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# *Virginia's Pharmacist Workforce: 2018*

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Healthcare Workforce Data Center

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*13,962 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!***

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# The Pharmacist Workforce: At a Glance:

## The Workforce

Licensees:	15,424
Virginia's Workforce:	8,620
FTEs:	6,943

## Background

Rural Childhood:	32%
HS Degree in VA:	48%
Prof. Degree in VA:	49%

## Current Employment

Employed in Prof.:	91%
Hold 1 Full-time Job:	72%
Satisfied?:	87%

## Survey Response Rate

All Licensees:	91%
Renewing Practitioners:	96%

## Education

Baccalaureate:	36%
Pharm.D./Professional:	64%

## Job Turnover

Switched Jobs in 2018:	5%
Employed over 2 yrs:	62%

## Demographics

Female:	65%
Diversity Index:	51%
Median Age:	44

## Finances

Median Inc.:	\$120k-\$130k
Health Benefits:	70%
Under 40 w/ Ed debt:	74%

## Primary Roles

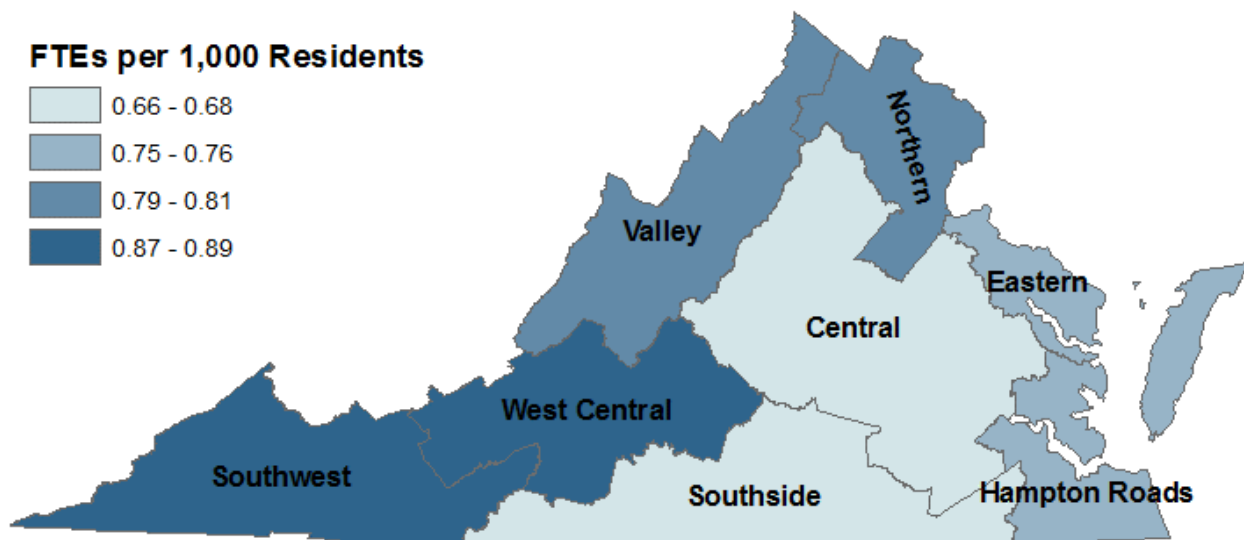
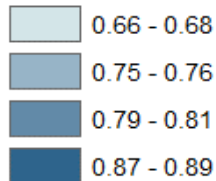
Patient Care:	74%
Administration:	7%
Education:	1%

Source: Va. Healthcare Workforce Data Center

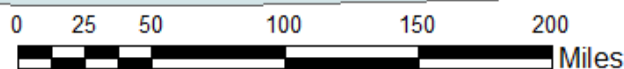
## Full Time Equivalency Units per 1,000 Residents by Virginia Performs Regions

Source: Va Healthcare Work force Data Center

### FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2017  
Source: U.S. Census Bureau, Population Division



## Results in Brief

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A total of 13,962 pharmacists voluntarily took part in the 2018 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 91% of the 15,424 pharmacists who are licensed in the state and 96% of renewing practitioners. The HWDC estimates that 8,620 pharmacists participated in Virginia's workforce during the survey period and they provided 6,943 full-time equivalency units (FTE).

The majority of Virginia's pharmacists are female, and the median age among those in the workforce is 44. About 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. Overall, 11% of Virginia's pharmacists work in a non-metro area. Around 64% of Virginia's pharmacist workforce have earned a doctoral or other professional degree as their highest educational attainment. About 42% of pharmacists currently carry educational debt, including about three-quarters of those under the age of 40. The median debt for those pharmacists with educational debt is between \$110,000 and \$120,000.

Nine out of every ten pharmacists are currently employed in the profession, with 72% holding one full-time position. Over the past year, 3% of pharmacists have been involuntarily unemployed, while another 3% have been underemployed. The typical pharmacist earned between \$120,000 and \$130,000 in 2018. Around 87% of all pharmacists are satisfied with their current employment situation, including 47% who indicated that they are "very satisfied".

About 90% of all pharmacists work in the private sector, including 66% 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 28% of all professionals. Hospital systems and smaller pharmacies were also common employers. About 4 in 10 pharmacists expect to retire by the age of 65 and 7% of the current workforce expect to retire in the next two years. Half of the current workforce expect to retire by 2043.

## Summary of Trends

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The total number of licensed pharmacists has grown by 21% since 2013. Of these, the number working in the state workforce has also increased but the increase of 9% is more modest by comparison. Further, the 1.4% increase in FTE provided by pharmacists over the same period is an even more modest increase.

The race/ethnicity diversity index of Virginia's pharmacists has increased from 47% in 2013 to 51% in 2018. The percentage of pharmacist who are female has inched up by about one percent every year from 62% in 2013 to 65% in the current report. Median age has been relatively stable between 44 to 45 years in the past six surveys. Even the percent under age 40, which increased from 37% in 2013 to 40% in 2016, has stayed at 40% in the past two years.

Educational attainment continues to increase among the pharmacist workforce. In 2013, only 51% had a pharmacy doctorate compared to 64% in 2018. Although the percent reporting educational debt declined from 41% to 40% between 2017 and 2018, the amount of debt increased from a median of \$90K-\$100K in 2013 to \$110K-\$120K in 2018.

The labor market was a bit slack for pharmacists in the past year; 3% reported being involuntarily employed compared to the 1% involuntary employment rate in nearly all pre-2017 surveys. However, around 91% still reported being employed in the profession and the current involuntary unemployment rate in December 2018, when the survey took place, was 2%. Median income was stable at \$120K to \$130K between 2016 and 2018 after increasing from \$110K-\$120K in 2013. However, the percent earning above \$140,000 increased from 17% in 2016 to 20% in 2018; only 12% earned in that income range in 2013.

Pharmacists intending to retire in the next decade increased from 22% in the pre-2017 surveys to 23% in 2017 and stayed at 23% in 2018. The percent planning to retire in the next two years has increased from 6% in 2013 to 7% in recent years. Regarding future plans, only 9% intended to pursue additional education in 2018 compared to 13% in 2013.

**A Closer Look:**

Licensee Counts		
License Status	#	%
<b>Renewing Practitioners</b>	13,765	89%
<b>New Licensees</b>	944	6%
<b>Non-Renewals</b>	715	5%
<b>All Licensees</b>	<b>15,424</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

*HWDC surveys tend to achieve very high response rates. 96% of renewing pharmacists submitted a survey. These represent 91% of pharmacists who held a license at some point in 2018.*

Statistic	Response Rates		Response Rate
	Non Respondents	Respondent	
<b>By Age</b>			
<b>Under 30</b>	144	903	86%
<b>30 to 34</b>	204	2,269	92%
<b>35 to 39</b>	179	2,101	92%
<b>40 to 44</b>	149	1,786	92%
<b>45 to 49</b>	149	1,733	92%
<b>50 to 54</b>	143	1,508	91%
<b>55 to 59</b>	93	1,304	93%
<b>60 and Over</b>	401	2,358	86%
<b>Total</b>	<b>1,462</b>	<b>13,962</b>	<b>91%</b>
<b>New Licenses</b>			
<b>Issued in 2018</b>	303	641	68%
<b>Metro Status</b>			
<b>Non-Metro</b>	118	1,022	90%
<b>Metro</b>	571	7,760	93%
<b>Not in Virginia</b>	772	5,179	87%

Source: Va. Healthcare Workforce Data Center

**At a Glance:**

**Licensed Pharmacists**

Number:	15,424
New:	6%
Not Renewed:	5%

**Survey Response Rates**

All Licensees:	91%
Renewing Practitioners:	96%

Source: Va. Healthcare Workforce Data Center

**Response Rates**

<b>Completed Surveys</b>	13,962
<b>Response Rate, all licensees</b>	91%
<b>Response Rate, Renewals</b>	96%

Source: Va. Healthcare Workforce Data Center

**Definitions**

- 1. The Survey Period:** The survey was conducted in December 2018.
- 2. Target Population:** All pharmacists who held a Virginia license at some point in 2018.
- 3. 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 2018.

## At a Glance:

### Workforce

Pharmacist Workforce: 8,620  
 FTEs: 6,943

### Utilization Ratios

Licensees in VA Workforce: 56%  
 Licensees per FTE: 2.22  
 Workers per FTE: 1.24

Source: Va. Healthcare Workforce Data Center

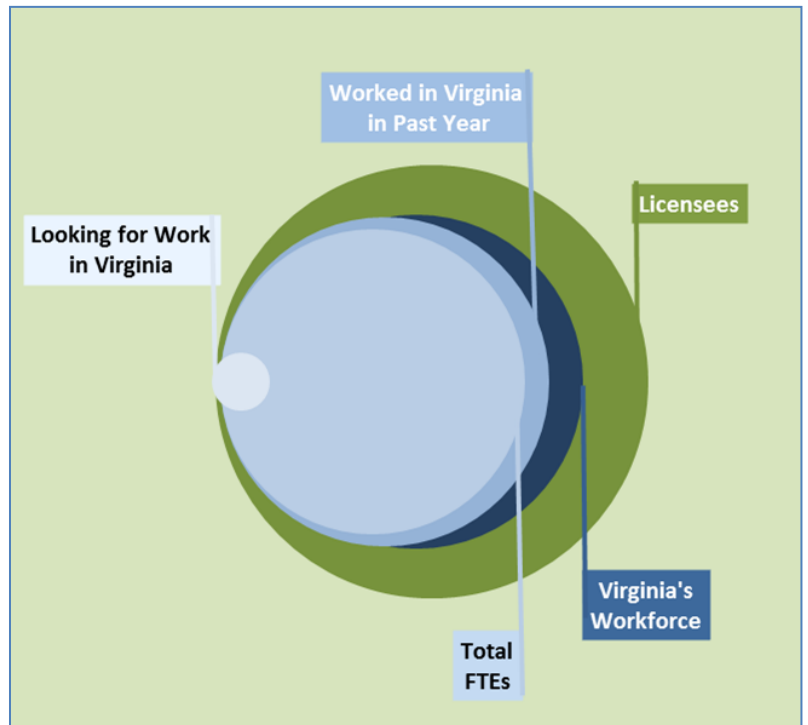
Virginia's Pharmacist Workforce		
Status	#	%
Worked in Virginia in Past Year	8,355	97%
Looking for Work in Virginia	265	3%
Virginia's Workforce	8,620	100%
Total FTEs	6,943	
Licensees	15,424	

