## Virginia's Audiology Workforce: 2013

Healthcare Workforce Data Center

July 2014

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

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

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

More than 300 Audiologists 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 Audiology & Speech-Language Pathology express our sincerest appreciation for your ongoing cooperation.

#### Thank You!

#### Virginia Department of Health Professions

**David E. Brown, D.C.** *Director* 

Jaime H. Hoyle, J.D. Chief Deputy Director

Healthcare Workforce Data Center Staff:

Dr. Elizabeth Carter, Ph.D. *Executive Director* 

Justin Crow, MPA Research Analyst Laura Jackson Operations Manager Christopher Coyle Research Assistant

#### The Board of Audiology & Speech-Language Pathology

#### Chair

A. Tucker Gleason, Ph.D., CCC-A Jeffersonton

#### Vice-Chair

Laura Purcell Verdun, MA, CCC-SLP

Oak Hill

#### **Members**

Lillian Beasley Beahm, Au.D., CCC-A Roanoke

George T. Hashisaki, MD Charlottesville

Wanda L. Pritekel, MA, CCC-SLP Warrenton

Ronald Spencer, RN *Midlothian* 

Harold Sayles, Ph.D. *Henrico* 

#### **Contents**

Results in Brief	2
Survey Response Rates	3
The Workforce	4
Demographics	5
Background	6
Education	8
Specializations & Credentials	9
Current Employment Situation	10
Employment Quality	11
2013 Labor Market	12
Work Site Distribution	13
Establishment Type	14
Time Allocation	16
Patient Workload	17
Retirement & Future Plans	18
Full-Time Equivalency Units	20
Maps	21
Council on Virginia's Future Regions	
Area Health Education Center Regions	
Workforce Investment Areas	
Health Services Areas	
Planning Districts	
Appendix	26
Weights	

# The Audiology Workforce: At a Glance:

The Workforce
Licensees: 501

Virginia's Workforce: 406 FTEs: 375

#### **Survey Response Rate**

All Licensees: 67% Renewing Practitioners: 74%

#### **Demographics**

Female: 85%
Diversity Index: 19%
Median Age: 45

Source: Va. Healthcare Workforce Data Cente

#### Background

Rural Childhood: 7% HS Degree in VA: 27% Prof. Degree in VA: 31%

#### **Education**

Au.D.: 59% Any Doctorate: 69%

#### **Finances**

Median Inc.: \$60k-\$70k Health Benefits: 53% Under 40 w/ Ed debt: 55%

#### **Current Employment**

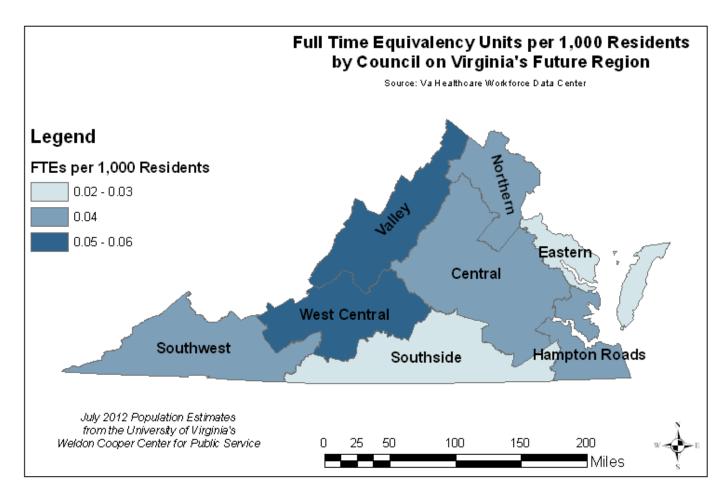
Employed in Prof.: 95% Hold 1 Full-time Job: 74% Satisfied?: 96%

#### Job Turnover

Switched Jobs in 2013: 5% Employed over 2 yrs: 73%

#### **Primary Roles**

Patient Care: 82% Administration: 2% Non-Clinical Educ.: 1%



335 audiologists voluntarily took part in the 2013 Audiology 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 audiologists. These survey respondents represent 67% of the 501 audiologists who are licensed in the state and 74% of renewing practitioners.

The HWDC estimates that 406 audiologists participated in Virginia's workforce during the survey period, which is defined as those who worked at least a portion of the year in the state or who live in the state and intend to return to work as an audiologist some point in the future. Virginia's audiology workforce provided 375 "full-time equivalency units" during the survey time period, which the HWDC defines simply as working 2,000 hours a year (or 40 hours per week for 50 weeks with 2 weeks off).

85% of audiologists are female, and the median age of all audiologists is 45. In a random encounter between two audiologists, there is just a 19% chance that they would be of different races or ethnicities, a measure known as the diversity index. For the Virginia population as a whole, this same probability is 54%. Meanwhile, the diversity index for those audiologists who are under the age of 40 is 18%.

More than one-quarter of all audiologists grew up in a rural area, and 19% of these professionals currently work in non-Metro areas of the state. Meanwhile, approximately one-third of Virginia's audiologists graduated from high school in Virginia, while 31% received their initial professional degree in the state. In total, 43% of Virginia's audiology workforce has some educational background in the state.

Nearly 60% of audiologists hold a Doctor of Audiology (Au.D.) as their highest professional degree, while another 31% have a master's degree. More than half of audiologists who are under the age of 40 currently carry educational debt. The median debt burden for those with educational debt is between \$40,000 and \$50,000.

95% of audiologists are currently employed in the profession. Nearly three-quarters hold one full-time position, while another 6% hold two or more position. Less than 1% of audiologists are involuntarily unemployed, while another 2% are voluntarily unemployed. Nearly three-quarters of all audiologists have been at their primary work location for at least two years.

The median annual income for audiologists is between \$60,000 and \$70,000, while one-quarter earn more than \$90,000 per year. In addition, more than three-quarters of Virginia's audiology workforce receive at least one employer-sponsored benefit, including more than half who receive employer-sponsored health insurance. 96% of audiologists indicate they are satisfied with their current employment situation, including two-thirds who indicate they are "very satisfied".

Nearly three-quarters of audiologists work in Northern Virginia, Central Virginia or Hampton Roads. One-quarter of audiologists worked at two or more locations in the past year. 80% of audiologists work in the private sector, including 69% who work at a for-profit company. Nearly one-quarter of audiologists work at a private group practice, while another 20% work at a physician's office.

