

Virginia Department of Behavioral Health and
Developmental Services

My Life, My Community

Review of Provider Rates for
Crisis Supports and Service Facilitation

Proposed Rate Models

prepared by:

Burns & Associates, Inc.
3030 North 3rd Street, Suite 200
Phoenix, Arizona 85012
(602) 241-8520
www.burnshealthpolicy.com

January 20, 2017

Virginia Department of Behavioral Health and Developmental Services

***My Life, My Community* Review of Provider Rates for Crisis Supports and Service Facilitation
Proposed Rate Models**

Table of Contents

Comparison of Current and Proposed Rates.....	1
Proposed Rate Models	
Consumer-Directed Service Facilitation.....	2
Center-Based Crisis Supports.....	3
Community-Based Crisis Supports/ Crisis Support Services.....	5
Appendices	
Appendix A: Wage Assumptions	
Appendix B: Benefits Assumptions	

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Comparison of Current and Proposed Rates

	Unit	Area	Current	Proposed	Comments
CD - Initial Comprehensive Visit	Visit	ROS	\$179.33	\$210.88	
		NOVA	\$232.78	\$261.12	
CD - Routine Visit	Visit	ROS	\$55.69	\$65.90	
		NOVA	\$72.41	\$81.60	
CD - Reassessment Visit	Visit	ROS	\$89.11	\$105.44	
		NOVA	\$116.96	\$130.56	
CD - Employee Mgt. Training/Consumer Training	Visit	ROS	\$178.21	\$131.80	
		NOVA	\$231.67	\$163.20	
CD - Management Training	Hour	ROS	\$22.28	\$52.72	
		NOVA	\$28.96	\$65.28	
Center-Based Crisis Supports, Professional	Hour	ROS	\$88.41		Proposed rates would replace professional and non-professional hourly rates with a comprehensive daily rate
		NOVA	\$101.67		
Center-Based Crisis Supports, Non-Professional	Hour	ROS	\$24.02		
		NOVA	\$27.61		
Center-Based Crisis Supports, Professional	Day	ROS		\$612.29	
		NOVA		\$759.50	
Community-Based Crisis Supports/ Crisis Support Services, Clinician	Hour	ROS	\$88.41	\$70.62	Current 'Professional' rate would be divided into rates for licensed clinicians and for staff with bachelor's degrees
		NOVA	\$101.67	\$82.40	
Community-Based Crisis Supports/ Crisis Support Services, Bachelor's	Hour	ROS	\$88.41	\$58.35	
		NOVA	\$101.67	\$73.19	
Community-Based Crisis Supports/ Crisis Support Services, Non-Professional	Hour	ROS	\$24.02	\$36.80	
		NOVA	\$27.61	\$43.52	

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Consumer-Directed Facilitation Services

		Rest of State	N. Virginia
Unit of Service		Visit	Visit
Direct Support Staff Wages and Benefits	<i>Wages</i>		
	Direct Staff Hourly Wage	\$18.03	\$23.70
	<i>Employee Benefits</i>		
	Benefit Rate (as a percent of wages)	26.4%	23.0%
	Hourly Staff Cost Before Productivity Adj. (wages + benefits)	\$22.79	\$29.15
	<i>Productivity Assumptions</i>		
	Total Hours	40.00	40.00
	- Travel Time (between members)	6.25	6.25
	- Other Supports (coordination, participating in assessments, related documentation, etc.)	3.75	3.75
	- Missed Appointment (time not redirected)	0.50	0.50
	- Employer and One-on-One Supervision Time	0.50	0.50
	- Training	0.75	0.75
	- Paid Time Off	4.62	4.62
"Billable" Hours	23.63	23.63	
Productivity Adjustment	1.69	1.69	
Staff Cost After Productivity Adjustment	\$38.58	\$49.34	
Mileage	- Number of Miles Traveled per Week	200	200
	- Amount per Mile	\$0.535	\$0.535
	Weekly Mileage Cost	\$107.00	\$107.00
	Mileage Cost per Billable Hour	\$4.53	\$4.53
Admin. and Prog. Support	Cost per Billable Hour Before Admin. and Support	\$43.11	\$53.87
	- Program Support Funding per Day	\$18.00	\$20.00
	Program Support Cost per Billable Hour	\$3.81	\$4.23
	- Administration Percent	11.0%	11.0%
Administrative Cost per Billable Hour	\$5.80	\$7.18	
Total Hourly Cost (used for S5116 - Management Training)		\$52.72	\$65.28
Service Rates	<i>H2000 - Initial Comprehensive Visit</i>		
	- Hours to Conduct Visit	4.00	4.00
	Rate for an Initial Visit	\$210.88	\$261.12
	<i>99509 - Routine Visit</i>		
	- Hours to Conduct Visit	1.25	1.25
	Rate for a Routine Visit	\$65.90	\$81.60
	<i>T1028 - Reassessment Visit</i>		
- Hours to Conduct Visit	2.00	2.00	
Rate for a Reassessment Visit	\$105.44	\$130.56	
<i>S5109 - Employee Management Training/ Consumer Training</i>			
- Hours to Conduct Training	2.50	2.50	
Rate for a Reassessment Visit	\$131.80	\$163.20	

