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## **The Effect of Funding for School Divisions Focused on Mental Health Services**

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## Section I: Introduction to the Study

### **Introduction**

The COVID-19 pandemic created unexpected issues on a global scale. An area with a significant impact was mental health services, specifically after the COVID-19 pandemic. The grief, loss, and stress attributed to the loss of a loved one, financial worries from a parent being in between jobs, and the absence of social and physical activities, may have contributed to the increase in certain mental health challenges among individuals nationwide including Virginia. Mental health is a topic of concern these days for many. One major group of the population that is affected by this is the education system, particularly how they take care of their students. Students can be affected by many factors like substance abuse, unsupportive environments/ relationships, stress, bullying, a lack of proper resources, and even a lack of sleep. More recently, however, students face the difficulty of coping with the aftereffects of the COVID-19 outbreak and the resulting pandemic. This study delves into the effects COVID-19 had on mental health services provided in regions all across Virginia, with an analysis of different funding patterns shown.

### **Statement of the Problem**

The purpose of this report was to raise awareness of the issue of mental health across the counties of Virginia and provide an overview of the extent of mental health services provided by each county and how it relates to the varying degree of behavioral health issues across the Virginia counties.

### **Significance of the Study**

The primary significance of the study was to provide a visual representation of how the pandemic has affected money allocated to mental health in Virginia. Our main audiences are split into groups. The first and primary is our clients at Public Consulting Group, Inc. Then, the second would be Virginian governmental officials, especially those in the Department of Behavioral Health and Developmental Services, so they would take into account the findings of this study to make informed decisions in the planning of future budgets. The last would be the general public.

### **Questions**

We sought to answer many questions about the topic of mental health. These included: How did the budget for mental health change throughout the period of the pandemic? Do geographical demographics affect mental health budgets? What correlations were found within the data and could there be an explanation for them? What do the future budgets for each fiscal year look like?

## Section II: Findings

### Overview

Mental health can have a big impact on a person's performance in daily life. According to MHA (Mental Health America National), over 2.5 million children have depression, and over 60% of those people do not receive any treatment. There are several reasons why some people can't receive treatment, and one of those is the lack of mental health services in certain regions and the lack of experts to aid in this. In turn, the many side effects of poor mental health have become apparent. Mental health disorders for teens usually result in a loss of motivation to perform in school.

### Budget Allocation

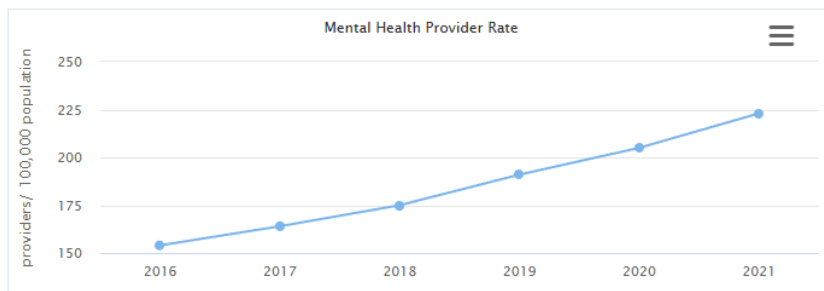
To understand why some people can't get treatment and find the overall underlying reason for the issue of mental health in Virginia, we first evaluated the budget allocated towards mental health services in each county of Virginia. With this data, we were able to evaluate how much each county was spending on their students and derive a Per Pupil Spending value for each county. Figure 1, shown below, shows a small excerpt of the counties in Virginia and how much they allocate towards their mental health services. With these metrics and looking at the map of Virginia, we were able to identify correlations on which regions had less access to mental health services.

