Virginia's Dentistry Workforce: 2018

Healthcare Workforce Data Center

April 2018

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

Follow us on Tumblr: *www.vahwdc.tumblr.com* Get a copy of this report from: *https://www.dhp.virginia.gov/hwdc/findings.htm* er 6.500 Demtists volumtarilv participated in this

survey. not be p Healthca Dentistry cooperat

Over 6,500 Dentists 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 Cheasapeake

Patricia B. Bonwell, RDH, PhD Montpelier

Sandra J. Catchings, DDS Stauton

Jamiah Dawson, DDS Newport News

Tammy C. Ridout, RDH Chesterfield

Carol R. Russek, JD *Midlothian*

James D. Watkins, DDS Hampton

Executive Director

Sandra K. Reen

Contents

Results in Brief	2
Summary of Trends	2
Survey Response Rates	3
The Workforce	4
Demographics	5
Background	6
Education	8
Current Employment Situation	9
Employment Quality	
2017 Labor Market	11
Work Site Distribution	12
Establishment Type	13
Time Allocation	15
Patient Workload	16
Retirement & Future Plans	
Full-Time Equivalency Units	19
Maps	
Virginia Performs Regions	
Area Health Education Center Regions	
Workforce Investment Areas	
Health Services Areas	
Planning Districts	24
Appendices	25
Appendix A: Weights	25

The Dentistry Workforce: At a Glance:

The Workforce

Licensees:	7,467
Virginia's Workforce:	5,606
FTEs:	4,442

Survey Response Rate

All Licensees:	87%
Renewing Practitioners:	98%

Demographics

Female:	37
Diversity Index:	54
Median Age:	4

Background

Rural Childhood:20%HS Diploma in VA:40%Prof. Degree in VA:38%

Education

Doctorate/Prof.:97%Master's Degree:1%

Finances

7% 4% Median Inc.: \$150k-\$160k Retirement Benefits: 41% Under 40 w/ Ed debt: 74%

Source: Va. Healthcare Workforce Data Center

Current Employment

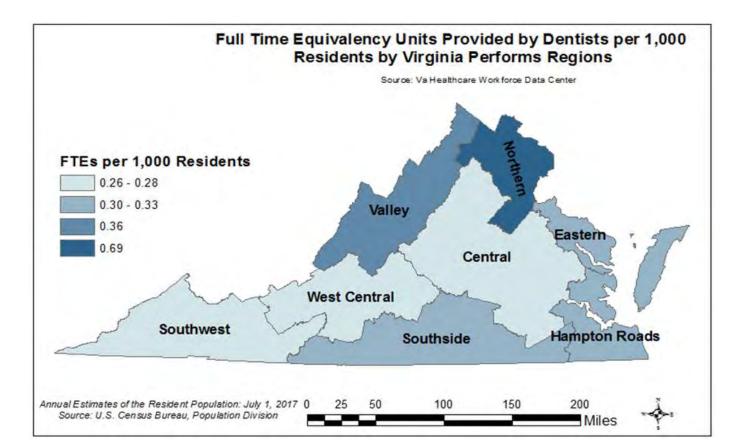
Employed in Prof.:96%Hold 1 Full-time Job:69%Satisfied?:95%

Job Turnover

Switched Jobs:	4%
Employed over 2 yrs:	74%

Time Allocation

Patient Care:80-89%Administration:1-9%Patient Care Role:92%



In 2018, 5,606 dentists in Virginia's workforce provided 4,423 "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). The Virginia Department of Health Professions' Healthcare Workforce Data Center (HWDC) administered the 2018 Dentist Survey which provided this data during the license renewal period in March 2018. The 6,515 survey respondents represent 87% of the 7,467 licensed dentists in the state and 98% of renewing practitioners, the highest response rates in the history of the survey.

Over one-third of dentists are female and the median age of all dentists is 49. In a random encounter between two dentists, there is a 54% chance that they would be of different races or ethnicities, a measure known as the diversity index. The index for Virginia, at 56%, is only slightly higher. Dentists under age 40 have a diversity index of 62%.

Nearly all dentists hold a doctorate or professional degree. About 40% of all dentists have educational debt, including 74% of dentists who are under the age of 40. The median debt for those dentists with educational debt is between \$130,000 and \$140,000. The median annual income for dentists is between \$150,000 and \$160,000, with 55% of wage or salaried dentists receiving at least one employer-sponsored benefit; 95% of dentists indicate they are satisfied with their current employment situation.

Only 7% of dentists currently work in non-Metro areas of the state. Nearly 80% of dentists worked in the Northern Virginia, Central Virginia, and Hampton Roads regions. Dentists spend about 90% of their time treating patients; on average, they treat 50-74 patients per week. Ninety-three percent of dentists work in the private sector, including 90% who work at a for-profit company. Two-thirds of dentists work at a solo dental practice, while another 19% work at a group dental practice. Only 8% of the workforce expect to retire in the next decade, while half of the current workforce expect to retire by 2038.

Summary of Trends

In the past five years, there are about 100 more dentists every year on average although the increase was slight in the past year. The number of dentists in the state's workforce in 2018 was at a 5-year high but the full time equivalency (FTE) units they provided, though higher than previous year's, was not.

There is some evidence of increasing gender diversity in the state's dentistry workforce although median age is nearly unchanged. Compared to 2013, females make up an increased proportion of the workforce (37% vs 30%) and an increasing majority for dentists under age 40 (56% vs 50%). The diversity index at 54% of the dentistry workforce did not change in the 2018 Survey although it increased in the past from 48% in 2013. However, diversity index for those under 40 years dropped from last year (62% vs 64%).

The percent of dentists in non-metro areas declined, though slightly, for the first time in five years (7% vs 8%). Although the educational attainment of dentists has barely changed since 2013, the median debt carried increased by \$10,000. The percent with debt also increased (39% vs 35%), with the percent carrying \$140,000 in debt increasing from 14% to 19%. The percent of dentists under age 40 who have education debt, however, declined (74% vs 81%).