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Center-Based Crisis Supports, Rest of State

	Unit of Service	Day			
Size	Assumed Home Size (Beds)	6			
Direct Support Staff Wages and Benefits	<i>Wages</i>		<i>Bachelor's</i>	<i>Clinician</i>	<i>Non-Prof.</i>
	Hourly Wage		\$20.57	\$24.20	\$12.60
	<i>Employee Benefits</i>				
	Benefit Rate (as a percent of wages)		24.9%	22.5%	30.8%
	Hourly Staff Cost Before Productivity Adj. (wages + benefits)		\$25.69	\$29.64	\$16.48
	<i>Productivity Assumptions</i>				
	Total Hours		40.00	40.00	40.00
	- Employer and One-on-One Supervision Time		0.25	0.25	0.25
	- Training		0.75	0.75	0.75
	- Paid Time Off		4.62	4.62	3.92
	"Billable" Hours		34.38	34.38	35.08
	Productivity Adjustment		1.16	1.16	1.14
	Staff Cost After Productivity Adjustment		\$29.89	\$34.49	\$18.79
	<i>Direct Support Staffing</i>				
	- Staff per First Shift		3	1	0
	Annual Hours for First Shift (8 hours per shift, 365 days)		8,760	2,920	0
	- Staff per Second Shift		3	1	0
	Annual Hours for Second Shift (8 hours per shift, 365 days)		8,760	2,920	0
	- Staff per Third Shift		0	0	3
	Annual Hours for Third Shift (8 hours per shift, 365 days)		0	0	8,760
Annual Direct Support Staff Cost per Home		\$889,694.80	\$523,672.80	\$201,421.60	\$164,600.40
Annual Direct Support Staff Cost per Bed		\$148,282.47	\$87,278.80	\$33,570.27	\$27,433.40
Medical Supports	<i>Registered Nurse</i>				
	- Annual Hours per Home (40 hours/ week)	2,080			
	Annual Hours per Bed	347			
	- Hourly Wage	\$27.78			
	- Benefit Rate (as a percent of wages)	21.2%			
	Annual Cost of Wages and Benefits per Bed	\$11,672.14			
	<i>On-Call Psychiatric Support</i>				
	- Annual Hours per Home (10 hours/ month)	120			
	Annual Hours per Bed	20			
	- Hourly Wage	\$89.00			
- Benefit Rate (as a percent of wages)	13.9%				
Annual Cost of Wages and Benefits per Bed	\$2,027.42				
Annual Medical Support Cost per Bed	\$13,699.56				
Mileage	Amount per Mile	\$0.535			
	Allocated Annual Miles per Vehicle per Bed (50 miles/ week)	2,600.0			
	Annual Mileage Cost per Bed	\$1,391.00			
Admin. and Prog. Support	Annual Cost Before Other Operating and Overhead Costs	\$163,373.03			
	- Program Support Funding per Bed per Day	\$18.00			
	Annual Program Support Cost per Bed	\$6,570.00			
	- Operating and Overhead Rate	11.0%			
Annual Administrative Cost per Bed	\$21,004.19				
Total Annual Cost per Bed	Total Annual Cost per Bed	\$184,377.22			
	- Average Occupancy (percentage of days bed is occupied)	82.5%			
	Rate per Client per Day	\$612.29			

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Center-Based Crisis Supports, Northern Virginia

