

---

# *Virginia's Dental Hygienist Workforce: 2018*

---

Healthcare Workforce Data Center

May 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](mailto:HWDC@dhp.virginia.gov)

Follow us on Tumblr: [www.vahwdc.tumblr.com](http://www.vahwdc.tumblr.com)

Get a copy of this report from: <https://www.dhp.virginia.gov/hwdc/findings.htm>

*5,489 Dental Hygienists 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 Dentistry 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  
*Operations Manager*

Christopher Coyle  
*Research Assistant*

# Virginia Board of Dentistry

## ***President***

John M. Alexander, DDS  
*Richmond*

## ***Vice-President***

Tonya A. Parris-Wilkins, DDS  
*Chester*

## ***Secretary-Treasurer***

Augustus A. Petticolas, DDS  
*Forest*

## ***Members***

Nathaniel C. Bryant, DDS  
*Chesapeake*

Tammy C. Ridout, RDH  
*Chesterfield*

Sandra J. Catchings, DDS  
*Staunton*

Patricia B. Bonwell, RDH, PhD  
*Montpelier*

Jamiah Dawson, DDS  
*Newport News*

James D. Watkins, DDS  
*Hampton*

Carol R. Russek, JD  
*Midlothian*

## ***Executive Director***

Sandra K. Reen

## Contents

---

<b>Results in Brief</b> .....	<b>2</b>
<b>Summary of Trends</b> .....	<b>2</b>
<b>Survey Response Rates</b> .....	<b>3</b>
<b>The Workforce</b> .....	<b>4</b>
<b>Demographics</b> .....	<b>5</b>
<b>Background</b> .....	<b>6</b>
<b>Education</b> .....	<b>8</b>
<b>Current Employment Situation</b> .....	<b>9</b>
<b>Employment Quality</b> .....	<b>10</b>
<b>Current Labor Market</b> .....	<b>11</b>
<b>Work Site Distribution</b> .....	<b>12</b>
<b>Establishment Type</b> .....	<b>13</b>
<b>Time Allocation</b> .....	<b>15</b>
<b>Patient Workload</b> .....	<b>16</b>
<b>Retirement &amp; Future Plans</b> .....	<b>17</b>
<b>Full-Time Equivalency Units</b> .....	<b>19</b>
<b>Maps</b> .....	<b>20</b>
Virginia Performs Regions .....	20
Area Health Education Center Regions .....	21
Workforce Investment Areas .....	22
Health Services Areas .....	23
Planning Districts.....	24
<b>Appendices</b> .....	<b>25</b>
Appendix A: Weights .....	25

## The Dental Hygienist Workforce: At a Glance:

### The Workforce

Licensees:	5,975
Virginia's Workforce:	4,883
FTEs:	3,148

### Background

Rural Childhood:	35%
HS Diploma in VA:	59%
Prof. Degree in VA:	65%

### Current Employment

Employed in Prof.:	93%
Hold 1 Full-time Job:	52%
Satisfied?:	94%

### Survey Response Rate

All Licensees:	92%
Renewing Practitioners:	97%

### Education

Associate:	54%
Baccalaureate:	41%

### Job Turnover

Switched Jobs:	7%
Employed over 2 yrs:	65%

### Demographics

Female:	98%
Diversity Index:	35%
Median Age:	44

### Finances

Median Inc.:	\$50k-\$60k
Retirement Benefits:	50%
Under 40 w/ Ed debt:	48%

### Time Allocation

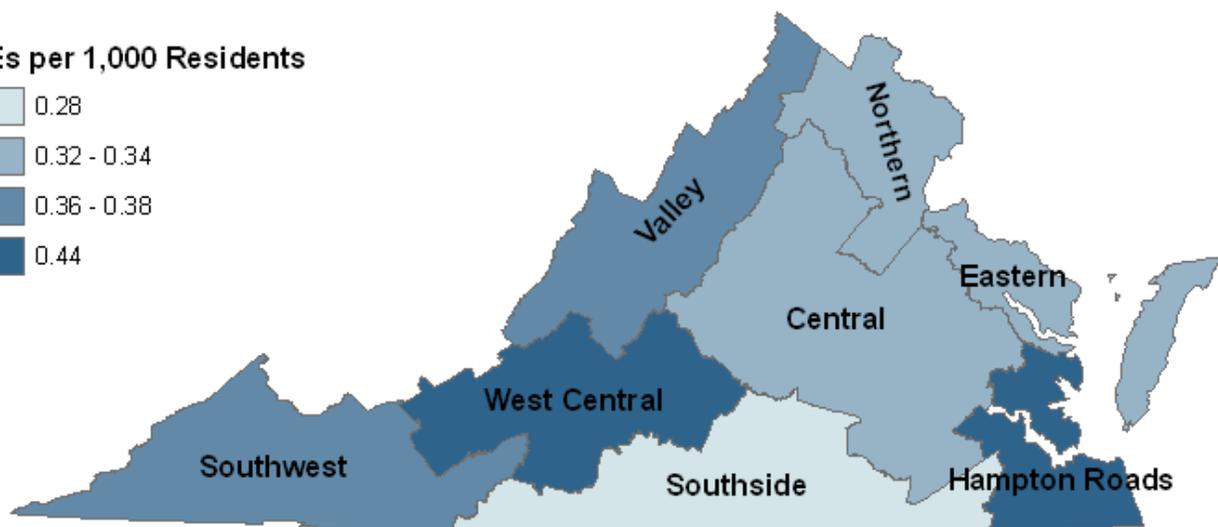
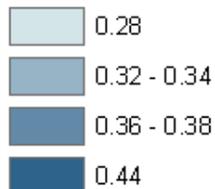
Patient Care:	90%-99%
Administration:	1%-9%
Patient Care Role:	93%

Source: Va. Healthcare Workforce Data Center

## Full Time Equivalency Units Provided by Dental Hygienists per 1,000 Residents by Virginia Performs Region

Source: Va Healthcare Workforce 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

---

5,489 dental hygienists voluntarily took part in the 2018 Dental Hygienist 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 March for dental hygienists. These survey respondents represent 92% of the 5,975 dental hygienists who are licensed in the state and 97% of renewing practitioners.

The HWDC estimates that 4,883 dental hygienists participated in Virginia's workforce during the survey period, which is defined as those dental hygienists 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 dental hygienist at some point in the future. Between April 2017 and March 2018, Virginia's dental hygienist workforce provided 3,148 "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).

41% of all dental hygienists are under the age of 40, and 97% of these professionals are female. In addition, the diversity index of those dental hygienists who are under the age of 40 is 40%, which is higher than the diversity index of 35% for the dental hygienist profession as a whole. In total, 98% of Virginia's dental hygienist workforce is female.

35% of all dental hygienist grew up in a rural area, and 20% of these professionals currently work in a non-metro area of the state. Overall, 10% of all dental hygienists current work in a non-metro area of Virginia. In addition, 72% of all dental hygienists have some educational background in the state. 54% have earned an Associate degree as their highest professional degree, while another 41% have earned a Bachelor's degree. 29% of all dental hygienists carry education debt, including 48% of those who are under the age of 40. The median debt burden is between \$10,000 and \$20,000.

93% of all dental hygienists are currently employed in the profession, and 52% have one full-time job. The median annual income for Virginia's dental hygienist workforce is between \$50,000 and \$60,000. Over the past year, 2% of all dental hygienists have been involuntary unemployed and 7% have been underemployed. Overall, 94% of all dental hygienists are satisfied with their current employment situation, including 94% who indicate they are "very satisfied".

## Summary of Trends

---

Since 2013, the number of licensed dental hygienists in Virginia has increased by 10% from 5,425 to 5,975. At the same time, the size of Virginia's dental hygienist workforce has increased by 9% from 4,496 to 4,883. However, the number of FTEs produced by these professionals has only increased by 3% during this time period from 3,062 to 3,148.

Over the past five years, Virginia's dental hygienist workforce has become more diverse. In 2013, the diversity index of this workforce was only 29%, but it has now increased to 35% in 2018. Regardless, the state's dental hygienist workforce remains less diverse than the state's overall population.

In 2013, 91% of all dental hygienists were employed in the profession at the time of the survey, and this figure increased to 93% in 2018. At the same time, the percentage of dental hygienists who hold one full-time job has increased from 47% to 52%. In addition, unemployment has fallen among these professionals. Over the past five years, the percentage of underemployed dental hygienists has fallen from 12% to 7%, while the percentage of involuntarily unemployed professionals has fallen from 4% to 2%.

There have been significant changes in the distribution of establishment types where Virginia's dental hygienists work. Since 2013, the percentage of dental hygienists who work in solo dental practices at their primary work location has increased from 53% to 72%. On the other hand, the percentage who works at group dental practices has decline from 39% in 2013 to 17% in 2018.

In 2013, 16% of all dental hygienists planned on increased their patient care hours over the following two years. However, only 11% expect to do the same in 2018. In addition, the percentage of dental hygienists who expect to pursue additional education opportunities has fallen from 11% to 8% during the same time period.

**A Closer Look:**

Licensees		
License Status	#	%
Renewing Practitioners	5,422	91%
New Licensees	300	5%
Non-Renewals	253	4%
<b>All Licensees</b>	<b>5,975</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

*HWDC surveys tend to achieve very high response rates. 97% of renewing dental hygienists submitted a survey. These represent 92% of dental hygienists who held a license at some point in the past year.*

Statistic	Response Rates		Response Rate
	Non Respondents	Respondent	
<b>By Age</b>			
Under 30	65	633	91%
30 to 34	52	733	93%
35 to 39	56	762	93%
40 to 44	56	682	92%
45 to 49	37	667	95%
50 to 54	42	613	94%
55 to 59	49	603	93%
60 and Over	129	796	86%
<b>Total</b>	<b>486</b>	<b>5,489</b>	<b>92%</b>
<b>New Licenses</b>			
Issued in Past Year	65	235	78%
<b>Metro Status</b>			
Non-Metro	34	513	94%
Metro	304	4,029	93%
Not in Virginia	148	945	86%

Source: Va. Healthcare Workforce Data Center

**Definitions**

- 1. The Survey Period:** The survey was conducted in March 2018.
- 2. Target Population:** All Dental Hygienists who held a Virginia license at some point between April 2017 and March 2018.
- 3. Survey Population:** The survey was available to dental hygienists who renewed their licenses online. It was not available to those who did not renew, including some dental hygienists newly licensed in 2018.