A typical audiologist spends between 80% and 90% of their time in client care activities, with most of the remaining time spent on administrative duties. 82% of audiologists serve a client care role, meaning that at least 60% of their time is spent in client care activities.

43% of audiologists expect to retire by the age of 65. Nearly 20% of the workforce expects to retire in the next decade, while half the current workforce expects to retire by 2038. Over the next two years, only 4% of audiologists plan on leaving either the state or the profession. Meanwhile, 13% of audiologists expect to pursue additional educational opportunities in the next two years, and 13% plan on increasing client care activities.

Licensee Counts						
License Status	#	%				
Renewing Practitioners	435	87%				
New Licensees	33	7%				
Non-Renewals	33	7%				
All Licensees	501	100%				

Source: Va. Healthcare Workforce Data Center

Our surveys tend to achieve very high response rates. 74% of renewing audiologists submitted a survey. These represent 67% of audiologists who held a license at some point in 2013.

Response Rates						
Statistic	Non Respondents	Respondent	Response Rate			
By Age						
Under 30	24	15	39%			
30 to 34	22	41	65%			
35 to 39	21	53	72%			
40 to 44	18	48	73%			
45 to 49	16	31	66%			
50 to 54	22	46	68%			
55 to 59	16	43	73%			
60 and Over	27	58	68%			
Total	166	335	67%			
New Licenses						
Issued in 2013	27	6	18%			
Metro Status						
Non-Metro	15	18	55%			
Metro	116	248	68%			
Not in Virginia	35	69	66%			

Source: Va. Healthcare Workforce Data Center

#### At a Glance:

#### **Licensed Audiologists**

Number: 501 New: 7% Not Renewed: 7%

#### **Survey Response Rates**

All Licensees: 67% Renewing Practitioners: 74%

Source: Va Healthcare Workforce Data Center

Response Rates	
Completed Surveys	335
Response Rate, all licensees	67%
Response Rate, Renewals	74%

Source: Va. Healthcare Workforce Data Center

#### **Definitions**

- **1. The Survey Period:** The survey was conducted in December 2013.
- 2. Target Population: All audiologists who held a Virginia license at some point in 2013.
- 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 audiologists newly licensed in 2013.

#### Workforce

2013 Audiology Workforce: 406 FTEs: 375

#### **Utilization Ratios**

Licensees in VA Workforce: 81% Licensees per FTE: 1.34 Workers per FTE: 1.08

Source: Va. Healthcare Workforce Data Center

Virginia's Audiology Workforce						
Status	#	%				
Worked in Virginia in Past Year	402	99%				
Looking for Work in Virginia	4	1%				
Virginia's Workforce	406	100%				
Total FTEs	375					
Licensees	501					

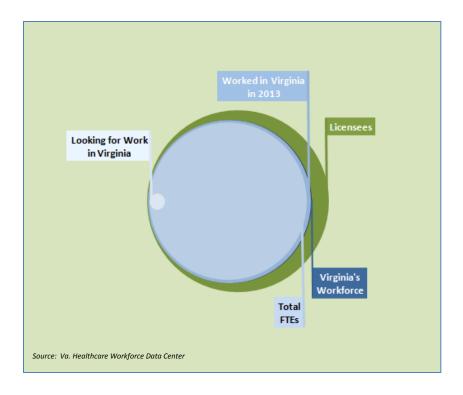
Source: Va. Healthcare Workforce Data Center

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

www.dhp.virginia.gov/hwdc

#### **Definitions**

- 1. Virginia's Workforce: A licensee with a primary or secondary work site in Virginia at any time in 2013 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						
	IV	lale	F	emale	Т	otal
Age	#	% Male	#	% Female	#	% in Age Group
Under 30	0	0%	34	100%	34	9%
30 to 34	3	7%	44	94%	47	12%
35 to 39	5	9%	57	91%	62	16%
40 to 44	3	5%	47	95%	50	13%
45 to 49	7	18%	33	82%	40	10%
50 to 54	15	26%	42	74%	57	15%
55 to 59	7	16%	36	84%	43	11%
60 +	17	29%	43	71%	60	15%
Total	58	15%	335	85%	393	100%

Cource	1/a	Healthcare	Markforce	Data Center

Race & Ethnicity						
Race/	Virginia*	Audiologists		Audiologists Under 40		
Ethnicity	%	#	%	#	%	
White	64%	357	90%	131	90%	
Black	19%	12	3%	6	4%	
Asian	6%	13	3%	4	3%	
Other Race	0%	3	1%	1	1%	
Two or more races	2%	5	1%	0	0%	
Hispanic	8%	7	2%	3	2%	
Total	100%	397	100%	145	100%	

<sup>\*</sup>Population data in this chart is from the US Census, ACS 1-yr estimates, 2011 vintage.

Source: Va. Healthcare Workforce Data Center

85% of all audiologists are women, including 94% of audiologists under the age of 40. The median age of audiologists is 45.

#### At a Glance:

Gender

% Female: 85% % Under 40 Female: 94%

Age

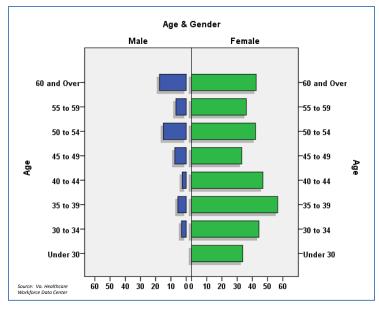
Median Age: 45 % Under 40: 36% % 55+: 26%

**Diversity** 

Diversity Index: 19% Under 40 Div. Index: 18%

Source: Va. Healthcare Workforce Data Center

In a chance encounter between two audiologists, there is a 19% 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 54%.