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](http://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 hours (40 hours for 50 weeks with 2 weeks off) 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	190	29%	470	71%	660	9%
30 to 34	380	32%	806	68%	1,186	17%
35 to 39	272	27%	732	73%	1,004	14%
40 to 44	246	29%	594	71%	841	12%
45 to 49	228	27%	632	74%	861	12%
50 to 54	243	32%	516	68%	759	11%
55 to 59	222	36%	391	64%	613	9%
60 +	722	58%	522	42%	1,244	17%
<b>Total</b>	<b>2,503</b>	<b>35%</b>	<b>4,663</b>	<b>65%</b>	<b>7,167</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity					
Race/ Ethnicity	Virginia*	Pharmacists		Pharmacists Under 40	
	%	#	%	#	%
White	62%	4,765	67%	1,717	60%
Black	19%	785	11%	364	13%
Asian	6%	1,247	17%	592	21%
Other Race	0%	108	2%	32	1%
Two or more races	3%	120	2%	86	3%
Hispanic	9%	108	2%	52	2%
<b>Total</b>	<b>100%</b>	<b>7,133</b>	<b>100%</b>	<b>2,843</b>	<b>100%</b>

\*\* 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

At a Glance:

**Gender**

% Female: 65%  
% Under 40 Female: 70%

**Age**

Median Age: 44  
% Under 40: 40%  
% 55+: 26%

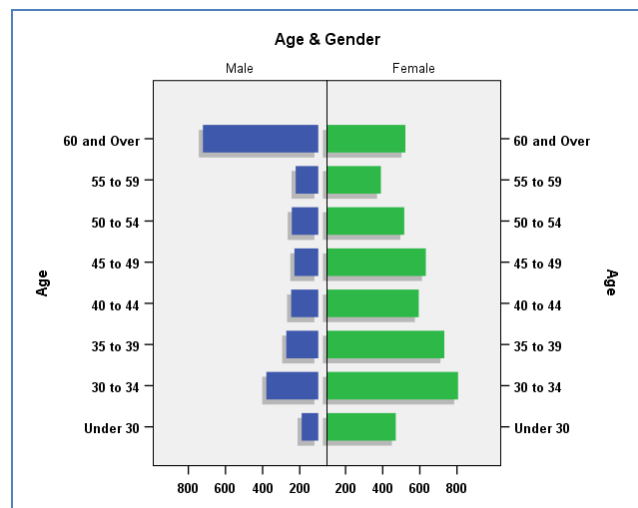
**Diversity**

Diversity Index: 51%  
Under 40 Div. Index: 57%

Source: Va. Healthcare Workforce Data Center

*In a chance encounter between two pharmacists, there is a 51% 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 56%.*

*40% of pharmacists are under the age of 40, and 70% 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: 32%

### Virginia Background

HS in Virginia: 48%  
 Prof. Education in VA: 49%  
 HS/Prof. Educ. in VA: 56%

### Location Choice

% Rural to Non-Metro: 23%  
 % Urban/Suburban to Non-Metro: 5%

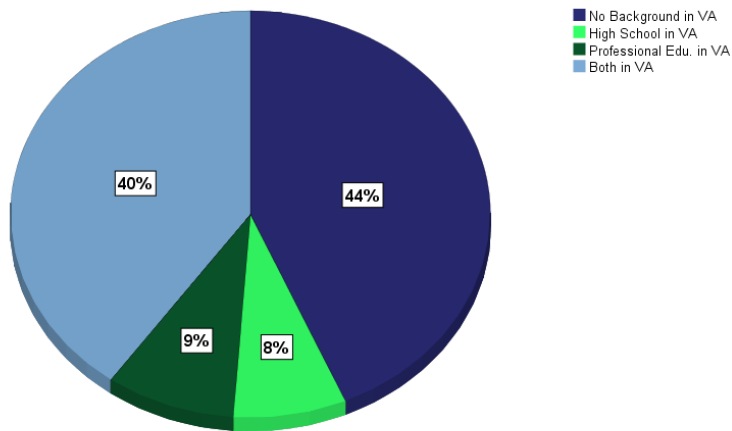
Source: Va. Healthcare Workforce Data Center

## A Closer Look:

Primary Location: USDA Rural Urban Continuum		Rural Status of Childhood Location		
Code	Description	Rural	Suburban	Urban
<b>Metro Counties</b>				
1	Metro, 1 million+	22%	57%	21%
2	Metro, 250,000 to 1 million	50%	40%	10%
3	Metro, 250,000 or less	40%	46%	14%
<b>Non-Metro Counties</b>				
4	Urban pop 20,000+, metro adjacent	50%	39%	11%
6	Urban pop, 2,500-19,999, metro adjacent	66%	28%	6%
7	Urban pop, 2,500-19,999, non adjacent	87%	8%	6%
8	Rural, metro adjacent	58%	31%	11%
9	Rural, non adjacent	63%	27%	10%
<b>Overall</b>		<b>32%</b>	<b>51%</b>	<b>17%</b>

Source: Va. Healthcare Workforce Data Center

Educational Background in Virginia



32% of pharmacists grew up in self-described rural areas, and 23% 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	3,376	Virginia	3,402
2	Outside U.S./Canada	799	Pennsylvania	496
3	Pennsylvania	450	North Carolina	302
4	New York	362	New York	291
5	West Virginia	204	Outside U.S./Canada	287
6	Maryland	203	Maryland	217
7	North Carolina	195	West Virginia	198
8	New Jersey	139	Massachusetts	193
9	Ohio	138	Washington, D.C.	190
10	Florida	101	Ohio	134

Source: Va. Healthcare Workforce Data Center

*48% of Virginia's pharmacists received their high school degree in Virginia, and 49% received their initial professional degree in the state.*

*Among pharmacists who have been licensed in the past five years, 42% received their high school degree in Virginia, and 45% received their initial professional degree in the state.*

Rank	Licensed in the Past 5 Years			
	High School	#	Professional School	#
1	Virginia	788	Virginia	824
2	Outside U.S./Canada	202	Pennsylvania	132
3	Pennsylvania	132	New York	96
4	New York	115	North Carolina	96
5	North Carolina	75	Maryland	86
6	Maryland	73	Tennessee	62
7	West Virginia	39	West Virginia	57
8	New Jersey	37	Outside U.S./Canada	52
9	Florida	35	Massachusetts	46
10	Ohio	33	Florida	45

Source: Va. Healthcare Workforce Data Center

*44% of Virginia's licensed pharmacists did not participate in Virginia's workforce in 2018. 91% of these professionals worked at some point in the past year, including 83% who currently work as pharmacists.*

## At a Glance:

**Not in VA Workforce**

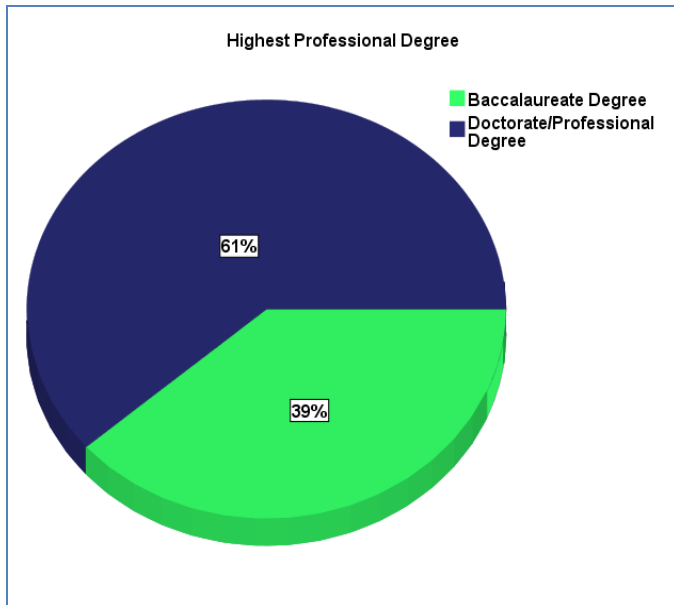
Total:	6,802
% of Licensees:	44%
Federal/Military:	7%
VA Border State/DC:	19%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Highest Professional Degree		
Degree	#	%
B.S. Pharmacy	2,494	36%
Pharm.D.	4,400	64%
<b>Total</b>	<b>6,894</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

## At a Glance:

**Education**

B.S. Pharmacy: 36%

Pharm.D.: 64%

**Educational Debt**

Carry debt: 42%

Under age 40 w/ debt: 74%

Median debt: \$110k-\$120k

Source: Va. Healthcare Workforce Data Center

64% of pharmacists hold a Doctorate in Pharmacy as their highest professional degree, while all remaining professionals have earned a Bachelor's degree in Pharmacy.

42% of pharmacists currently have educational debt, including 74% of those under the age of 40. For those with educational debt, the median debt is between \$110,000 and \$120,000. Among those under the age of 40 with debt, median is \$130,000 to \$140,000.