	Unit of Service	Day			
Size	Assumed Home Size (Beds)	6			
Direct Support Staff Wages and Benefits	<i>Wages</i>		<i>Bachelor's</i>	<i>Clinician</i>	<i>Non-Prof.</i>
	Hourly Wage		\$27.07	\$29.00	\$15.76
	<i>Employee Benefits</i>				
	Benefit Rate (as a percent of wages)		21.2%	20.5%	26.8%
	Hourly Staff Cost Before Productivity Adj. (wages + benefits)		\$32.81	\$34.95	\$19.98
	<i>Productivity Assumptions</i>				
	Total Hours		40.00	40.00	40.00
	- Employer and One-on-One Supervision Time		0.25	0.25	0.25
	- Training		0.75	0.75	0.75
	- Paid Time Off		4.62	4.62	3.92
	"Billable" Hours		34.38	34.38	35.08
	Productivity Adjustment		1.16	1.16	1.14
	Staff Cost After Productivity Adjustment		\$38.17	\$40.66	\$22.78
	<i>Direct Support Staffing</i>				
	- Staff per First Shift		3	1	0
	Annual Hours for First Shift (8 hours per shift, 365 days)		8,760	2,920	0
	- Staff per Second Shift		3	1	0
	Annual Hours for Second Shift (8 hours per shift, 365 days)		8,760	2,920	0
	- Staff per Third Shift		0	0	3
	Annual Hours for Third Shift (8 hours per shift, 365 days)		0	0	8,760
Annual Direct Support Staff Cost per Home	\$1,105,745.60		\$668,738.40	\$237,454.40	\$199,552.80
Annual Direct Support Staff Cost per Bed	\$184,290.93		\$111,456.40	\$39,575.73	\$33,258.80
Medical Supports	<i>Registered Nurse</i>				
	- Annual Hours per Home (40 hours/ week)	2,080			
	Annual Hours per Bed	347			
	- Hourly Wage	\$36.57			
	- Benefit Rate (as a percent of wages)	18.6%			
	Annual Cost of Wages and Benefits per Bed	\$15,035.78			
	<i>On-Call Psychiatric Support</i>				
	- Annual Hours per Home (10 hours/ month)	120			
	Annual Hours per Bed	20			
	- Hourly Wage	\$89.00			
- Benefit Rate (as a percent of wages)	13.9%				
Annual Cost of Wages and Benefits per Bed	\$2,027.42				
Annual Medical Support Cost per Bed	\$17,063.20				
Mileage	Amount per Mile	\$0.535			
	Allocated Annual Miles per Vehicle per Bed (50 miles/ week)	2,600.0			
	Annual Mileage Cost per Bed	\$1,391.00			
Admin. and Prog. Support	Annual Cost Before Other Operating and Overhead Costs	\$202,745.13			
	- Program Support Funding per Bed per Day	\$20.00			
	Annual Program Support Cost per Bed	\$7,300.00			
	- Operating and Overhead Rate	11.0%			
Annual Administrative Cost per Bed	\$25,960.63				
Total Annual Cost per Bed	Total Annual Cost per Bed	\$228,705.76			
	- Average Occupancy (percentage of days bed is occupied)	82.5%			
	Rate per Client per Day	\$759.50			

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Community-Based Crisis Supports/ Crisis Support Services, Rest of State

		Clinician	Bachelor's	Non-Prof.
Unit of Service		Hour	Hour	Hour
Direct Support Staff Wages and Benefits	<i>Wages</i>			
	MHRT/CSP Hourly Wage	\$24.20	\$20.57	\$12.60
	<i>Employee Benefits</i>			
	Benefit Rate (as a percent of wages)	22.5%	24.9%	34.3%
	Hourly Staff Cost Before Productivity Adj. (wages + benefits)	\$29.64	\$25.69	\$16.92
	<i>Productivity Assumptions</i>			
	Total Hours	40.00	40.00	40.00
	- Travel Time (between members)	5.00	5.00	5.00
	- Other Supports (coordination, collateral contacts, participating in assessments, related documentation, etc.)	3.75	2.50	1.25
	- Other Activities/ Downtime	5.00	5.00	5.00
	- Employer and One-on-One Supervision Time	0.50	0.50	0.50
	- Training	0.75	0.75	0.75
	- Paid Time Off	4.62	4.62	3.92
	"Billable" Hours	20.38	21.63	23.58
Productivity Adjustment	1.96	1.85	1.70	
Staff Cost After Productivity Adjustment	\$58.17	\$47.51	\$28.70	
Mileage	- Number of Miles Traveled per Week	160	160	160
	- Amount per Mile	\$0.535	\$0.535	\$0.535
	Weekly Mileage Cost	\$85.60	\$85.60	\$85.60
	Mileage Cost per Billable Hour	\$4.20	\$3.96	\$3.63
Admin. and Prog. Support	Cost per Billable Hour Before Admin. and Support	\$62.37	\$51.47	\$32.33
	- Program Support Funding per Day	\$18.00	\$18.00	\$18.00
	Program Support Cost per Billable Hour	\$4.42	\$4.16	\$3.82
	- Administration Percent	11.0%	11.0%	11.0%
	Administrative Cost per Billable Hour	\$8.25	\$6.88	\$4.47
Total Hourly Rate		\$70.62	\$58.35	\$36.80

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Community-Based Crisis Supports/ Crisis Support Services, Northern Virginia