<u>Childhood</u> Urban Childhood:

Urban Childhood: 7% Rural Childhood: 27%

Virginia Background

HS in Virginia: 34% Prof. Education in VA: 31% HS/Prof. Educ. in VA: 43%

**Location Choice** 

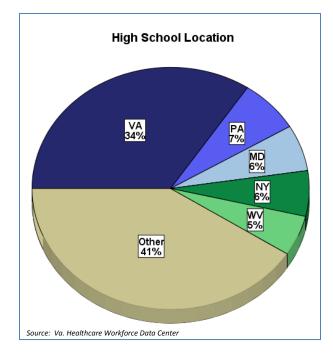
% Rural to Non-Metro: 19%

% Urban/Suburban to Non-Metro:

#### A Closer Look:

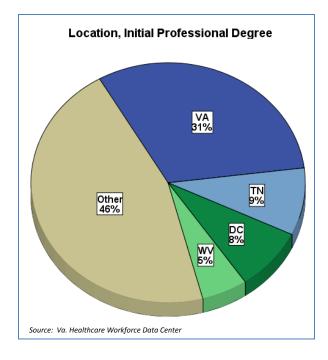
HEL	Primary Location: OA Rural Urban Continuum	Rural St	Rural Status of Childhood Location		
Code	Description	Rural	Suburban	Urban	
	Metro Cour	nties			
1	Metro, 1 million+	19%	72%	9%	
2	Metro, 250,000 to 1 million	28%	72%	-	
3	Metro, 250,000 or less	40%	53%	7%	
Non-Metro Counties					
4	Urban pop 20,000+, Metro adj	56%	44%	-	
6	Urban pop, 2,500-19,999, Metro adj	83%	17%	-	
7	Urban pop, 2,500-19,999, nonadj	73%	27%	-	
8	Rural, Metro adj	-	-	-	
9	Rural, nonadj	25%	75%	-	
	Overall	27%	66%	7%	

Source: Va. Healthcare Workforce Data Center



4%

43% off Virginia's audiologists have a background (i.e., a high school or professional degree) in the state. 27% of audiologists grew up in self-described rural areas, but just 8% of all audiologists currently work in non-Metro counties.



#### Top Ten States for Audiologist Recruitment

	All Professionals				
Rank	High School	#	Professional School	#	
1	Virginia	136	Virginia	124	
2	Pennsylvania	28	Tennessee	36	
3	Maryland	24	Washington, D.C.	33	
4	New York	24	West Virginia	21	
5	West Virginia	21	Maryland	17	
6	Outside of U.S.	16	Ohio	17	
7	Ohio	15	North Carolina	16	
8	Michigan	13	New York	16	
9	Indiana	11	Michigan	10	
10	New Jersey	10	Pennsylvania	10	

34% of Virginia's audiologists received their high school degree in Virginia, and 31% received their initial professional degree in the state.

Source: Va. Healthcare Workforce Data Center

Among audiologists who have been licensed in the past five years, 24% received their high school degree in Virginia, but just 10% received their initial professional degree in the state.

In fact, more of these audiologists received their initial professional degree in Tennessee.

	Licens	ed in the	e Past 5 Years	
Rank	High School	#	Professional School	#
1	Virginia	23	Tennessee	19
2	Pennsylvania	10	Washington, D.C.	10
3	New York	7	Virginia	10
4	Georgia	5	Maryland	8
5	Outside of U.S.	4	Texas	5
6	Tennessee	4	Pennsylvania	4
7	Texas	4	North Carolina	4
8	Ohio	4	Alabama	4
9	Florida	4	Missouri	3
10	Maryland	4	Connecticut	3

Source: Va. Healthcare Workforce Data Center

Nearly 20% of licensed audiologists did not participate in Virginia's workforce in 2013. 85% of these audiologists worked at some point in the past year, and 82% currently work as audiologists.

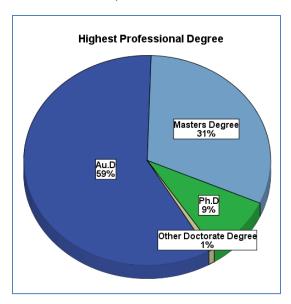
#### At a Glance:

#### **Not in VA Workforce**

Total: 95 % of Licensees: 19% Federal/Military: 16% Va Border State/DC: 33%

Highest Professional Degree						
Degree	#	%				
Masters Degree	120	31%				
Au.D.	227	59%				
Ph.D.	35	9%				
Other Doctorate 3 1%						
Total	386	100%				

Source: Va. Healthcare Workforce Data Center



31% of audiologists currently have educational debt, including 55% of those under the age of 40. For those with educational debt, the median amount is between \$40,000 and \$50,000.

#### At a Glance:

#### **Education**

Doctor of Audiology: 59% Masters Degree: 31%

#### **Educational Debt**

Carry debt: 31% Under age 40 w/ debt: 55% Median debt: \$40k-\$50k

Source: Va. Healthcare Workforce Data Center

59% of audiologists have a Doctor of Audiology (Au.D.) as their highest professional degree, while an additional 10% have another Doctoral Degree.

Educational Debt				
	All		Audiologists	
Amount Carried	Audio	logists	Under 40	
	#	%	#	%
None	229	69%	57	46%
Less than \$10,000	11	3%	2	2%
\$10,001-\$20,000	14	4%	10	8%
\$20,001-\$30,000	11	3%	7	6%
\$30,001-\$40,000	14	4%	8	6%
\$40,001-\$50,000	12	4%	12	10%
\$50,001-\$60,000	7	2%	3	2%
\$60,001-\$70,000	4	1%	4	3%
\$70,001-\$80,000	9	3%	4	3%
\$80,001-\$90,000	2	1%	2	2%
\$90,001-\$100,000	4	1%	3	2%
Over \$100,000	13	4%	13	10%
Total	330	100%	124	100%

#### **Top Specialties**

Hearing Aids/Devices: 61%
Pediatrics: 32%
Geriatrics: 28%

#### **Top Credentials**

CCC-A Audiology: 84% Hearing Aid Disp. Lic.: 63% F-AAA Fellow: 51%

Source: Va. Healthcare Workforce Data Center

#### A Closer Look:

Self-Designated Specialties			
Specialty	#	%	
Hearing Aids/Devices	249	61%	
Pediatrics	131	32%	
Geriatrics	113	28%	
Vestibular	92	23%	
Educational	62	15%	
Occupational Hearing Conservation	53	13%	
Cochlear Implants	43	11%	
Intraoperative Monitoring	10	2%	
Other	39	10%	
Have at least 1 Specialty	317	78%	

Source: Va. Healthcare Workforce Data Center

Credentials			
Credential	#	%	
CCC-A: Audiology	340	84%	
Hearing Aid Dispenser License	254	63%	
F-AAA Fellow	206	51%	
ABA Certification	22	5%	
CCC-SLP: Speech-Language Pathology	13	3%	
CI: Cochlear Implants	2	0%	
PASC: Pediatric Audiology	2	0%	
BCS-ION: Intraoperative Monitoring	0	0%	
Other	13	3%	
Have at least 1 Credential	388	96%	

Source: Va. Healthcare Workforce Data Center

More than three-quarters of all audiologists have at least one self-designated specialty, and 96% have at least one credential. Hearing Aids & Devices is the most common self-designated specialization, while CCC-A Audiology is the most common credential.

