention Bonus	460	7%	7%
Received At Least One Benefit	5,476	82%	86%

*From any employer at time of survey.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Underemployment in Past Year		
In the past year did you . . . ?	#	%
Experience Involuntary Unemployment?	113	1%
Experience Voluntary Unemployment?	286	3%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	229	3%
Work two or more positions at the same time?	704	8%
Switch employers or practices?	470	6%
Experienced at least 1	1,512	18%

Source: Va. Healthcare Workforce Data Center

Only 1% of Virginia’s pharmacists were involuntarily unemployed at some point in 2016. For comparison, Virginia’s average monthly unemployment rate was 4%.¹

Location Tenure				
Tenure	Primary		Secondary	
	#	%	#	%
Not Currently Working at this Location	136	2%	93	9%
Less than 6 Months	704	10%	130	13%
6 Months to 1 Year	561	8%	106	11%
1 to 2 Years	1,234	18%	164	17%
3 to 5 Years	1,347	20%	198	20%
6 to 10 Years	1,058	16%	151	15%
More than 10 Years	1,665	25%	147	15%
Subtotal	6,706	100%	988	100%
Did not have location	272		7,410	
Item Missing	1,466		45	
Total	8,443		8,443	

Source: Va. Healthcare Workforce Data Center

Nearly half of all pharmacists receive a salary or commission at their primary work location, while 43% receive an hourly wage.

At a Glance:

Unemployment Experience

Involuntarily Unemployed: 1%
Underemployed: 3%

Stability

Switched: 6%
New Location: 22%
Over 2 years: 61%
Over 2 yrs, 2nd location: 50%

Employment Type

Salary or Wage: 93%

Source: Va. Healthcare Workforce Data Center

61% of pharmacists have worked at their primary location for more than 2 years—the job tenure normally required to get a conventional mortgage loan.

Employment Type		
Primary Work Site	#	%
Salary/ Commission	3,153	51%
Hourly Wage	2,603	42%
By Contract	74	1%
Business/ Practice Income	317	5%
Unpaid	43	1%
Subtotal	6,191	100%

Source: Va. Healthcare Workforce Data Center

¹ As reported by the US Bureau of Labor Statistics. The not seasonally adjusted monthly unemployment rate ranged from 3.9% in December 2015 to 4.0% in November 2016. November’s rate is from preliminary data.

At a Glance:

Concentration

Top Region:	25%
Top 3 Regions:	70%
Lowest Region:	2%

Locations

2 or more (2016):	12%
2 or more (Now*):	13%

Source: Va. Healthcare Workforce Data Center

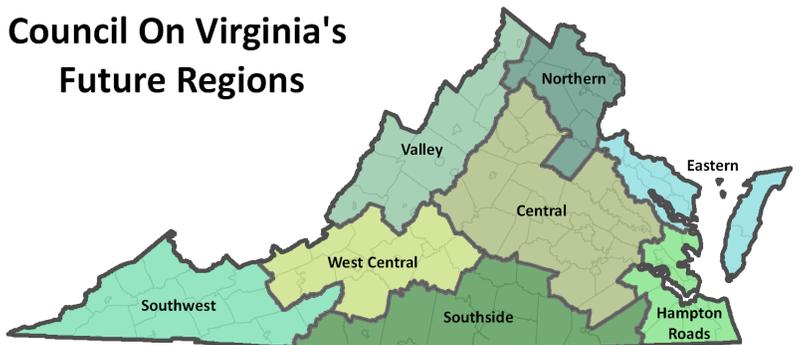
Half of all pharmacists in the state work in either Northern Virginia or Central Virginia.

A Closer Look:

Regional Distribution of Work Locations				
COVF Region	Primary Location		Secondary Location	
	#	%	#	%
Central	1,687	25%	194	19%
Eastern	123	2%	19	2%
Hampton Roads	1,292	19%	175	18%
Northern	1,687	25%	231	23%
Southside	242	4%	37	4%
Southwest	379	6%	84	8%
Valley	422	6%	63	6%
West Central	736	11%	112	11%
Virginia Border State/DC	38	1%	39	4%
Other US State	57	1%	39	4%
Outside of the US	1	0%	3	0%
Total	6,664	100%	996	100%
Item Missing	1,508		38	

Source: Va. Healthcare Workforce Data Center

Council On Virginia's Future Regions



Over the past year, 12% of Virginia's pharmacists have worked at multiple locations.

Locations	Number of Work Locations			
	Work Locations in 2016		Work Locations Now*	
	#	%	#	%
0	270	3%	324	5%
1	7,142	85%	5,695	82%
2	527	6%	490	7%
3	320	4%	293	4%
4	45	1%	25	0%
5	27	0%	21	0%
6 or More	112	1%	71	1%
Total	8,443	100%	6,919	100%

*At the time of survey completion, December 2016.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
For-Profit	4,290	69%	687	74%
Non-Profit	1,422	23%	188	20%
State/Local Government	228	4%	25	3%
Veterans Administration	127	2%	6	1%
U.S. Military	129	2%	13	1%
Other Federal Gov't	58	1%	9	1%
Total	6,254	100%	928	100%
Did not have location	272		7,410	
Item Missing	1,917		106	

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Sector

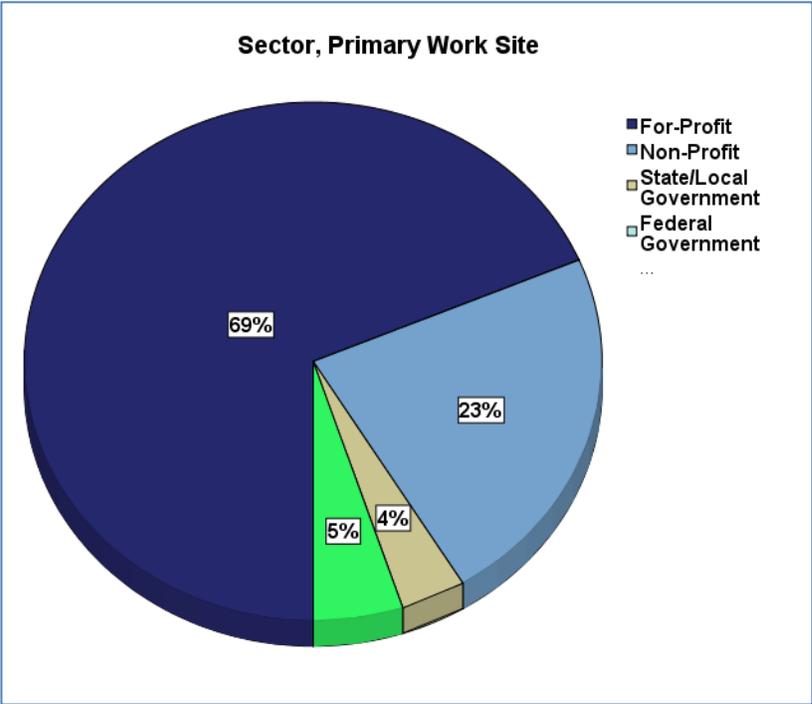
For Profit:	69%
Federal:	5%

Top Establishments

Large Chain Pharmacy: (11+ Stores)	31%
Hospital/Health System: (Inpatient)	23%
Independent Pharmacy: (1-4 Stores)	9%

Source: Va. Healthcare Workforce Data Center

More than 90% of all pharmacists work in the private sector, including 69% who work at a for-profit company. Another 5% of pharmacists work for the federal government, while 4% work for a state or local government.