Educational Debt				
Amount Carried	All Pharmacists		Pharmacists Under 40	
	#	%	#	%
<b>None</b>	3,456	58%	598	26%
<b>\$20,000 or less</b>	178	3%	89	4%
<b>\$20,001-\$40,000</b>	192	3%	96	4%
<b>\$40,001-\$60,000</b>	249	4%	124	5%
<b>\$60,001-\$80,000</b>	219	4%	121	5%
<b>\$80,001-100,000</b>	228	4%	143	6%
<b>\$100,001-\$120,000</b>	225	4%	161	7%
<b>\$120,001-\$140,000</b>	172	3%	128	5%
<b>\$140,001-\$160,000</b>	159	3%	136	6%
<b>\$160,001-\$180,000</b>	142	2%	117	5%
<b>\$180,001-\$200,000</b>	127	2%	106	5%
<b>Over \$200,000</b>	579	10%	509	22%
<b>Total</b>	<b>5,926</b>	<b>100%</b>	<b>2,328</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

## At a Glance:

### Top Specialties

Immunization:	17%
Community Pharmacy:	8%
Ambulatory Care:	4%

### Top Board Certifications

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

### Top Residencies (PGY1)

Pharmacy Practice (Post 1993):	10%
Community Pharmacy:	5%
Pharmacy Practice (Pre 1993):	4%

Source: Va. Healthcare Workforce Data Center

PGY1		
Residency	#	%
<b>Pharmacy Practice (Post 1993)</b>	875	10%
<b>Community Pharmacy</b>	440	5%
<b>Pharmacy Practice (Pre 1993)</b>	347	4%
<b>Managed Care Pharmacy</b>	38	0%
<b>Other</b>	0	0%
<b>Total</b>	<b>1,700</b>	<b>20%</b>
PGY2		
<b>Ambulatory Care</b>	102	16%
<b>Critical Care</b>	56	9%
<b>Drug Information</b>	49	8%
<b>Internal Medicine/Cardiology</b>	47	8%
<b>Health-system Pharmacy Administration</b>	32	5%
<b>Infectious Disease</b>	26	4%
<b>Psychiatry</b>	26	4%
<b>Geriatrics</b>	25	4%
<b>Pediatrics</b>	24	4%
<b>Oncology</b>	22	4%
<b>Pharmacotherapy</b>	20	3%
<b>Managed Care Pharmacy Systems</b>	13	2%
<b>Emergency Medicine</b>	11	2%
<b>Other</b>	169	27%
<b>At Least One</b>	<b>622</b>	<b>7%</b>

Source: Va. Healthcare Workforce Data Center

### Board Certifications

Certification	#	%
<b>BPS-Pharmacotherapy</b>	468	5%
<b>BPS-Ambulatory Care</b>	95	1%
<b>BCGP-Geriatrics</b>	89	1%
<b>BPS-Oncology</b>	36	0%
<b>BPS- Psychiatric</b>	24	0%
<b>BPS- Nutrition</b>	12	0%
<b>BPS-Nuclear Pharmacy</b>	10	0%
<b>ABAT-Applied Toxicology</b>	1	0%
<b>Other Board Certification</b>	179	2%
<b>At Least One Certification</b>	<b>825</b>	<b>10%</b>

Source: Va. Healthcare Workforce Data Center

10% of pharmacists hold a board certification, including 5% who hold a certification in Pharmacotherapy. 34% also have a self-designated specialty area, including 17% who have a specialization in immunization.

### At a Glance:

**Top Services**

Immunization: 33%  
 Medication Management: 30%  
 Compounding: 27%

**Disease Management**

Anticoagulation: 16%

Source: Va. Healthcare Workforce Data Center

### A Closer Look:

Disease Management in Collaborative Practice		
	#	%
Anticoagulation	85	16%
Hypertension, Hypercholesterolemia, Asthma, Tobacco cessation, Travel medications, Anticoagulation, Diabetes	32	6%
Hypertension, Hypercholesterolemia, Asthma, Tobacco cessation, Anticoagulation, Diabetes	23	4%
Hypertension, Hypercholesterolemia, Asthma, Diabetes	13	2%
Hypertension, Hypercholesterolemia, Anticoagulation, Diabetes	12	2%
Diabetes	12	2%
Anticoagulation, Diabetes	12	2%
Hypertension, Hypercholesterolemia, Asthma, Tobacco cessation, Diabetes	10	2%
Hypertension	7	1%
Hypertension, Hypercholesterolemia, Asthma, Diabetes	5	1%
Hypertension, Diabetes	4	1%
Hypertension, Hypercholesterolemia, Anticoagulation	3	1%
Hypertension, Hypercholesterolemia	2	0%
Hypertension, Anticoagulation, Diabetes	2	0%
Hypertension, Hypercholesterolemia, Asthma, Tobacco cessation, Travel medications, Diabetes	2	0%
Asthma, Anticoagulation, Diabetes	2	0%
Hypertension, Asthma, Anticoagulation	1	0%
Hypercholesterolemia, Tobacco cessation, Travel medications, Diabetes	1	0%
Hypertension, Hypercholesterolemia, Asthma, Anticoagulation	1	0%
Hypertension, Asthma, Diabetes	1	0%
Hypercholesterolemia	1	0%
Hypertension, Anticoagulation	1	0%
Other	296	56%
<b>Total</b>	<b>528</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

Services Provided				
Services	Primary		Secondary	
	#	%	#	%
Immunization	2,837	33%	2,837	33%
Medication Therapy Management	2,566	30%	287	3%
Compounding	2,350	27%	240	3%
Central Filling	1,135	13%	144	2%
Remote Order Processing	810	9%	82	1%
Collaborative Practice Agreement	531	6%	64	1%
Remote Consulting/Telepharmacy	0	0%	0	0%
<b>At Least One Service</b>	<b>4,702</b>	<b>55%</b>	<b>3,112</b>	<b>36%</b>

Source: Va. Healthcare Workforce Data Center

## At a Glance:

### Employment

Employed in Profession: 91%  
 Involuntarily Unemployed: 2%

### Positions Held

1 Full-time: 72%  
 2 or More Positions: 8%

### Weekly Hours:

40 to 49: 50%  
 60 or more: 4%  
 Less than 30: 13%

Source: Va. Healthcare Workforce Data Center

## A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	7	0%
Employed in a pharmacy-related capacity	6,345	91%
Employed, NOT in a pharmacy-related capacity	209	3%
Not working, reason unknown	0	0%
Involuntarily unemployed	108	2%
Voluntarily unemployed	169	2%
Retired	138	2%
<b>Total</b>	<b>6,976</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

*91% of Virginia’s pharmacists are currently employed in the profession, and 2% of all pharmacy professionals are involuntarily unemployed at the moment. 72% of the state’s pharmacist workforce have one full-time job, while 8% of pharmacists have multiple positions. 50% 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	415	6%
One Part-Time Position	933	14%
Two Part-Time Positions	143	2%
One Full-Time Position	4,945	72%
One Full-Time Position & One Part-Time Position	364	5%
Two Full-Time Positions	4	0%
More than Two Positions	34	0%
<b>Total</b>	<b>6,838</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	415	6%
1 to 9 hours	171	3%
10 to 19 hours	233	3%
20 to 29 hours	454	7%
30 to 39 hours	1,351	20%
40 to 49 hours	3,410	50%
50 to 59 hours	496	7%
60 to 69 hours	153	2%
70 to 79 hours	69	1%
80 or more hours	54	1%
<b>Total</b>	<b>6,806</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Income		
Annual Income	#	%
Volunteer Work Only	67	1%
\$50,000 or less	473	9%
\$50,001-\$60,000	104	2%
\$60,001-\$70,000	111	2%
\$70,001-\$80,000	143	3%
\$80,001-\$90,000	147	3%
\$90,001-\$100,000	222	4%
\$100,001-\$110,000	553	10%
\$110,001-\$120,000	669	13%
\$120,001-\$130,000	916	17%
\$130,001-\$140,000	794	15%
\$140,001-\$150,000	482	9%
More than \$150,000	595	11%
<b>Total</b>	<b>5,276</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

## At a Glance:

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

**Benefits**  
Employer Health Insurance: 70%  
Employer Retirement: 72%

**Satisfaction**  
Satisfied: 87%  
Very Satisfied: 47%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
Very Satisfied	3,150	47%
Somewhat Satisfied	2,680	40%
Somewhat Dissatisfied	601	9%
Very Dissatisfied	300	5%
<b>Total</b>	<b>6,731</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

*The typical pharmacist earned between \$120,000 and \$130,000 in 2018. Among pharmacists who received either an hourly wage or a salary as compensation at their primary work location, 70% received health insurance and 72% also had access to a retirement plan.*

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
Paid Vacation Leave	4,858	77%	80%
Retirement	4,390	69%	72%
Health Insurance	4,284	68%	70%
Dental Insurance	4,118	65%	68%
Paid Sick Leave	3,750	59%	62%
Group Life Insurance	3,144	50%	52%
Signing/Retention Bonus	409	6%	7%
<b>Received At Least One Benefit</b>	<b>5,140</b>	<b>81%</b>	<b>84%</b>

\*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?	220	3%
Experience Voluntary Unemployment?	261	3%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	292	3%
Work two or more positions at the same time?	673	8%
Switch employers or practices?	396	5%
<b>Experienced at least 1</b>	<b>1,512</b>	<b>18%</b>

Source: Va. Healthcare Workforce Data Center

*3% of Virginia's pharmacists were involuntary unemployed at some point in 2018. For comparison, Virginia's average monthly unemployment rate was 3.0%.<sup>1</sup>*

Location Tenure				
Tenure	Primary		Secondary	
	#	%	#	%
<b>Not Currently Working at this Location</b>	166	3%	71	8%
<b>Less than 6 Months</b>	620	10%	106	12%
<b>6 Months to 1 Year</b>	507	8%	96	11%
<b>1 to 2 Years</b>	1,198	18%	166	19%
<b>3 to 5 Years</b>	1,448	22%	174	20%
<b>6 to 10 Years</b>	942	15%	127	14%
<b>More than 10 Years</b>	1,603	25%	136	16%
<b>Subtotal</b>	<b>6,485</b>	<b>100%</b>	<b>876</b>	<b>100%</b>
<b>Did not have location</b>	311		7,706	
<b>Item Missing</b>	1,824		39	
<b>Total</b>	<b>8,620</b>		<b>8,620</b>	

Source: Va. Healthcare Workforce Data Center

*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: 3%  
 Underemployed: 3%

**Stability**  
 Switched: 5%  
 New Location: 20%  
 Over 2 years: 62%  
 Over 2 yrs, 2<sup>nd</sup> location: 50%

**Employment Type**  
 Salary or Wage: 93%

Source: Va. Healthcare Workforce Data Center

*62% 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	#	%
<b>Salary/ Commission</b>	2,945	50%
<b>Hourly Wage</b>	2,538	43%
<b>By Contract</b>	81	1%
<b>Business/ Practice Income</b>	295	5%
<b>Unpaid</b>	47	1%
<b>Subtotal</b>	<b>5,906</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

<sup>1</sup> As reported by the US Bureau of Labor Statistics, the non-seasonally adjusted monthly unemployment rate fell from 3.7% in January 2018 to 2.6% in December 2018. December 2018 unemployment rate from was preliminary at the time of publication.