Response Rates	
Completed Surveys	5,489
Response Rate, All Licensees	92%
Response Rate, Renewals	97%

Source: Va. Healthcare Workforce Data Center

**At a Glance:**

**Licensed Dental Hygienists**

Number: 5,975  
 New: 5%  
 Not Renewed: 4%

**Response Rates**

All Licensees: 92%  
 Renewing Practitioners: 97%

Source: Va. Healthcare Workforce Data Center

## At a Glance:

### Workforce

Dental Hygienist Workforce: 4,883  
 FTEs: 3,148

### Utilization Ratios

Licensees in VA Workforce: 82%  
 Licensees per FTE: 1.90  
 Workers per FTE: 1.55

Source: Va. Healthcare Workforce Data Center

## Definitions

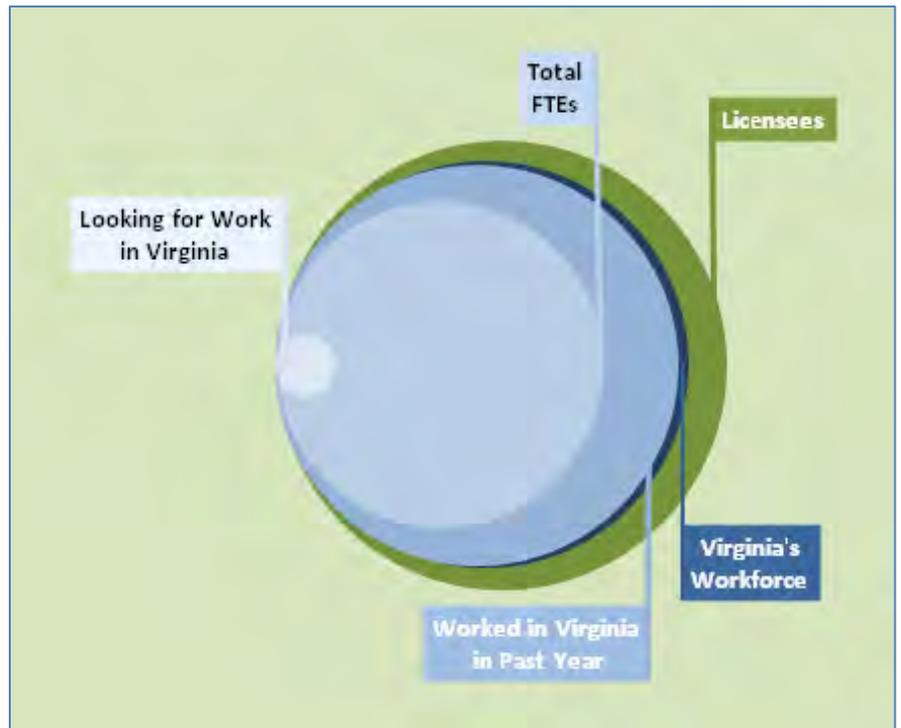
- 1. Virginia's Workforce:** A licensee with a primary or secondary work site in Virginia at any time between April 2017 and March 2018 or who indicated intent to return to Virginia's workforce at any point in the future.
- 2. Full Time Equivalency Unit (FTE):** The HWDC uses 2,000 (40 hours for 50 weeks) 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.

Virginia's Dental Hygienist Workforce		
Status	#	%
Worked in Virginia in Past Year	4,769	98%
Looking for Work in Virginia	114	2%
Virginia's Workforce	4,883	100%
Total FTEs	3,148	
Licensees	5,975	

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)



Source: Va. Healthcare Workforce Data Center

**A Closer Look:**

Age & Gender						
Age	Male		Female		Total	
	#	% Male	#	% Female	#	% in Age Group
Under 30	13	2%	559	98%	572	13%
30 to 34	29	5%	574	95%	603	14%
35 to 39	10	2%	601	98%	611	14%
40 to 44	11	2%	521	98%	532	12%
45 to 49	12	2%	494	98%	506	12%
50 to 54	1	0%	461	100%	462	11%
55 to 59	3	1%	444	99%	447	10%
60 +	5	1%	588	99%	593	14%
<b>Total</b>	<b>83</b>	<b>2%</b>	<b>4,242</b>	<b>98%</b>	<b>4,325</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity					
Race/ Ethnicity	Virginia*	Dental Hygienists		Hygienists Under 40	
	%	#	%	#	%
White	62%	3,490	80%	1,372	77%
Black	19%	219	5%	101	6%
Asian	6%	275	6%	143	8%
Other Race	1%	59	1%	15	1%
Two or more races	3%	100	2%	53	3%
Hispanic	9%	206	5%	106	6%
<b>Total</b>	<b>100%</b>	<b>4,349</b>	<b>100%</b>	<b>1,790</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, 2016.

Source: Va. Healthcare Workforce Data Center

**At a Glance:**

**Gender**

% Female: 98%  
% Under 40 Female: 97%

**Age**

Median Age: 44  
% Under 40: 41%  
% 55+: 24%

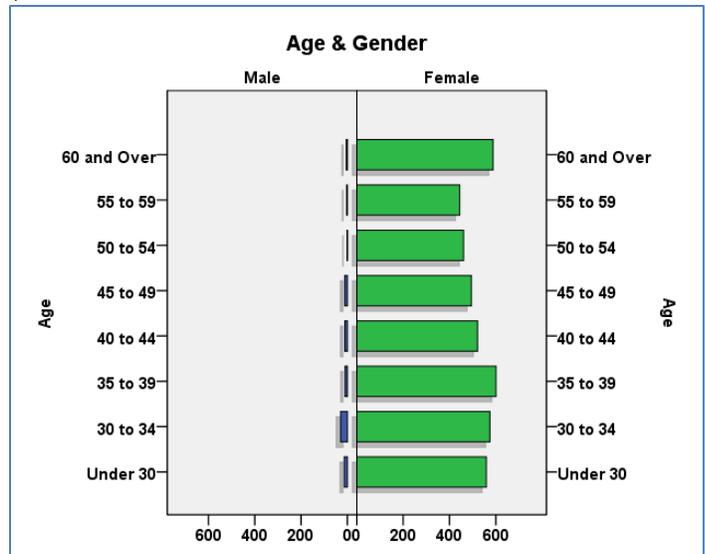
**Diversity**

Diversity Index: 35%  
Under 40 Div. Index: 40%

Source: Va. Healthcare Workforce Data Center

*In a chance encounter between two dental hygienists, there is a 35% chance they would be of a different race/ethnicity (a measure known as the Diversity Index).*

*41% of dental hygienists are under the age of 40. 97% of these professionals are female, and they have a diversity index of 40%.*



Source: Va. Healthcare Workforce Data Center

## At a Glance:

### Childhood

Urban Childhood: 13%  
 Rural Childhood: 35%

### Virginia Background

HS in Virginia: 59%  
 Prof. in VA: 65%  
 HS or Prof. in VA: 72%

### Location Choice

% Rural to Non-Metro: 20%  
 % Urban/Suburban to Non-Metro: 4%

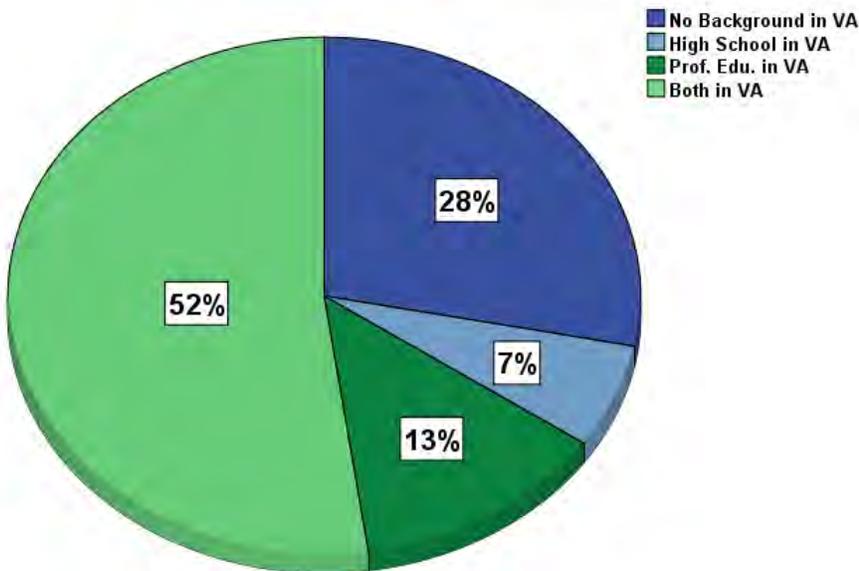
Source: Va. Healthcare Workforce Data Center

## 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+	24%	61%	16%
2	Metro, 250,000 to 1 million	48%	41%	11%
3	Metro, 250,000 or less	63%	32%	6%
<b>Non-Metro Counties</b>				
4	Urban pop 20,000+, Metro adj	63%	24%	13%
6	Urban pop, 2,500-19,999, Metro adj	70%	22%	8%
7	Urban pop, 2,500-19,999, nonadj	91%	7%	2%
8	Rural, Metro adj	71%	20%	9%
9	Rural, nonadj	66%	30%	5%
<b>Overall</b>		<b>35%</b>	<b>52%</b>	<b>13%</b>

Source: Va. Healthcare Workforce Data Center

## Educational Background in Virginia



Source: Va. Healthcare Workforce Data Center

35% of dental hygienists grew up in a rural area, and 20% of this group currently works in non-metro areas of the state. Overall, 10% of dental hygienists currently work in non-metro areas of Virginia.