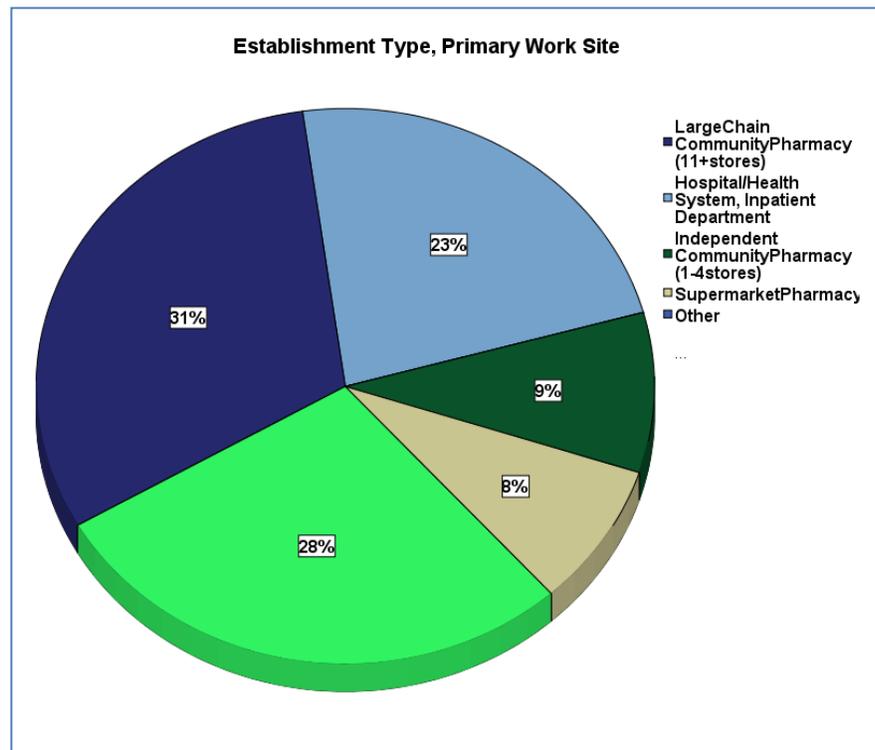


Source: Va. Healthcare Workforce Data Center

Top Location Types				
Establishment Type	Primary Location		Secondary Location	
	#	%	#	%
Large Chain Community Pharmacy	1,896	31%	247	27%
Hospital/Health System, Inpatient Department	1,397	23%	158	17%
Independent Community Pharmacy	568	9%	145	16%
Supermarket Pharmacy	510	8%	51	6%
Hospital/Health System, Outpatient Department	319	5%	42	5%
Mass Merchandiser (i.e. Big Box Store)	266	4%	35	4%
Nursing Home/Long-Term Care	190	3%	38	4%
Clinic-Based Pharmacy	185	3%	58	6%
Benefit Administration	144	2%	12	1%
Academic Institution	120	2%	33	4%
Home Health/Infusion	66	1%	6	1%
Manufacturer	41	1%	2	0%
Mail Service Pharmacy	34	1%	10	1%
Small Chain Community Pharmacy	24	0%	5	1%
Wholesale Distributor	2	0%	0	0%
Other	333	5%	62	7%
Total	6,095	100%	904	100%
Did Not Have a Location	272		7,410	

Large chain community pharmacies of more than 10 stores are the most common establishment type in Virginia, employing nearly one-third of the state's pharmacist workforce.

Source: Va. Healthcare Workforce Data Center



Large chain community pharmacies of more than 10 stores were also the most common establishment type among pharmacists who also had a secondary work location.

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Typical Time Allocation

Patient Care: 80%-89%
Administration: 1%-9%
Education: 0%

Roles

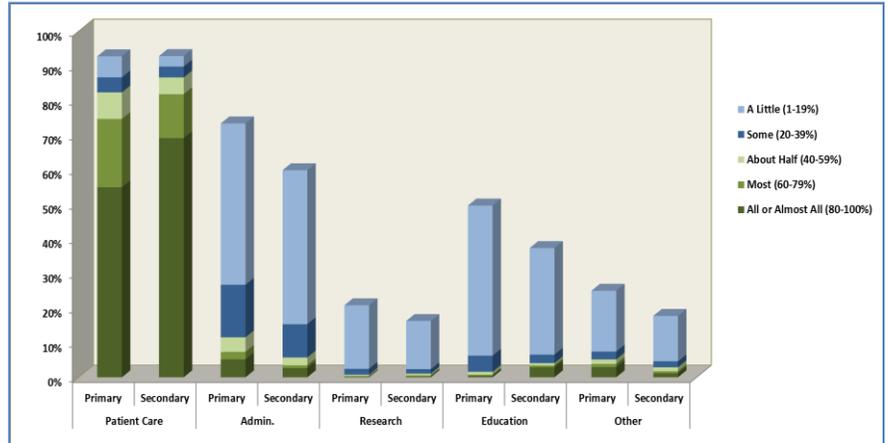
Patient Care: 75%
Administration: 7%
Education: 1%

Patient Care Pharmacists

Median Admin Time: 1%-9%
Ave. Admin Time: 10%-19%

Source: Va. Healthcare Workforce Data Center

A Closer Look:



Source: Va. Healthcare Workforce Data Center

A typical pharmacist spends most of her time in patient care activities. In fact, three-quarters of pharmacists fill a patient care role, defined as spending at least 60% of her time in that activity.

Time Allocation											
Time Spent	Patient Care		Admin.		Research		Education		Other		
	Pri. Site	Sec. Site	Pri. Site	Sec. Site	Pri. Site	Sec. Site	Pri. Site	Sec. Site	Pri. Site	Sec. Site	
All or Almost All (80-100%)	55%	69%	5%	3%	0%	0%	0%	3%	3%	1%	
Most (60-79%)	20%	13%	2%	1%	0%	0%	0%	1%	1%	1%	
About Half (40-59%)	8%	5%	4%	2%	0%	1%	1%	1%	1%	1%	
Some (20-39%)	4%	3%	15%	10%	2%	1%	5%	2%	2%	2%	
A Little (1-20%)	6%	3%	47%	44%	18%	14%	43%	31%	18%	13%	
None (0%)	7%	7%	27%	40%	79%	84%	50%	63%	75%	82%	

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Retirement Expectations				
Expected Retirement Age	All		Over 50	
	#	%	#	%
Under age 50	126	2%	-	-
50 to 54	207	4%	0	0%
55 to 59	613	10%	110	5%
60 to 64	1,435	24%	504	23%
65 to 69	2,138	36%	885	40%
70 to 74	747	13%	386	18%
75 to 79	188	3%	96	4%
80 or over	97	2%	52	2%
I do not intend to retire	361	6%	152	7%
Total	5,912	100%	2,186	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Retirement Expectations

All Pharmacists

Under 65: 40%

Under 60: 16%

Pharmacists 50 and over

Under 65: 28%

Under 60: 5%

Time until Retirement

Within 2 years: 7%

Within 10 years: 22%

Half the workforce: By 2041

Source: Va. Healthcare Workforce Data Center

40% of Virginia’s pharmacists expect to retire before the age of 65, while 24% plan on working until at least age 70. Among pharmacists who are age 50 and over, 28% still plan on retiring by age 65, while close to one-third expect to work until at least age 70.