Figure 1

County	Spending	Students		County	Spending	Students
Dinwiddie Cour	983,923	4,257		Halifax County	1,943,201	4,625
Brunswick Cour	245,693	1,405		Charlotte Coun	1,412,311	4,491
Nottoway Cour	490,672	1,811		Mecklenburg C	556,586	3,973
Amelia County	490,373	1,663		Campbell Coun	2,780,034	7,873
Prince Edward	364,143	1,889		Lunenburg Cou	220,050	1,575
Patrick County	819,648	2,482		Appomattox Co	237,006	2,361
Henry County	1,645,245	7,010		Buckingham Co	640,356	1,992
Bedford County	2,305,276	9,090		Cumberland Co	294,374	1,283
Pittsylvania Cou	2,157,204	7,919		Powhatan Cour	1,031,495	4,251
Danville City	2,194,852	5,685		Greensville Cou	383,583	2,034
Lynchburg City	3,604,946	7,903		Martinsville Cit	597,303	1,810
Martinsville Cit	597,303	1,810		Petersburg City	1,287,939	4,272

### Supplementary Graphs

Figure 2 - shows the trend in the number of Mental health providers per 100,000 population in Virginia



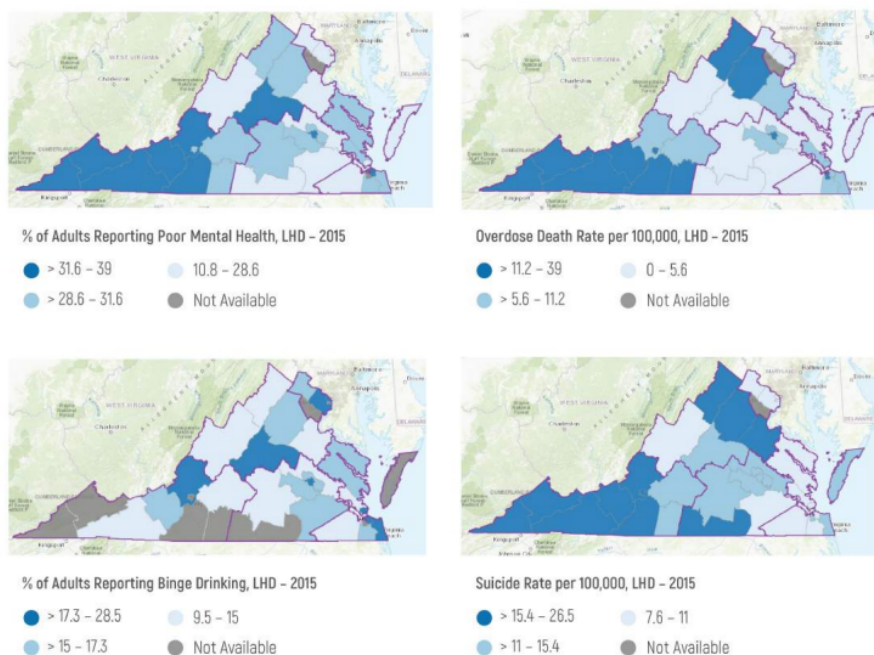
## Virginia Regions

In the state of Virginia, there are 134 counties and equivalents. However, not every county has accurate and up-to-date data that is needed to make accurate inferences. To make our findings easier to understand and also more precise, we decided to split Virginia into eight different regions: Southwest, Southside, Hampton Roads, Eastern, Central, Valley, and Northern. In order to answer the questions we had before we needed to draw conclusions from each region.

### Southwest

The southwest region represents one of the more rural areas in Virginia, and this fact correlates with much of the region's findings. Figure 3 below shows several maps of these select population behavioral outcomes reported by local health districts and provided by the Virginia Department of Health. The Southwestern region has the highest percentage of adults reporting mental health problems which is possibly correlated with the suicide rate and overdose death rate being the highest as well.

Figure 3



Due to a lack of funding and health care services in rural Southwestern Virginia, a lot of adults' and children's needs are left unattended. The 2022 County Health Rankings report showed the cities of Bristol, Norton, Buchanan, Dickenson, Lee, Russel, Smith, Tazewell, and Wise are ranked among the bottom 25% of Virginia's 134 counties. The Southwestern allocated budget for mental health is relatively low when compared to the rest of Virginia as the ratio of mental health professionals to the population of Southwest VA is 1:1,555 whereas the state average is 1:550.