		Clinician	Bachelor's	Non-Prof.
Unit of Service		Hour	Hour	Hour
Direct Support Staff Wages and Benefits	<i>Wages</i>			
	MHRT/CSP Hourly Wage	\$29.00	\$27.07	\$15.76
	<i>Employee Benefits</i>			
	Benefit Rate (as a percent of wages)	20.5%	21.2%	29.6%
	Hourly Staff Cost Before Productivity Adj. (wages + benefits)	\$34.95	\$32.81	\$20.42
	<i>Productivity Assumptions</i>			
	Total Hours	40.00	40.00	40.00
	- Travel Time (between members)	5.00	5.00	5.00
	- Other Supports (coordination, collateral contacts, participating in assessments, related documentation, etc.)	3.75	2.50	1.25
	- Other Activities/ Downtime	5.00	5.00	5.00
	- Employer and One-on-One Supervision Time	0.50	0.50	0.50
	- Training	0.75	0.75	0.75
	- Paid Time Off	4.62	4.62	3.92
	"Billable" Hours	20.38	21.63	23.58
Productivity Adjustment	1.96	1.85	1.70	
Staff Cost After Productivity Adjustment	\$68.60	\$60.67	\$34.64	
Mileage	- Number of Miles Traveled per Week	160	160	160
	- Amount per Mile	\$0.535	\$0.535	\$0.535
	Weekly Mileage Cost	\$85.60	\$85.60	\$85.60
	Mileage Cost per Billable Hour	\$4.20	\$3.96	\$3.63
Admin. and Prog. Support	Cost per Billable Hour Before Admin. and Support	\$72.80	\$64.63	\$38.27
	- Program Support Funding per Day	\$20.00	\$20.00	\$20.00
	Program Support Cost per Billable Hour	\$4.91	\$4.62	\$4.24
	- Administration Percent	11.0%	11.0%	11.0%
	Administrative Cost per Billable Hour	\$9.60	\$8.56	\$5.25
Total Hourly Rate		\$82.40	\$73.19	\$43.52

Virginia Department of Behavioral Health and
Developmental Services

My Life, My Community

Review of Provider Rates for Service Facilitation

Proposed Rate Models - Appendices

prepared by:

Burns & Associates, Inc.
3030 North 3rd Street, Suite 200
Phoenix, Arizona 85012
(602) 241-8520
www.burnshealthpolicy.com

January 20, 2017

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Appendix A - Wage Assumptions

Wage Data for Select Job Classifications that Include Duties Related to Waiver Service Job Requirements

BLS Code and Title	Bureau of Labor Statistics Wages ¹									
	Rest of State (see p. A-4 and A-5)					Northern Virginia (Washington-Arlington-Alexandria, DC-VA MD-WV Metropolitan Division)				
	10th %-ile	25th %-ile	50th %-ile	75th %-ile	90th %-ile	10th %-ile	25th %-ile	50th %-ile	75th %-ile	90th %-ile
11-9151 Social and community service managers	\$17.72	\$21.56	\$27.07	\$34.94	\$44.64	\$25.92	\$33.34	\$45.80	\$58.22	\$72.89
19-3031 Clinical/ couns./ school psychologists	\$16.62	\$23.64	\$30.24	\$40.01	\$54.78	\$17.64	\$29.08	\$38.22	\$50.60	\$74.68
21-1012 Educational/ voc./ school counselors	\$15.95	\$19.45	\$24.61	\$31.86	\$41.43	\$19.69	\$24.48	\$30.78	\$40.55	\$50.48
21-1014 Mental health counselors	\$14.05	\$16.64	\$20.38	\$25.10	\$32.04	\$12.77	\$16.99	\$22.79	\$29.19	\$36.62
21-1015 Rehabilitation counselors	\$11.09	\$14.23	\$17.99	\$22.87	\$27.91	\$12.70	\$14.80	\$20.27	\$26.89	\$33.07
21-1021 Child/ family/ school social workers	\$13.05	\$14.81	\$18.22	\$23.52	\$30.75	\$17.40	\$22.19	\$28.16	\$36.00	\$44.51
21-1022 Healthcare social workers	\$16.06	\$19.54	\$24.20	\$29.55	\$34.12	\$17.56	\$23.13	\$29.00	\$34.95	\$42.58
21-1023 Mental hlth/ sub. abuse social work	\$13.75	\$16.56	\$20.57	\$25.91	\$33.12	\$15.96	\$20.42	\$27.07	\$35.09	\$42.92
21-1093 Social and human service assistants	\$7.97	\$9.71	\$11.87	\$15.02	\$18.90	\$11.90	\$14.31	\$18.40	\$22.43	\$26.70
21-1094 Community health workers	\$30.90	\$38.62	\$48.06	\$62.55	\$79.03	\$15.02	\$19.39	\$27.51	\$37.35	\$46.68
25-2051 Special education teachers, preschool	\$54.82	\$67.79	\$83.65	\$120.13	\$0.00	\$11.25	\$28.93	\$38.20	\$52.67	\$64.43
25-2052 Special ed. teachers, elementary school	\$21.68	\$27.17	\$34.33	\$43.00	\$0.00	\$20.29	\$25.11	\$31.81	\$39.88	\$49.04
25-2053 Special education teachers, middle school	\$21.84	\$27.27	\$34.07	\$41.84	\$0.00	\$23.65	\$28.22	\$34.62	\$42.01	\$52.86
25-2054 Special ed. teachers, secondary school	\$20.94	\$26.08	\$34.52	\$45.09	\$0.00	\$23.51	\$27.31	\$34.46	\$44.94	\$56.00
29-1066 Psychiatrists	\$39.40	\$60.12	\$0.00	\$0.00	\$0.00	\$26.86	\$62.30	\$89.00	\$0.00	\$0.00
29-1141 Registered nurses	\$18.94	\$22.53	\$27.78	\$33.25	\$39.69	\$25.70	\$30.39	\$36.57	\$43.82	\$49.19
29-1122 Occupational therapists	\$28.05	\$34.65	\$42.77	\$50.33	\$60.32	\$31.82	\$37.12	\$44.30	\$52.99	\$61.20
29-1123 Physical therapists	\$25.65	\$30.78	\$37.24	\$43.60	\$52.43	\$28.39	\$33.95	\$41.22	\$48.72	\$58.13
29-1127 Speech-language pathologists	\$24.00	\$28.63	\$35.00	\$43.93	\$54.81	\$27.22	\$32.78	\$40.43	\$51.19	\$61.27
29-2053 Psychiatric technicians	\$9.88	\$10.84	\$12.60	\$14.86	\$17.63	\$12.38	\$13.62	\$15.76	\$18.33	\$24.97
29-2061 Lic. practical and lic. vocational nurses	\$14.39	\$15.97	\$18.52	\$21.65	\$24.81	\$18.73	\$20.57	\$23.26	\$26.95	\$29.80
31-1011 Home health aides	\$7.76	\$8.58	\$10.20	\$12.15	\$13.90	\$9.77	\$10.82	\$12.39	\$13.80	\$14.64
31-1013 Psychiatric aides	\$9.21	\$10.30	\$12.13	\$14.08	\$16.39	\$9.80	\$12.49	\$14.00	\$15.96	\$17.79
31-1014 Nursing assistants	\$6.98	\$8.03	\$9.33	\$11.03	\$12.60	\$10.00	\$11.50	\$13.52	\$15.99	\$18.47
31-2011 Occupational therapist assistants	\$17.31	\$24.00	\$28.90	\$34.15	\$37.67	\$17.34	\$25.03	\$28.70	\$34.73	\$40.71
31-2021 Physical therapist assistants	\$10.28	\$17.74	\$24.72	\$30.31	\$34.64	\$10.70	\$15.04	\$25.16	\$31.51	\$36.37
31-9092 Medical assistants	\$9.66	\$11.45	\$13.47	\$16.18	\$19.00	\$11.85	\$13.94	\$16.84	\$20.18	\$23.55
39-9021 Personal and home care aides	\$7.20	\$7.63	\$8.34	\$9.51	\$10.84	\$9.63	\$10.19	\$11.13	\$12.32	\$14.27
39-9032 Recreation workers	\$7.34	\$8.22	\$10.43	\$14.30	\$19.10	\$8.51	\$10.28	\$14.30	\$19.37	\$26.76
39-9041 Residential Advisers	\$9.56	\$10.71	\$12.82	\$15.87	\$19.82	\$9.61	\$10.65	\$12.89	\$17.14	\$21.41