#### **Employment**

Employed in Profession: 95% Involuntarily Unemployed: 0%

#### **Positions Held**

1 Full-time: 74% 2 or More Positions: 6%

#### **Weekly Hours:**

40 to 49:52%60 or more:4%Less than 30:13%

Source: Va. Healthcare Workforce Data Center

#### A Closer Look:

Current Work Status				
Status	#	%		
Employed, capacity unknown	0	0%		
Employed in an audiology-related capacity	375	95%		
Employed, NOT in an audiology- related capacity	8	2%		
Not working, reason unknown	0	0%		
Involuntarily unemployed	1	0%		
Voluntarily unemployed	8	2%		
Retired	1	0%		
Total	394	100%		

Source: Va. Healthcare Workforce Data Center

<b>Current Positions</b>				
Positions	#	%		
No Positions	10	3%		
One Part-Time Position	67	17%		
Two Part-Time Positions	6	2%		
One Full-Time Position	288	74%		
One Full-Time Position & One Part-Time Position	18	5%		
Two Full-Time Positions	0	0%		
More than Two Positions	0	0%		
Total	389	100%		

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours			
Hours	#	%	
0 hours	10	3%	
1 to 9 hours	4	1%	
10 to 19 hours	17	4%	
20 to 29 hours	31	8%	
30 to 39 hours	79	20%	
40 to 49 hours	203	52%	
50 to 59 hours	29	7%	
60 to 69 hours	14	4%	
70 to 79 hours	0	0%	
80 or more hours	3	1%	
Total	390	100%	

Source: Va. Healthcare Workforce Data Center

95% of licensed audiologists are employed in the profession, and less than 1% are involuntary unemployed. Nearly three-quarters of audiologists have full-time work, while 6% have two or more positions. More than half of audiologists work between 40 and 49 hours per week, while 4% of audiologists work at least 60 hours per week.

lı	ncome	
Hourly Wage	#	%
Volunteer Work Only	2	1%
\$20,000 or less	17	6%
\$20,001-\$30,000	10	3%
\$30,001-\$40,000	18	6%
\$40,001-\$50,000	19	7%
\$50,001-\$60,000	42	15%
\$60,001-\$70,000	50	17%
\$70,001-\$80,000	40	14%
\$80,001-\$90,000	35	12%
\$90,001-\$100,000	17	6%
\$100,001-\$110,000	10	4%
\$110,001-\$120,000	7	2%
\$120,000 and over	22	8%
Total	289	100%

Employer-Sponsored Benefits				
Benefit	#	%		
Paid Vacation	248	66%		
Paid Sick Leave	236	63%		
Health Insurance	199	53%		
Retirement	164	44%		
Dental Insurance	149	40%		
Group Life Insurance	115	31%		
Signing/Retention Bonus	19	5%		
Receive at least one benefit*	290	77%		

<sup>\*</sup>From any employer at time of survey.

Source: Va. Healthcare Workforce Data Center

96% of audiologists were satisfied with their jobs, including two-thirds who were very satisfied.

#### At a Glance:

#### **Hourly Earnings**

Median Income: \$60k-70k Middle 50%: \$50k-\$90k

#### **Benefits**

Employer Health Insrnce: 53% Employer Retirement: 44%

#### Satisfaction

Satisfied: 96% Very Satisfied: 66%

The median annual income for audiologists is between \$60,000 and \$70,000, while one-quarter earn more than \$90,000 per year. 77% of audiologists receive at least one employer-sponsored benefit, including 53% who receive health insurance.

Job Satisfaction				
Level	#	%		
Very Satisfied	251	66%		
Somewhat Satisfied	112	30%		
Somewhat Dissatisfied	12	3%		
Very Dissatisfied 3 1%				
Total	378	100%		

Underemployment in Past Year		
In the past year did you?	#	%
Experience Involuntary Unemployment?	7	2%
Experience Voluntary Unemployment?	19	5%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	7	2%
Work two or more positions at the same time?	35	9%
Switch employers or practices?	19	5%
Experienced at least 1	81	20%

Source: Va. Healthcare Workforce Data Center

Only 2% of Virginia's audiologists were involuntary unemployed at some point in 2013. For comparison, Virginia's average monthly unemployment rate was 5.5%.<sup>2</sup>

Location Tenure				
Tanana	Primary		Secondary	
Tenure	#	%	#	%
Not Currently Working at this Location	8	2%	8	8%
Less than 6 Months	19	5%	6	6%
6 Months to 1 Year	18	5%	4	4%
1 to 2 Years	56	15%	17	18%
3 to 5 Years	85	22%	25	26%
6 to 10 Years	66	17%	12	13%
More than 10 Years	126	33%	25	26%
Subtotal	378	100%	96	100%
Did not have location	4		304	
Item Missing	24		6	
Total	406		406	

Source: Va. Healthcare Workforce Data Center

64% of audiologists receive a salary or commission at their primary work location, while 19% receive an hourly wage.

#### At a Glance:

## **Unemployment Experience 2013**

Involuntarily Unemployed: 2% Underemployed: 2%

#### **Stability**

Switched: 5%
New Location: 12%
Over 2 years: 73%
Over 2 yrs, 2<sup>nd</sup> location: 65%

#### **Employment Type**

Salary/Commission: 64% Hourly Wage: 19%

Source: Va. Healthcare Workforce Data Center

Nearly three-quarters of audiologists have worked at their primary location for more than 2 years.