### Southside

Around 91 thousand students are enrolled in public schools across the various counties in the Southside region. With such a large number of students, the Southside region allocates around 27 million dollars toward mental health services. Although each county has its own budget allocated toward mental health

services based on the student population, the Southside region is responsible for 7.2% of the total budget allocated to mental health services in the state. Figure 4 shows a comparison between average pps(per-pupil spending) in the region compared to the state. The average per-pupil spending in Virginia is around \$293 while the national average is around \$129.

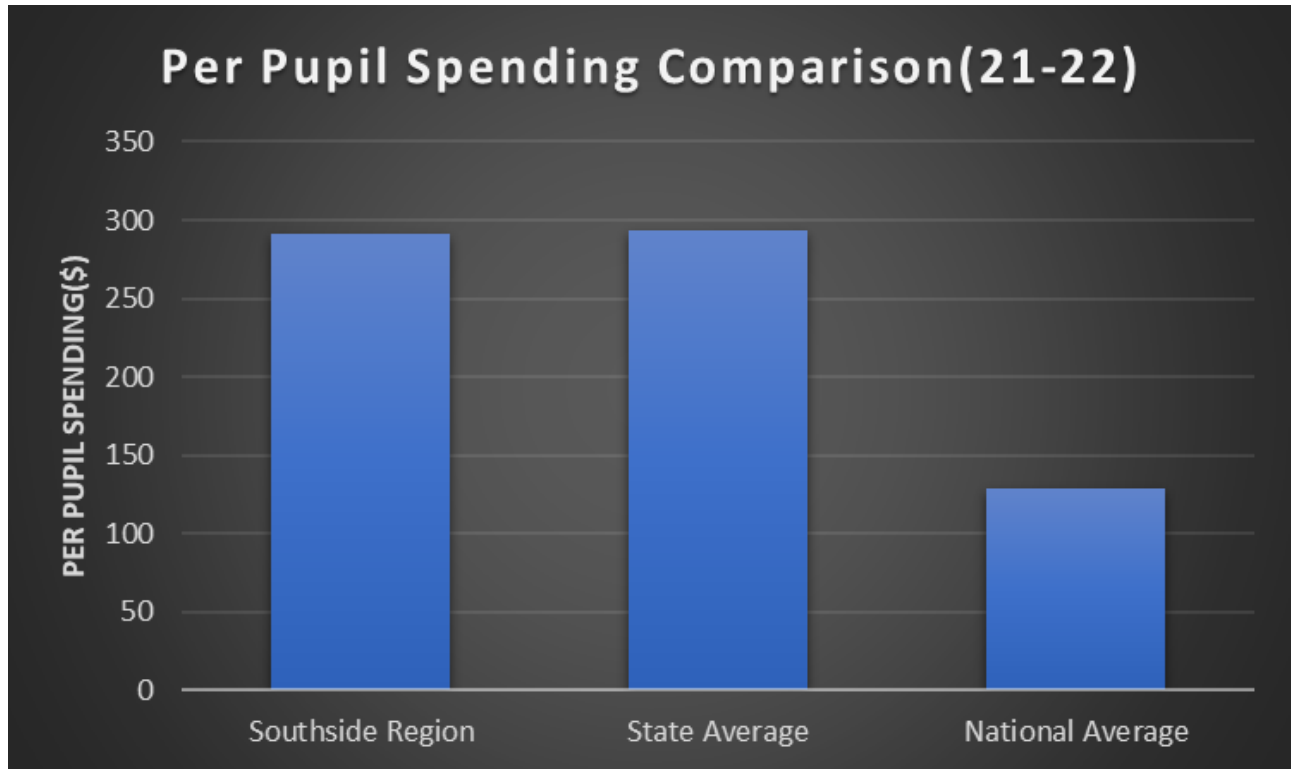


Figure 4

### ***Hampton Roads***

Around 200,000 students are enrolled in public schools across the various counties in the Hampton Roads Region. With such a large number of students, Hampton Roads allocates about 61 million dollars toward mental health services. The Hampton Roads region is responsible for 16.6% of the total budget allocated to mental health services in the state. As the pandemic peaked, the budget allocation toward mental health services generally increased for all the counties in the Hampton Roads region. As seen in Figure 5, the general average per pupil spending in the Hampton Roads Region comes out to around \$345. In comparison, the average per-pupil spending in Virginia is around \$293 while the national average is around \$129.