## At a Glance:

### Concentration

Top Region:	26%
Top 3 Regions:	71%
Lowest Region:	2%

### Locations

2 or more (2018):	11%
2 or more (Now*):	12%

Source: Va. Healthcare Workforce Data Center

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

## A Closer Look:

Regional Distribution of Work Locations				
Virginia Performs Region	Primary Location		Secondary Location	
	#	%	#	%
Central	1,679	26%	170	19%
Eastern	105	2%	18	2%
Hampton Roads	1,233	19%	157	18%
Northern	1,645	26%	209	24%
Southside	227	4%	26	3%
Southwest	360	6%	71	8%
Valley	381	6%	62	7%
West Central	736	11%	97	11%
Virginia Border State/DC	32	0%	31	3%
Other US State	51	1%	44	5%
Outside of the US	1	0%	3	0%
<b>Total</b>	<b>6,450</b>	<b>100%</b>	<b>888</b>	<b>100%</b>
<b>Item Missing</b>	<b>1,859</b>		<b>28</b>	

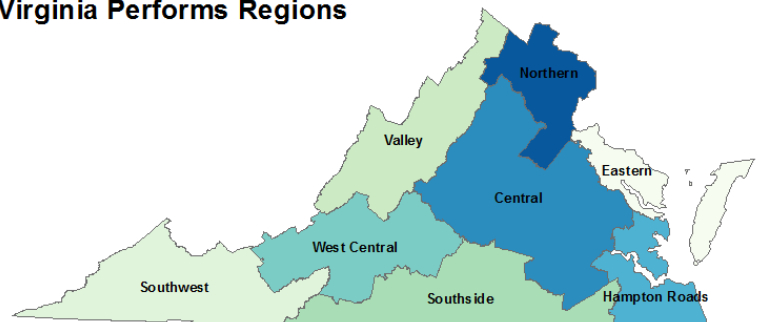
Source: Va. Healthcare Workforce Data Center

Number of Work Locations				
Locations	Work Locations in 2018		Work Locations Now*	
	#	%	#	%
0	308	4%	395	6%
1	7,398	86%	5,515	82%
2	475	6%	449	7%
3	291	3%	255	4%
4	34	0%	23	0%
5	17	0%	13	0%
6 or More	99	1%	76	1%
<b>Total</b>	<b>8,620</b>	<b>100%</b>	<b>6,726</b>	<b>100%</b>

\*At the time of survey completion, December 2018.

Source: Va. Healthcare Workforce Data Center

## Virginia Performs Regions



Over the past year, 11% of Virginia's pharmacists worked at multiple locations.

**A Closer Look:**

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
<b>For-Profit</b>	3,992	66%	583	70%
<b>Non-Profit</b>	1,459	24%	189	23%
<b>State/Local Government</b>	260	4%	31	4%
<b>Veterans Administration</b>	126	2%	8	1%
<b>U.S. Military</b>	132	2%	17	2%
<b>Other Federal Gov't</b>	71	1%	2	0%
<b>Total</b>	<b>6,040</b>	<b>100%</b>	<b>830</b>	<b>100%</b>
<b>Did not have location</b>	311		7,706	
<b>Item Missing</b>	2,269		85	

Source: Va. Healthcare Workforce Data Center

## At a Glance: (Primary Locations)

**Sector**

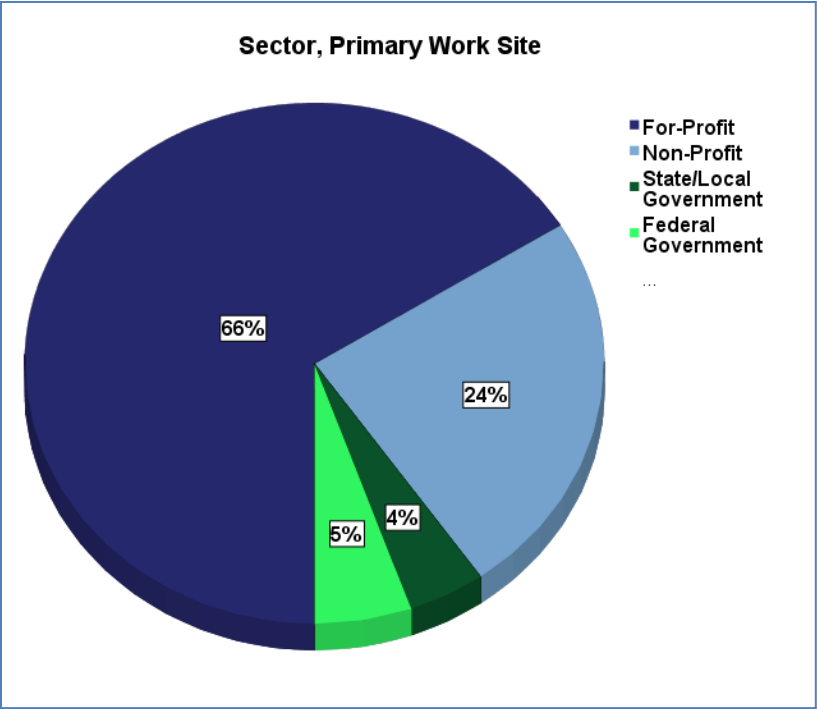
For Profit:	66%
Federal:	5%

**Top Establishments**

Large Chain Pharmacy: (11+ Stores)	28%
Hospital/Health System: (Inpatient)	24%
Independent Pharmacy: (1-4 Stores)	10%

Source: Va. Healthcare Workforce Data Center

90% of all pharmacists work in the private sector, including 66% 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.



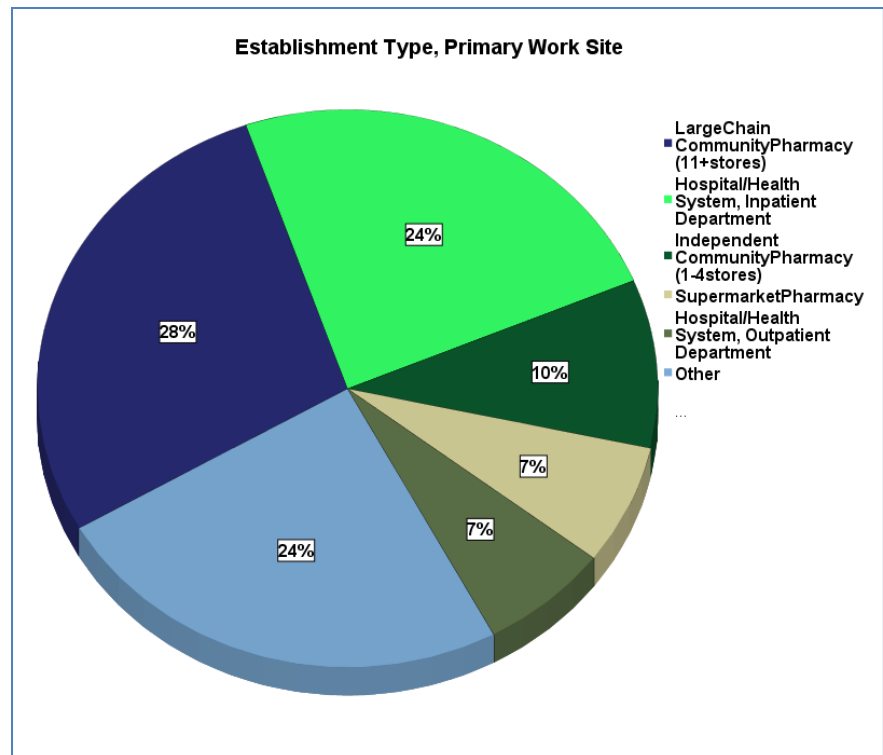
Source: Va. Healthcare Workforce Data Center

Top Location Types				
Establishment Type	Primary Location		Secondary Location	
	#	%	#	%
Large Chain Community Pharmacy	1,653	28%	190	23%
Hospital/Health System, Inpatient Department	1,415	24%	134	16%
Independent Community Pharmacy	575	10%	141	17%
Supermarket Pharmacy	411	7%	42	5%
Hospital/Health System, Outpatient Department	401	7%	40	5%
Mass Merchandiser (i.e. Big Box Store)	258	4%	33	4%
Clinic-Based Pharmacy	199	3%	71	9%
Nursing Home/Long-Term Care	184	3%	32	4%
Benefit Administration	152	3%	4	0%
Academic Institution	112	2%	36	4%
Home Health/Infusion	70	1%	3	0%
Manufacturer	52	1%	0	0%
Mail Service Pharmacy	41	1%	8	1%
Small Chain Community Pharmacy	27	0%	8	1%
Wholesale Distributor	7	0%	0	0%
Other	343	6%	77	9%
<b>Total</b>	<b>5,900</b>	<b>100%</b>	<b>819</b>	<b>100%</b>
<b>Did Not Have a Location</b>	<b>311</b>		<b>7,706</b>	

Large chain community pharmacies of more than 10 stores are the most common establishment type in Virginia, employing over a quarter 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%

### Roles

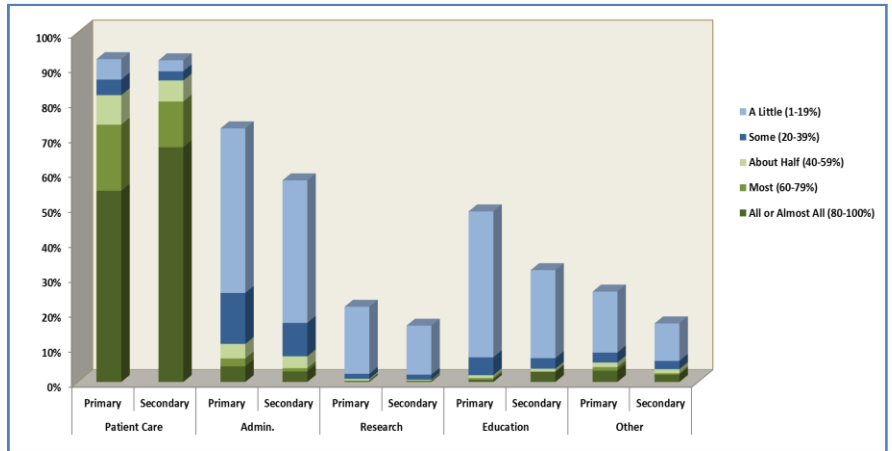
Patient Care: 74%  
Administration: 7%  
Education: 1%

### Patient Care Pharmacists

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

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, nearly 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
<b>All or Almost All (80-100%)</b>	55%	67%	4%	3%	0%	0%	1%	3%	3%	2%
<b>Most (60-79%)</b>	19%	13%	2%	1%	0%	0%	0%	0%	1%	0%
<b>About Half (40-59%)</b>	8%	6%	4%	3%	0%	0%	1%	1%	1%	1%
<b>Some (20-39%)</b>	4%	3%	15%	10%	1%	1%	5%	3%	3%	2%
<b>A Little (1-20%)</b>	6%	3%	47%	41%	19%	14%	42%	25%	17%	11%
<b>None (0%)</b>	8%	8%	27%	42%	78%	84%	51%	68%	74%	83%

Source: Va. Healthcare Workforce Data Center

**A Closer Look:**

Retirement Expectations				
Expected Retirement Age	All		Over 50	
	#	%	#	%
<b>Under age 50</b>	154	3%	-	-
<b>50 to 54</b>	208	4%	0	0%
<b>55 to 59</b>	539	10%	110	5%
<b>60 to 64</b>	1,396	25%	478	23%
<b>65 to 69</b>	2,047	37%	861	42%
<b>70 to 74</b>	636	11%	346	17%
<b>75 to 79</b>	176	3%	95	5%
<b>80 or over</b>	86	2%	48	2%
<b>I do not intend to retire</b>	310	6%	131	6%
<b>Total</b>	<b>5,551</b>	<b>100%</b>	<b>2,069</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

**At a Glance:**

**Retirement Expectations**

**All Pharmacists**

Under 65: 41%

Under 60: 16%

**Pharmacists 50 and over**

Under 65: 28%

Under 60: 5%

**Time until Retirement**

Within 2 years: 7%

Within 10 years: 23%

Half the workforce: By 2043

Source: Va. Healthcare Workforce Data Center

41% of Virginia’s pharmacists expect to retire before the age of 65, while 22% 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, 9% of pharmacists expect to pursue additional educational opportunities, and 8% also plan on increasing the number of hours that they devote to patients.