Within the next two years, 1% of Virginia’s pharmacists plan on leaving the profession and 3% expect to leave the state. Meanwhile, 10% of pharmacists expect to pursue additional educational opportunities, and 9% also plan on increasing the number of hours that they devote to patients.

Future Plans

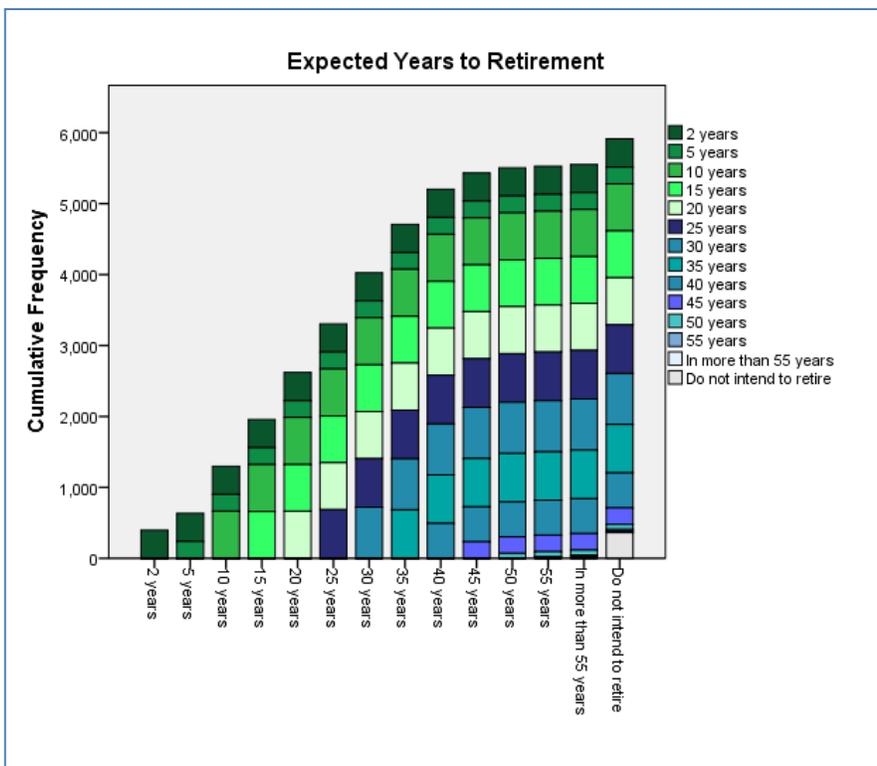
2 Year Plans:	#	%
Decrease Participation		
Leave Profession	108	1%
Leave Virginia	257	3%
Decrease Patient Care Hours	213	3%
Decrease Teaching Hours	29	0%
Increase Participation		
Increase Patient Care Hours	772	9%
Increase Teaching Hours	478	6%
Pursue Additional Education	876	10%
Return to Virginia’s Workforce	98	1%

Source: Va. Healthcare Workforce Data Center

By comparing retirement expectation to age, we can estimate the maximum years to retirement for pharmacists. Only 7% of pharmacists plan on retiring in the next two years, while 22% plan on retiring in the next ten years. Half of the current pharmacist workforce expects to be retired by 2041.

Time to Retirement			
Expect to retire within . . .	#	%	Cumulative %
2 years	397	7%	7%
5 years	237	4%	11%
10 years	664	11%	22%
15 years	659	11%	33%
20 years	664	11%	44%
25 years	685	12%	56%
30 years	720	12%	68%
35 years	683	12%	80%
40 years	493	8%	88%
45 years	232	4%	92%
50 years	71	1%	93%
55 years	23	0%	93%
In more than 55 years	24	0%	94%
Do not intend to retire	361	6%	100%
Total	5,912	100%	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

Using these estimates, retirements will begin to reach 10% of the current workforce starting in 2026. Retirements will peak at 12% of the current workforce around 2041 before declining to under 10% of the current workforce again around 2056.

At a Glance:

FTEs

Total: 6,976
 FTEs/1,000 Residents: 0.837
 Average: 0.85

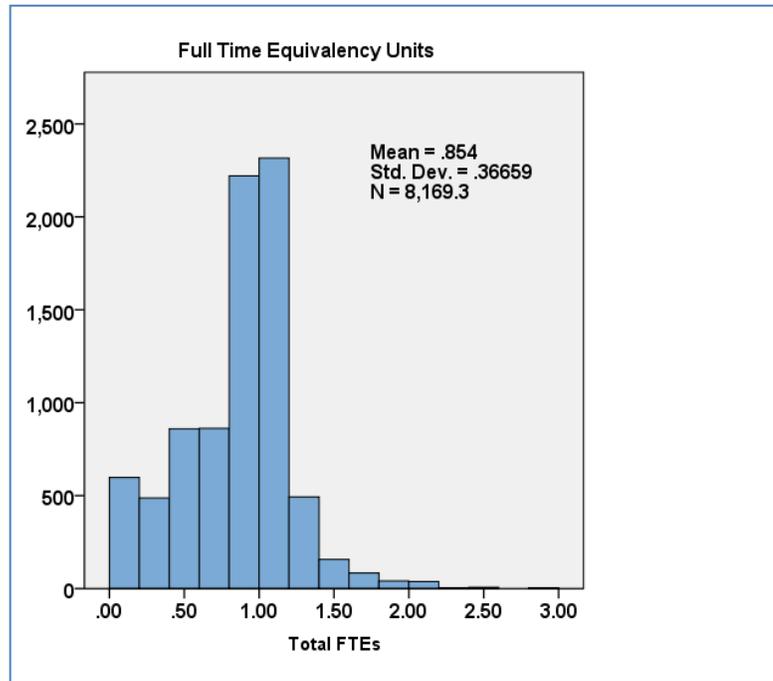
Age & Gender Effect

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:

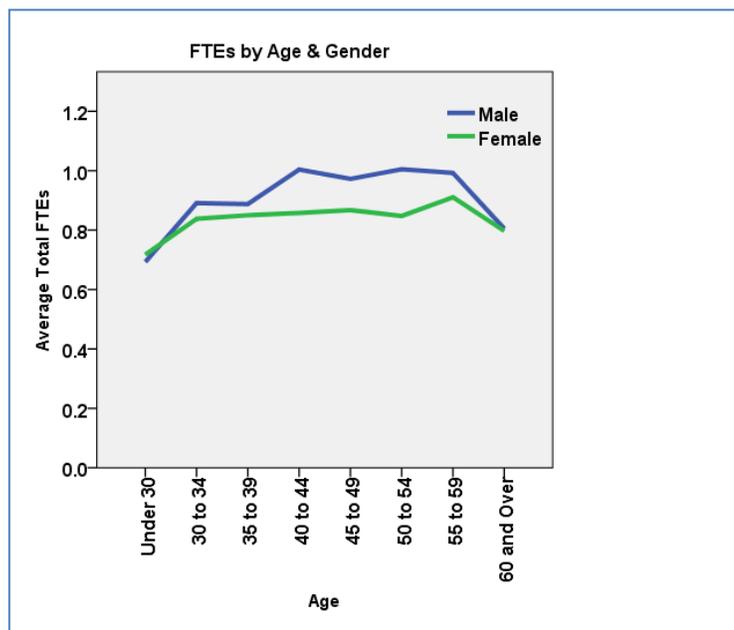


Source: Va. Healthcare Workforce Data Center

The typical pharmacist provided 0.92 FTEs in 2016, or about 37 hours per week for 52 weeks. Although FTEs appear to vary by both age and gender, statistical tests did not verify that a difference exists.²

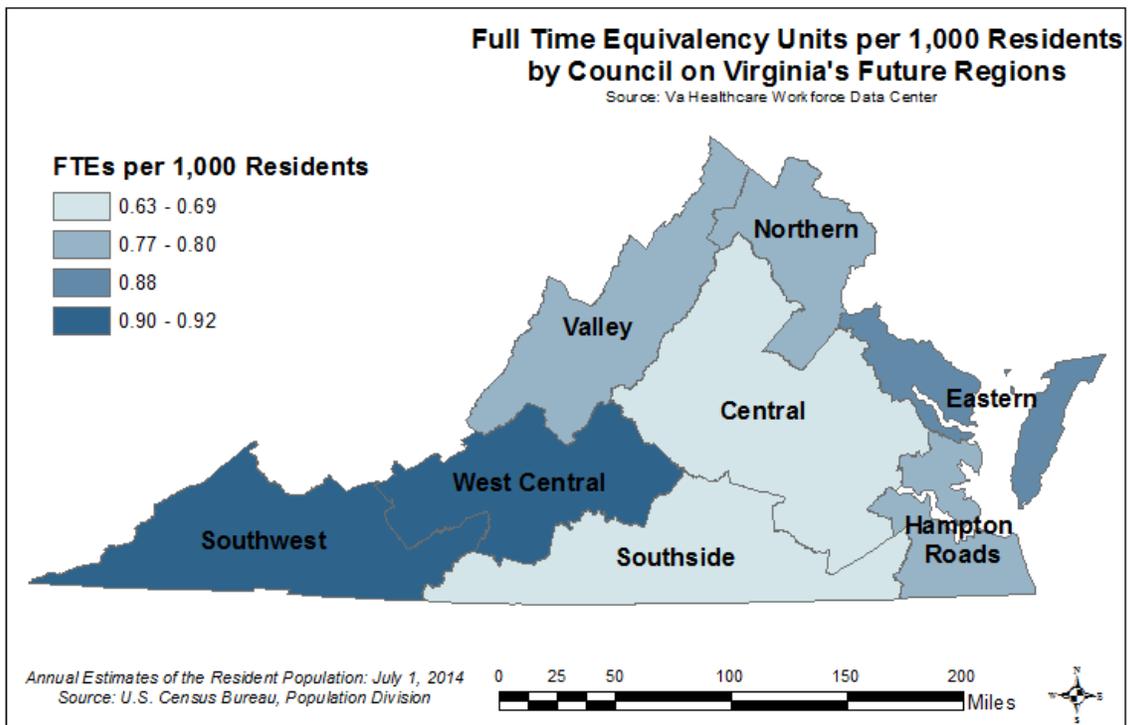
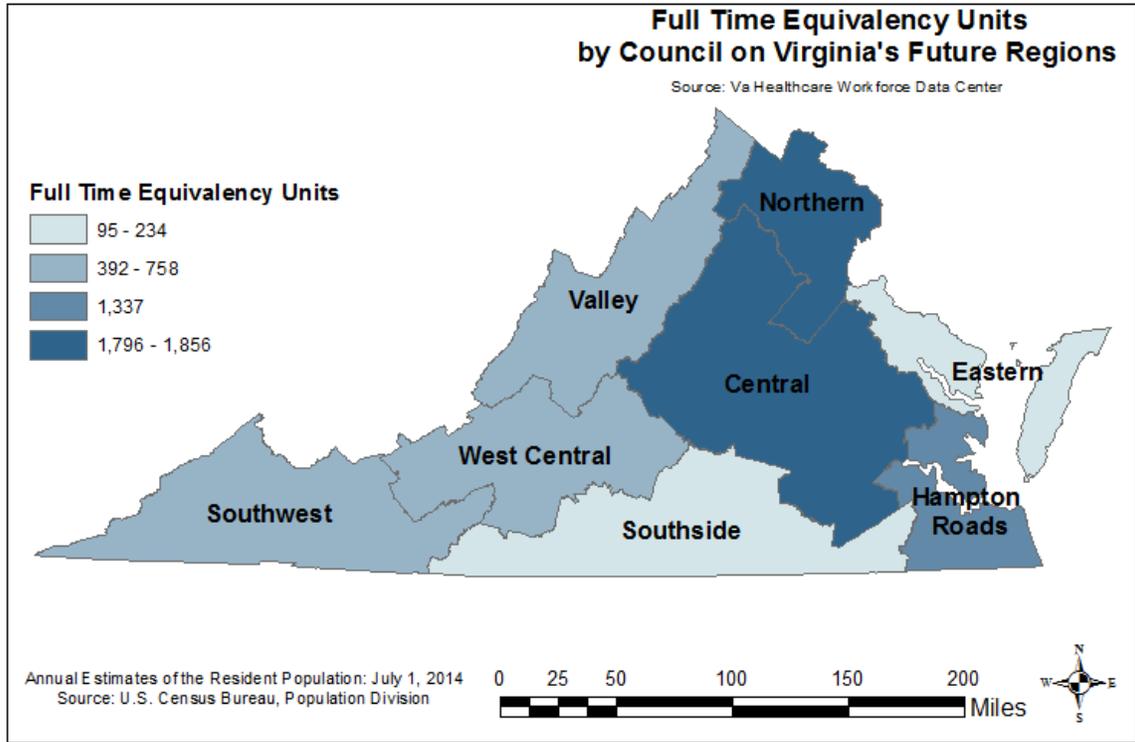
Full-Time Equivalency Units		
	Average	Median
Age		
Under 30	0.72	0.78
30 to 34	0.83	0.90
35 to 39	0.85	0.87
40 to 44	0.90	0.90
45 to 49	0.91	0.99
50 to 54	0.90	0.92
55 to 59	0.94	0.95
60 and Over	0.81	0.81
Gender		
Male	0.89	0.99
Female	0.84	0.93

