

Preliminary Report from the Advisory Committee on Teacher Shortages

October 2017

Table of Contents

I.	Executive Summary	P.2
II.	Background on Virginia’s Teacher Shortage	P. 5
	A. Virginia’s Teacher Shortage Landscape	
	B. Conditions Contributing to the Shortage	
	i. Shrinking Teacher Pipeline	
	ii. Teacher Turnover	
	C. The Advisory Committee on Teacher Shortages	
III.	Recommendations to Address Declining Teacher Pipeline Through Recruitment Initiatives	P.13
	A. Modernized Pathways into the Profession	
	B. Building Awareness of Pathways into the Profession	
	C. Enhancing Total Compensation While Reducing Cost of Entry Into Teaching	
IV.	Recommendations to Address Teacher Turnover Through Retention Initiatives	P.17
	A. Enhancing Teacher Preparedness	
	B. Fostering Positive School Climate	
	C. Targeted Financial Incentives	
V.	Areas for Further Study by the Committee	P.22

Appendices:

A.	Letter from Governor McAuliffe Requesting Report	P.23
B.	Roster of the Advisory Committee on Teacher Shortages	P.25
C.	Roster of the Reciprocity Workgroup	P.26

I. Executive Summary

What's the issue?

Virginia is facing a growing shortage of qualified teachers in many localities. Teacher shortages have long existed in the state, but the issue has become increasingly severe in terms of the number of unfilled positions, the breadth of subject areas that are hard to staff, and the diversity of teachers relative to the student body.

The number of unfilled teacher positions across the state has increased by 40 percent over the past 10 years (from 760 to 1,080), and has reached crisis proportions in certain divisions—especially those with high levels of poverty. For example, two months before the 2017 school year began, the city of Petersburg had 142 unfilled teaching positions out of a total of 400—over one-third of their teachers.

Shortages are also occurring in more subject areas than mathematics, special education, and career and technical education, which have historically been hard to staff. Today, shortages have also become severe in subjects such as foreign language, English as a second language, and English. Further, the number of minority teachers has not kept pace with the increasingly diverse student body. Currently, 79 percent of Virginia teachers are white, but non-white students make up 49 percent of Virginia's student population. This disparity is larger than the disparities in the Commonwealth's regional counterparts.

Why should we care about this issue?

Reversing the trend in teacher shortages is essential for the Commonwealth's future economic growth and prosperity. The education and training of a state's workforce is the top factor that companies consider when choosing where to locate or expand. Without quality teachers in every classroom, an increasing number of Virginians will be unprepared to succeed in the workforce or to pursue the postsecondary educational opportunities that are required to fill most jobs of tomorrow. Without a work-ready labor pool, the Commonwealth's ability to retain and attract businesses will be severely compromised.

Why is the issue occurring?

Teacher shortages in Virginia have worsened due to steeply declining student enrollment in teacher preparation programs combined with high attrition rates among existing teachers.

Several factors account for the declining pipeline of teachers who want to enter the profession:

- Costly and outdated pathways into the profession, such as requiring a Master's degree.
- Increasingly negative perception of the profession, whereby teachers do not feel as valued and respected as in past generations.
- Undesirable working conditions once in the classroom, partly due to challenges associated with more poverty, students with disabilities, and English language learners.

- Limited earnings potential, particularly in high poverty divisions.

Attrition also significantly contributes to teacher shortages. Multiple factors influence teachers to leave the profession for reasons other than retirement:

- Concerns about over testing and accountability, which creates stress and can stifle creativity.
- Unhappiness with the school administration, reinforcing the importance of school leadership and climate that have been established in the research literature.
- Dissatisfaction with their career, which is often linked to a lack of adequate preparation for the challenges encountered in the classroom.

What can we do about this issue?

An array of initiatives is needed to address the multifaceted root causes of teacher shortages. Although compensation is often thought of as the leading challenge in recruiting and retaining teachers, research and extensive discussions with education professionals indicate that it is only one of many supports needed to make the profession more appealing.