The employment outlook continues to be strong for dentists in Virginia. Unemployment is nearly non-existent. Median income increased by \$10,000 for the first time in five years. The proportion receiving at least one employer-sponsored benefit increased from 46% in 2013 to 55% in 2018. This improvement in employment quality has not affected retirement intentions. The percent of dentists who intend to retire by age 65 increased from 36% in 2013 to 39% in 2018; the finding that half of the dentistry workforce plan to retire by two decades after the survey also has remained unchanged in the past five years.

Licensees			
License Status	#	%	
Renewing Practitioners	6,627	89%	
New Licensees	426	6%	
Non-Renewals	414	6%	
All Licensees	7,467	100%	

Source: Va. Healthcare Workforce Data Center

Our surveys tend to achieve very high response rates. 98% of renewing dentists submitted a survey. These represent 87% of dentists who held a license at some point in the past year.

Response Rates			
Statistic	Non Respondents	Respondent	Response Rate
By Age			
Under 30	41	138	77%
30 to 34	149	718	83%
35 to 39	134	915	87%
40 to 44	90	845	90%
45 to 49	88	799	90%
50 to 54	57	604	91%
55 to 59	54	634	92%
60 and Over	339	1,862	85%
Total	952	6,515	87%
New Licenses			
lssued 4/2017 to 3/2018	144	282	66%
Metro Status			
Non-Metro	54	329	86%
Metro	570	4,638	89%
Not in Virginia	328	1,548	83%

Source: Va. Healthcare Workforce Data Center

Definitions

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

Response Rates	
Completed Surveys	6,515
Response Rate, All Licensees	87%
Response Rate, Renewals	98%
Source: Va. Healthcare Workforce Data Center	

At a Glance:

Licensed Dentists

Number:	7,467
New	6%
Not Renewed:	6%
<u>Response Rates</u>	
All Licensees:	87%
Renewing Practitione	ers: 98%
Source: Va. Healthcare Workf	orce Data Center

At a Glance:

Dentistry Workforce:	5,606
FTEs:	4,442
Iltilization Ratios	
	75%
<u>Utilization Ratios</u> Licensees in VA Workforce: Licensees per FTE:	75% 1.68

Source: Va. Healthcare Workforce Data Center

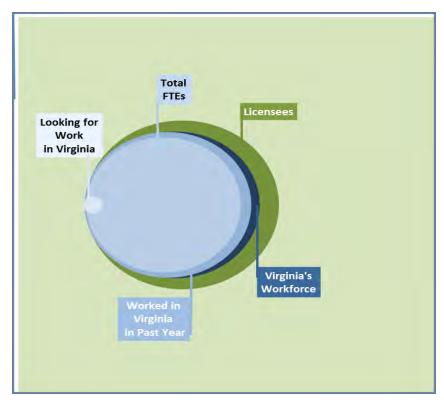
Virginia's Dentistry Workforce			
Status	#	%	
Worked in Virginia in Past Year	5,520	98%	
Looking for Work in Virginia	86	2%	
Virginia's Workforce	5,606	100%	
Total FTEs	4,442		
Licensees	7,467		

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: <u>www.dhp.virginia.gov/hwdc</u>

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.



Age & Gender							
	Male		Fe	Female		Total	
Age	#	% Male	#	% Female	#	% in Age Group	
Under 30	54	43%	73	57%	128	3%	
30 to 34	227	42%	318	58%	545	12%	
35 to 39	289	46%	344	54%	633	14%	
40 to 44	309	53%	270	47%	579	13%	
45 to 49	307	57%	227	43%	534	12%	
50 to 54	273	64%	154	36%	427	10%	
55 to 59	276	70%	116	30%	392	9%	
60 +	1,107	88%	146	12%	1,253	28%	
Total	2,843	63%	1,647	37%	4,491	100%	

Source: Va. Healthcare Workforce Data Center

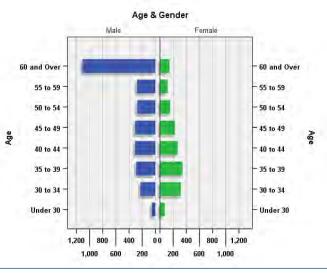
Race & Ethnicity					
Race/	Virginia*	Dentists		Dentists Under 40	
Ethnicity	%	#	%	#	%
White	62%	2 <i>,</i> 865	64%	682	53%
Black	19%	280	6%	71	5%
Asian	6%	877	20%	386	30%
Other Race	0%	159	4%	68	5%
Two or More Races	3%	82	2%	18	1%
Hispanic	9%	212	5%	67	5%
Total	100%	4,474	100%	1,291	100%

*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, 2016.

At a Glance:

<u>Gender</u>	
% Female:	37%
% Under 40 Female:	56%
<u>Age</u>	
Median Age:	49
% Under 40:	29%
% 55+:	37%
<u>Diversity</u>	
Diversity Index:	54%
Under 40 Div. Index:	62%

In a chance encounter between two dentists, there is a 54% chance they would be of a different race/ethnicity (a measure known as the Diversity Index), compared to a 56% chance for Virginia's population as a whole.



Source: Va. Healthcare Workforce Data Center

More than one-quarter of dentists are under the age of 40. 56% of these professionals are female, and 30% are non-Hispanic Asian.