Employment Type			
Primary Work Site	#	%	
Salary/ Commission	205	64%	
Hourly Wage	61	19%	
By Contract	10	3%	
Business/ Practice Income	45	14%	
Unpaid	0	0%	
Subtotal	321	100%	

<sup>&</sup>lt;sup>1</sup> As reported by the US Bureau of Labor Statistics for 2013. The not seasonally adjusted monthly unemployment rate ranged from 6.3% in January to 4.8% in December.

#### Concentration

Top Region:36%Top 3 Regions:73%Lowest Region:1%

#### Locations

2 or more (2013): 25% 2 or more (Now\*): 24%

Source: Va. Healthcare Workforce Data Center

More than one-third of audiologists work in Northern Virginia, while another 20% work in Central Virginia. Meanwhile, Eastern Virginia has the lowest concentration of audiologists in the state.

Number of Work Locations							
Locations	Locat	ork ions in )13	Work Locations Now*				
	#	%	#	%			
0	4	1%	11	3%			
1	299	74%	280	73%			
2	50	12%	49	13%			
3	43	11%	35	9%			
4	6	1%	4	1%			
5	0	0%	0	0%			
6 or More	3	1%	3	1%			
Total	406	100%	382	100%			

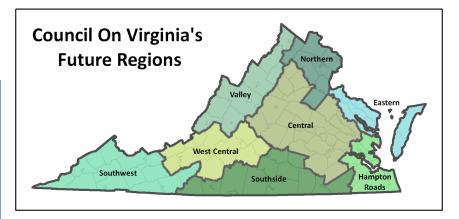
<sup>\*</sup>At the time of survey completion, December 2013.

Source: Va. Healthcare Workforce Data Center

#### A Closer Look:

Regional Distribution of Work Locations							
COVF Region		mary ation	Secondary Location				
	#	%	#	%			
Central	74	20%	13	13%			
Eastern	3	1%	0	0%			
<b>Hampton Roads</b>	67	18%	14	14%			
Northern	135	36%	35	35%			
Southside	10	3%	12	12%			
Southwest	21	6%	4	4%			
Valley	29	8%	7	7%			
West Central	36	9%	4	4%			
Virginia Border State/DC	4	1%	7	7%			
Other US State	0	0%	3	3%			
Outside of the US	0	0%	0	0%			
Total	379	100%	99	100%			
Item Missing	21		3				

Source: Va. Healthcare Workforce Data Center



Nearly three-quarters of audiologists had just one work location in 2013, while another 12% had two work locations during the year.

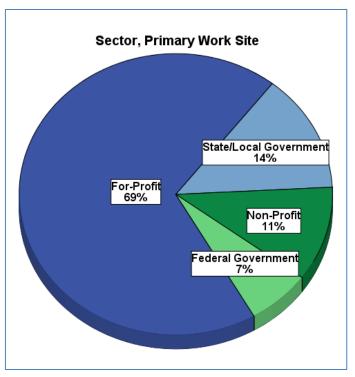
Location Sector								
		mary	Secondary					
Sector	Loc	ation	Loc	ation				
	#	%	#	%				
For-Profit	245	69%	75	82%				
Non-Profit	39	11%	4	4%				
State/Local Government	48	14%	7	8%				
<b>Veterans Administration</b>	13	4%	5	5%				
U.S. Military	7	2%	1	1%				
Other Federal Gov't	3	1%	0	0%				
Total	355	100%	92	100%				
Did not have location	4		304					
Item Missing	46		10					

# At a Glance: (Primary Locations) Sector For Profit: 69% Federal: 7% Top Establishments Private Practice (Group): 24% Physician Office: 20%

15%

Private Practice (Solo):

69% of audiologists work in a for-profit company, while another 14% work in state or local government. Meanwhile, 11% of audiologists work in the non-profit sector, and 7% work for the federal government.

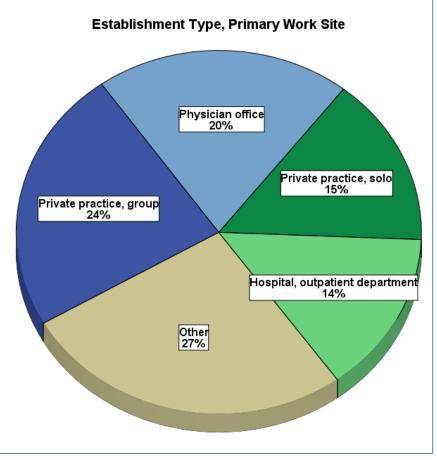


Top 10 Location Type							
Establishment Type		mary ation		ndary ation			
	#	%	#	%			
Private Practice (Group)	82	24%	28	31%			
Physician Office	71	20%	22	24%			
Private Practice (Solo)	52	15%	15	16%			
Hospital (Outpatient)	50	14%	13	14%			
School (Providing Care to Clients)	28	8%	4	4%			
Academic Institution (Teaching Health Professions Students)	14	4%	4	4%			
Community-Based Clinic/Health Center	12	3%	1	1%			
Administrative/Business Organization	4	1%	0	0%			
Hospital (Inpatient)	4	1%	0	0%			
Residential Facility/Group Home	2	1%	0	0%			
Rehabilitation Facility	1	0%	0	0%			
Other	27	8%	4	4%			
Total	347	100%	91	100%			
Does not have location	4		304				

Nearly one-quarter of audiologists work in a private group practice, while another 20% work in a physician's office. Meanwhile, 15% work in a private solo practice, and 14% work in the outpatient department of a hospital.

Source: Va. Healthcare Workforce Data Center

For secondary work locations, nearly half of audiologists work in a private practice, while nearly onequarter work in a physician's office.



# At a Glance: (Primary Locations)

### Typical Time Allocation

Client Care: 80%-89% Administration: 10%-19%

#### **Roles**

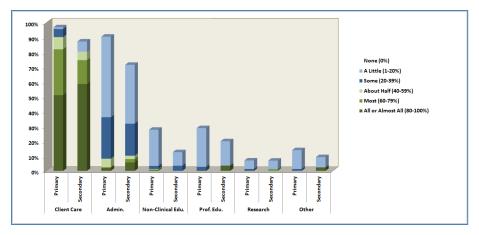
Patient Care: 82% Administration: 2% Non-Clinical Educ.: 1%

#### **Administration Time**

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

Source: Va. Healthcare Workforce Data Center

#### A Closer Look:



Source: Va. Healthcare Workforce Data Center

A typical audiologist spends most of their time in client care activities, with most of the remaining time handling administrative tasks. 82% of audiologists fill a client care role, defined as spending 60% or more of their time in that activity.