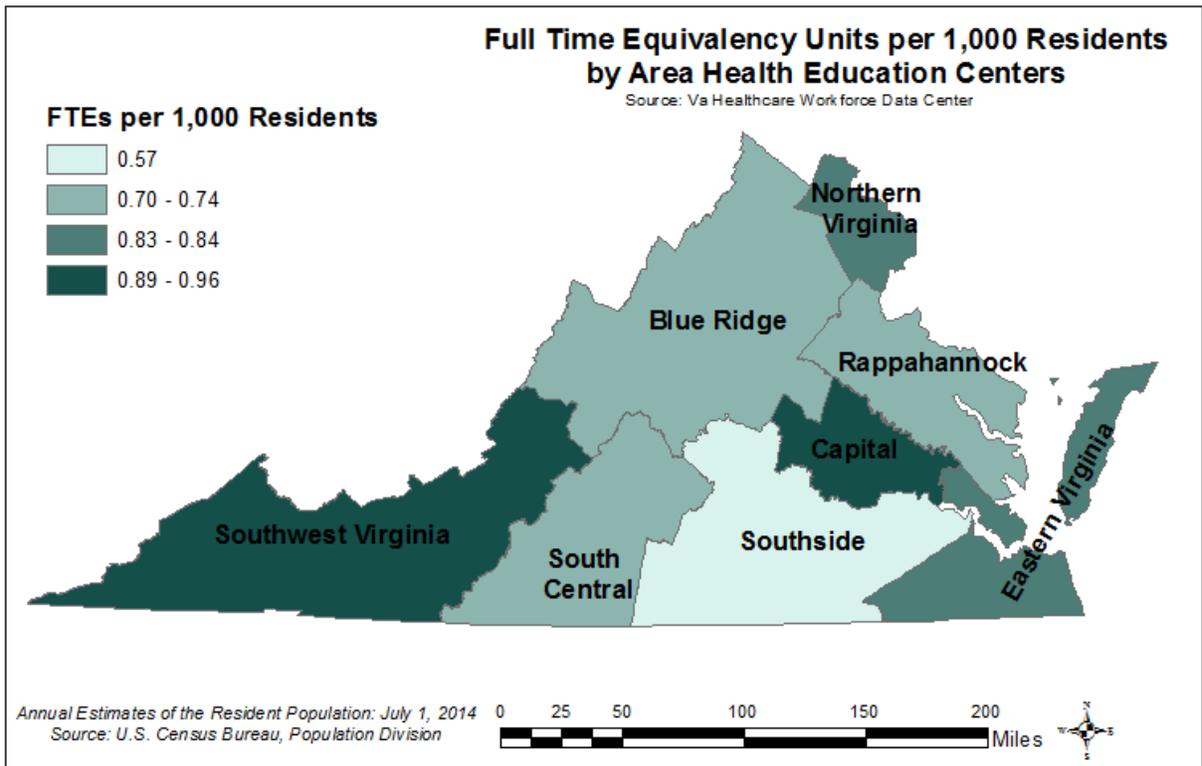
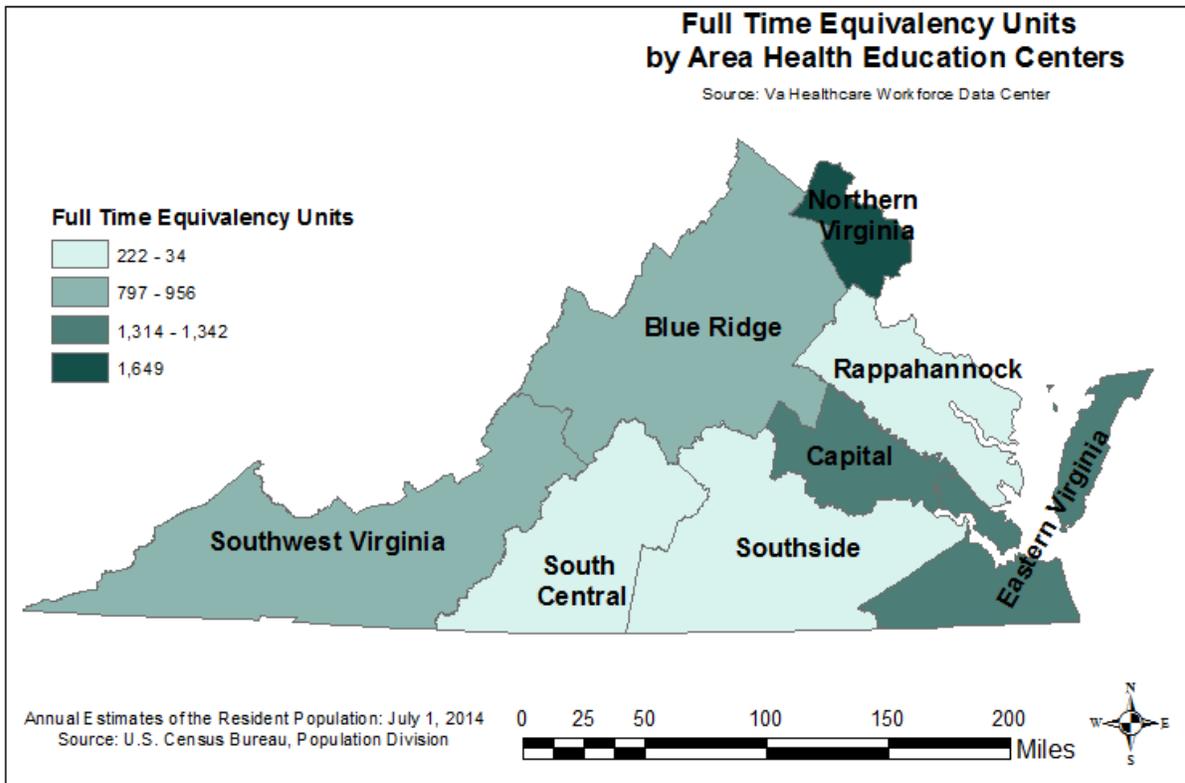
Source: Va. Healthcare Workforce Data Center