## Top Ten States for Dental Hygienist Recruitment

Rank	All Dental Hygienists			
	High School	#	Dental School	#
1	Virginia	2,540	Virginia	2,804
2	Outside U.S./Canada	247	North Carolina	202
3	Pennsylvania	149	Maryland	144
4	New York	140	West Virginia	137
5	West Virginia	133	New York	113
6	Maryland	131	Pennsylvania	97
7	North Carolina	125	Florida	92
8	Florida	85	Tennessee	79
9	New Jersey	73	Washington, D.C.	63
10	Michigan	65	Michigan	56

Source: Va. Healthcare Workforce Data Center

*59% of all dental hygienists earned their high school degree in Virginia, and 65% received their initial professional degree in the state.*

*Among dental hygienists who received their initial license in the past five years, 55% earned their high school degree in Virginia, while 63% received their initial professional degree in the state.*

Rank	Licensed in the Past 5 Years			
	High School	#	Dental School	#
1	Virginia	561	Virginia	642
2	Outside U.S./Canada	63	North Carolina	55
3	Maryland	41	Maryland	48
4	Pennsylvania	39	West Virginia	30
5	North Carolina	33	Pennsylvania	26
6	West Virginia	30	Florida	24
7	New York	23	New York	21
8	Florida	19	Tennessee	14
9	California	17	Michigan	13
10	Texas	15	Georgia	12

Source: Va. Healthcare Workforce Data Center

*19% of Virginia's licensees were not part of the state's dental hygienist workforce. 81% of these licensees worked at some point in the past year, and 69% currently work as dental hygienists.*

### At a Glance:

#### Not in VA Workforce

Total:	1,092
% of Licensees:	18%
Federal/Military:	6%
Va Border State/DC:	19%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Highest Dental Hygienist Degree		
Degree	#	%
Certificate	70	2%
Associate Degree	2,312	54%
Baccalaureate Degree	1,736	41%
Post-Graduate Cert.	20	0%
Master's Degree	119	3%
Doctorate	4	0%
<b>Total</b>	<b>4,261</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

## At a Glance:

**Education**

Associate: 54%

Baccalaureate: 41%

**Educational Debt**

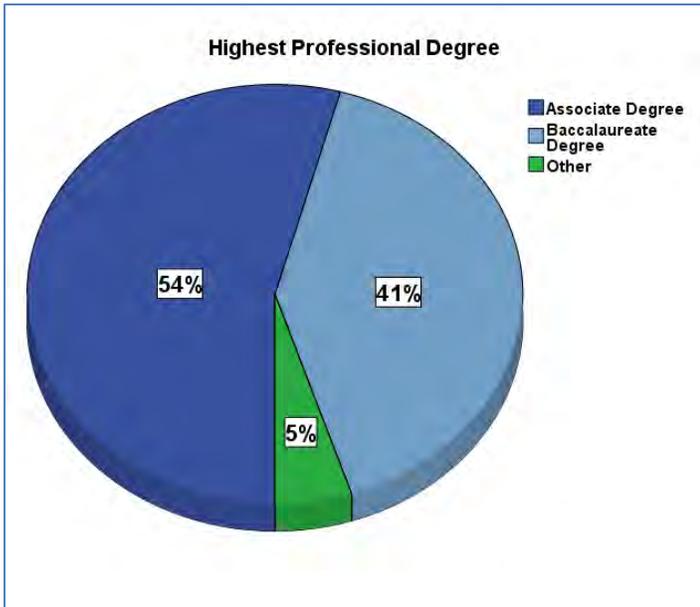
Carry debt: 29%

Under age 40 w/ debt: 48%

Median debt: \$10k-\$20k

Source: Va. Healthcare Workforce Data Center

29% of dental hygienists carry educational debt, including 48% of those under the age of 40. For those with educational debt, their median burden is between \$10,000 and \$20,000.



Source: Va. Healthcare Workforce Data Center

Educational Debt				
Amount Carried	All Dental Hygienists		Hygienists under 40	
	#	%	#	%
None	2,783	71%	862	52%
Less than \$10,000	341	9%	217	13%
\$10,000-\$19,999	245	6%	176	11%
\$20,000-\$29,999	190	5%	140	8%
\$30,000-\$39,999	106	3%	81	5%
\$40,000-\$49,999	72	2%	52	3%
\$50,000-\$59,999	62	2%	44	3%
\$60,000-\$69,999	37	1%	27	2%
\$70,000-\$79,999	27	1%	17	1%
\$80,000-\$89,999	27	1%	22	1%
\$90,000-\$99,999	9	0%	4	0%
\$100,000 or more	34	1%	16	1%
<b>Total</b>	<b>3,932</b>	<b>100%</b>	<b>1,657</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

## At a Glance:

### Employment

Employed in Profession: 93%  
 Involuntarily Unemployed: < 1%

### Positions Held

1 Full-time: 52%  
 2 or More Positions: 17%

### Weekly Hours:

40 to 49: 12%  
 60 or more: 1%  
 Less than 30: 29%

Source: Va. Healthcare Workforce Data Center

## A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	0	0%
Employed in a dentistry related capacity	4,021	93%
Employed, NOT in a dentistry related capacity	102	2%
Not working, reason unknown	0	0%
Involuntarily unemployed	18	< 1%
Voluntarily unemployed	166	4%
Retired	37	1%
<b>Total</b>	<b>4,344</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

*93% of Virginia's dental hygienists are currently employed in the profession, and less than 1% are involuntarily unemployed. 52% currently hold one full-time job, while 17% hold multiple positions simultaneously.*

Current Positions		
Positions	#	%
No Positions	221	5%
One Part-Time Position	1,092	25%
Two Part-Time Positions	361	8%
One Full-Time Position	2,245	52%
One Full-Time Position & One Part-Time Position	276	6%
Two Full-Time Positions	4	< 1%
More than Two Positions	84	2%
<b>Total</b>	<b>4,283</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	221	5%
1 to 9 hours	152	4%
10 to 19 hours	350	8%
20 to 29 hours	747	18%
30 to 39 hours	2,191	51%
40 to 49 hours	521	12%
50 to 59 hours	40	1%
60 to 69 hours	19	< 1%
70 to 79 hours	12	< 1%
80 or more hours	10	< 1%
<b>Total</b>	<b>4,263</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

**A Closer Look:**

Income		
Hourly Wage	#	%
<b>Volunteer Work Only</b>	27	1%
<b>Less than \$20,000</b>	210	6%
<b>\$20,000-\$29,999</b>	189	5%
<b>\$30,000-\$39,999</b>	334	9%
<b>\$40,000-\$49,999</b>	456	13%
<b>\$50,000-\$59,999</b>	692	19%
<b>\$60,000-\$69,999</b>	716	20%
<b>\$70,000-\$79,999</b>	547	15%
<b>\$80,000-\$89,999</b>	270	8%
<b>\$90,000-\$99,999</b>	108	3%
<b>\$100,000 or More</b>	58	2%
<b>Total</b>	<b>3,609</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

## At a Glance:

**Earnings**  
Median Income: \$50k-\$60k

**Benefits**  
Paid Vacation: 67%  
Retirement: 50%

**Satisfaction**  
Satisfied: 94%  
Very Satisfied: 61%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
<b>Very Satisfied</b>	2,562	61%
<b>Somewhat Satisfied</b>	1,415	34%
<b>Somewhat Dissatisfied</b>	186	4%
<b>Very Dissatisfied</b>	63	2%
<b>Total</b>	<b>4,227</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

*The typical dental hygienist made between \$50,000 and \$60,000 in the past year. Among dental hygienists who were compensated at their primary work location with either a salary or an hourly wage, 64% received paid vacation leave and 49% had access to a retirement plan.*

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
<b>Paid Vacation</b>	2,691	67%	66%
<b>Retirement</b>	1,995	50%	49%
<b>Paid Sick Leave</b>	1,396	35%	34%
<b>Dental Insurance</b>	688	17%	17%
<b>Group Life Insurance</b>	540	13%	13%
<b>Signing/Retention Bonus</b>	114	3%	3%
<b>Received At Least One Benefit</b>	<b>3,019</b>	<b>75%</b>	<b>74%</b>

\*From any employer at time of survey.

Source: Va. Healthcare Workforce Data Center

**A Closer Look:**

Employment Instability in Past Year		
In the past year did you . . . ?	#	%
Experience involuntary unemployment?	74	2%
Experience voluntary unemployment?	312	6%
Work part-time or temporary positions, but would have preferred a full-time/permanent position?	361	7%
Work two or more positions at the same time?	856	18%
Switch employers or practices?	323	7%
<b>Experienced at least one</b>	<b>1,439</b>	<b>29%</b>

Source: Va. Healthcare Workforce Data Center

*Only 2% of Virginia’s dental hygienists experienced involuntary unemployment at some point in the past year. By comparison, Virginia’s average monthly unemployment rate was 3.6% during the same time period.<sup>1</sup>*

Location Tenure				
Tenure	Primary		Secondary	
	#	%	#	%
<b>Not Currently Working at this Location</b>	138	3%	91	9%
<b>Less than 6 Months</b>	266	6%	157	16%
<b>6 Months to 1 Year</b>	376	9%	136	14%
<b>1 to 2 Years</b>	676	16%	214	21%
<b>3 to 5 Years</b>	746	18%	178	18%
<b>6 to 10 Years</b>	631	15%	94	9%
<b>More than 10 Years</b>	1,291	31%	134	13%
<b>Subtotal</b>	<b>4,125</b>	<b>100%</b>	<b>1,004</b>	<b>100%</b>
<b>Did not have location</b>	153		3,832	
<b>Item Missing</b>	605		47	
<b>Total</b>	<b>4,883</b>		<b>4,883</b>	

Source: Va. Healthcare Workforce Data Center

*79% of dental hygienists receive an hourly wage at their primary work location, while 19% earn a salary or work on commission.*

**At a Glance:**

**Unemployment Experience**

Involuntarily Unemployed: 2%  
Underemployed: 7%

**Turnover & Tenure**

Switched Jobs: 7%  
New Location: 23%  
Over 2 years: 65%  
Over 2 yrs, 2<sup>nd</sup> location: 40%

**Employment Type**

Hourly Wage: 79%  
Salary/Commission: 19%

Source: Va. Healthcare Workforce Data Center

*65% of dental hygienists have been employed at their primary work location for at least two years.*

Employment Type		
Primary Work Site	#	%
<b>Hourly Wage</b>	2,686	79%
<b>Salary/ Commission</b>	659	19%
<b>By Contract</b>	34	1%
<b>Unpaid</b>	12	< 1%
<b>Business/ Practice Income</b>	5	< 1%
<b>Subtotal</b>	<b>3,395</b>	<b>100%</b>
<b>Did not have location</b>	153	
<b>Item Missing</b>	1,335	

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 ranged from 3.5% in April 2017 to 3.3% in February 2018. The unemployment rate from February 2018 was still preliminary at the time of publication, while the unemployment rate in March 2018 had not yet been reported.