Priority recommendations

1. Virginia should make stackable, economic pathways into the profession available to all students. This pathway should include career exposure at the middle school level, teachers for tomorrow programs in high school, to include dual enrollment coursework, and articulation agreements between community colleges and 4 year institutions. To achieve this, the following is required:
 - a. Drawing on successful existing models, the Virginia Department of Education (VDOE) should develop and share a model “Grow Your Own” program based on best practices, which local school divisions can implement. These models expose high school students to careers in teaching, provide for dual enrollment coursework, work based learning opportunities, and in some cases, financial incentives for students to return to the division to work after obtaining a degree. VDOE should provide technical and financial supports for the design and implementation of these programs at the local level. *(Recommended by TDVEP, VDOE 2016 Report)*
 - b. Articulation agreements between community colleges and four-year institutions should be strengthened to ensure maximum credits transfer for students.
2. The Virginia Board of Education (VBOE) should revise the Approved Program Regulations to allow education-based majors in teaching/education through the development of a four-year undergraduate major in teaching. *(Recommended by TDVEP, VDOE 2016 Report)*

3. The Department of Education should partner with school divisions to raise awareness about the availability of federal loan forgiveness programs and income-driven repayment (IDR) programs, which are estimated to be utilized by a fraction of eligible individuals (TEACH grant 19%, Stafford Teacher Loan Forgiveness program 0.8%, IDR 37%).
4. Virginia should establish a Commonwealth's Teaching Fellows programs similar to the one that existed in North Carolina. The program would be highly competitive and recruit students interested in teaching in high-need locations and subject areas. . In exchange for a scholarship to complete a degree in Education, fellows would commit to four years teaching in a high-needs school. Students who do not complete their commitment would have to pay back the portion of their scholarship for which they did not fulfill their commitment.
5. The state could provide additional funding to support differential compensation or retention bonuses. Offering \$5,000 to teacher to 2,000 teachers statewide would require funding of \$10 million. *(Recommended in VDOE 2016 Report)*

Recommendations to be further examined by Committee next year

Certain areas require additional review and consideration before meaningful and effective recommendations can be formulated. In particular, the Committee endorsed recommendations previously made related to teacher mentorship programs (24) and principal training programs (25) based on overwhelming research and evidence of the impact of these programs on students outcomes and teacher retention, and with a partial understanding of Virginia's strengths and weaknesses in these departments. While important to call these strategies out as those previously recommended and supported by research, the Committee believes additional time is needed to do a statewide needs assessment and make recommendations targeting and maximizing any new state investments.

II. Background on Virginia’s Teacher Shortage

Across the country, school districts are struggling to meet the demand for qualified teachers. Likewise, Virginia is facing a growing shortage of qualified teachers in many localities, a trend that must be reversed in order to lay the foundation for the Commonwealth’s future economic growth and prosperity. Teachers are the single most important factor in the quality of a child’s education, and they determine whether students are adequately prepared to pursue a postsecondary education. Postsecondary credentials and degrees will be essential for obtaining jobs in the New Virginia Economy. Since the end of the Great Recession, almost all new jobs (95%) required a postsecondary education. If tomorrow’s workforce lacks the preparation and credentials required to secure open jobs, their financial stability as well as the Commonwealth’s ability to retain and attract businesses will be severely compromised.