	Time Allocation											
	Client Care Admin.		Non-Clinical Education		Professional Education		Research		Other			
Time Spent	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site
All or Almost All (80-100%)	51%	59%	2%	6%	0%	0%	0%	3%	0%	0%	0%	2%
Most (60-79%)	31%	16%	0%	2%	1%	0%	0%	0%	0%	1%	0%	0%
About Half (40-59%)	8%	6%	6%	2%	0%	0%	0%	0%	0%	0%	0%	0%
Some (20-39%)	5%	0%	28%	22%	2%	3%	2%	0%	1%	0%	1%	0%
A Little (1-20%)	1%	7%	54%	41%	24%	9%	26%	16%	6%	6%	13%	7%
None (0%)	3%	13%	9%	29%	72%	88%	71%	79%	93%	94%	86%	91%

#### **Weekly Patient Totals**

(Median)

Primary Location: 20-29 Secondary Location: 10-19 Total 30-39

% with Group Sessions

Primary Location: 8% Secondary Location: 11%

Source: Va. Healthcare Workforce Data Center

#### A Closer Look:

Patients / Week		Primary Work Location		ary Work ation	Total	
vveek	#	%	#	%	#	%
None	18	5%	11	12%	16	5%
1-9	21	6%	22	23%	20	6%
10-19	55	16%	30	32%	39	11%
20-29	85	24%	18	19%	76	22%
30-39	60	17%	11	12%	49	14%
40-49	48	14%	0	0%	51	15%
50-59	24	7%	1	1%	44	13%
60-69	12	3%	0	0%	22	6%
70-79	9	3%	0	0%	10	3%
80 or	16	5%	2	2%	23	6%
more	10	370		270	23	070
Total	348	100%	95	100%	350	100%

Source: Va. Healthcare Workforce Data Center

A typical audiologist has between 20 and 29 individual patient sessions at their primary work location. In addition, 8% of audiologists participate in group patient sessions at their primary work location. Overall, the typical audiologist sees between 30 and 39 patients per week across both primary and secondary work locations.

# -f \\( -   -  -  -  -  -  -  -  -  -  -  -  -	Primary Work Location					Secondary Work Location			
# of Weekly Sessions	Individua	l Sessions	Group S	Sessions	Individua	al Sessions	<b>Group Sessions</b>		
363310113	#	%	#	%	#	%	#	%	
None	19	5%	319	92%	11	12%	84	89%	
1-9	27	8%	24	7%	27	28%	6	6%	
10-19	56	16%	1	0%	31	33%	4	4%	
20-29	85	24%	0	0%	15	16%	0	0%	
30-39	59	17%	1	0%	9	9%	0	0%	
40-49	47	14%	0	0%	0	0%	0	0%	
50-59	25	7%	0	0%	1	1%	0	0%	
60-69	11	3%	0	0%	0	0%	0	0%	
70-79	7	2%	0	0%	0	0%	0	0%	
80 or more	10	3%	0	0%	2	2%	0	0%	
Total	347	100%	346	100%	95	100%	94	100%	

Retirement Expectations							
Expected Retirement	P	All	Ov	er 50			
Age	#	%	#	%			
Under age 50	6	2%	-	-			
50 to 54	5	2%	1	1%			
55 to 59	27	9%	10	8%			
60 to 64	94	30%	36	29%			
65 to 69	112	36%	46	37%			
70 to 74	39	13%	19	15%			
75 to 79	4	1%	3	2%			
80 or over	6	2%	4	3%			
I do not intend to retire	15	5%	7	6%			
Total	309	100%	126	100%			

Source: Va. Healthcare Workforce Data Center

#### At a Glance:

#### **Retirement Expectations**

All Audiologists

Under 65: 43% Under 60: 12%

Audiologists 50 and over

Under 65: 37% Under 60: 9%

#### **Time until Retirement**

Within 2 years: 5%
Within 10 years: 19%
Half the workforce: by 2038

Source: Va. Healthcare Workforce Data Cente

Approximately two-thirds of all audiologists expect to retire at some point in their 60s, while more than 20% expect to work until at least age 70. Among audiologists who are over the age of 50, two-thirds still expect to retire in their 60s. Meanwhile, one-quarter of audiologists over the age of 50 expect to work through at least age 70, including 6% who do not expect to retire at all.

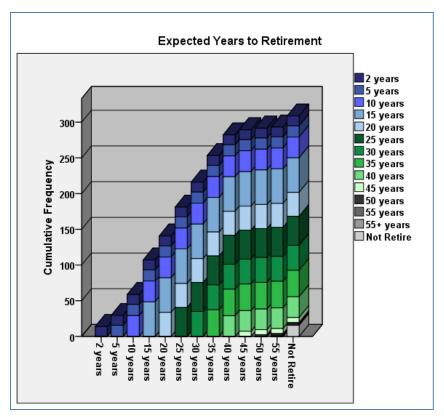
Within the next two years approximately 4% of audiologists expect to leave either the profession or Virginia. Meanwhile, 13% of audiologists plan on pursuing additional educational opportunities, and 13% also plan to increase client care hours.

Future Plans							
2 Year Plans:	#	%					
Decrease Participation	n						
Leave Profession	5	1%					
Leave Virginia	11	3%					
<b>Decrease Client Care Hours</b>	18	4%					
Decrease Teaching Hours	1	0%					
Increase Participation	า						
Increase Client Care Hours	51	13%					
Increase Teaching Hours	17	4%					
Pursue Additional Education	53	13%					
Return to Virginia's Workforce	1	0%					

By comparing retirement expectation to age, we can estimate the maximum years to retirement for audiologists. Only 5% of audiologists plan on retiring in the next two years, while 19% plan on retiring in the next ten years. Half of the current audiology workforce expects to be retired by 2038.