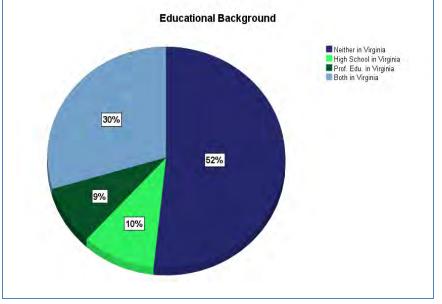
At a Glance:

Childhood

Urban Childhood:	23%
Rural Childhood:	20%
Virginia Background	
HS in Virginia:	40%
Dental Ed. in VA:	38%
HS or Dental Ed. in VA:	48%
Location Choice	
% Rural to Non-Metro:	18%
% Urban/Suburban	
to Non-Metro:	4%
Source: Va. Healthcare Workforce Data Cent	ter

A Closer Look:

Primary Location: USDA Rural Urban Continuum		Rural St	Rural Status of Childhood Location		
Code	Description	Rural	Suburban	Urban	
	Metro Cou	nties			
1	Metro, 1 million+	15%	59%	26%	
2	Metro, 250,000 to 1 million	32%	52%	16%	
3	Metro, 250,000 or less	31%	51%	18%	
Non-Metro Counties					
4	Urban pop 20,000+, Metro adj	44%	44%	11%	
6	Urban pop, 2,500-19,999, Metro adj	43%	41%	15%	
7	Urban pop, 2,500-19,999, nonadj	72%	23%	6%	
8	Rural, Metro adj	59%	30%	11%	
9	Rural, nonadj	36%	48%	16%	
Source: Va	Overall Healthcare Workforce Data Center	20%	57%	23%	





Source: Va. Healthcare Workforce Data Center

Top Ten States for Dentist Recruitment

Rank	All Dentists				
Kank	High School	#	Dental School	#	
1	Virginia	1,760	Virginia	1,675	
2	Outside U.S./Canada	783	DC	373	
3	New York	227	Pennsylvania	277	
4	Maryland	180	Maryland	261	
5	Pennsylvania	164	Outside U.S./Canada	245	
6	Florida	104	New York	214	
7	West Virginia	99	Massachusetts	188	
8	California	99	West Virginia	119	
9	North Carolina	93	California	107	
10	New Jersey	92	Tennessee	92	

40% of all dentists earned their high school degree in Virginia, and 38% received their initial professional degree in the state.

Source: Va. Healthcare Workforce Data Center

Among dentists who received their initial license in the past five years, 28% earned their high school degree in Virginia, while 23% received their initial professional degree in the state.

Rank	Licensed in the Past 5 Years				
Kalik	High School	#	Dental School	#	
1	Virginia	373	Virginia	296	
2	Outside U.S./Canada	365	Outside U.S./Canada	151	
3	New York	55	New York	117	
4	Maryland	45	Pennsylvania	93	
5	Pennsylvania	43	Maryland	84	
6	North Carolina	40	Massachusetts	80	
7	California	39	Washington, D.C.	73	
8	Florida	34	California	56	
9	West Virginia	29	West Virginia	41	
10	Texas	25	Ohio	29	

Source: Va. Healthcare Workforce Data Center

One quarter of Virginia's licensees were not part of the state's dental workforce. 88% of these licensees worked at some point in the past year, including 83% who worked as dentists.

At a Glance:

Not in VA Workforce

Total:	1,861
% of Licensees:	25%
Federal/Military:	14%
Va Border State/DC:	20%

Highest Dental Degree		
Degree	#	%
Baccalaureate	45	1%
Graduate Certificate	43	1%
Masters	58	1%
Doctorate/Professional	4,244	97%
Total	4,390	100%

Source: Va. Healthcare Workforce Data Center

More than one-third of dentists carry educational debt, including 74% of those under the age of 40. For those in debt, their median burden is between \$130,000 and \$140,000.

Residencies/Special Training Programs		
Residency	#	%
General Practice Residency -1 (GPR-1)	684	12%
Advanced Education in General Dentistry (AEGD)	526	9%
Orthodontics	314	7%
Pediatric Dentistry	220	4%
Periodontology	161	3%
Oral and Maxillofacial Surgery	155	3%
General Practice Residency -2 (GPR-2)	150	3%
Endodontics	134	2%
Prosthodontics	108	2%
Dental Public Health	17	0%
Oral and Maxillofacial Pathology	10	0%
Oral and Maxillofacial Radiology	5	0%
At Least One	2,155	38%
Source: Va. Healthcare Workforce Data Center		

At a Glance:

Education

Doctorate/Professional:97%Baccalaureate:1%

Educational Debt

Carry debt:	39%
Under age 40 w/ de	bt: 74%
Median debt:	\$130k-\$140k

Residencies

GPR-1:	12%
AEGD:	9%
Orthodontics:	7%

Source: Va. Healthcare Workforce Data Center

Educational Debt				
Amount Carried	All Dentists		Dentists under 40	
	#	%	#	%
None	2,331	61%	291	26%
Less than \$40,000	218	6%	68	6%
\$40,000-\$59,999	113	3%	37	3%
\$60,000-\$79,999	102	3%	38	3%
\$80,000-\$99,999	119	3%	41	4%
\$100,000-\$119,999	144	4%	64	6%
\$120,000-\$139,999	87	2%	43	4%
\$140,000-\$159,999	96	2%	52	5%
\$160,000-\$179,999	67	2%	38	3%
\$180,000-\$199,999	62	2%	39	3%
\$200,000 or More	501	13%	412	37%
Total	3,840	100%	1,123	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Employment

Employed in Profession: 96% Involuntarily Unemployed: <1%

Positions Held

1 Full-time:	69%
2 or More Positions:	14%
Weekly Hours:	
40 to 49:	29%
60 or more:	3%
Less than 30:	14%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status				
Status	#	%		
Employed, capacity unknown	2	<1%		
Employed in a dentistry related capacity	4,222	96%		
Employed, NOT in a dentistry related capacity	16	<1%		
Not working, reason unknown	0	0%		
Involuntarily unemployed	7	<1%		
Voluntarily unemployed	53	1%		
Retired	102	2%		
Total	4,402	100%		
Source: Va. Healthcare Workforce Data Center				

96% of Virginia's dentists are employed in the profession, and 69% currently have one full-time job. 29% of dentists currently work between 40 and 49 hours per week, while only 3% work at least 60 hours per week.