## At a Glance:

### Concentration

Top Region:	33%
Top 3 Regions:	74%
Lowest Region:	2%

### Locations

2 or more (Past Year):	25%
2 or more (Now*):	22%

Source: Va. Healthcare Workforce Data Center

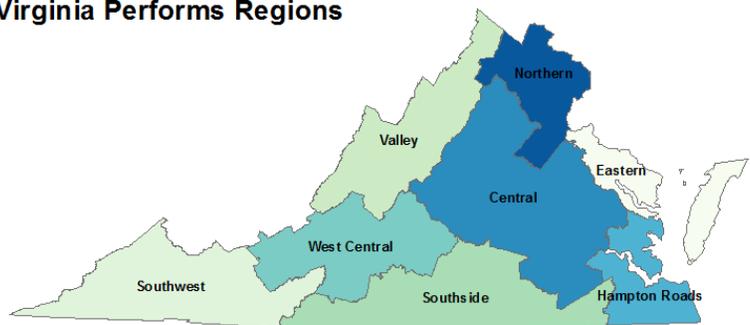
33% of all dental hygienists work in Northern Virginia, the most of any region in the state. Along with Hampton Roads and Central Virginia, these three regions employ 74% of the state's dental hygienist workforce.

## A Closer Look:

Regional Distribution of Work Locations				
Virginia Performs Region	Primary Location		Secondary Location	
	#	%	#	%
Central	727	18%	169	16%
Eastern	62	2%	15	1%
Hampton Roads	978	24%	210	20%
Northern	1,345	33%	386	37%
Southside	122	3%	29	3%
Southwest	184	4%	34	3%
Valley	226	6%	46	4%
West Central	419	10%	92	9%
Virginia Border State/DC	23	1%	15	1%
Other US State	13	0%	39	4%
Outside of the US	0	0%	1	0%
<b>Total</b>	<b>4,099</b>	<b>100%</b>	<b>1,036</b>	<b>100%</b>
Item Missing	631		15	

Source: Va. Healthcare Workforce Data Center

### Virginia Performs Regions



22% of all dental hygienists currently have multiple work locations, while 25% have worked at multiple locations over the past year.

Locations	Number of Work Locations			
	Work Locations in Past Year		Work Locations Now*	
	#	%	#	%
0	116	3%	231	6%
1	3,072	73%	3,073	73%
2	607	14%	588	14%
3	301	7%	289	7%
4	49	1%	21	1%
5	21	1%	8	0%
6 or More	65	2%	24	1%
<b>Total</b>	<b>4,232</b>	<b>100%</b>	<b>4,232</b>	<b>100%</b>

\*At the time of survey completion, March 2018.  
Source: Va. Healthcare Workforce Data Center

A Closer Look:

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
<b>For-profit</b>	3,721	94%	859	90%
<b>Non-profit</b>	69	2%	49	5%
<b>State/local government</b>	92	2%	43	4%
<b>Veterans Administration</b>	8	0%	0	0%
<b>U.S. Military</b>	56	1%	1	0%
<b>Other Federal Government</b>	9	0%	4	0%
<b>Total</b>	<b>3,955</b>	<b>100%</b>	<b>956</b>	<b>100%</b>
<b>Did not have location</b>	153		3832	
<b>Item missing</b>	776		95	

Source: Va. Healthcare Workforce Data Center

## At a Glance: (Primary Locations)

**Sector**

For Profit: 94%

Federal: 2%

**Top Establishments**

Solo Practice: 72%

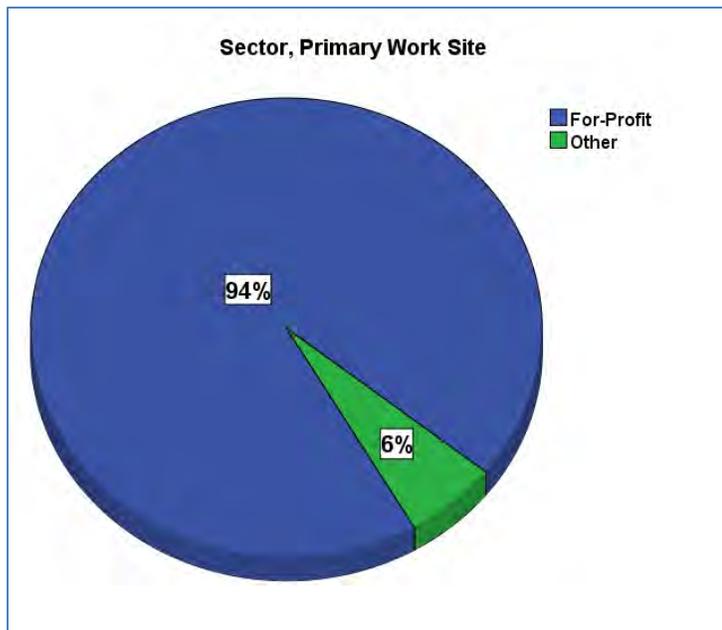
Group Practice: 17%

Dental/Health Clinic: 6%

**Remote Supervision**

Primary Location: 23%

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

94% of dental hygienists work in for-profit establishments, while 2% work for the federal government.

23% of dental hygienists work under remote supervision at their primary work location.

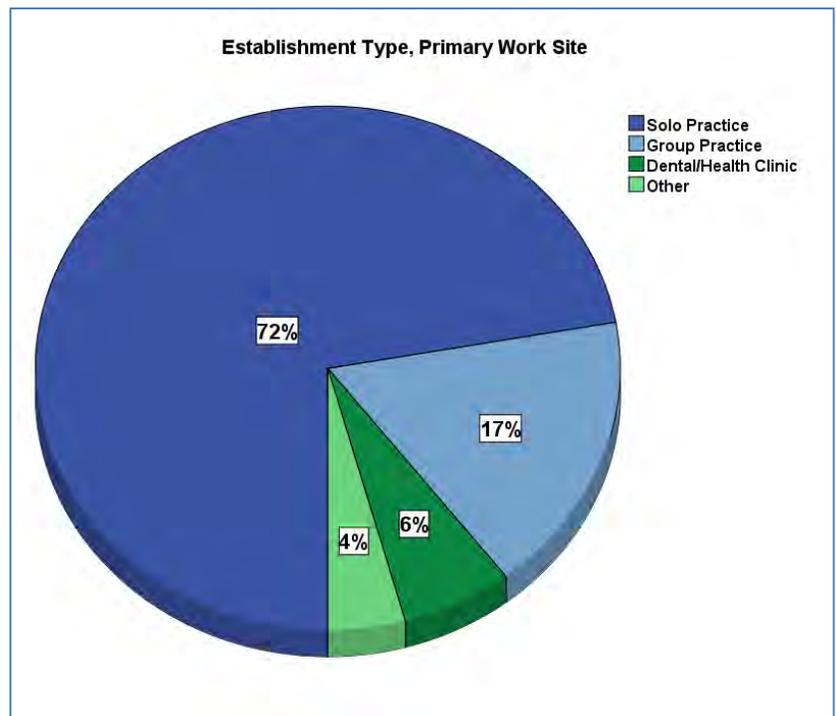
Response	Remote Supervision			
	Primary Location		Secondary Location	
	#	%	#	%
<b>Yes</b>	928	23%	199	21%
<b>No</b>	3,048	77%	769	79%
<b>Total</b>	<b>3,976</b>	<b>100%</b>	<b>968</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

Establishment Type	Location Type			
	Primary Location		Secondary Location	
	#	%	#	%
Solo Practice	2,821	72%	686	73%
Group Practice	680	17%	89	10%
Dental/Health Clinic	241	6%	73	8%
Dental School (Including Combined Dental/Dental Hygiene)	53	1%	49	5%
Hospital/Health System	21	1%	3	0%
Public Health Program	16	0%	6	1%
Corrections	14	0%	7	1%
K-12 School or Non-Dental College	11	0%	0	0%
Insurance	6	0%	0	0%
Supplier Organization	5	0%	3	0%
Nursing Home/Long-Term Care Facility	3	0%	3	0%
Other	37	1%	17	2%
<b>Total</b>	<b>3,908</b>	<b>100%</b>	<b>936</b>	<b>100%</b>
<b>Did Not Have a Location</b>	153		3,832	

Source: Va. Healthcare Workforce Data Center

72% of dental hygienists work at a solo dental practice at their primary work location, while another 17% work at a group dental practice.



Among those dental hygienists who also have a secondary work location, 73% work at a solo dental practice and 10% work at a group dentist practice.