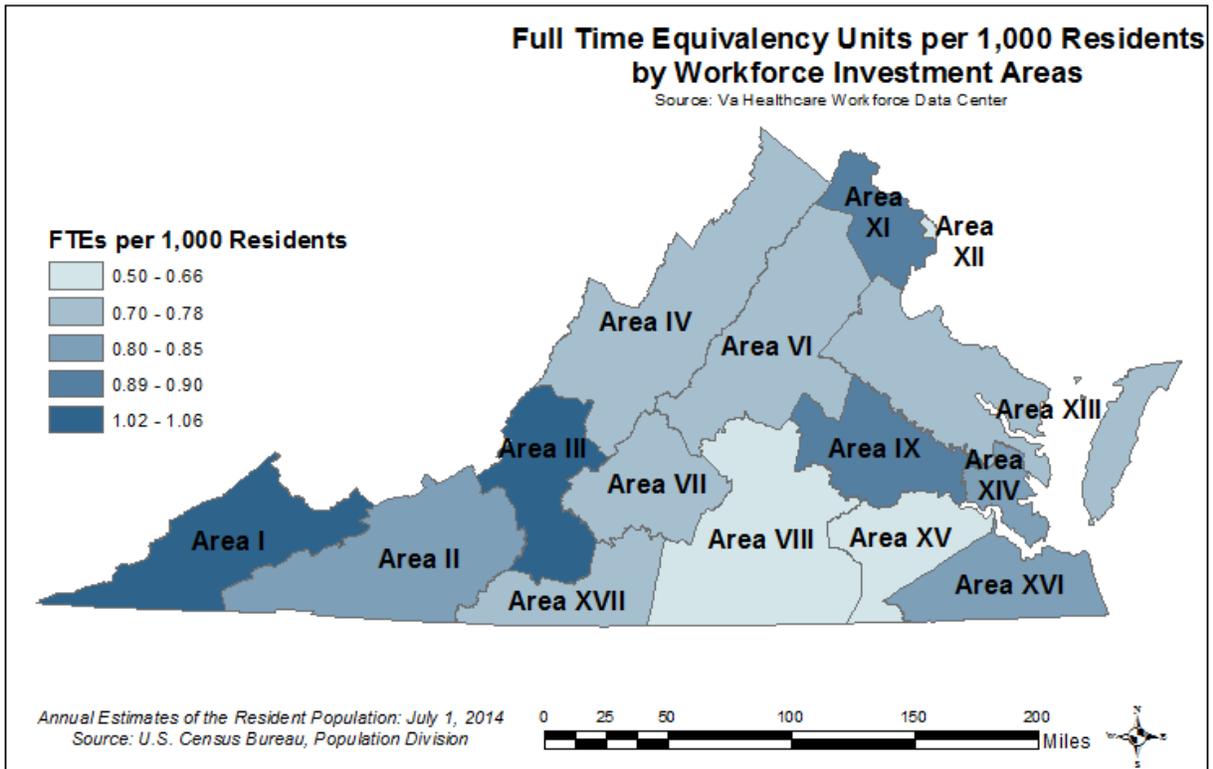
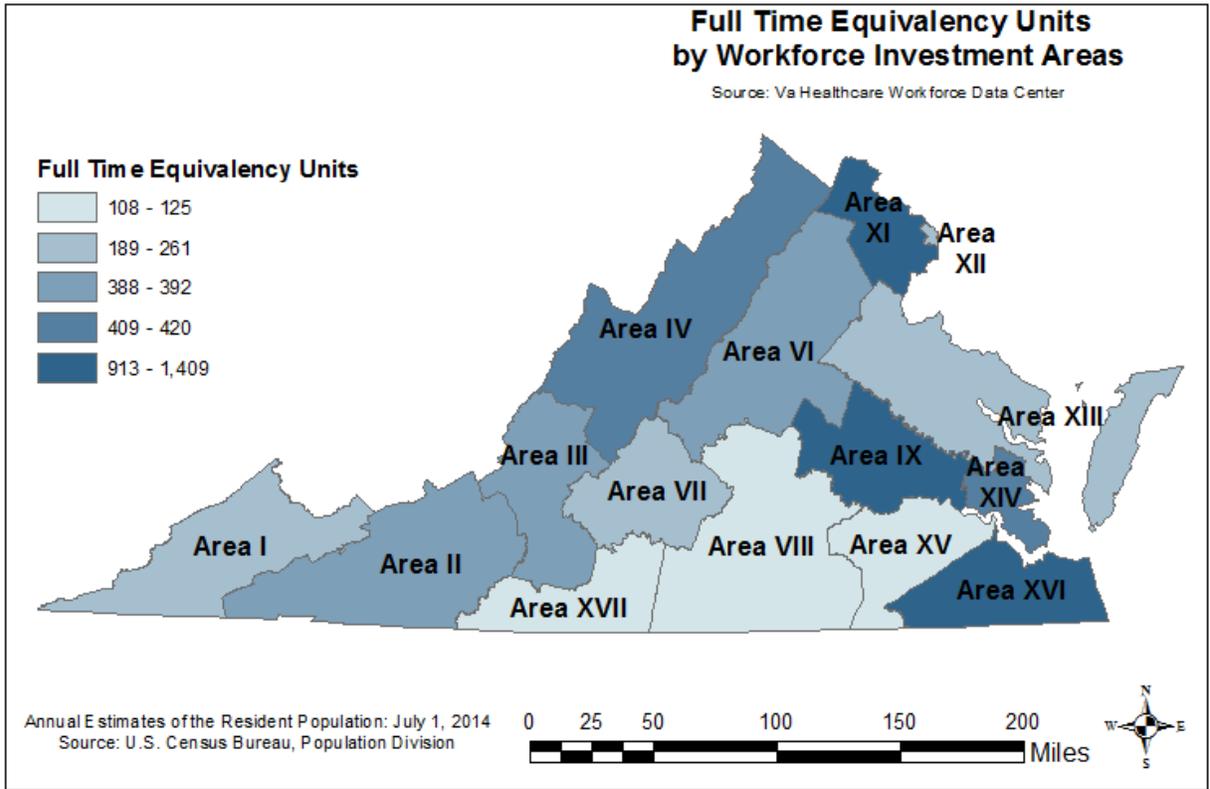