Current Positions				
Positions	#	%		
No Positions	162	4%		
One Part-Time Position	556	13%		
Two Part-Time Positions	247	6%		
One Full-Time Position	2,943	69%		
One Full-Time Position &	257	6%		
One Part-Time Position				
Two Full-Time Positions	23	1%		
More than Two Positions	91	2%		
Total	4,278	100%		

Current Weekly Hours			
Hours	#	%	
0 hours	162	4%	
1 to 9 hours	100	2%	
10 to 19 hours	171	4%	
20 to 29 hours	349	8%	
30 to 39 hours	1,919	45%	
40 to 49 hours	1,237	29%	
50 to 59 hours	230	5%	
60 to 69 hours	69	2%	
70 to 79 hours	27	1%	
80 or more hours	21	0%	
Total	4,285	100%	
Source: Va. Healthcare Workforce Data Center			

lr	ncome	
Hourly Wage	#	%
Volunteer Work Only	47	1%
Less Than \$30,000	139	4%
\$30,000-\$69,999	253	7%
\$70,000-\$109,999	593	17%
\$110,000-\$149,999	661	19%
\$150,000-\$189,999	518	15%
\$190,000-\$229,999	394	11%
\$230,000-\$269,999	272	8%
\$270,000-\$309,999	167	5%
\$310,000-\$349,999	69	2%
More than \$350,000	316	9%
Total	3,429	100%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction				
Level	#	%		
Very Satisfied	3,123	72%		
Somewhat Satisfied	1,015	23%		
Somewhat Dissatisfied	145	3%		
Very Dissatisfied	38	1%		
Total	4,322	100%		

Source: Va. Healthcare Workforce Data Center

At a Glance:

Earnings Median Income:	\$150k-\$160k
<u>Benefits</u>	
Retirement:	34%
Paid Vacation:	21%
Satisfaction	
Satisfied:	95%
Very Satisfied:	71%
Source: Va. Healthcare V	Vorkforce Data Center

The typical dentist made between \$150,000 and \$160,000 in the past year. Among dentists who were compensated at the primary work location with either a salary or an hourly wage, 41% had access to a retirement plan and 31% received paid vacation leave.

Employer-Sponsored Benefits				
Benefit	#	%	% of Wage/Salary Employees	
Retirement	1,472	35%	41%	
Paid Vacation	931	22%	31%	
Paid Sick Leave	561	13%	18%	
Group Life Insurance	544	13%	18%	
Dental Insurance	487	12%	16%	
Signing/Retention Bonus	132	3%	5%	
Receive at least one benefit	1,889	45%	55%	
*From any employer at time of surv	ey.	-		

Employment Instability in Past Year				
In the past year did you?	#	%		
Experience involuntary unemployment?	41	1%		
Experience voluntary unemployment?	149	3%		
Work part-time or temporary positions, but would	120	2%		
have preferred a full-time/permanent position?				
Work two or more positions at the same time?	708	13%		
Switch employers or practices?	197	4%		
Experienced at least 1	1,020	18%		
Source: Va. Healthcare Workforce Data Center				

Only 1% of Virginia's dentists experienced involuntary unemployment at some point during the renewal cycle. By comparison, Virginia's average monthly unemployment rate was 3.6% during the past year.¹

Location Tenure				
Toome	Primary		Secondary	
Tenure	#	%	#	%
Not Currently Working at this	71	2%	50	5%
Location				
Less than 6 Months	195	5%	120	12%
6 Months to 1 Year	328	8%	121	12%
1 to 2 Years	497	12%	193	19%
3 to 5 Years	755	18%	185	18%
6 to 10 Years	568	14%	125	12%
More than 10 Years	1,783	42%	246	24%
Subtotal	4,197	100%	1,040	100%
Did not have location	92		4,503	
Item Missing	1,317		63	
Total	5,606		5,606	
Source: Va. Healthcare Workforce Data Center				

More than half of dentists are salary or wage employees, while 36% receive income from their own practice.

At a Glance:

Unemployment Experience

Involuntarily Unemployed:	1%
Underemployed:	2%

Turnover & Tenure

Switched Jobs:	4%
New Location:	18%
Over 2 years:	74%
Over 2 yrs, 2 nd location:	53%

Employment Type

Salary/Commission:	57%
Business/Practice Income:	36%
Hourly Wage:	3%

Source: Va. Healthcare Workforce Data Center

About three-quarters of dentists have worked at their primary location for at least two years.

Employment Type						
Primary Work Site	#	%				
Salary/ Commission	1,928	57%				
Hourly Wage	97	3%				
By Contract	97	3%				
Business/ Practice	1,196	36%				
Income						
Unpaid	41	1%				
Subtotal	3,358	100%				
Did not have	92					
location						
Item Missing	2,156					

¹ As reported by the US Bureau of Labor Statistics. The non-seasonally adjusted monthly unemployment rate ranged from 3.3% in February 2018 to 3.9% in June 2017. The statistic for February 2018 was preliminary at the time of publishing this report.

At a Glance	:
<u>Concentration</u>	
op Region:	42%
op 3 Regions:	78%
owest Region:	1%
ocations	
or more (Past Year):	20%
or more (Now*):	23%

42% of all dentists work in Northern Virginia, the most of any region in Virginia. With only 1% of the workforce, Eastern Virginia has the fewest number of dentists of any region in the state.

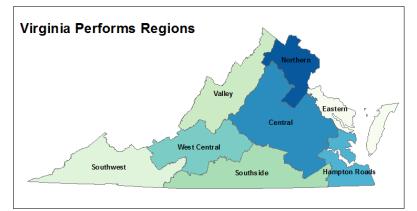
Number of Work Locations						
	W	ork	Work			
Locations	Locati	ons in	Loca	tions		
Locations	Past	Year	No	w*		
	#	%	#	%		
0	88	2%	145	3%		
1	4,418	79%	3,137	73%		
2	716	13%	669	16%		
3	287	5%	253	6%		
4	56	1%	44	1%		
5	17	0%	12	0%		
6 or	24	0%	19	0%		
More						
Total	5,606	100%	4,279	100%		

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

A Closer Look:

Regional Distribution of Work Locations							
Virginia Performs		nary ation	Secondary Location				
Region	# %		#	%			
Central	776	19%	211	20%			
Eastern	56	1%	13	1%			
Hampton Roads	725	17%	156	15%			
Northern	1,760	42%	456	42%			
Southside	122	3%	17	2%			
Southwest	97	2%	16	1%			
Valley	211	5%	38	4%			
West Central	353	8%	69	6%			
Virginia Border State/DC	35	1%	42	4%			
Other US State	29	1%	55	5%			
Outside of the US	1	0%	2	0%			
Total	4,165	100%	1,075	100%			
Item Missing 1,349 28							

e: Va. Healthcare Workforce Data Center



Nearly 80% of dentists currently have just one work location, while 23% have two different work locations.