A. Virginia’s Teacher Shortage Landscape

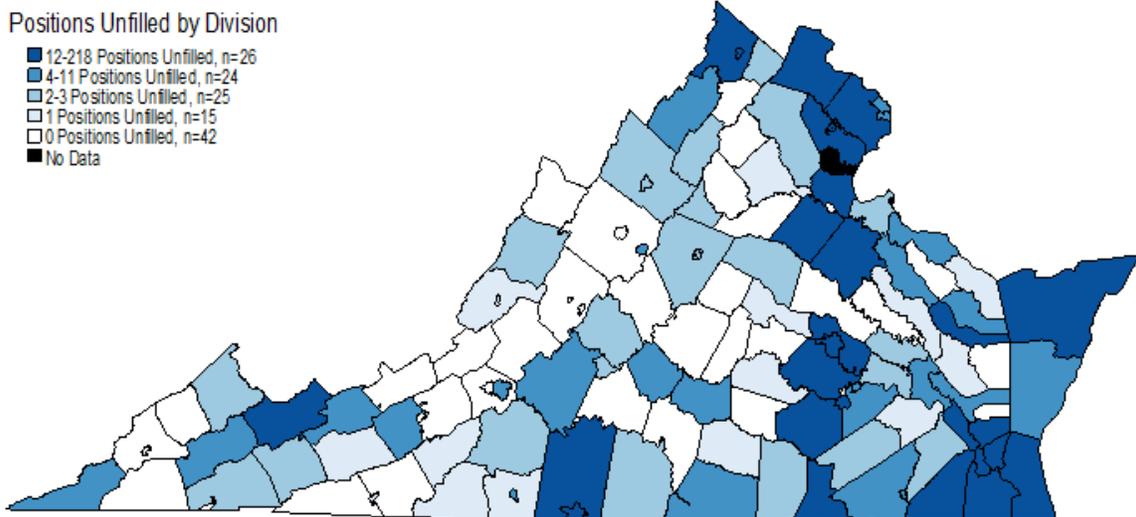
Teacher shortages have long existed in the state, but according to VDOE data, the number of unfilled teacher positions has increased over the past 10 years from 760 in 2006 (0.8% of teachers) to 1,080 in 2017 (1.1% of teachers).

Although shortages occur in every region, certain divisions are experiencing shortages of crisis proportion; one month into the 2016 school year, Middlesex County Public Schools had over 20 percent of their teaching positions unfilled, followed by Petersburg with almost 14 percent. Not surprisingly, divisions with highest concentrations of poverty tend to have the hardest time attracting and retaining high quality teachers.

*Divisions with Largest Teacher Shortages
Top 10 Divisions with Highest Percent of Unfilled Positions vs. Highest Number of Unfilled Positions
2016-2017*

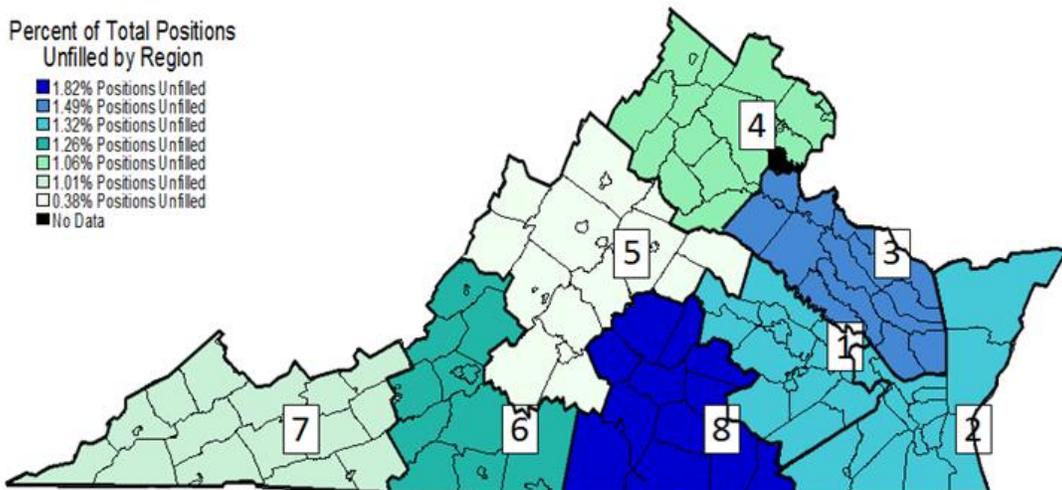
Top 10 Divisions with Highest % Unfilled Positions	2016		Top 10 Highest Divisions with Highest # of Unfilled Positions	2016	
	Shortage %	# Unfilled Positions		# Unfilled Positions	Shortage %
Middlesex Co Pblc Schs	20.3%	20	Fairfax Co Pblc Schs	218	1.4%
Petersburg City Pblc Schs	13.9%	47	Prince Wm Co Pblc Schs	61	1.0%
Danville City Pblc Schs	10.1%	47	Richmond City Pblc Schs	53	3.2%
Bland Co Pblc Schs	8.6%	6	Norfolk City Pblc Schs	53	2.2%
Greensville Co Pblc Schs	6.7%	13	Petersburg City Pblc Schs	47	13.9%
Caroline Co Pblc Schs	5.4%	13	Danville City Pblc Schs	47	10.1%
Martinsville City Pblc Schs	4.9%	9	Suffolk City Pblc Schs	44	4.0%
Appomattox Co Pblc Schs	4.5%	8	Loudoun Co Pblc Schs	34	0.6%
Bath Co Pblc Schs	4.4%	3	Chesapeake City Pblc Schs	24	0.9%
Dinwiddie Co Pblc Schs	4.4%	15	Portsmouth City Pblc Schs	23	2.2%