**Future Plans**

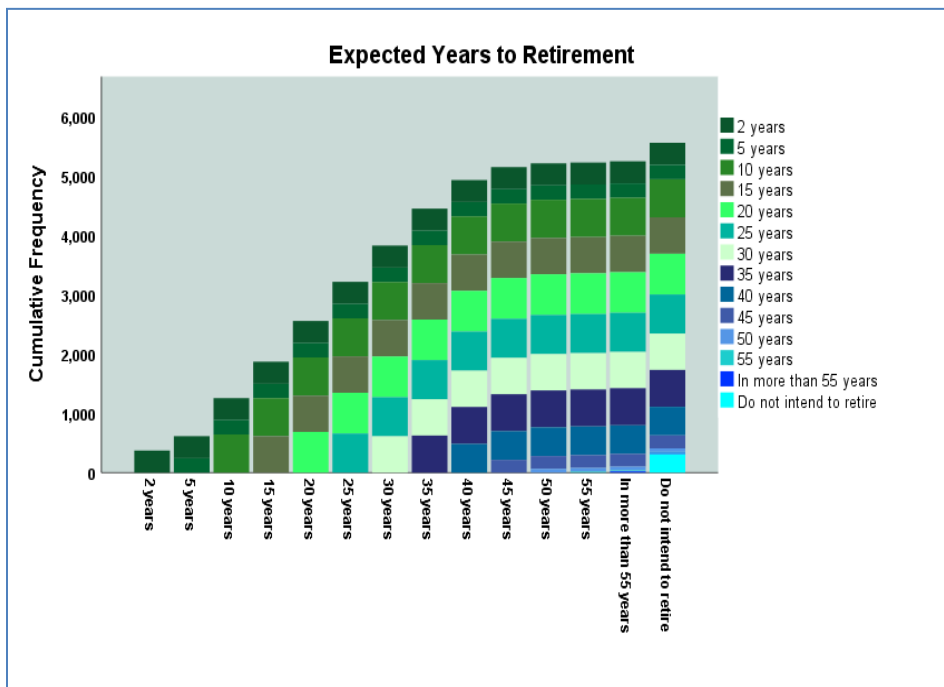
2 Year Plans:	#	%
<b>Decrease Participation</b>		
<b>Leave Profession</b>	114	1%
<b>Leave Virginia</b>	256	3%
<b>Decrease Patient Care Hours</b>	236	3%
<b>Decrease Teaching Hours</b>	30	0%
<b>Increase Participation</b>		
<b>Increase Patient Care Hours</b>	689	8%
<b>Increase Teaching Hours</b>	446	5%
<b>Pursue Additional Education</b>	806	9%
<b>Return to Virginia’s Workforce</b>	120	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 23% plan on retiring in the next ten years. Half of the current pharmacist workforce expect to retire by 2043.

Time to Retirement			
Expect to retire within . .	#	%	Cumulative %
<b>2 years</b>	371	7%	7%
<b>5 years</b>	242	4%	11%
<b>10 years</b>	641	12%	23%
<b>15 years</b>	613	11%	34%
<b>20 years</b>	684	12%	46%
<b>25 years</b>	659	12%	58%
<b>30 years</b>	611	11%	69%
<b>35 years</b>	623	11%	80%
<b>40 years</b>	482	9%	89%
<b>45 years</b>	216	4%	93%
<b>50 years</b>	64	1%	94%
<b>55 years</b>	16	0%	94%
<b>In more than 55 years</b>	20	0%	94%
<b>Do not intend to retire</b>	310	6%	100%
<b>Total</b>	<b>5,551</b>	<b>100%</b>	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

Using these estimates, retirement will begin to reach 10% of the current workforce starting in 2028. Retirement will peak at 12% of the current workforce at that time before declining to under 10% of the current workforce again around 2058.

## At a Glance:

### FTEs

Total: 6,943  
 FTEs/1,000 Residents<sup>2</sup>: 0.825  
 Average: 0.84

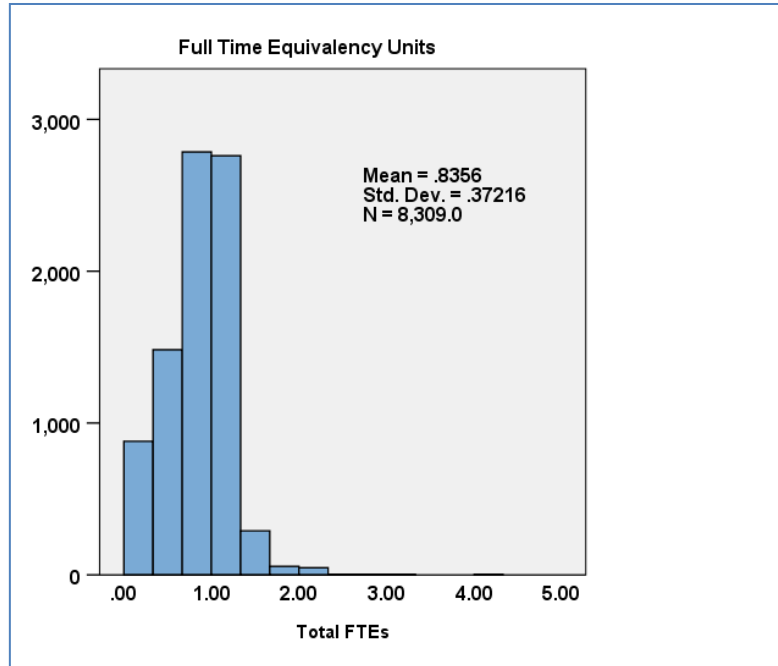
### Age & Gender Effect

Age, Partial Eta<sup>3</sup>: Small  
 Gender, Partial Eta<sup>3</sup>: Negligible

*Partial Eta<sup>3</sup> Explained:*  
 Partial Eta<sup>3</sup> is a statistical measure of effect size.

Source: Va. Healthcare Workforce Data Center

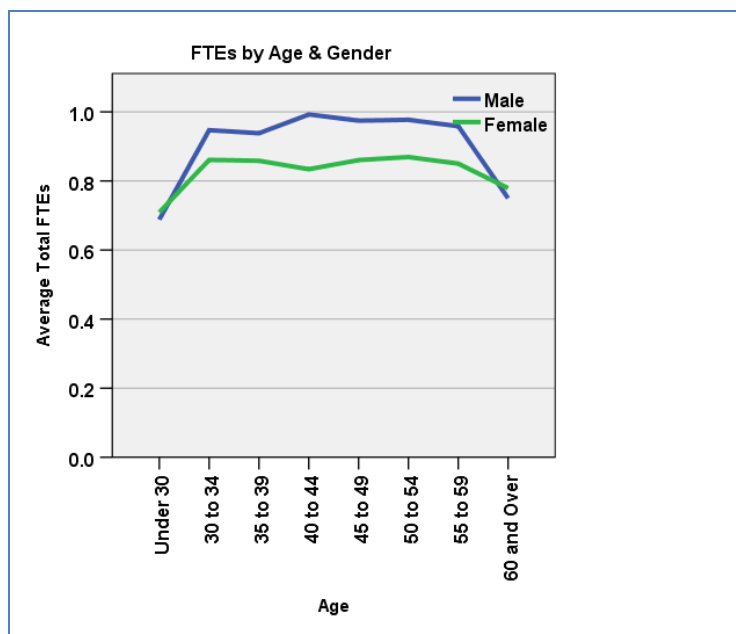
## A Closer Look:



The typical pharmacist provided 0.92 FTEs in 2018, 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.<sup>3</sup>

Full-Time Equivalency Units		
	Average	Median
<b>Age</b>		
Under 30	0.69	0.64
30 to 34	0.89	0.92
35 to 39	0.83	0.90
40 to 44	0.78	0.91
45 to 49	0.91	0.97
50 to 54	0.95	1.05
55 to 59	0.86	0.85
60 and Over	0.76	0.72
<b>Gender</b>		
Male	0.88	0.97
Female	0.83	0.93