Time to R	Time to Retirement							
Expect to retire within	#	%	Cumulative					
			%					
2 years	14	5%	5%					
5 years	16	5%	10%					
10 years	29	9%	19%					
15 years	48	16%	35%					
20 years	34	11%	46%					
25 years	40	13%	59%					
30 years	35	11%	70%					
35 years	37	12%	82%					
40 years	29	9%	91%					
45 years	7	2%	94%					
50 years	2	1%	94%					
55 years	2	1%	95%					
In more than 55 years	0	0%	95%					
Do not intend to retire	15	5%	100%					
Total	309	100%						

Source: Va. Healthcare Workforce Data Center



Using these estimates, retirements will begin to reach 10% of the current workforce starting in 2028. Peak retirement years will take place around the same time, when 16% of the current workforce expects to retire every five years. After 2028, retirements will not permanently fall below 10% of the current workforce during a five-year time interval until 2053.

**FTEs** 

Total: 375 Average: 0.93

#### **Age & Gender Effect**

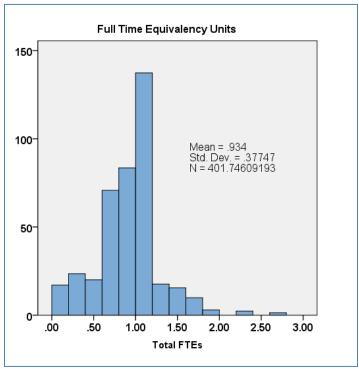
Age, Partial Eta<sup>2</sup>: 0.03 Gender, Partial Eta<sup>2</sup>: 0.011

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

> > .01=Small Effect .06=Medium Effect .138=Large Effect

Source: Va. Healthcare Workforce Data Center

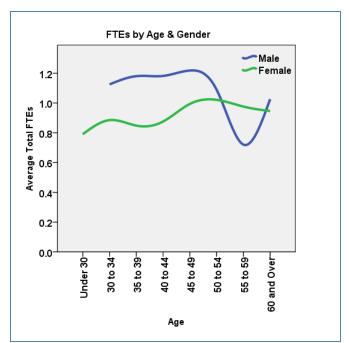
#### A Closer Look:



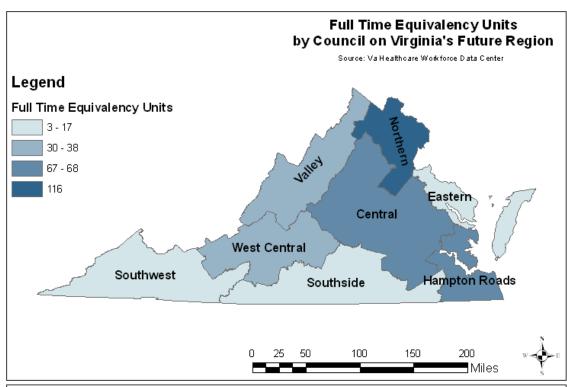
Source: Va. Healthcare Workforce Data Center

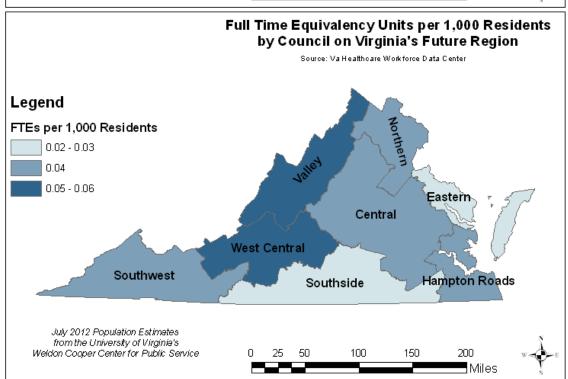
The average audiologist provided 0.93 FTEs in 2013, or about 36 hours per week for 52 weeks. Statistical tests did not verify any difference in the variability of FTEs by either age or gender.<sup>2</sup>

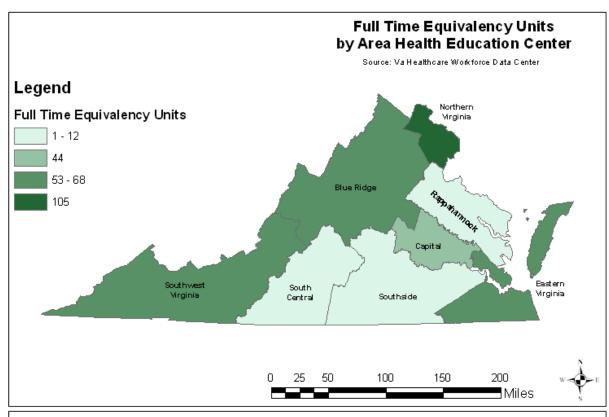
Full-Time Equivalency Units									
	Average N								
	Age								
<b>Under 30</b> 0.79 0.84									
30 to 34	0.89	0.88							
35 to 39	0.88	0.95							
40 to 44	0.90	0.96							
45 to 49	1.03	1.17							
50 to 54	1.03	1.04							
55 to 59	0.95	0.91							
60 and Over	0.97	1.06							
	Gender								
Male	1.06	1.08							
Female	0.91	0.91							

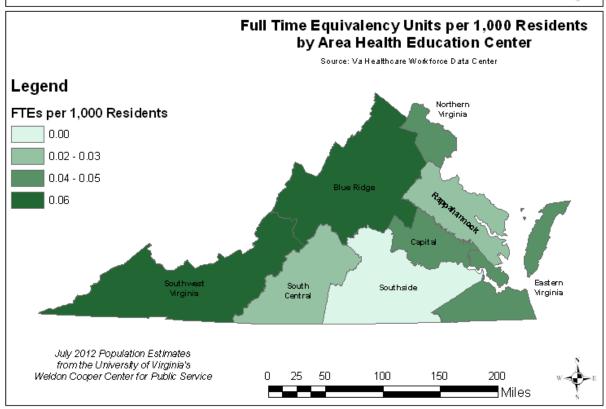


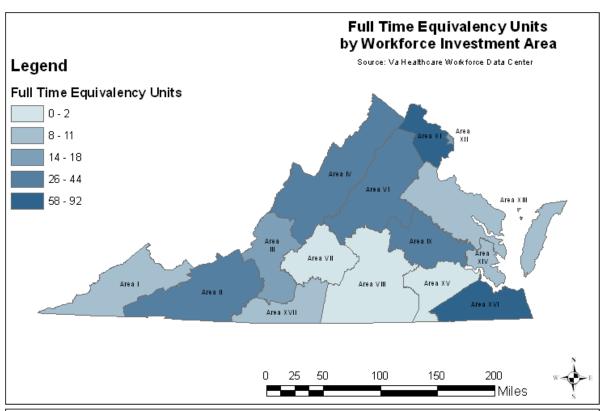
<sup>&</sup>lt;sup>2</sup> There were also assumption violations in Mixed between-within ANOVA (Levene's Test was significant).