Source: Va. Healthcare Workforce Data Center

## At a Glance: (Primary Locations)

### Typical Time Allocation

Patient Care: 90%-99%  
Administration: 1%-9%

### Roles

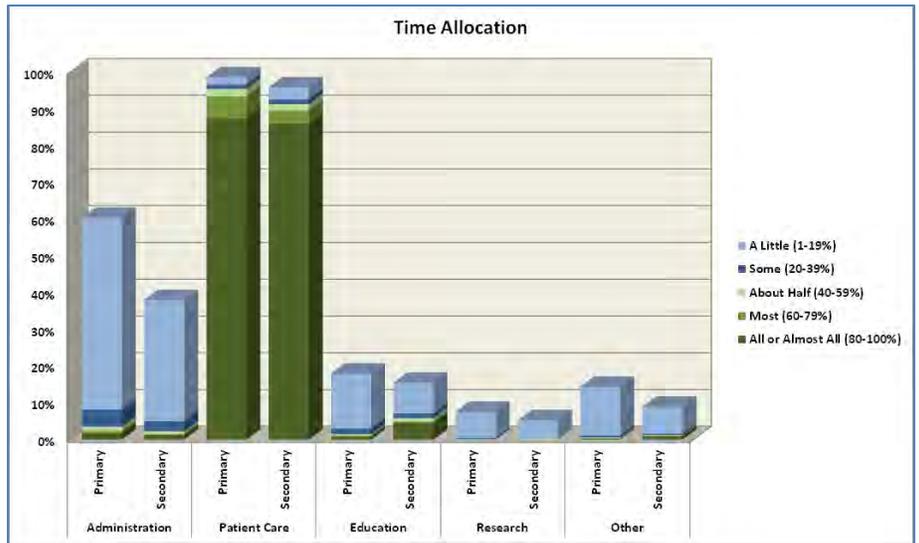
Patient Care: 93%  
Administrative: 2%  
Education: 1%

### Patient Care Hygienists

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

Source: Va. Healthcare Workforce Data Center

## A Closer Look:



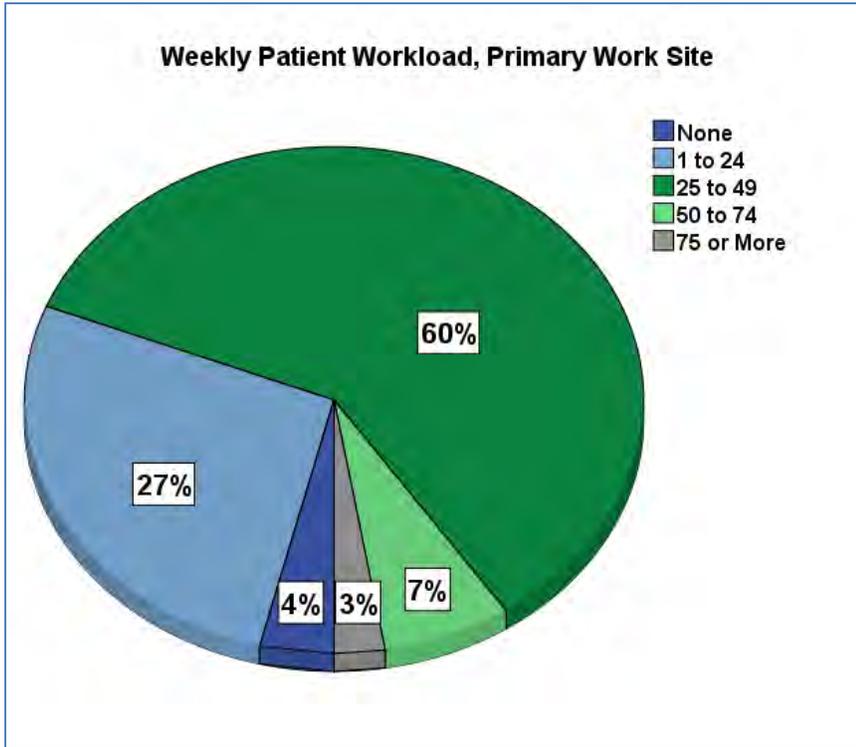
Source: Va. Healthcare Workforce Data Center

*A typical dental hygienist spends nearly all of her time treating patients. In particular, 93% of dental hygienists fill a patient care role, defined as spending 60% or more of their time on patient care activities.*

Time Allocation										
Time Spent	Admin.		Patient Care		Education		Research		Other	
	Prim. Site	Sec. Site	Prim. Site	Sec. Site	Prim. Site	Sec. Site	Prim. Site	Sec. Site	Prim. Site	Sec. Site
<b>All or Almost All (80-100%)</b>	2%	1%	87%	86%	1%	5%	0%	0%	0%	1%
<b>Most (60-79%)</b>	1%	0%	6%	4%	0%	0%	0%	0%	0%	0%
<b>About Half (40-59%)</b>	1%	1%	2%	2%	0%	1%	0%	0%	0%	0%
<b>Some (20-39%)</b>	5%	3%	1%	1%	1%	1%	0%	0%	1%	0%
<b>A Little (1-20%)</b>	52%	33%	2%	3%	15%	8%	7%	5%	13%	7%
<b>None (0%)</b>	40%	62%	2%	4%	82%	84%	93%	95%	86%	91%

Source: Va. Healthcare Workforce Data Center

A Closer Look:



Source: Va. Healthcare Workforce Data Center

At a Glance:

Patient Workload (Median)

Primary Location: 25-49  
 Secondary Location: 1-24

Source: Va. Healthcare Workforce Data Center

*The typical dental hygienist treated between 25 and 49 patients per week at her primary work location. For those dental hygienists who also had a secondary work location, the median workload was between 1 and 24 patients per week.*

# of Patients Per Week	Patient Care Visits			
	Primary		Secondary	
	#	%	#	%
<b>None</b>	155	4%	91	9%
<b>1-24</b>	1,091	27%	692	71%
<b>25-49</b>	2,391	60%	145	15%
<b>50-74</b>	270	7%	28	3%
<b>75-99</b>	50	1%	8	1%
<b>100-124</b>	27	1%	4	0%
<b>125-149</b>	9	0%	0	0%
<b>150-174</b>	3	0%	0	0%
<b>175-199</b>	3	0%	0	0%
<b>200 or More</b>	14	0%	2	0%
<b>Total</b>	<b>4,013</b>	<b>100%</b>	<b>970</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

**A Closer Look:**

Retirement Expectations				
Expected Retirement Age	All Dental Hygienists		Hygienists over 50	
	#	%	#	%
<b>Under age 50</b>	329	9%	-	-
<b>50 to 54</b>	402	11%	19	1%
<b>55 to 59</b>	674	18%	137	11%
<b>60 to 64</b>	1,090	29%	413	32%
<b>65 to 69</b>	867	23%	459	36%
<b>70 to 74</b>	199	5%	136	11%
<b>75 to 79</b>	43	1%	27	2%
<b>80 or over</b>	16	0%	11	1%
<b>I do not intend to retire</b>	171	5%	70	6%
<b>Total</b>	<b>3,792</b>	<b>100%</b>	<b>1,272</b>	<b>100%</b>

Source: Va. Healthcare Workforce Data Center

**At a Glance:**

**Retirement Expectations**

**All Dental Hygienists**

Under 65: 66%

Under 60: 37%

**Hygienists 50 and over**

Under 65: 45%

Under 60: 12%

**Time until Retirement**

Within 2 years: 6%

Within 10 years: 25%

Half the workforce: By 2038

Source: Va. Healthcare Workforce Data Center

*66% of dental hygienists expect to retire by the age of 65. Among dental hygienists who are already at least age 50, 45% still expect to retire by age 65.*

*Within the next two years, 11% of Virginia’s dental hygienists plan on increasing their patient care activities, and 8% plan on pursuing additional educational opportunities.*

**Future Plans**

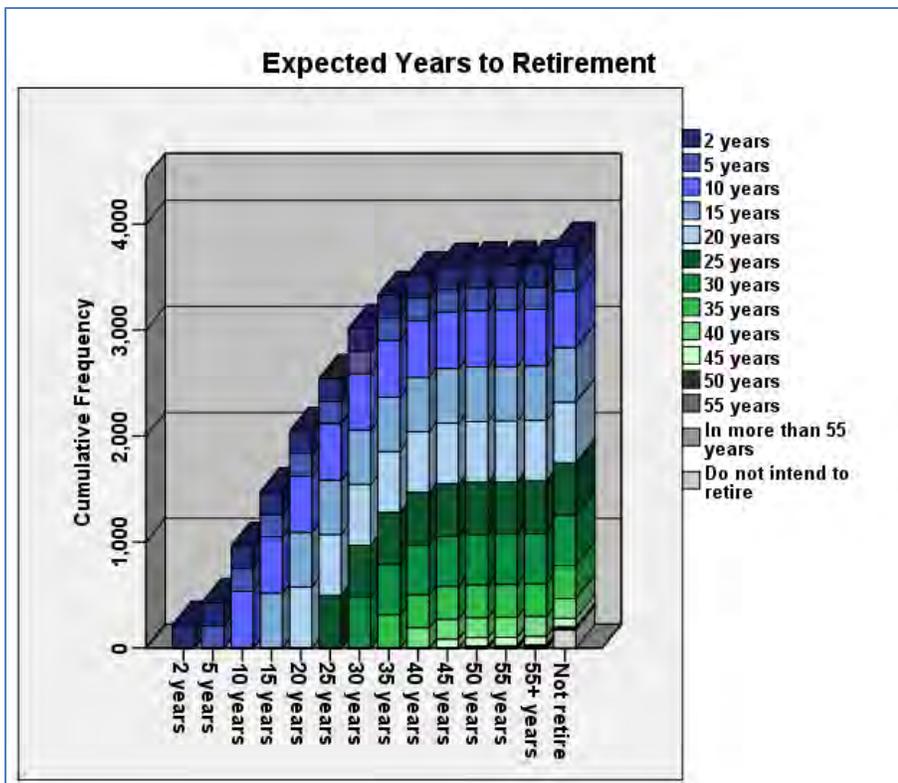
2 Year Plans:	#	%
<b>Decrease Participation</b>		
<b>Leave Profession</b>	110	2%
<b>Leave Virginia</b>	146	3%
<b>Decrease Patient Care Hours</b>	527	11%
<b>Decrease Teaching Hours</b>	15	0%
<b>Increase Participation</b>		
<b>Increase Patient Care Hours</b>	528	11%
<b>Increase Teaching Hours</b>	151	3%
<b>Pursue Additional Education</b>	410	8%
<b>Return to Virginia’s Workforce</b>	49	1%

Source: Va. Healthcare Workforce Data Center

By comparing retirement expectation to age, we can estimate the maximum years to retirement for dental hygienists. While only 6% of dental hygienists expect to retire in the next two years, 25% plan on retiring within the next decade. More than half of the current workforce expects to retire by 2038.