Source: Va. Healthcare Workforce Data Center

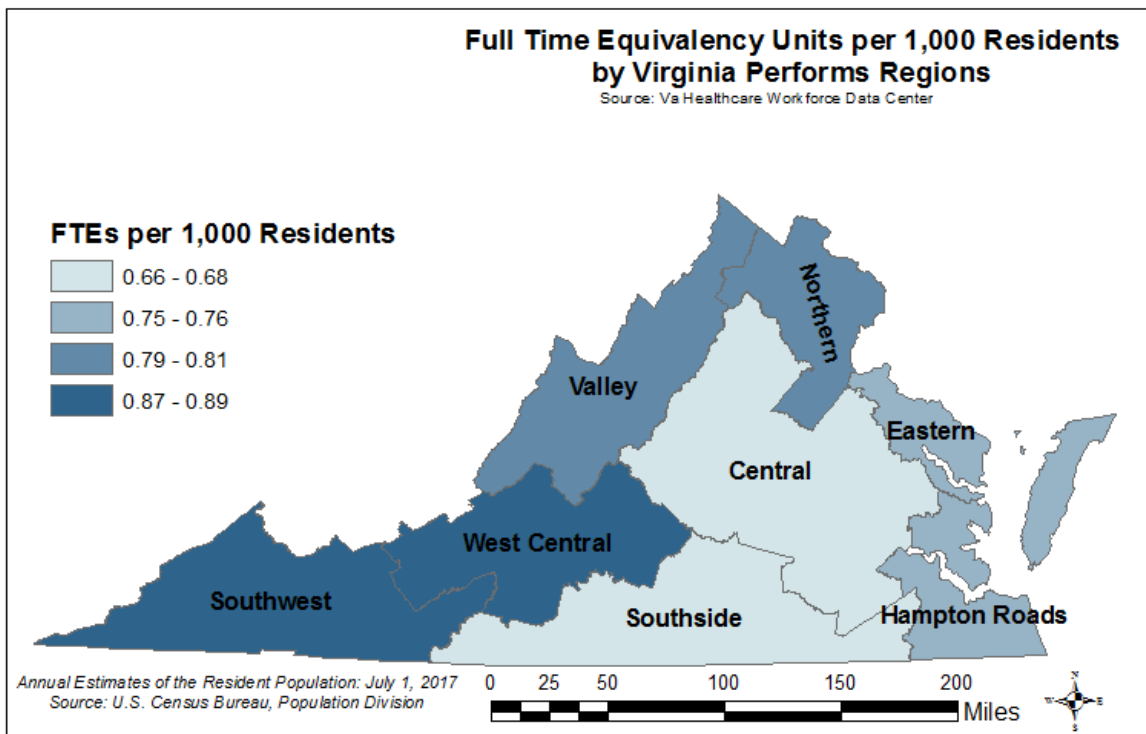
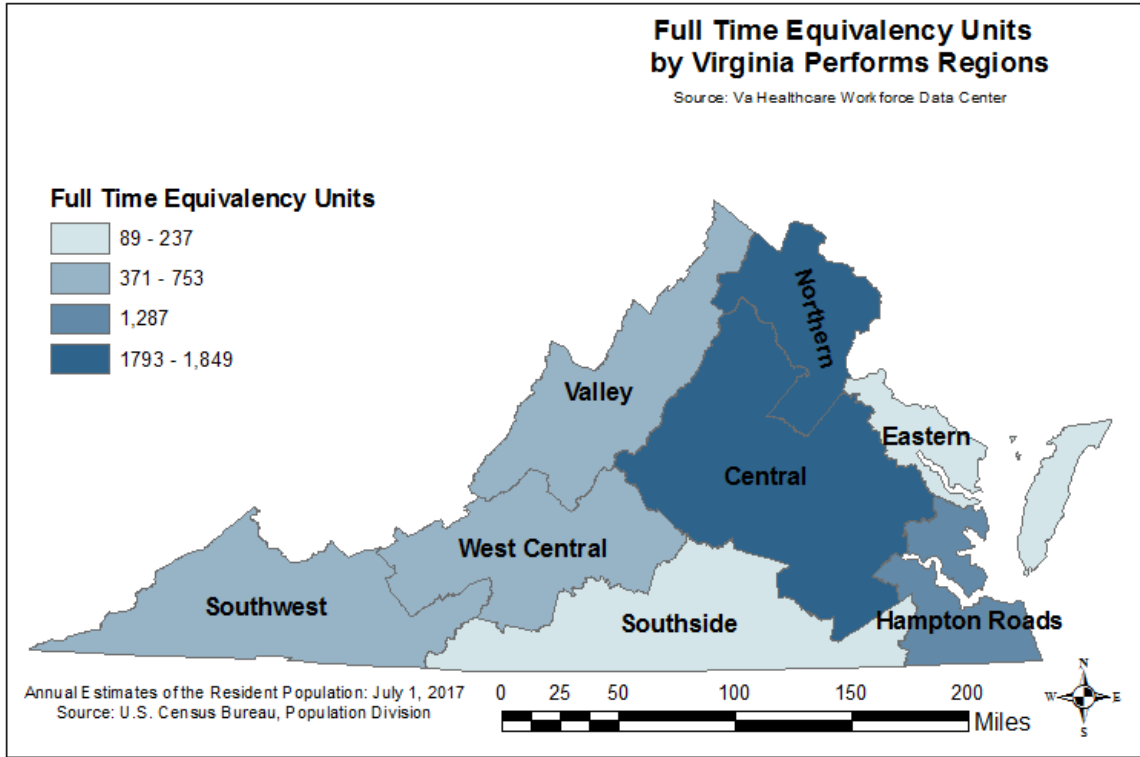


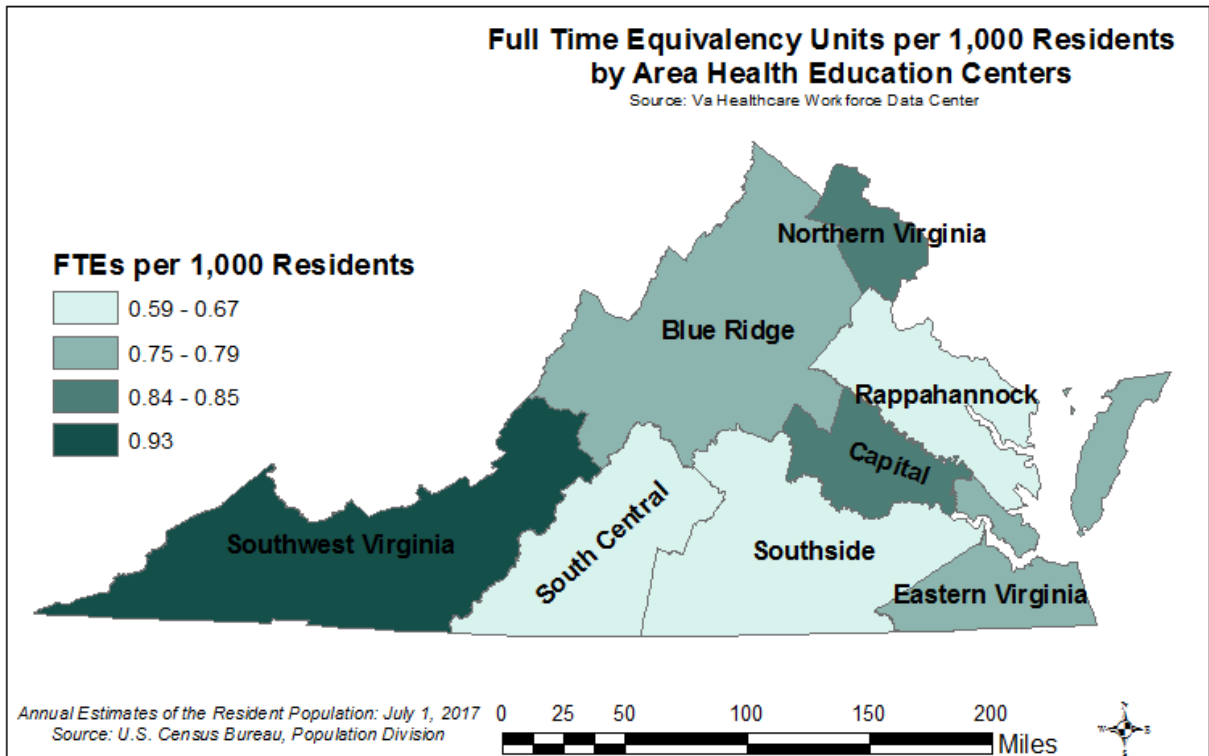
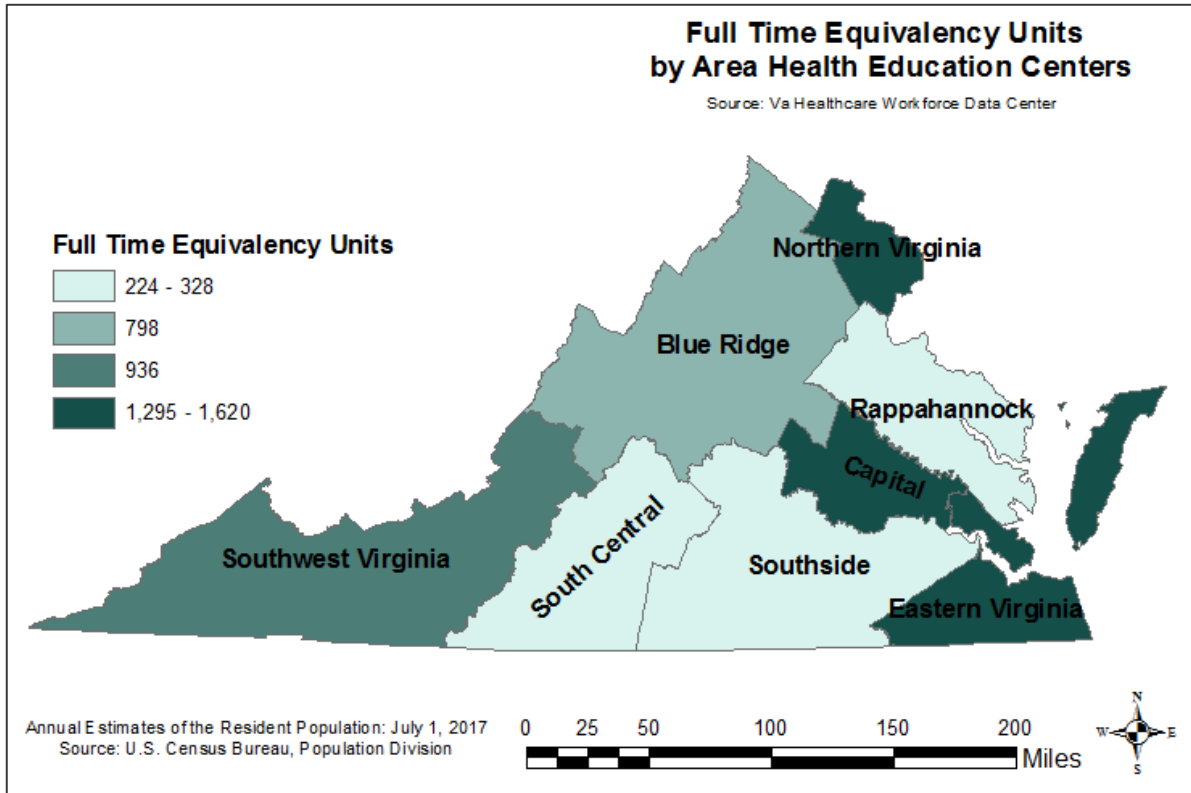
Source: Va. Healthcare Workforce Data Center