Location Sector							
	Prin	nary	Secondary				
Sector	Loca	ition	Location				
	#	# %		%			
For-profit	3,621	90%	868	86%			
Non-profit	140	3%	53	5%			
State/local government	144	4%	73	7%			
Veterans Administration	18	0%	2	0%			
U.S. Military	103	3%	12	1%			
Other Federal	14	0%	5	0%			
Government							
Total	4,040	100%	1,014	100%			
Did not have location	92		4,503				
Item missing	1,475		90				

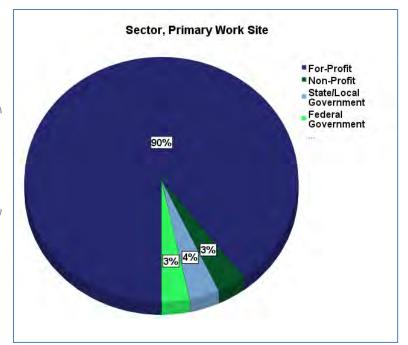
90% of dentists worked in for-profit

establishments. Another 7% worked for a government agency, including 4% who worked for the state government.

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

<u>Sector</u>	
For Profit:	90%
Federal:	3%
Top Establishmer	<u>nts</u>
Solo Practice:	66%
Group Practice:	19%
Source: Va. Healthcare Workforce I	Doto Center



Source: Va. Healthcare Workforce Data Center

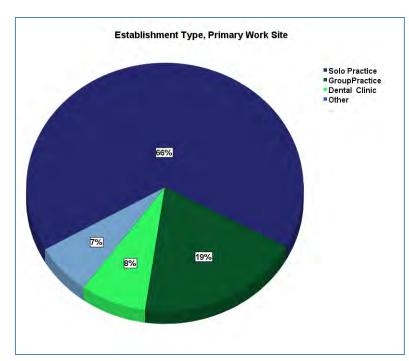
13

Location Type						
Establishment Type	Prim Loca		Secondary Location			
	#	%	#	%		
Solo Practice	2,617	66%	537	55%		
Group Practice	765	19%	243	25%		
Dental/Health Clinic	306	8%	89	9%		
Dental School (including Combined Dental/Dental						
Hygiene)	73	2%	27	3%		
Hospital/Health System	56	1%	18	2%		
Corrections	33	1%	14	1%		
Public Health Program	20	1%	11	1%		
Dental Hygiene Program (Community College)	9	0%	6	1%		
Insurance	5	0%	2	0%		
K-12 School or Non-Dental College	4	0%	6	1%		
Dental Hygiene Program (Technical School)	0	0%	0	0%		
Other	61	2%	23	2%		
Total	3,949	100%	976	100%		
Did Not Have a Location	3,949 94	10078	4 ,503	10078		

Nearly two-thirds of dentists work at a solo dental practice at their primary work location, while another 19% work at a group dental practice. Dental/health clinics were also significant employers of Virginia's dental workforce.

Source: Va. Healthcare Workforce Data Center

Among those dentists who also have a secondary work location, more than threequarters work at a dental practice, including 55% who work at a solo dental practice.

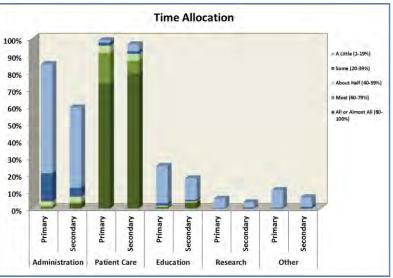


Source: Va. Healthcare Workforce Data Center

Time Allocation

At a Glance: (Primary Locations)						
Typical Time Alloc	ation					
Patient Care:	80%-89%					
Administration:	1%-9%					
<u>Roles</u> Patient Care: Administrative: Education:	92% 1% 1%					
Patient Care Denti	<u>sts</u>					
Median Admin Time:	1%-9%					
Ave. Admin Time:	10%-19%					
Source: Va. Healthcare Workforce Data Center						

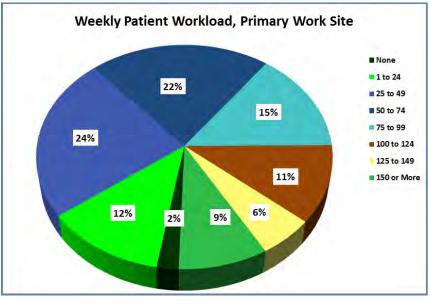
A Closer Look:



Source: Va. Healthcare Workforce Data Center

A typical dentist spends most of his time caring for patients, with most of the remaining time spent doing administrative tasks. 92% of dentists fill a patient care role, defined as spending 60% or more of their time on patient care activities.

Time Allocation										
Time Spent	Adn	nin.	Pati Ca		Educa	ation	Rese	arch	Otl	ner
	Prim. Site	Sec. Site								
All or Almost All (80-100%)	1%	3%	74%	79%	1%	3%	0%	0%	0%	0%
Most (60-79%)	1%	1%	18%	8%	0%	0%	0%	0%	0%	0%
About Half (40-59%)	3%	3%	4%	4%	1%	1%	0%	0%	0%	0%
Some (20-39%)	17%	5%	2%	2%	1%	1%	0%	1%	0%	1%
A Little (1-20%)	64%	47%	1%	4%	22%	13%	5%	3%	10%	6%
None (0%)	15%	40%	1%	3%	75%	82%	94%	96%	89%	93%



At a Glance:						
Patient Workload						
(Median)						
Total						
Primary Location:	50-74					
Secondary Location:	1-24					
<u>Hygiene Checks by Se Personnel</u>	upport					
Primary Location:	1-24					
Secondary Location:	None					
Source: Va. Healthcare Workforce D	ata Center					

Source: Va. Healthcare Workforce Data Center

1

The typical dentist treated between 50 and 74 patients per week at his primary work location. Approximately one-quarter of those visits were hygiene checks by support personnel.