Time to Retirement			
Expect to retire within . . .	#	%	Cumulative %
2 years	217	6%	6%
5 years	210	6%	11%
10 years	534	14%	25%
15 years	514	14%	39%
20 years	574	15%	54%
25 years	494	13%	67%
30 years	474	13%	80%
35 years	311	8%	88%
40 years	187	5%	93%
45 years	81	2%	95%
50 years	15	0%	95%
55 years	4	0%	95%
In more than 55 years	7	0%	96%
Do not intend to retire	171	5%	100%
<b>Total</b>	<b>3,792</b>	<b>100%</b>	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

Using these estimates, retirements will begin to reach over 10% of the current workforce every five years by 2028. Retirements will peak at 15% of the current workforce in 2038 before declining to under 10% of the current workforce again around 2053.

## At a Glance:

### FTEs

Total: 3,148  
 FTEs/1,000 Residents<sup>2</sup>: 0.372  
 Average: 0.67

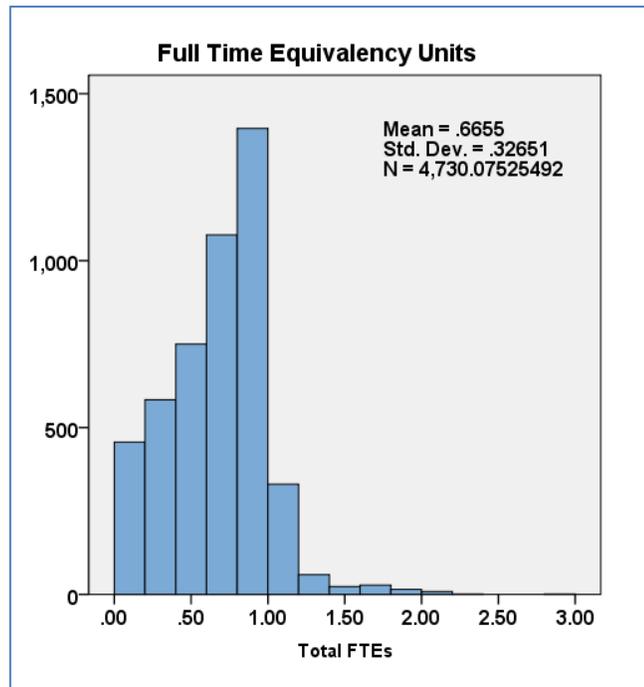
### Age & Gender Effect

Age, Partial Eta<sup>2</sup>: Negligible  
 Gender, Partial Eta<sup>2</sup>: None

*Partial Eta<sup>2</sup> Explained:*  
 Partial Eta<sup>2</sup> is a statistical measure of effect size.

Source: Va. Healthcare Workforce Data Center

## A Closer Look:

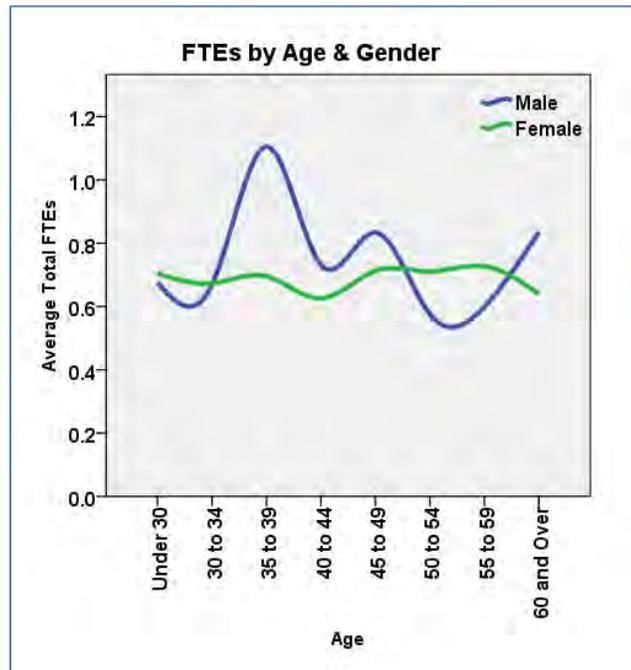


Source: Va. Healthcare Workforce Data Center

*The typical dental hygienist provided 0.67 FTEs in the past year, or approximately 27 hours per week for 50 weeks. Although FTEs appear to vary by age, statistical tests did not verify a difference exists.<sup>3</sup>*

Full-Time Equivalency Units		
Age	Average	Median
<b>Age</b>		
Under 30	0.71	0.78
30 to 34	0.65	0.73
35 to 39	0.68	0.75
40 to 44	0.57	0.63
45 to 49	0.70	0.70
50 to 54	0.69	0.70
55 to 59	0.68	0.70
60 and Over	0.64	0.65
<b>Gender</b>		
Male	0.76	0.83
Female	0.68	0.75

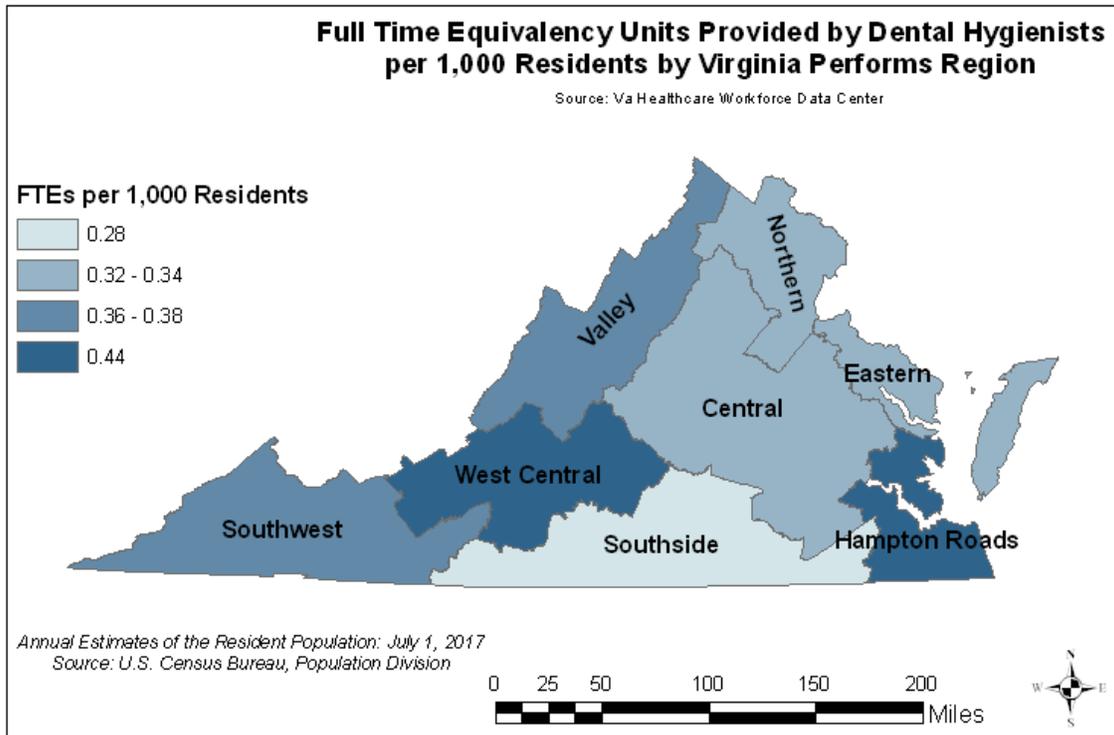
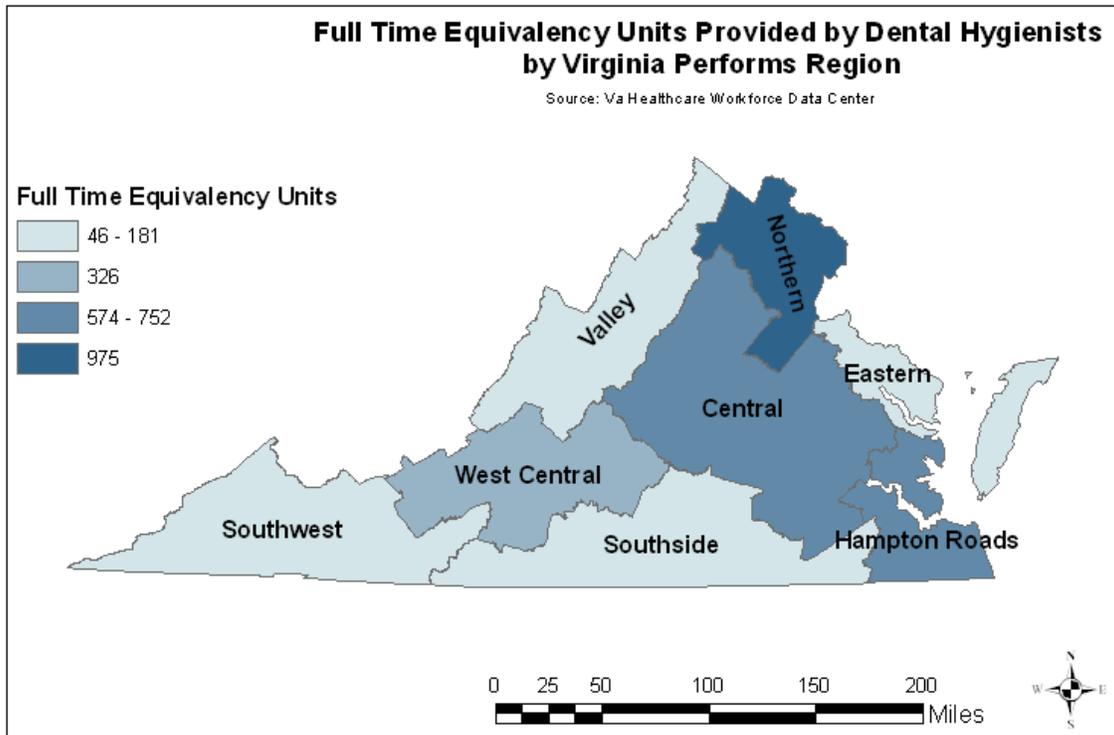
Source: Va. Healthcare Workforce Data Center