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

**Appendix A: Wage Assumptions
Development of Job Requirements (Using BLS Job Codes) by Service**

Consumer-Directed Service Facilitation	Crisis Supports-Clinician	Crisis Supports-Bachelor's	Crisis Supports-Non- Professional	Crisis Supports- Psychiatrist	Crisis Supports-Registered Nurse
---	---------------------------	----------------------------	--------------------------------------	----------------------------------	-------------------------------------

BLS Code and Title						
11-9151	Social and community service managers					
19-3031	Clinical/ couns./ school psychologists					
21-1012	Educational/ voc./ school counselors					
21-1014	Mental health counselors					
21-1015	Rehabilitation counselors					
21-1021	Child/ family/ school social workers					
21-1022	Healthcare social workers	50%	100%			
21-1023	Mental hlth/ sub. abuse social work			100%		
21-1093	Social and human service assistants	50%				
21-1094	Community health workers					
25-2051	Special education teachers, preschool					
25-2052	Special ed. teachers, elementary school					
25-2053	Special education teachers, middle school					
25-2054	Special ed. teachers, secondary school					
29-1066	Psychiatrists				100%	
29-1141	Registered nurses					100%
29-1122	Occupational therapists					
29-1123	Physical therapists					
29-1127	Speech-language pathologists					
29-2053	Psychiatric technicians			100%		
29-2061	Lic. practical and lic. vocational nurses					
31-1011	Home health aides					
31-1013	Psychiatric aides					
31-1014	Nursing assistants					
31-2011	Occupational therapist assistants					
31-2021	Physical therapist assistants					
31-9092	Medical assistants					
39-9021	Personal and home care aides					
39-9032	Recreation workers					
39-9041	Residential Advisers					
		100%	100%	100%	100%	100%

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

**Appendix A: Wage Assumptions
Comparison of Wages from Provider Survey and Bureau of Labor Statistics
(Using Job Requirement Assumptions)**

Consumer-Directed Service Facilitation	Crisis Supports-Clinician	Crisis Supports-Bachelor's	Crisis Supports-Non-Professional	Crisis Supports-Psychiatrist	Crisis Supports-Registered Nurse
--	---------------------------	----------------------------	----------------------------------	------------------------------	----------------------------------