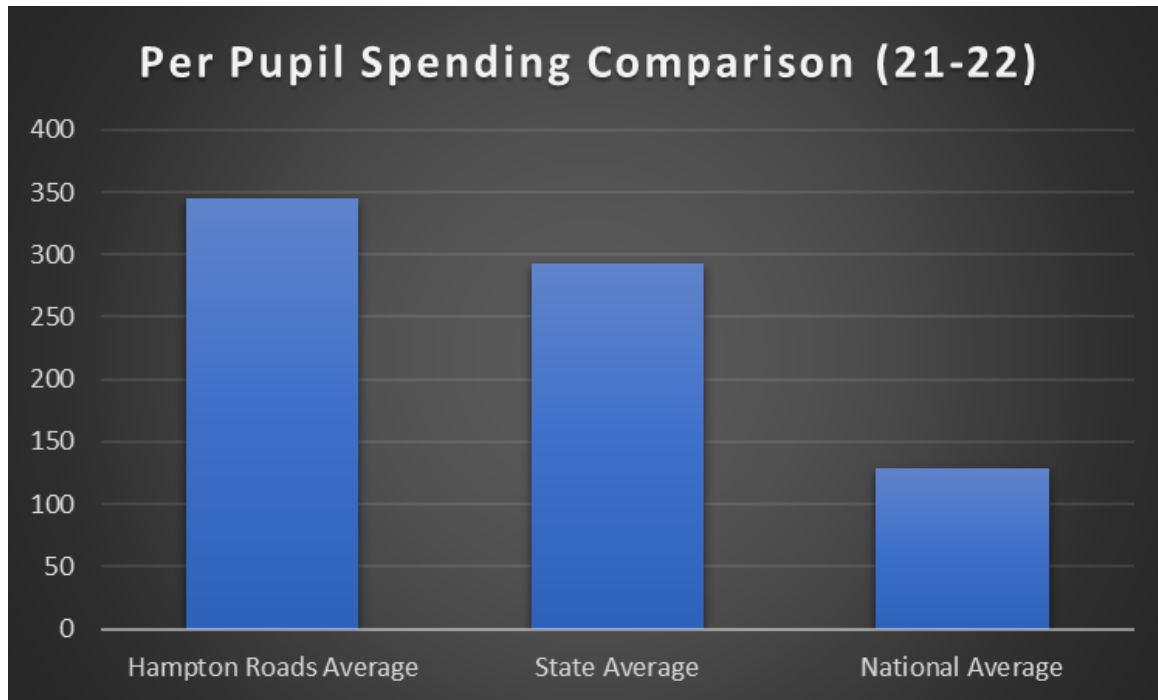


Figure 5

#### Valley Region

In Roanoke, as in other parts of the state, access to mental health services is a significant concern. Roanoke residents who need mental health services face long wait times, and many do not receive the care they need due to a lack of resources. In addition, individuals with mental health conditions are disproportionately affected by poverty and other social determinants of health, which can further exacerbate their mental health issues.