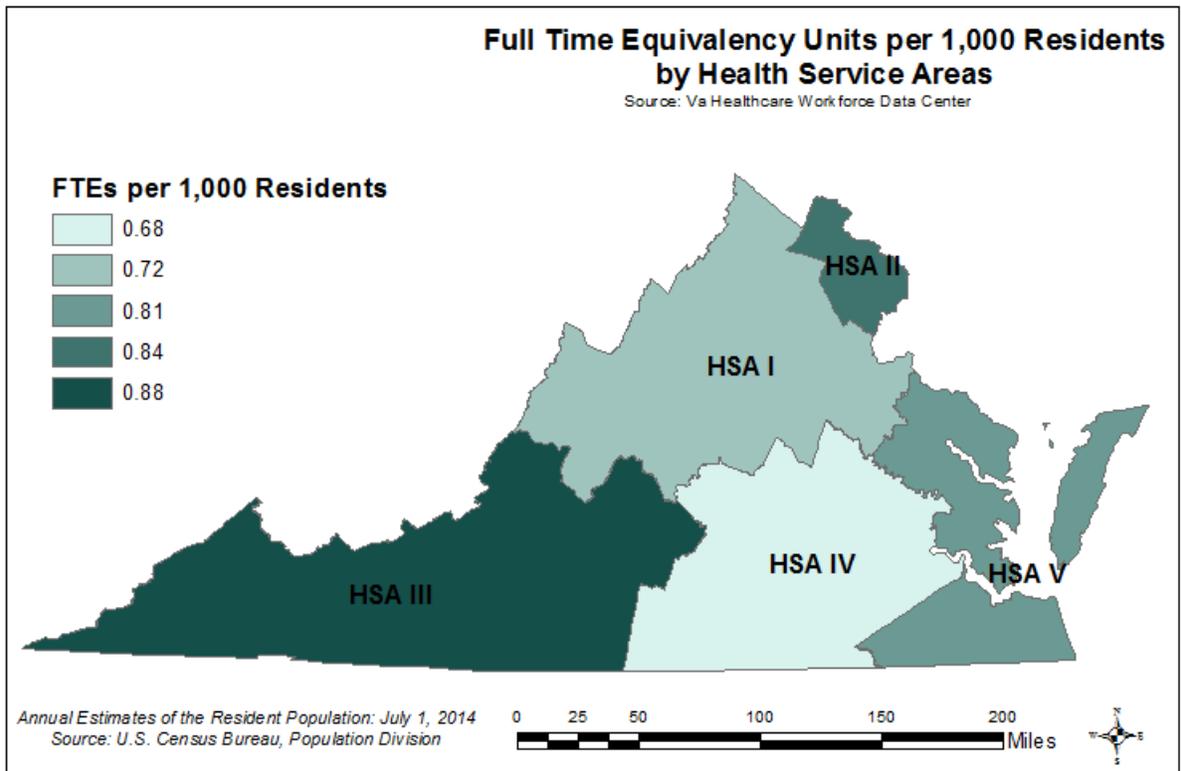
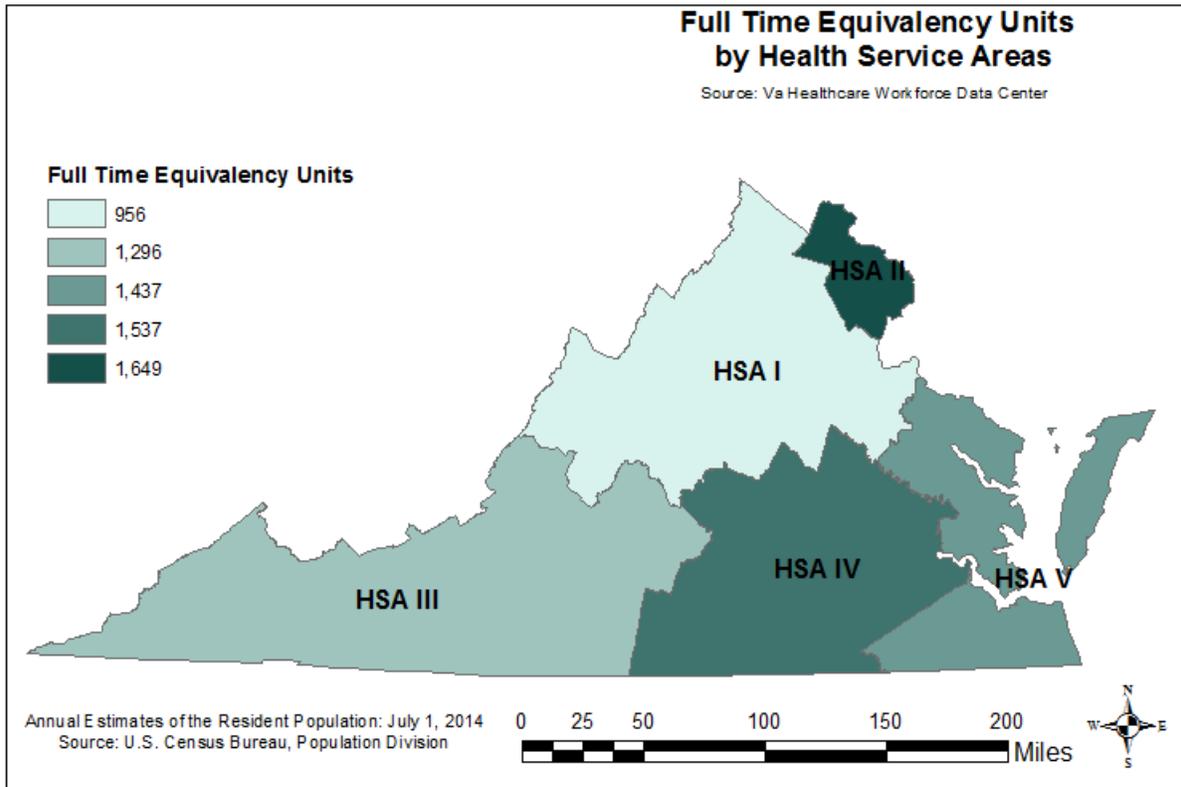
Source: Va. Healthcare Workforce Data Center