	Pri	Primary Work Location			Secondary Work Location			
# of Patients Per Week	Total		Hygiene Checks*		Total		Hygiene Checks*	
	#	%	#	%	#	%	#	%
None	88	2%	1,726	43%	72	7%	570	56%
1-24	490	12%	920	23%	485	48%	328	32%
25-49	962	24%	721	18%	248	24%	81	8%
50-74	874	22%	351	9%	109	11%	16	2%
75-99	594	15%	159	4%	38	4%	13	1%
100-124	452	11%	63	2%	31	3%	5	0%
125-149	226	6%	33	1%	10	1%	2	0%
150-174	143	4%	16	0%	8	1%	1	0%
175-199	63	2%	10	0%	3	0%	0	0%
200-224	63	2%	4	0%	3	0%	0	0%
225-249	27	1%	2	0%	4	0%	0	0%
250-274	14	0%	3	0%	0	0%	0	0%
275-299	10	0%	2	0%	0	0%	0	0%
300 or more	42	1%	0	0%	2	0%	0	0%
Total	4,049	100%	4,010	100%	1,013	100%	1,017	100%

*Performed by Support Personnel

Retirement Expectations					
Expected Retirement	All Dentists		Dentists over 50		
Age	#	%	#	%	
Under age 50	44	1%	-	-	
50 to 54	145	4%	-	-	
55 to 59	395	11%	63	4%	
60 to 64	863	23%	283	17%	
65 to 69	1,104	30%	532	31%	
70 to 74	639	17%	451	26%	
75 to 79	216	6%	177	10%	
80 or over	82	2%	58	3%	
I do not intend to retire	246	7%	145	8%	
Total	3,732	100%	1,709	100%	

Source: Va. Healthcare Workforce Data Center

At a Glance:

Retirement ExpectationsAll DentistsUnder 65:39%Under 60:16%Dentists 50 and overUnder 65:20%Under 60:4%

Time until Retirement

Within 2 years:	8%
Within 10 years:	28%
Half the workforce:	By 2038

Source: Va. Healthcare Workforce Data Center

More than one-third of dentists expect to retire by the age of 65, but only 20% of those dentists who are age 50 or over expect to retire by the same age. Meanwhile, about one-third of all dentists expect to work until at least age 70, including 7% who do not expect to retire at all.

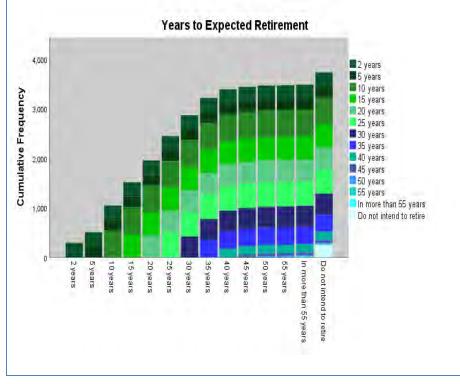
Within the next two years, only 2% of Virginia's dentists plan on leaving the state and 1% plan on leaving the profession. Meanwhile, 14% of dentists plan on increasing their patient care activities, and 11% plan on pursuing additional educational opportunities.

Future Plans				
2 Year Plans:	#	%		
Decrease Participatio	n			
Leave Profession	74	1%		
Leave Virginia	111	2%		
Decrease Patient Care Hours	473	8%		
Decrease Teaching Hours	20	0%		
Increase Participation				
Increase Patient Care Hours	764	14%		
Increase Teaching Hours	244	4%		
Pursue Additional Education	636	11%		
Return to Virginia's Workforce	30	1%		

By comparing retirement expectation to age, we can estimate the maximum years to retirement for dentists. 8% of dentists expect to retire within the next two years, while 28% expect to retire in the next ten years. More than half of the current dentistry workforce expects to retire by 2038.

Time to Retirement					
Expect to retire within	#	%	Cumulative %		
2 years	291	8%	8%		
5 years	215	6%	14%		
10 years	539	14%	28%		
15 years	469	13%	41%		
20 years	440	12%	52%		
25 years	493	13%	66%		
30 years	422	11%	77%		
35 years	349	9%	86%		
40 years	172	5%	91%		
45 years	50	1%	92%		
50 years	27	1%	93%		
55 years	6	0%	93%		
In more than 55 years	14	0%	93%		
Do not intend to retire	246	7%	100%		
Total	3,732	100%			

Source: Va. Healthcare Workforce Data Center



Using these estimates, retirements will begin to reach over 10% of the current workforce every 5 years by 2028. Retirements will peak at 14% of the current workforce around the same time period before declining to under 10% of the current workforce again around 2053.



FTEs	
Total:	4,442
FTEs/1,000 Residents ² :	0.528
Average:	0.81

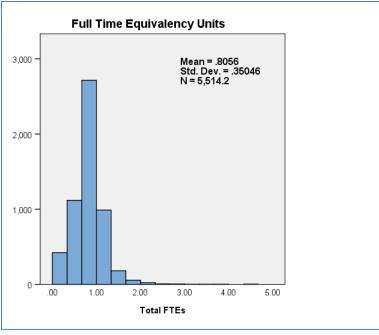
Age & Gender Effect

Age, Partial Eta³:SmallGender, Partial Eta³:Small

Partial Eta³ Explained: Partial Eta³ is a statistical measure of effect size.