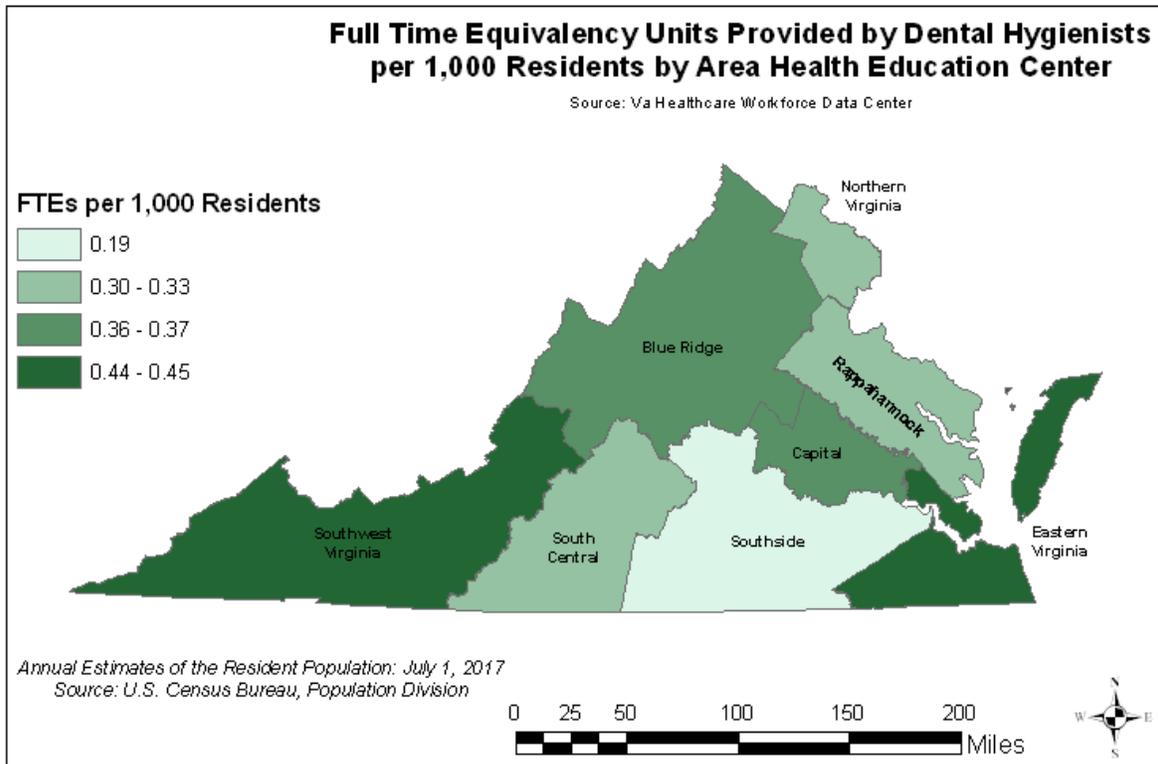
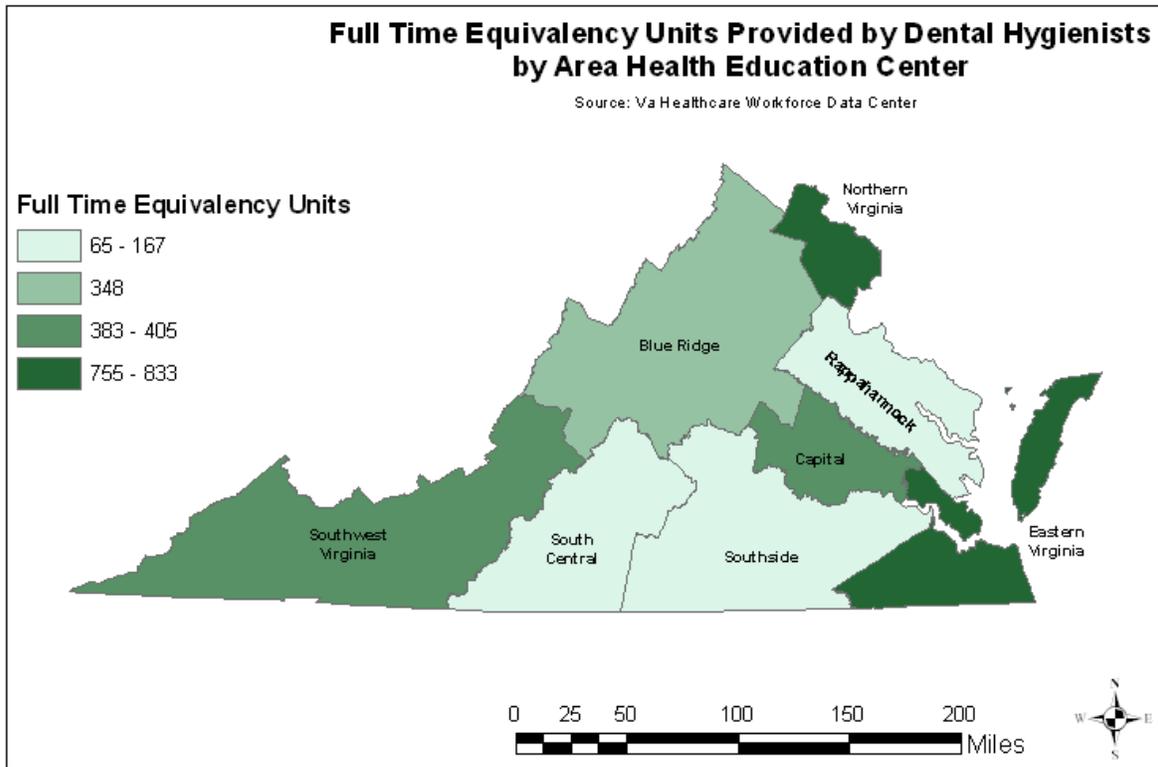


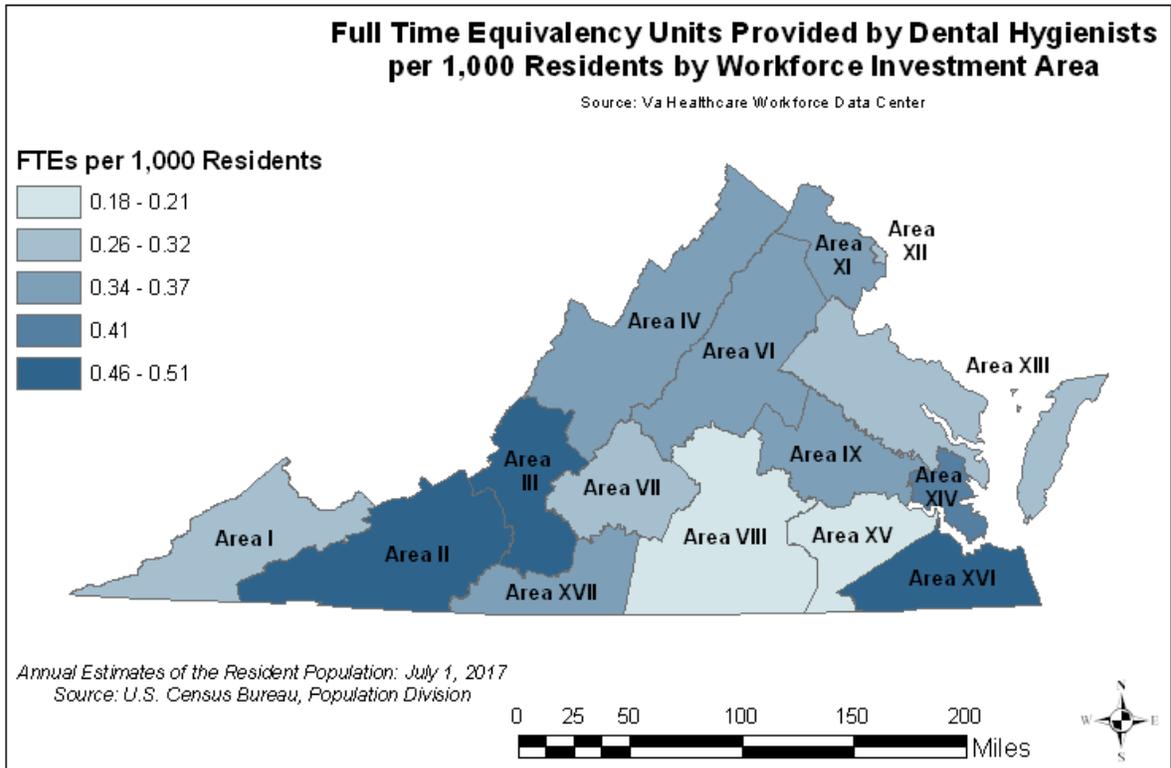
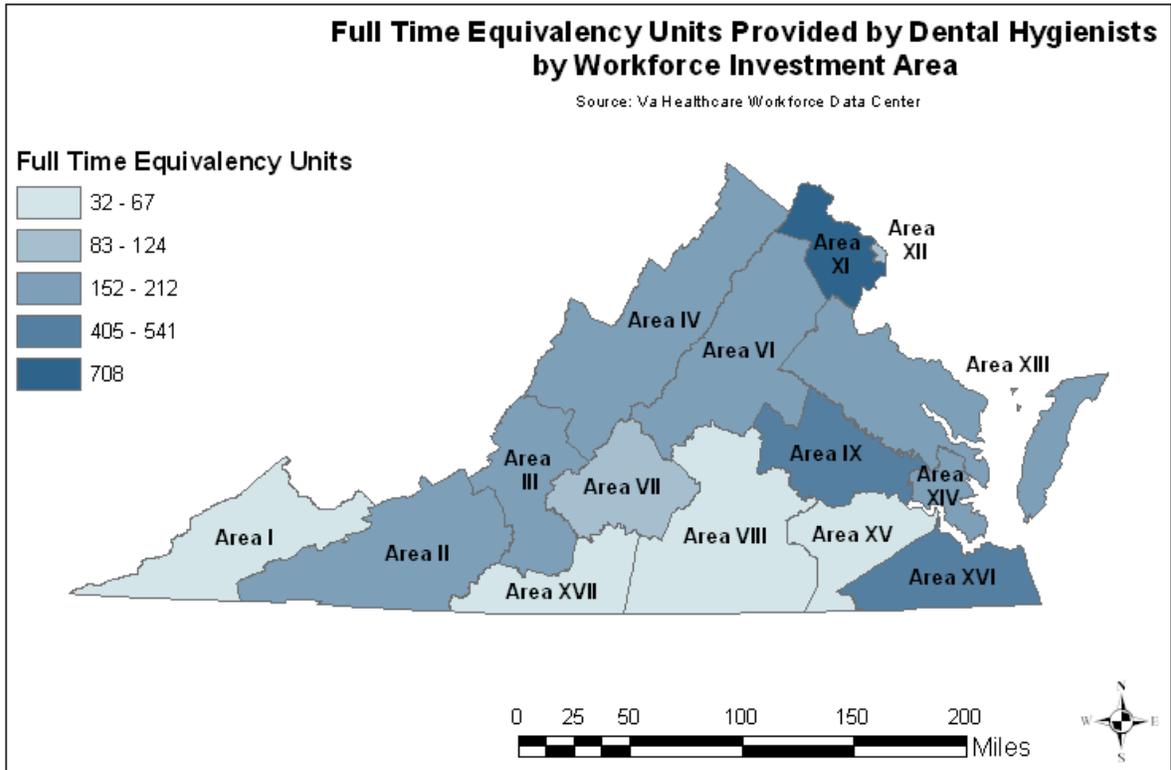
Source: Va. Healthcare Workforce Data Center