Rest of State

Bureau of Labor Statistics¹

10th %ile	\$12.02	\$16.06	\$13.75	\$9.88	\$39.40	\$18.94
25th %ile	\$14.63	\$19.54	\$16.56	\$10.84	\$60.12	\$22.53
50th %ile	\$18.03	\$24.20	\$20.57	\$12.60		\$27.78
75th %ile	\$22.29	\$29.55	\$25.91	\$14.86		\$33.25
90th %ile	\$26.51	\$34.12	\$33.12	\$17.63		\$39.69

Northern Virginia

Bureau of Labor Statistics¹

10th %ile	\$14.73	\$17.56	\$15.96	\$12.38	\$26.86	\$25.70
25th %ile	\$18.72	\$23.13	\$20.42	\$13.62	\$62.30	\$30.39
50th %ile	\$23.70	\$29.00	\$27.07	\$15.76	\$89.00	\$36.57
75th %ile	\$28.69	\$34.95	\$35.09	\$18.33		\$43.82
90th %ile	\$34.64	\$42.58	\$42.92	\$24.97		\$49.19

¹All rate models have been set using the median (50th percentile) hourly wage with the exception of psychiatrists in the ROS regions. The median wage was not published for these areas to the NOVA wage is used.

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Appendix A - Wage Assumptions

**Estimate of Proportion of Employment in the Washington
Arlington-Alexandria, DC-VA-MD-WV Metropolitan
Division Attributable to Virginia**

Jurisdictions in Washington-Arlington- Alexandria, DC-VA-MD-WV Metropolitan Division	Population Est. (2013)
Alexandria city, VA	148,892
Arlington County, VA	224,906
Calvert County, MD	90,484
Charles County, MD	152,864
Clarke County, VA	14,348
District of Columbia	658,893
Fairfax County, VA	1,131,000
Fairfax city, VA	23,973
Falls Church city, VA	13,508
Fauquier County, VA	67,207
Fredericksburg city, VA	28,132
Jefferson County, WV	55,073
Loudoun County, VA	349,679
Manassas Park city, VA	16,149
Manassas city, VA	41,705
Prince George's County, MD	890,081
Prince William County, VA	438,580
Spotsylvania County, VA	127,348
Stafford County, VA	136,788
Warren County, VA	38,699
Total	4,648,309
In Virginia	2,800,914
% in Virginia	60%

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Appendix A - Wage Assumptions

Wage Data for Select Job Classifications that Include Duties Related to Waiver Service Job Requirements