Source: Va. Healthcare Workforce Data Center

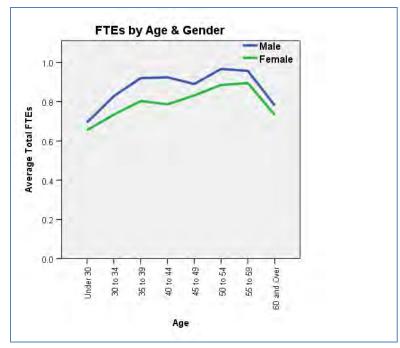
A Closer Look:



Source: Va. Healthcare Workforce Data Center

The typical (median) dentist provided 0.843 FTEs during the past year, or approximately 34 hours per week for 52 weeks. Although FTEs appear to vary by age and gender, statistical tests did not verify that a difference exists.²

Full-Time Equivalency Units					
Age	Average	Median			
	Age				
Under 30	0.68	0.68			
30 to 34	0.78	0.82			
35 to 39	0.87	0.91			
40 to 44	0.83	0.84			
45 to 49	0.83	0.84			
50 to 54	0.90	0.86			
55 to 59	0.91	0.84			
60 and	0.71	0.65			
Over					
Gender					
Male	0.86	0.88			
Female	0.79	0.84			



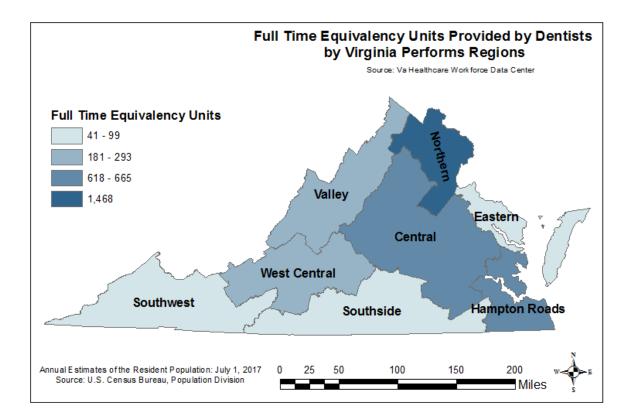
Source: Va. Healthcare Workforce Data Center Source: Va. Healthcare Workforce Data Center

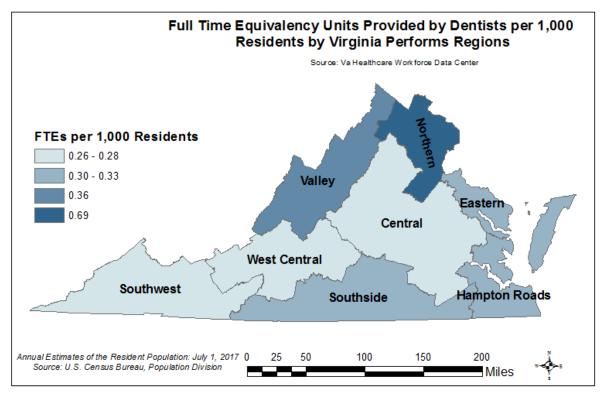
² Number of residents in 2017 was used as the denominator. ³ Due to assumption violations in Mixed between within ANOVA (Internet

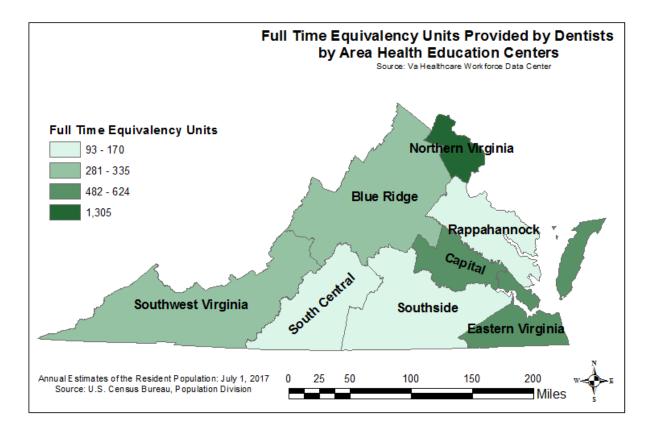
³ Due to assumption violations in Mixed between-within ANOVA (Interaction effect is significant)