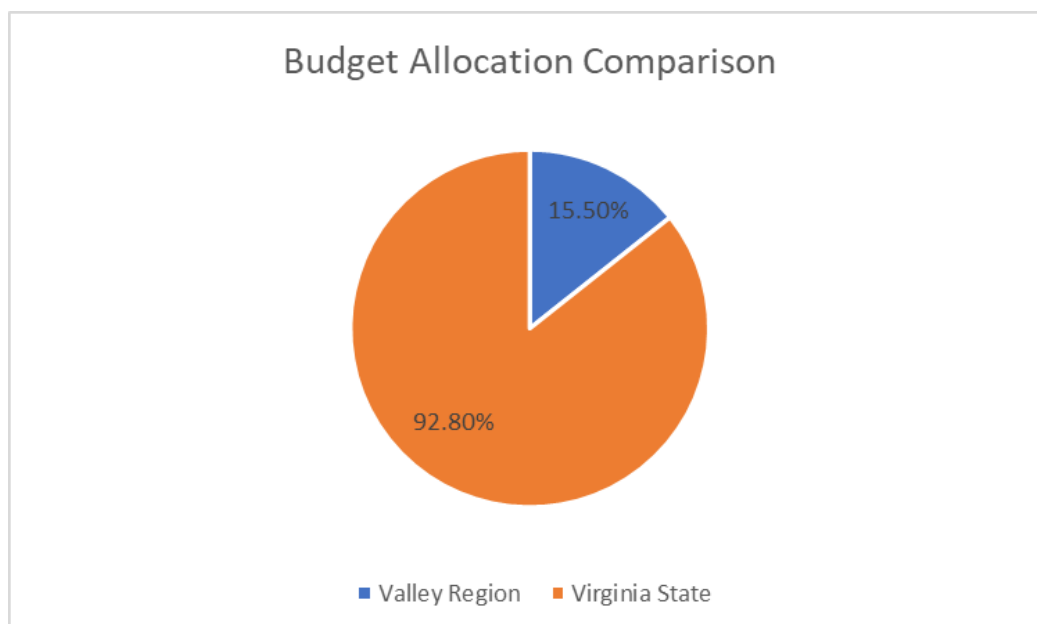


Figure 6

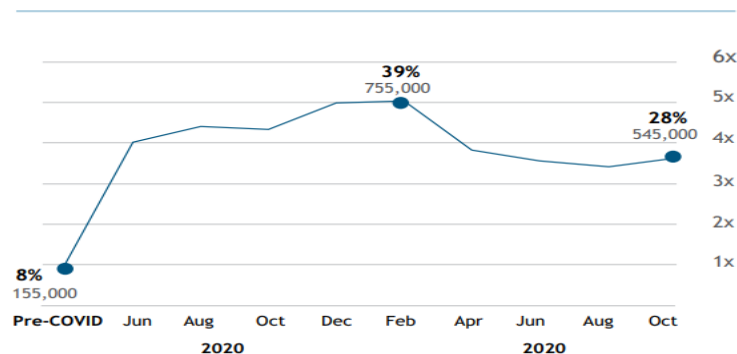
In the Shenandoah Valley, mental health is also a significant concern. The report highlights a shortage of mental health providers in the region, particularly in rural areas. Both regions also face challenges related to substance abuse and addiction. Overall, Roanoke and the Shenandoah Valley face significant challenges related to mental health, including access to services, workforce shortages, and social determinants of health.

### ***Northern Region***

The Northern Region is made up of some of the biggest counties in Virginia including Fairfax, Arlington, Loudoun, and Prince William. As seen in Figure 7, after the start of the pandemic, the percentage of adults in Northern Virginia that experienced symptoms of clinical depression and anxiety skyrocketed from 8% to a peak of 39% in the heat of COVID. However, correspondingly, the amount of Mental Health Providers in Northern Virginia also rose throughout the pandemic. In 2021, its number reached 223 providers per 100,000 population, which was a 45% increase from 2017.

Figure 2.

Percent of adults in Northern Virginia with active symptoms of clinical anxiety/depression