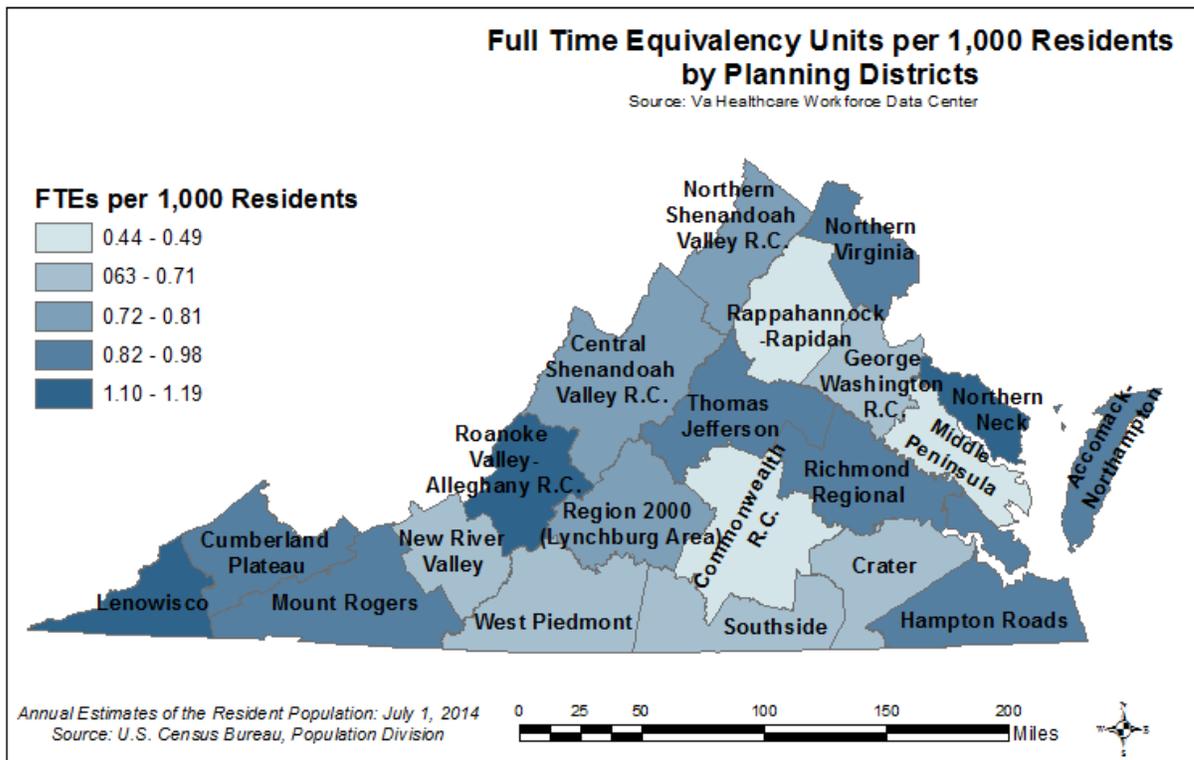
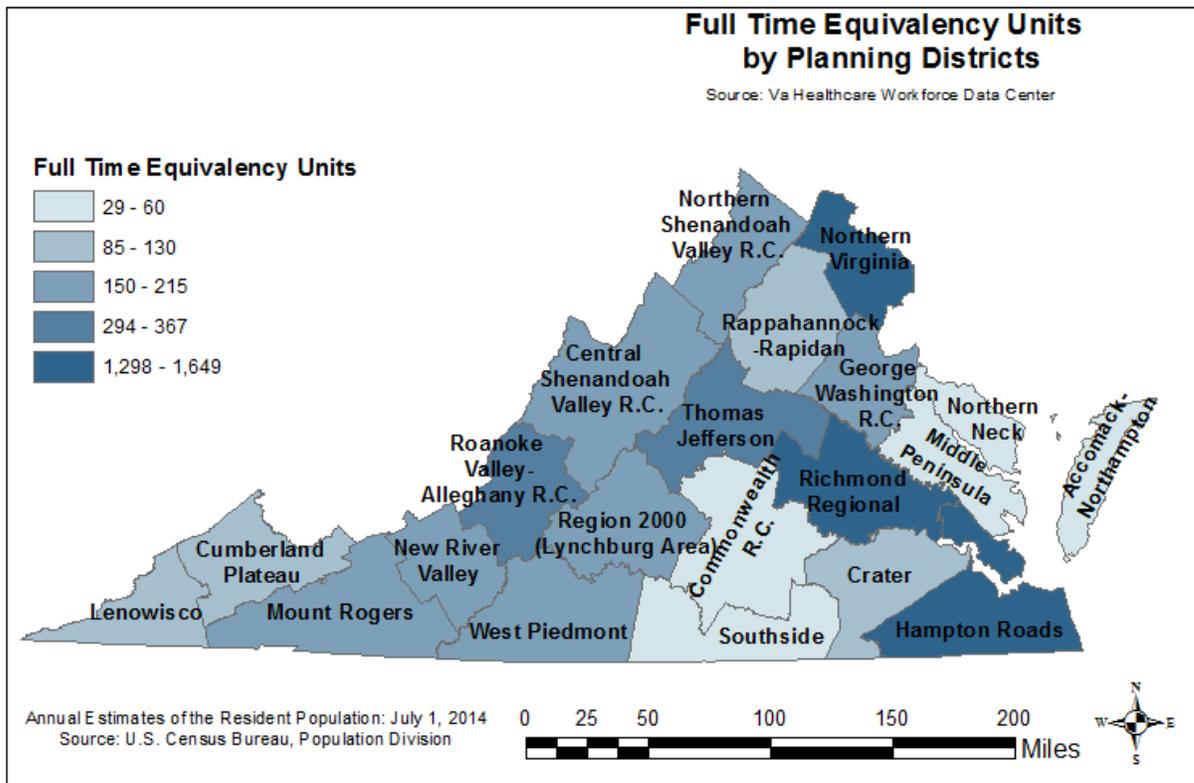
² Due to assumption violations in Mixed between-within ANOVA (Levene's Test & Interaction effect are significant).











Appendix

Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
Metro, 1 million+	6166	91.08%	1.097934473	1.06458	1.196754
Metro, 250,000 to 1 million	918	91.61%	1.091557669	1.058397	1.189803
Metro, 250,000 or less	947	92.19%	1.084765178	1.051811	1.182399
Urban pop 20,000+, Metro adj	116	88.79%	1.126213592	1.092	1.227578
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500-19,999, Metro adj	383	86.42%	1.157099698	1.121948	1.261244
Urban pop, 2,500-19,999, nonadj	264	87.88%	1.137931034	1.103362	1.240351
Rural, Metro adj	232	82.76%	1.208333333	1.171626	1.317089
Rural, nonadj	106	88.68%	1.127659574	1.093403	1.229155
Virginia border state/DC	2289	87.85%	1.138239682	1.103661	1.240687
Other US State	2990	85.18%	1.173930114	1.138267	1.27959

Source: Va. Healthcare Workforce Data Center

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	1,056	89.30%	1.119830329	1.082328	1.205618
30 to 34	2,295	90.41%	1.106024096	1.068984	1.190755
35 to 39	1,984	90.32%	1.107142857	1.070065	1.191959
40 to 44	1,781	91.41%	1.093980344	1.057344	1.177788
45 to 49	1,823	90.84%	1.100845411	1.063979	1.185179
50 to 54	1,529	91.89%	1.088256228	1.051811	1.171626
55 to 59	1,334	90.70%	1.102479339	1.065558	1.186938
60 and Over	2,607	81.74%	1.22336931	1.182399	1.317089

Source: Va. Healthcare Workforce Data Center

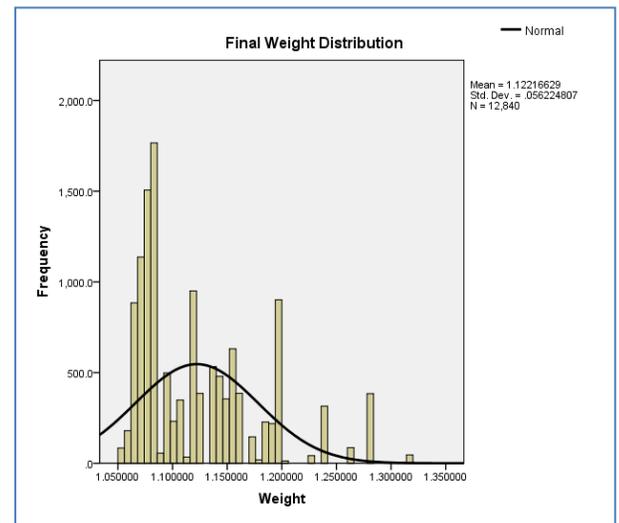
See the Methods section on the HWDC website for details on HWDC Methods:

www.dhp.virginia.gov/hwdc/

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

$$\text{Age Weight} \times \text{Rural Weight} \times \text{Response Rate} = \text{Final Weight.}$$

Overall Response Rate: 0.89111



Source: Va. Healthcare Workforce Data Center