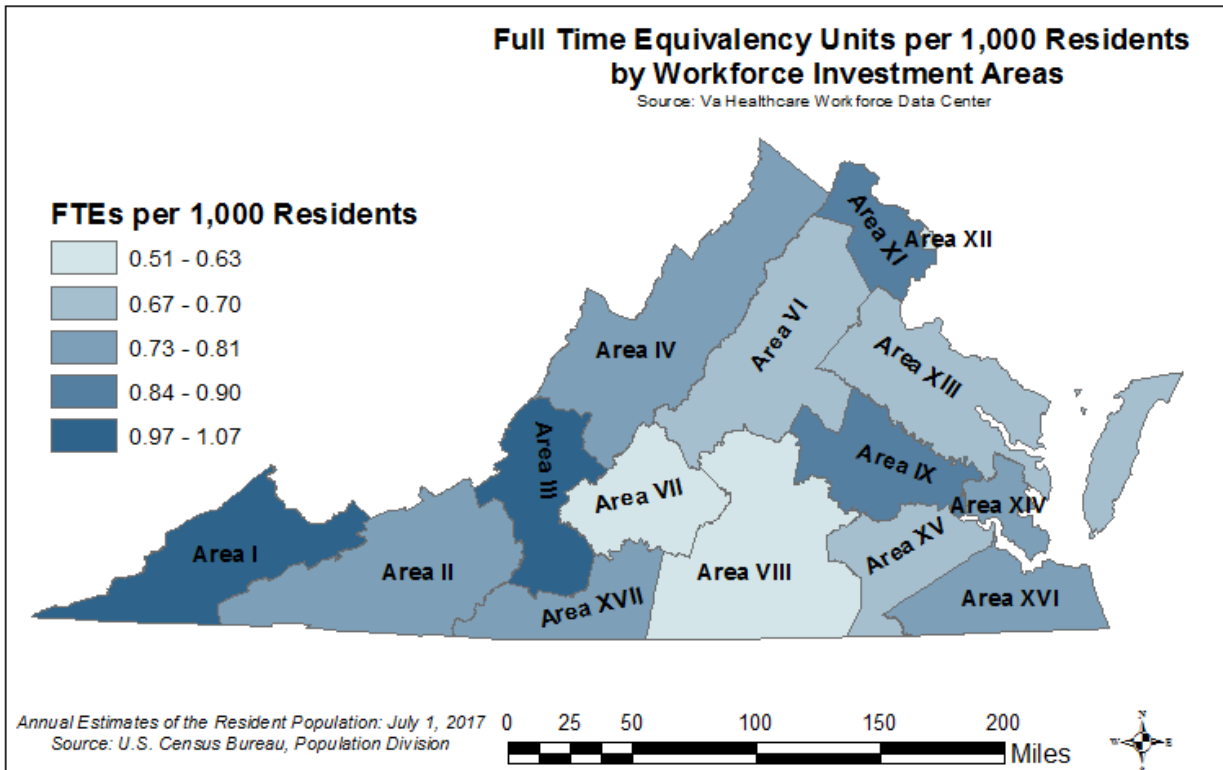
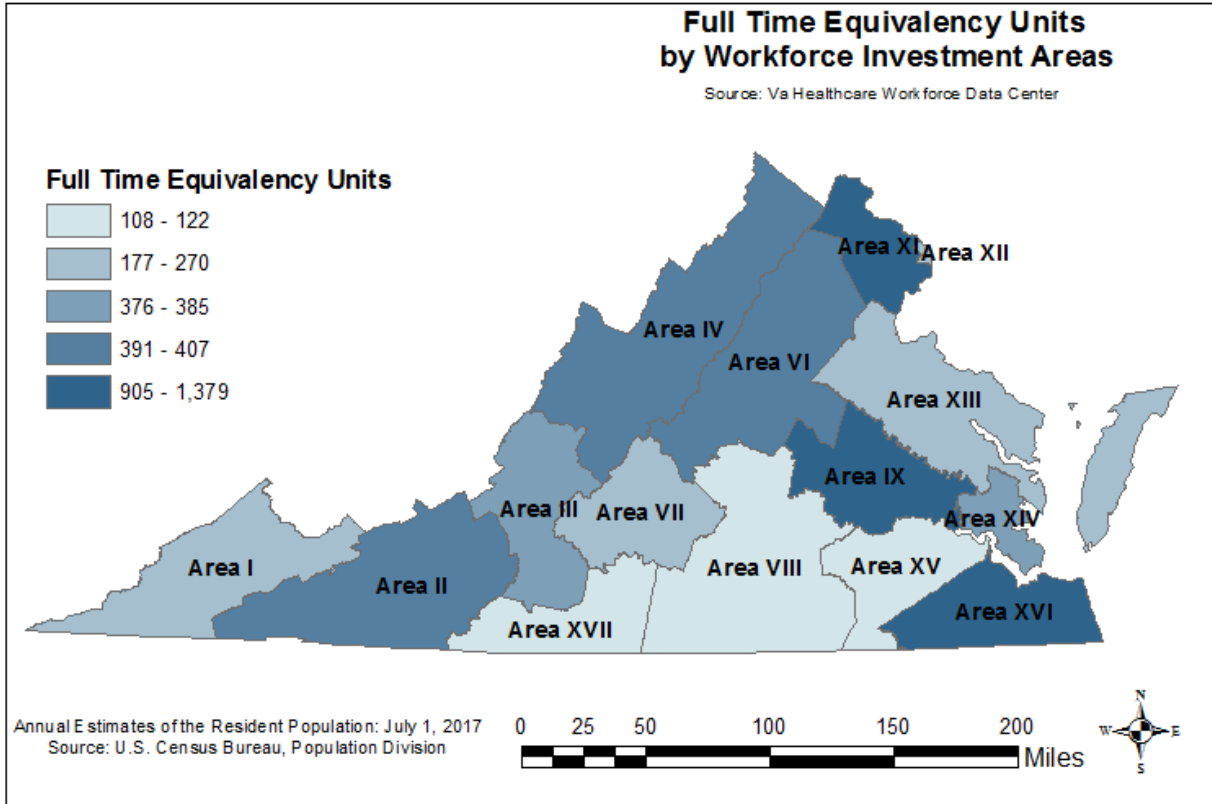
<sup>2</sup> Number of residents in 2017 was used as the denominator.

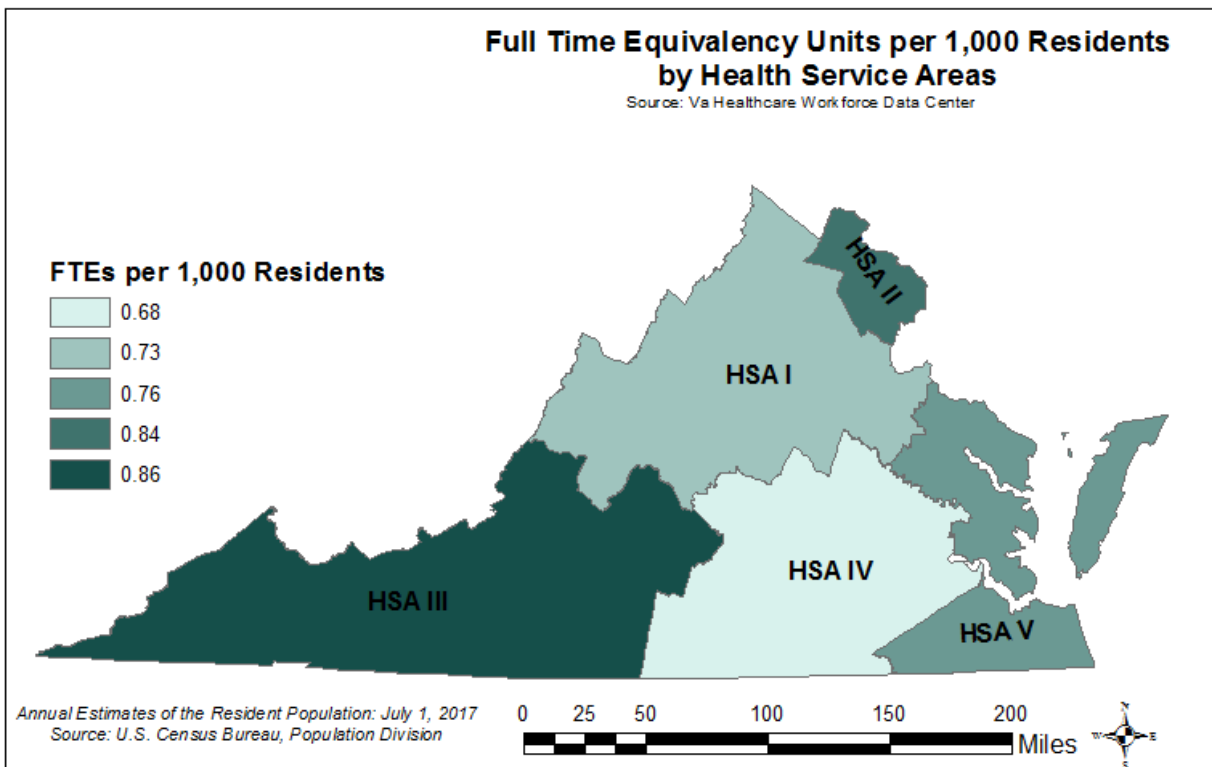
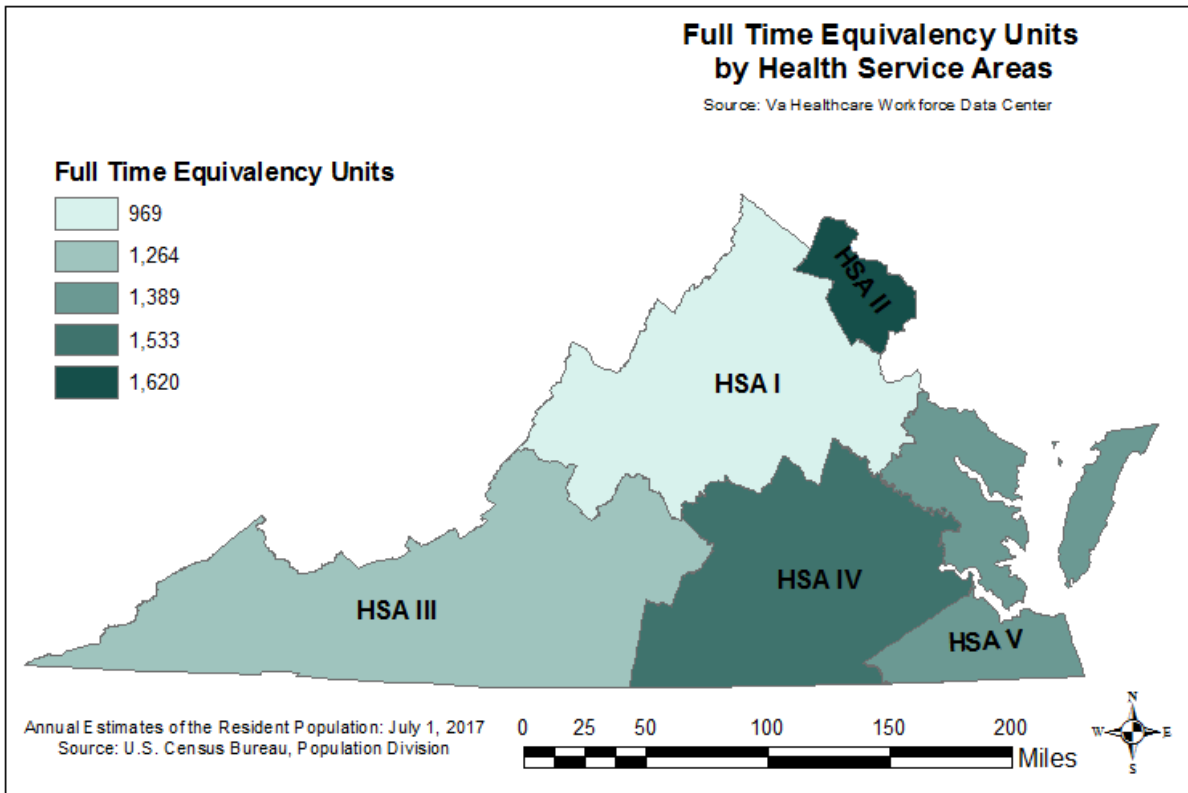
<sup>3</sup> Due to assumption violations in Mixed between-within ANOVA (Levene's Test & Interaction effect are significant).