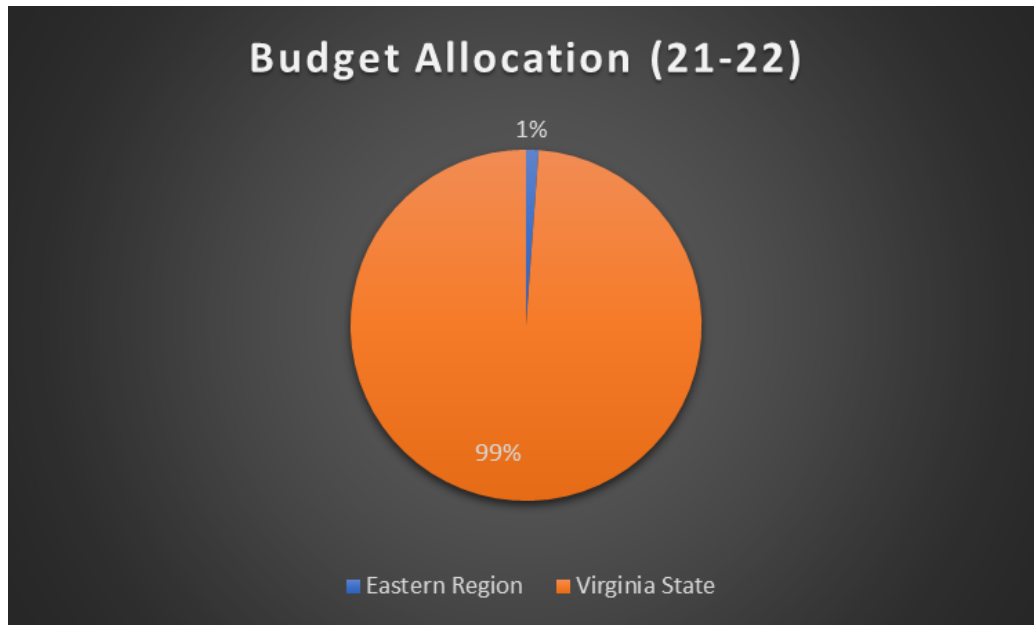
Source: Insight Region™ analysis of data from Pulse Survey for Northern Virginia and data from the National Health Interview Survey (2019) for Virginia, adjusted down based on historic prevalence of “frequent mental distress” in Northern Virginia compared to the state.

Figure 7

These findings suggest that mental health has become a more prominent issue in Northern Virginia after the effect of the pandemic, but also that there was an increase in mental health services to meet this growing issue.

### ***Eastern Region***

The Eastern Region of Virginia includes counties that have a small set of students, making up about 1.15% of students enrolled in Virginia public schools during the 2021- 2022 school year, with the only exception being Accomack County having a much larger set of students. However, the Per-Pupil Spending (PPS) is varied and spread out. The budget allocations for the Eastern region, as seen in the figure below, represent about 1% of the state’s spending, which is proportional to the 1.15% student population in this region.



*Figure 8 - Eastern region budget allocation for the 2021 - 2022 school year*

The per-pupil spending across the Eastern region comes to an average of about \$299. The average per-pupil expenditure in Virginia comes to about \$293, while the national average is about \$129. The Eastern region's average is just above the state average PPS.

### ***Central Region***

The Central Region makes up for a decent proportion of the total population of Virginia. The figure below shows several statistics for each county that makes up the Central Region. The second column shows the mental health service budget before covid, and the third column shows the mental health service budget after covid. Through this data, it can be inferred that the introduction of the pandemic saw a general increase in the budget allocated to mental health services throughout almost every single county in the central region of Virginia. The per pupil spending also seemed to display average numbers compared to other regions within Virginia



DivisionNumber	Mental HS Budget(Pre-Covid-20-21	Mental HS Budget(Post_Covid-21-2	Other Services	Other Services	Total Count(All
2 Albemarle Cou	2,605,607	2,821,594			13,970
5 Amherst Count	1,117,124	1,116,110			3,987
6 Appomattox Co	199,492	237,006			2,361
10 Bedford Count	2,192,259	2,305,276			9,090
16 Campbell Coun	2,454,977	2,780,034			7,873
24 Culpeper Coun	1,549,834	1,757,051			8,353
25 Fluvanna Coun	575,633	668,446			3,439
39 Greene County	513,523	543,107			2,838
54 Louisa County	1,677,133	1,870,407			5,173
115 Lynchburg City		3,604,946			7,903
56 Madison Count	285,495	295,573			1,683
62 Nelson County	465,685	496,668			1,480
68 Orange County	710,073	743,928			5,042
78 Rappahannock County		646,114			736