BLS Code and Title	Estimation of Rest of State Wages											
	Statewide			Northern Virginia (Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division)				Rest of State Estimates				
	Employment	Mean Wage	Total Calculated Wages	Total Employment	Est. Employ. in Virginia	Mean Wage	Total Calculated Wages	Est. Employ. w/o N. VA	Calc. Wages w/o N. VA	Est. Wage w/o N. VA	% Change	
11-9151 Social and community service managers	2,430	\$38.01	\$192,117,744	2,010	1,211	\$46.95	\$118,276,856	1,219	\$73,840,888	\$29.13	-23%	
19-3031 Clinical/ couns./ school psychologists	2,460	\$37.30	\$190,856,640	1,530	922	\$42.66	\$81,805,104	1,538	\$109,051,536	\$34.09	-9%	
21-1012 Educational/ voc./ school counselors	6,660	\$29.35	\$406,579,680	4,520	2,724	\$33.14	\$187,740,970	3,936	\$218,838,710	\$26.73	-9%	
21-1014 Mental health counselors	8,670	\$22.39	\$403,772,304	4,000	2,410	\$23.80	\$119,317,753	6,260	\$284,454,551	\$21.85	-2%	
21-1015 Rehabilitation counselors	2,800	\$19.84	\$115,548,160	1,600	964	\$21.54	\$43,195,032	1,836	\$72,353,128	\$18.95	-4%	
21-1021 Child/ family/ school social workers	8,770	\$23.32	\$425,394,112	4,980	3,001	\$29.63	\$184,939,259	5,769	\$240,454,853	\$20.04	-14%	
21-1022 Healthcare social workers	2,400	\$26.27	\$131,139,840	1,360	819	\$29.56	\$50,386,183	1,581	\$80,753,657	\$24.56	-6%	
21-1023 Mental hlth/ sub. abuse social work	3,390	\$22.95	\$161,825,040	950	572	\$27.90	\$33,219,717	2,818	\$128,605,323	\$21.94	-4%	
21-1093 Social and human service assistants	6,500	\$15.04	\$203,340,800	4,210	2,537	\$18.76	\$98,988,114	3,963	\$104,352,686	\$12.66	-16%	
21-1094 Community health workers	420	\$22.47	\$19,629,792	940	566	\$29.81	\$35,120,278	-146	-\$15,490,486	\$50.87	126%	
25-2051 Special education teachers, preschool	700	\$32.39	\$47,166,000	250	151	\$39.28	\$12,308,922	549	\$34,857,078	\$30.51	-6%	
25-2052 Special ed. teachers, elementary school	5,550	\$30.75	\$354,922,500	3,640	2,193	\$33.34	\$152,108,202	3,357	\$202,814,298	\$29.05	-6%	
25-2053 Special education teachers, middle school	2,720	\$30.44	\$172,203,200	1,340	807	\$36.08	\$60,598,277	1,913	\$111,604,923	\$28.05	-8%	
25-2054 Special ed. teachers, secondary school	3,730	\$31.52	\$244,576,100	2,200	1,326	\$36.79	\$101,451,665	2,404	\$143,124,435	\$28.62	-9%	
29-1066 Psychiatrists	750	\$93.23	\$145,438,800	520	313	\$88.25	\$57,515,669	437	\$87,923,131	\$96.80	4%	
29-1141 Registered nurses	63,340	\$31.41	\$4,138,179,552	31,350	18,890	\$37.41	\$1,469,918,894	44,450	\$2,668,260,658	\$28.86	-8%	
29-1122 Occupational therapists	2,620	\$41.46	\$225,940,416	1,510	910	\$45.13	\$85,410,330	1,710	\$140,530,086	\$39.51	-5%	
29-1123 Physical therapists	5,400	\$41.18	\$462,533,760	3,020	1,820	\$41.93	\$158,708,404	3,580	\$303,825,356	\$40.80	-1%	
29-1127 Speech-language pathologists	3,110	\$38.76	\$250,730,688	1,630	982	\$42.38	\$86,579,819	2,128	\$164,150,869	\$37.09	-4%	
29-2053 Psychiatric technicians	4,140	\$13.44	\$115,734,528	690	416	\$16.92	\$14,632,468	3,724	\$101,102,060	\$13.05	-3%	
29-2061 Lic. practical and lic. vocational nurses	21,410	\$19.80	\$881,749,440	7,730	4,658	\$23.74	\$230,000,260	16,752	\$651,749,180	\$18.70	-6%	
31-1011 Home health aides	10,370	\$10.77	\$232,304,592	9,940	5,990	\$12.39	\$154,356,815	4,380	\$77,947,777	\$8.55	-21%	
31-1013 Psychiatric aides	1,090	\$13.06	\$29,609,632	370	223	\$13.95	\$6,469,103	867	\$23,140,529	\$12.83	-2%	
31-1014 Nursing assistants	35,790	\$12.07	\$898,529,424	15,090	9,093	\$13.90	\$262,888,845	26,697	\$635,640,579	\$11.45	-5%	
31-2011 Occupational therapist assistants	870	\$29.02	\$52,514,592	230	139	\$29.28	\$8,440,478	731	\$44,074,114	\$28.97	0%	
31-2021 Physical therapist assistants	2,410	\$24.80	\$124,317,440	1,050	633	\$23.96	\$31,531,471	1,777	\$92,785,969	\$25.10	1%	
31-9092 Medical assistants	11,230	\$15.15	\$353,879,760	6,710	4,043	\$17.27	\$145,238,909	7,187	\$208,640,851	\$13.96	-8%	
39-9021 Personal and home care aides	37,290	\$9.28	\$719,786,496	13,710	8,261	\$11.51	\$197,779,328	29,029	\$522,007,168	\$8.65	-7%	
39-9032 Recreation workers	10,890	\$12.98	\$294,012,576	4,660	2,808	\$16.06	\$93,799,295	8,082	\$200,213,281	\$11.91	-8%	
39-9041 Residential Advisers	2,600	\$14.04	\$75,928,320	2,480	1,494	\$14.26	\$44,324,039	1,106	\$31,604,281	\$13.74	-2%	

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

Appendix B: Benefits Assumptions¹

% of Employees with Access			% of Employees Who Receive ('Participation')			Benefit Level for Participating Employees			Effective Benefit Level (Accounts for Participation)		
BLS Data ²	Rate Model		BLS Data ²	Rate Model		BLS Data ²	Rate Model		BLS Data ²	Rate Model	
	Prof. Svcs.	Para-Prof.		Prof. Svcs.	Para-Prof.		Prof. Svcs.	Para-Prof.		Prof. Svcs.	Para-Prof.