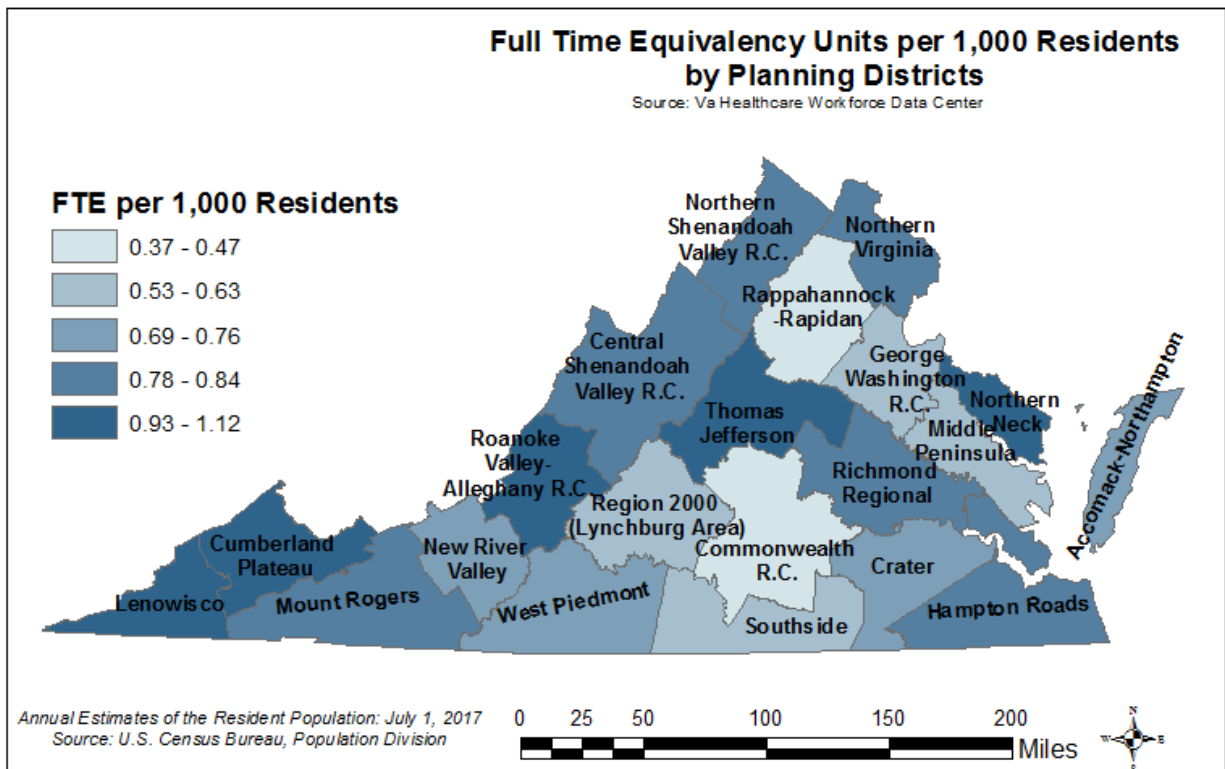
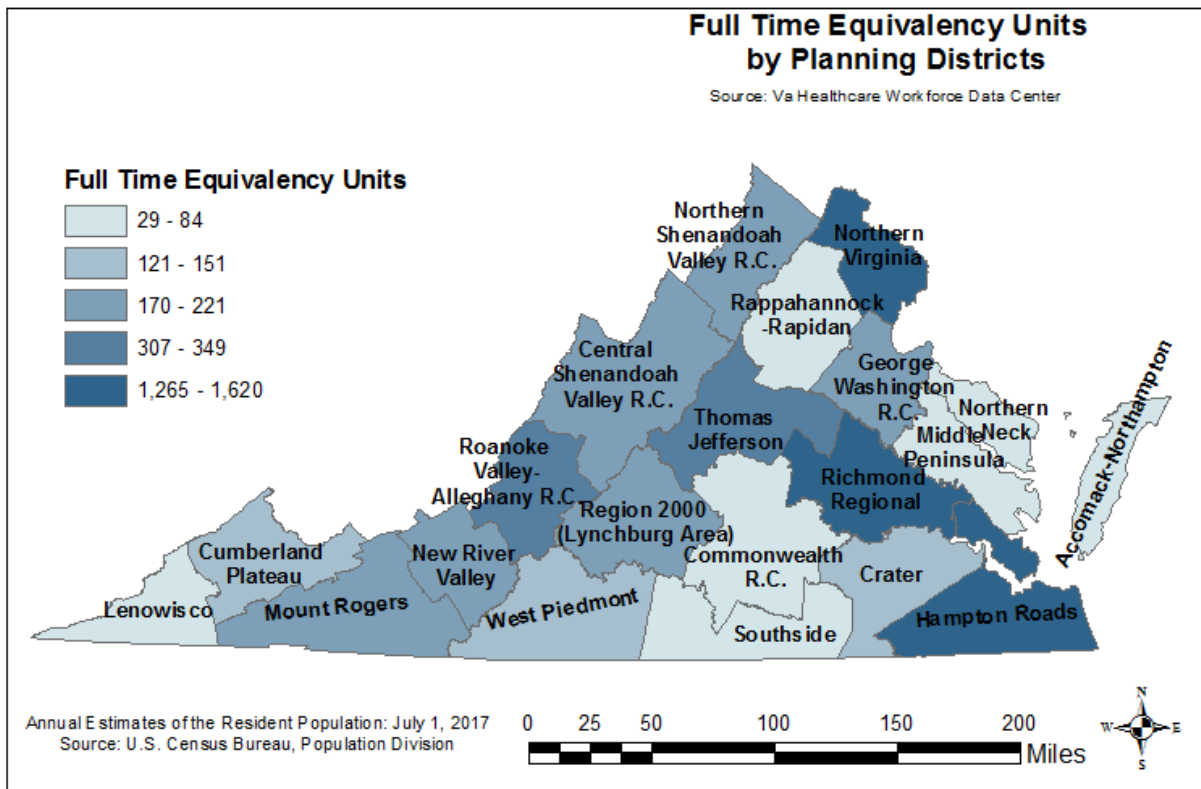












## Appendix

### Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
<b>Metro, 1 million+</b>	6,392	93.21%	1.072843	1.0404	1.13630
<b>Metro, 250,000 to 1 million</b>	909	93.29%	1.071934	1.0395	1.13534
<b>Metro, 250,000 or less</b>	1,030	92.62%	1.079665	1.0470	1.14353
<b>Urban pop 20,000+, Metro adj</b>	122	92.62%	1.079646	1.0470	1.14351
<b>Urban pop 20,000+, nonadj</b>	0	NA	NA	NA	NA
<b>Urban pop, 2,500-19,999, Metro adj</b>	377	88.33%	1.132132	1.0979	1.19910
<b>Urban pop, 2,500-19,999, nonadj</b>	290	92.76%	1.078067	1.0455	1.14184
<b>Rural, Metro adj</b>	227	84.14%	1.188482	1.1526	1.25878
<b>Rural, nonadj</b>	124	93.55%	1.068966	1.0367	1.13220
<b>Virginia border state/DC</b>	2,610	88.85%	1.125485	1.0915	1.19206
<b>Other US State</b>	3,341	85.60%	1.168182	1.1329	1.23728

Source: Va. Healthcare Workforce Data Center

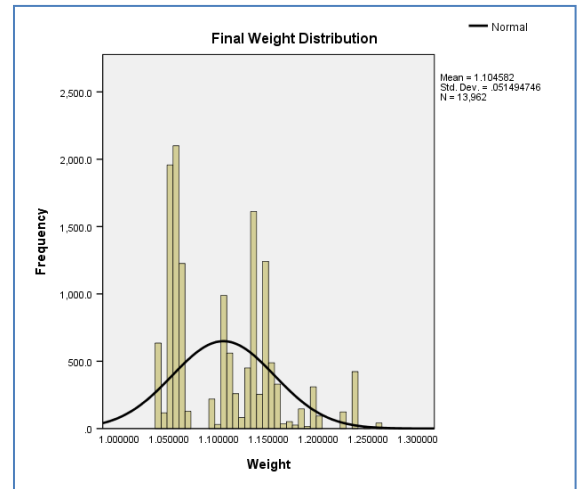
See the Methods section on the HWDC website for details on HWDC Methods:

[www.dhp.virginia.gov/hwdc/](http://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: 0.74362**



Source: Va. Healthcare Workforce Data Center

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
<b>Under 30</b>	1,047	86.25%	1.159468	1.1219	1.2474
<b>30 to 34</b>	2,473	91.75%	1.089907	1.0546	1.1726
<b>35 to 39</b>	2,280	92.15%	1.085198	1.0501	1.1675
<b>40 to 44</b>	1,935	92.30%	1.083427	1.0484	1.1656
<b>45 to 49</b>	1,882	92.08%	1.085978	1.0508	1.1683
<b>50 to 54</b>	1,651	91.34%	1.094828	1.0594	1.1778
<b>55 to 59</b>	1,397	93.34%	1.071319	1.0367	1.1526
<b>60 and Over</b>	2,759	85.47%	1.170059	1.1322	1.2588

Source: Va. Healthcare Workforce Data Center