Figure 9

### **Richmond Region**

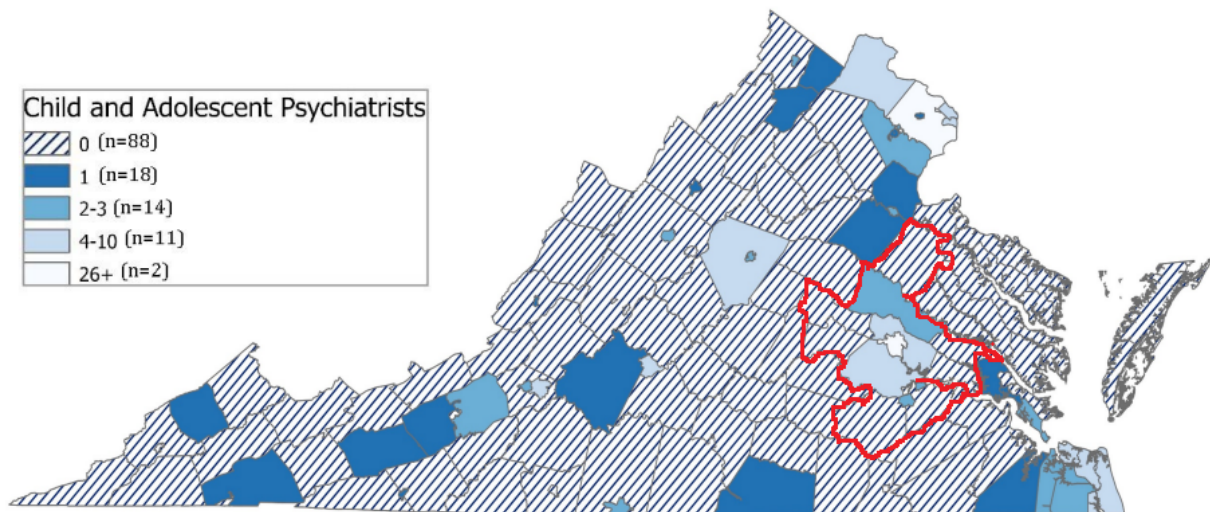
191,221 students enrolled in Greater Richmond Region, about 15% of VA students in 2021-2022.

Richmond spends \$142 per pupil on mental health, 10% more than the US average and half of Virginia's spending. Services include drug counseling, suicide prevention, and behavior accommodations. Students are taught lessons on health, drugs, alcohol, and support programs to increase awareness. Please reduce the length of this text.

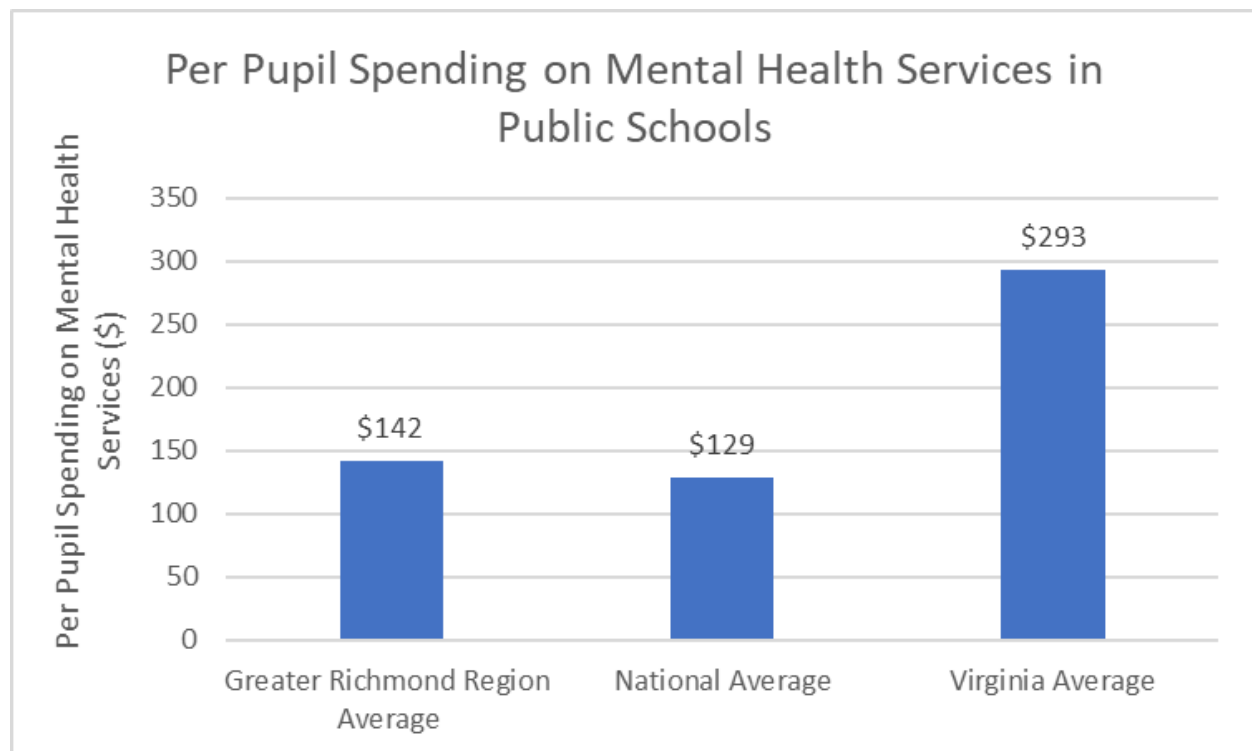
Data Table of Every County/City in the Greater Richmond Area