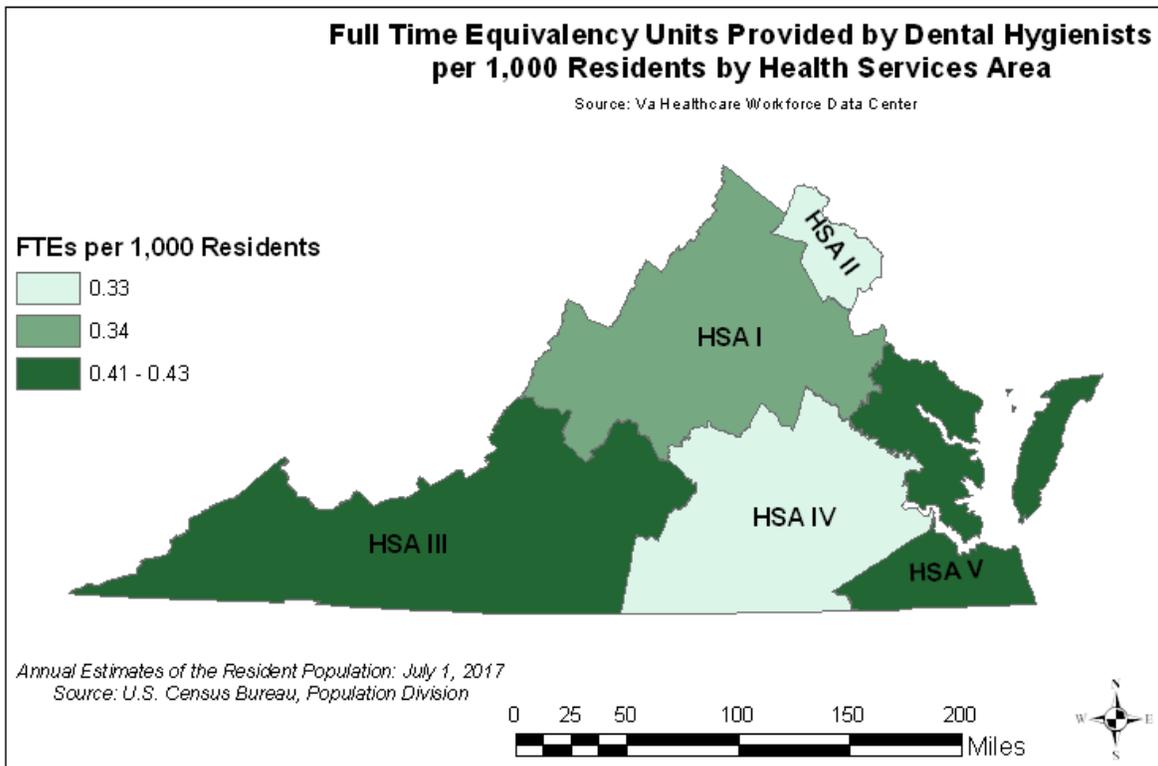
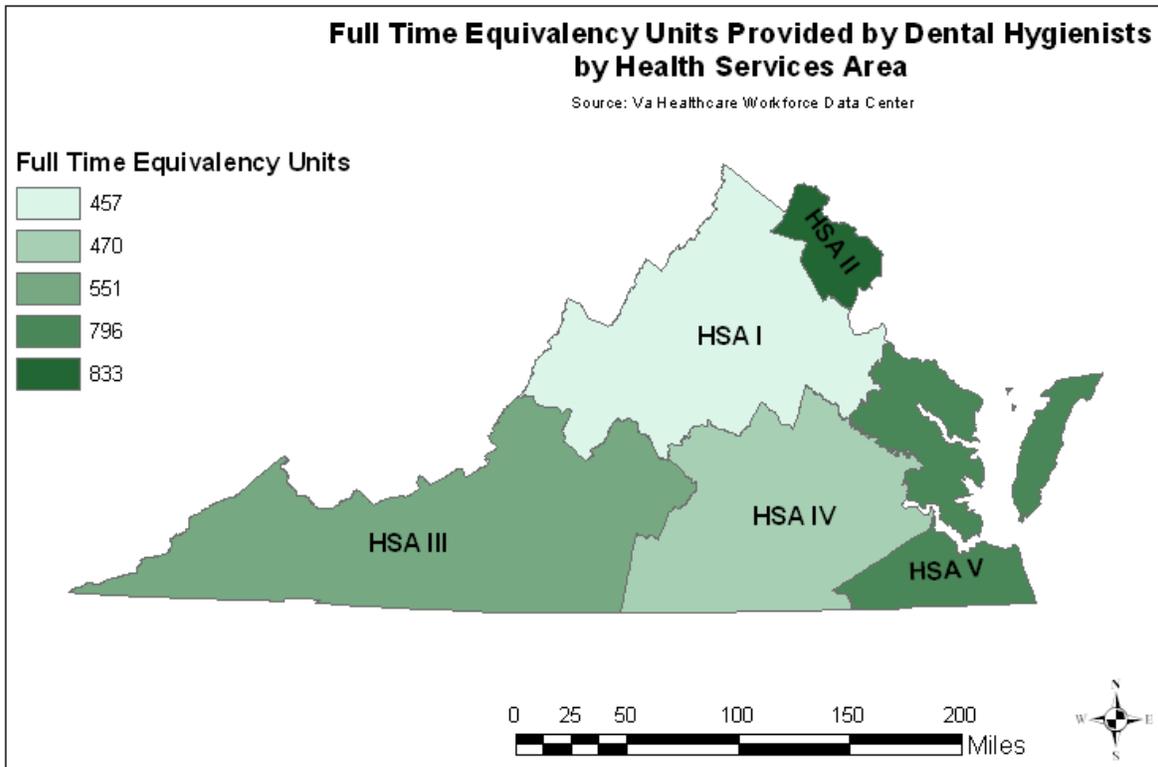
<sup>2</sup> Number of residents in 2017 was used as the denominator.

<sup>3</sup> Due to assumption violations in Mixed between-within ANOVA (Levene's Test is significant)











## Appendices

### Appendix A: Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
Metro, 1 million+	3,500	92.71%	1.078582	1.04582	1.15143
Metro, 250,000 to 1 million	412	95.15%	1.05102	1.01909	1.12201
Metro, 250,000 or less	421	93.11%	1.07398	1.04135	1.14652
Urban pop 20,000+, Metro adj	94	96.81%	1.032967	1.00159	1.10273
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500-19,999, Metro adj	192	93.23%	1.072626	1.04004	1.14507
Urban pop, 2,500-19,999, nonadj	131	95.42%	1.048	1.01616	1.11878
Rural, Metro adj	84	88.10%	1.135135	1.10065	1.2118
Rural, nonadj	46	95.65%	1.045455	1.0137	1.11606
Virginia border state/DC	521	87.72%	1.140044	1.10541	1.21704
Other US State	572	85.31%	1.172131	1.13652	1.2513

Source: Va. Healthcare Workforce Data Center

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	698	90.69%	1.102686	1.04639	1.18736
30 to 34	785	93.38%	1.070941	1.01627	1.15318
35 to 39	818	93.15%	1.073491	1.01869	1.15593
40 to 44	738	92.41%	1.082111	1.02687	1.16521
45 to 49	704	94.74%	1.055472	1.00159	1.13652
50 to 54	655	93.59%	1.068515	1.01396	1.15057
55 to 59	652	92.48%	1.08126	1.02606	1.16429
60 and Over	925	86.05%	1.16206	1.10273	1.2513

Source: Va. Healthcare Workforce Data Center

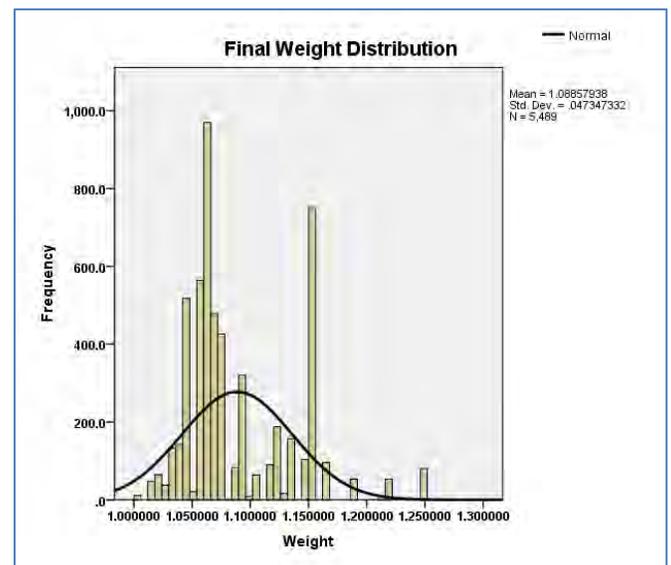
See the Methods section on the HWDC website for details on HWDC Methods:

[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: 0.918661**



Source: Va. Healthcare Workforce Data Center