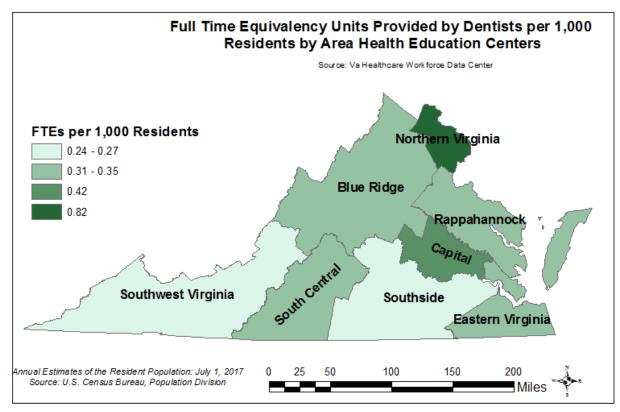
Maps

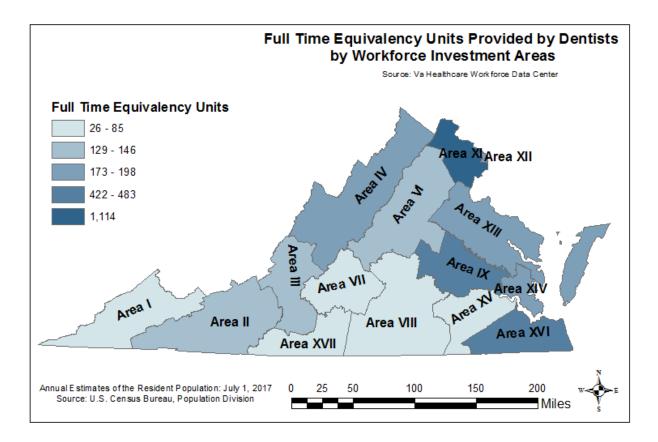
Virginia Performs Regions

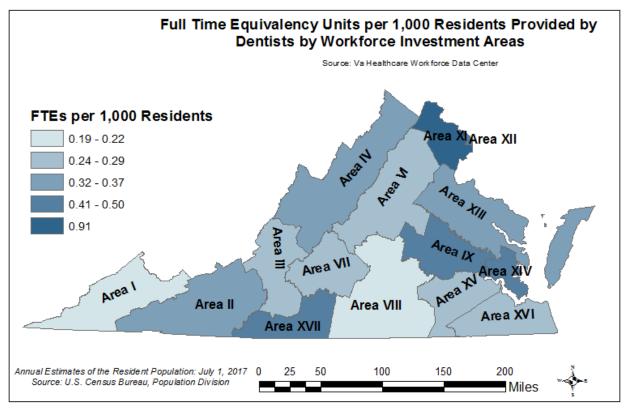


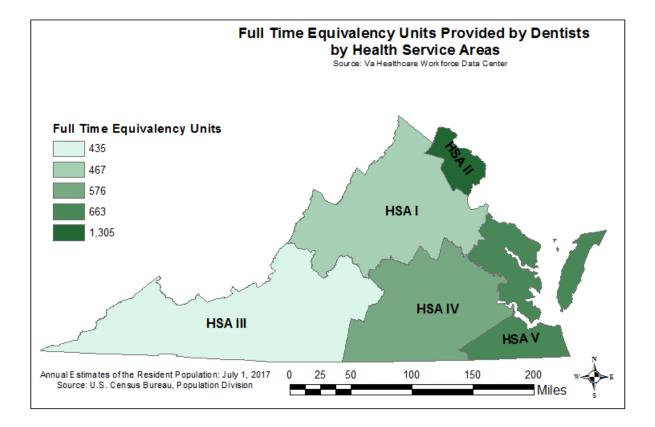


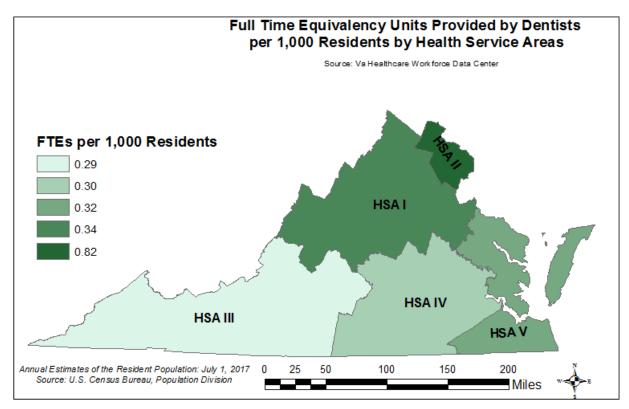




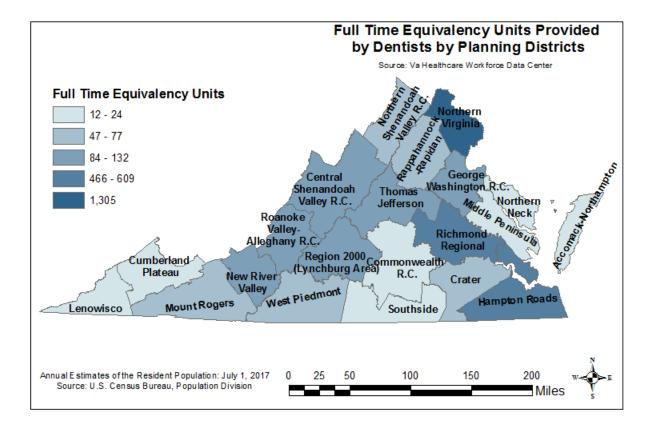


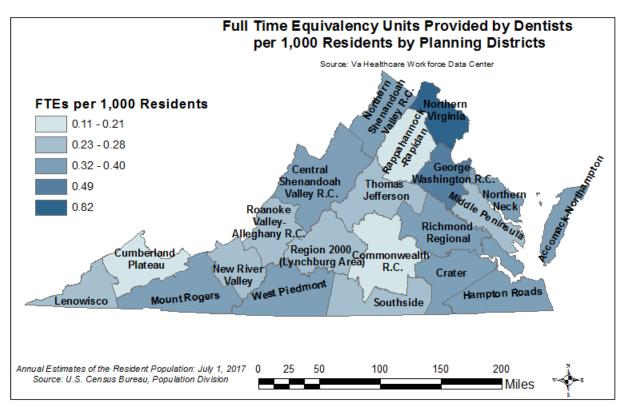






23





Appendix A: Weights

Rural	Location Weight			Total Weight		
Status	#	Rate	Weight	Min	Max	
Metro, 1 million+	4350	88.87%	1.125193999	1.065356246	1.273414001	
Metro, 250,000 to 1 million	358	88.27%	1.132911392	1.072663229	1.282147994	
Metro, 250,000 or less	500	91.20%	1.096491228	1.038179887	1.24093026	
Urban pop 20,000+, Metro adj	71	85.92%	1.163934426	1.102036459	1.317257643	
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA	
Urban pop, 2,500- 19,999, Metro adj	143	86.01%	1.162601626	1.100774537	1.224880859	
Urban pop, 2,500- 19,999, nonadj	69	92.75%	1.078125	1.020790374	1.135878917	
Rural, Metro adj	76	78.95%	1.2666666667	1.199305405	1.334520544	
Rural, nonadj	24	87.50%	1.142857143	1.082080065	1.178692667	
Virginia border state/DC	761	83.18%	1.20221169	1.138278141	1.360577109	
Other US State	1115	82.06%	1.218579235	1.15377526	1.379100724	

Age Weight **Total Weight** Age Weight Under 30 179 77.09% 1.297101449 1.24093026 1.379100724 30 to 34 867 82.81% 1.207520891 1.135878917 1.334520544 35 to 39 1049 87.23% 1.146448087 1.07842955 1.267024477 40 to 44 935 90.37% 1.106508876 1.222884703 1.040859924 45 to 49 887 90.08% 1.110137672 1.044273425 1.226895154 50 to 54 661 91.38% 1.094370861 1.029442055 1.209470086 55 to 59 688 92.15% 1.085173502 1.020790374 1.199305405 60 and 2201 84.60% 1.182062299 1.111930778 1.306384372 Over

See the Methods section on the HWDC website for details on HWDC Methods: <u>www.dhp.virginia.gov/hwdc/</u>

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

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

Overall Response Rate: 0.8725