Mandatory Benefits

FICA ³											7.65%	7.65%
Federal UI ⁴											0.60%	0.60%
State UI ⁵											1.55%	1.55%
Workers' Comp.											3.11%	3.11%

Paid Time Off⁶

							<i>Days per year</i>			<i>Days per year</i>		
Holidays	80%	100%	85%	80%	100%	85%	7.0	10.0	10.0	5.6	10.0	8.5
Vacation Leave	79%	100%	85%	79%	100%	85%	10.0	20.0	20.0	7.9	20.0	17.0
Sick Leave	61%			61%			6.0			3.7		
Total							23.0	30.0	30.0	17.2	30.0	25.5

Health Insurance⁷

							<i>Employer contribution per month</i>			<i>Employer contribution per month</i>		
	70%	100%	85%	54%	100%	85%	\$349	\$375	\$375	\$189	\$375	\$319

Retirement

							<i>Employer contribution (% of salary)</i>			<i>Employer contribution (% of salary)</i>		
	63%	0%	0%	46%	0%	0%	NR	0.0%	0.0%	NR	0.0%	0.0%

Other Benefits⁸

							<i>Employer contribution per month</i>			<i>Employer contribution per month</i>		
	-	100%	85%	-	100%	85%	-	\$100	\$100	-	\$100	\$85

¹Benefit assumptions are equal to those in other waiver rate models

²BLS' 2013 National Compensation Survey (http://www.bls.gov/ncs/ebs/benefits/2013/ownership_private.htm); data reported is for private employers in

³Combined Social Security tax rate of 6.2% and Medicare tax rate of 1.45%

⁴Applies to first \$7,000 in wages

⁵Applies to first \$8,000 in wages

⁶BLS data for vacation and sick leave is based on national figures for employees with 1-5 years of experience (average for those with 6-10 experience is 15 days of vacation and 6 days of sick leave)

⁷In addition to BLS data, other data sources were reviewed. According to 2013 data from the U.S. DHHS' Medical Expenditure Panel, the average premium for a single person policy across all employers in Virginia was \$450.67 with an employer share of \$347.00 (Tables II.C.1 and II.C.2). Data from U.S. DHHS, Kaiser, and the Urban Institute, the cost of the 'benchmark' silver plan offered through the federal health insurance exchange in Virginia was less than \$300 per month for persons under 40 years old (the cost varies by age and location, but was always less than \$300; for those 50 years of age or older, the benchmark premiums were between \$300 and \$500)

⁸BLS provides information for a variety of other benefits that cannot be combined

**Virginia Department of Behavioral Health and Developmental Services
Proposed Rate Models**

**Appendix B: Benefits Assumptions
Benefit Rates by Wage Level**

Hourly Wage	Annual Salary	Effective Benefit Rate - Model Assumptions ^{1,2}			
		Professional Services		Paraprofessional Services	
		w/ PTO	w/o PTO	w/ PTO	w/o PTO
\$9	\$18,720	53.6%	42.1%	47.3%	37.5%
\$10	\$20,800	50.5%	39.0%	44.6%	34.9%
\$11	\$22,880	47.9%	36.4%	42.4%	32.7%
\$12	\$24,960	45.8%	34.3%	40.6%	30.8%
\$13	\$27,040	44.0%	32.5%	39.1%	29.3%
\$14	\$29,120	42.4%	30.9%	37.7%	28.0%
\$15	\$31,200	41.1%	29.6%	36.6%	26.8%
\$16	\$33,280	39.9%	28.4%	35.6%	25.8%
\$17	\$35,360	38.9%	27.3%	34.7%	24.9%
\$18	\$37,440	37.9%	26.4%	33.9%	24.1%
\$19	\$39,520	37.1%	25.6%	33.2%	23.4%
\$20	\$41,600	36.4%	24.9%	32.6%	22.8%
\$21	\$43,680	35.7%	24.2%	32.0%	22.2%
\$22	\$45,760	35.1%	23.6%	31.5%	21.7%
\$23	\$47,840	34.5%	23.0%	31.0%	21.2%
\$24	\$49,920	34.0%	22.5%	30.6%	20.8%
\$25	\$52,000	33.5%	22.0%	30.2%	20.4%
\$26	\$54,080	33.1%	21.6%	29.8%	20.0%
\$27	\$56,160	32.7%	21.2%	29.5%	19.7%
\$28	\$58,240	32.3%	20.8%	29.1%	19.4%
\$29	\$60,320	32.0%	20.5%	28.8%	19.1%
\$30	\$62,400	31.7%	20.2%	28.6%	18.8%
\$31	\$64,480	31.4%	19.9%	28.3%	18.5%
\$32	\$66,560	31.1%	19.6%	28.1%	18.3%
\$33	\$68,640	30.8%	19.3%	27.8%	18.1%
\$34	\$70,720	30.6%	19.1%	27.6%	17.8%
\$35	\$72,800	30.3%	18.8%	27.4%	17.6%
\$36	\$74,880	30.1%	18.6%	27.2%	17.5%
\$37	\$76,960	29.9%	18.4%	27.1%	17.3%
\$38	\$79,040	29.7%	18.2%	26.9%	17.1%
\$39	\$81,120	29.5%	18.0%	26.7%	16.9%
\$40	\$83,200	29.3%	17.8%	26.6%	16.8%

¹Benefit rates based on the wage assumed in rate models, rounded down to the nearest dollar

²Benefit rate in rate models exclude paid time off, which is incorporated in the models as a productivity adjustment