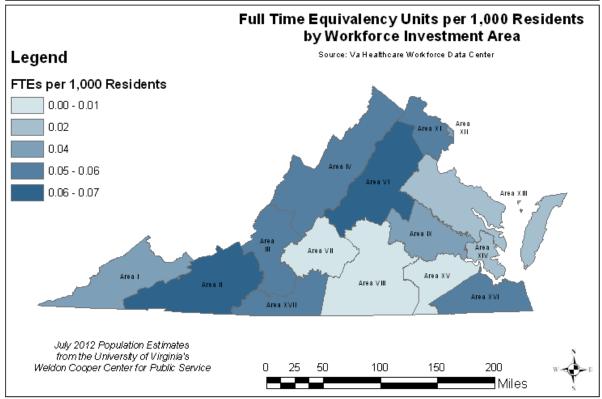


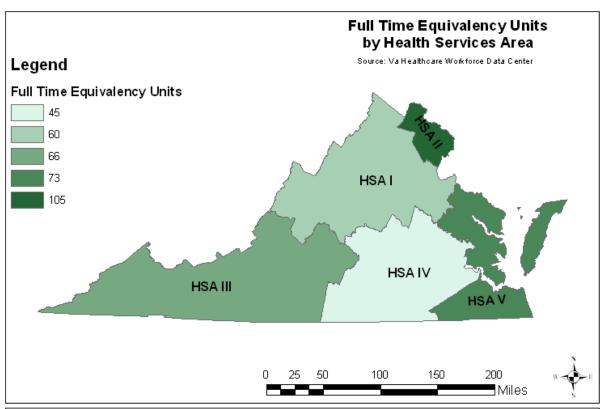


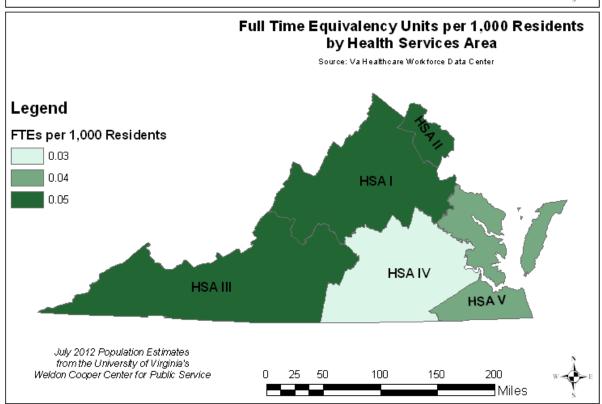


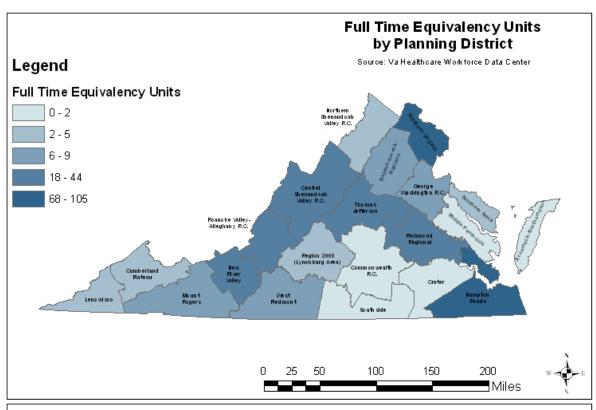


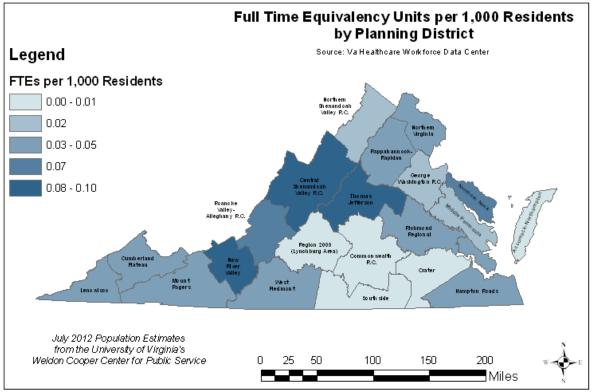












#### Weights

Rural		Location We	eight	Total \	Weight
Status	#	Rate	Weight	Min	Max
Metro, 1 million+	274	66.79%	1.497268	1.37369	2.60303
Metro, 250,000 to 1 million	30	66.67%	1.5	1.3762	1.54119
Metro, 250,000 or less	60	75.00%	1.333333	1.22329	2.31803
Urban pop 20,000+, Metro adj	9	22.22%	4.5	4.44806	4.62356
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500- 19,999, Metro adj	10	70.00%	1.428571	1.31067	1.41208
Urban pop, 2,500- 19,999, nonadj	10	60.00%	1.666667	1.55601	1.71243
Rural, Metro adj	2	50.00%	2.0	1.83882	1.83882
Rural, nonadj	2	100.00%	1.0	0.9336	0.97994
Virginia border state/DC	77	62.34%	1.604167	1.47177	2.78888
Other US State	27	77.78%	1.285714	1.1796	2.23524

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	39	38.46%	2.6	2.23524	2.78888
30 to 34	63	65.08%	1.536585	1.32102	4.62356
35 to 39	74	71.62%	1.396226	0.9336	1.55601
40 to 44	66	72.73%	1.375	1.1821	1.83882
45 to 49	47	65.96%	1.516129	1.30343	1.52067
50 to 54	68	67.65%	1.478261	1.27087	4.44806
55 to 59	59	72.88%	1.372093	1.1796	1.47177
60 and Over	85	68.24%	1.465517	0.97994	1.63323

See the Methods section on the HWDC website for details on HWDC Methods: <a href="https://www.dhp.virginia.gov/hwdc/">www.dhp.virginia.gov/hwdc/</a>

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

ageweight x ruralweight x responserate = final weight.

#### **Overall Response Rate**: 0.668663