County/City	Mental Health Spending (Dollars per county/city for the 21-22 school year)	Per Pupil Spending for Mental Health Services (Dollars)
Amelia County	490,373	294
Charles City County	210,826	375
Chesterfield County	13,114,734	205
Dinwiddie County	983,923	231
Goochland County	811,767	307
Hanover County	4,048,337	237
Henrico County	9,407,031	186
King William County	487,669	234
New Kent County	1,389,171	404
Powhatan County	1,031,495	242
Prince George County	1,897,527	310
Sussex County	625,032	626
Richmond City	13,702,661	631
Petersburg City	1,287,939	301
Hopewell City	1,560,689	391
Colonial Heights	909,111	319

## Distribution of Child and Adolescent Psychiatrists



In a 2022 study, the Greater Richmond Region experienced an overwhelming majority of having 0 child and Adolescent Psychiatrists in the counties and cities constituting it. As seen in the image above, only one small region has above 26 child psychiatrists, so mental health services are not very accessible for the entire Greater Richmond Region. With such a vast deficit in accessibility, the state of Virginia, and the Richmond Region, lack the necessary resources to foster the best development in children.



Compared to the Virginia Average, the Greater Richmond Region lacks heavily in funding, and it is also reflected in the Adolescent Psychiatric mapping. Overall, the lack of funding distribution for mental health will go on to impede, and disrupt many students, as they overcome the global hurdle of Covid-19, and faze back into a more challenging social setting.

### ***Solutions***

To improve the availability and accessibility of mental health services in Virginia, several solutions can be implemented. The state can increase funding for mental health programs and services, which can include establishing grant programs to support mental health initiatives in underserved areas. Per-pupil spending on mental health services in schools can also be increased to provide more resources for school-based mental health programs, such as hiring more school counselors, social workers, and psychologists. Virginia can improve coordination and integration of mental health services across different agencies and organizations, including expanding partnerships with schools, faith-based groups, and community-based organizations. The use of telehealth and other technology-based mental health services can be increased to reach individuals who may not have access to traditional mental health services. Addressing workforce shortages in the mental health field can also be achieved by providing incentives such as scholarships and loan forgiveness programs to encourage more individuals to pursue careers in mental health. By implementing these solutions, Virginia can create a more equitable and accessible mental health system, which can improve the mental health outcomes of its residents.

### Section III : Study Conclusions

#### Conclusions

Mental health is a crucial aspect of overall health and well-being, and it is essential to ensure that everyone in Virginia has access to the resources and services they need to maintain good mental health. While Virginia has made some progress in improving its mental health system, there are still significant gaps in access to services, particularly in rural and underserved areas. By increasing funding for mental health programs and services, improving coordination and integration of services, and addressing workforce shortages, Virginia can create a more equitable and accessible mental health system that provides the support and care that its residents need. The COVID-19 pandemic has also highlighted the importance of mental health, and the state must continue to prioritize mental health initiatives in its recovery efforts. By prioritizing mental health and working to address the challenges faced by individuals with mental health conditions, Virginia can create a healthier, more resilient, and more inclusive society.