Division-Level Distribution of Unfilled Teacher Positions
Number of Unfilled Teacher Positions, 2016



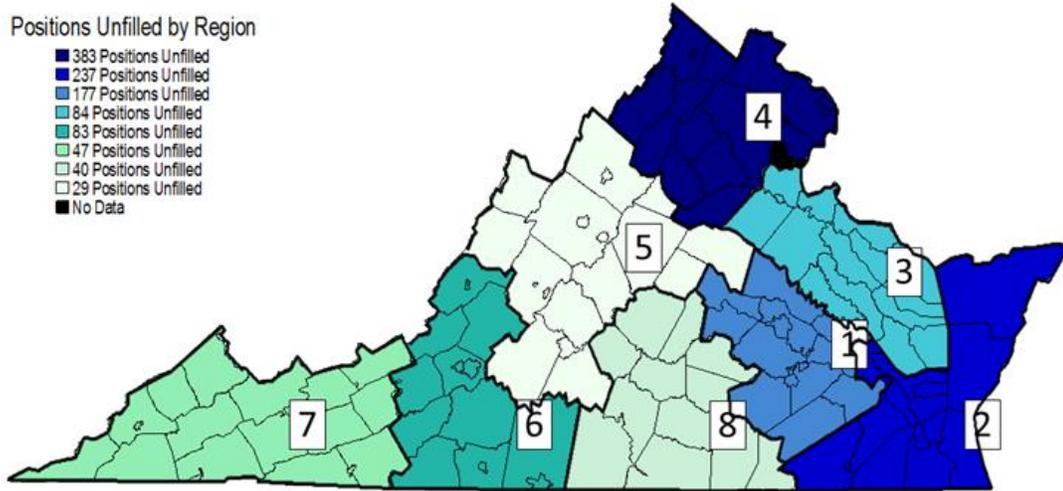
At the regional level, Superintendent’s Region 8 (Southside) faces the most severe teacher shortage when examining the ratio of vacancies to total positions. Superintendent’s Region 3 (Northern Neck) is facing one of the most severe shortages, both in percentages of their total workforce and in sheer numbers. Fairfax County and Prince William County experience the highest number of teacher vacancies, but due to the size of their workforce their shortage translates into a relatively small proportion of teaching positions.

Regional Distribution of Teacher Shortages
Ratio of Unfilled Positions to Total Teacher Positions, 2016



Regional Distribution of Unfilled Teacher Positions

Number of Unfilled Teacher Positions, 2016



The subject areas in which teacher shortages exist have historically been most acute in mathematics, special education and career and technical education. While that remains true today, shortages now exist in elementary and middle schools and over the past 10 years, shortages have become severe in subjects such as foreign language, English as a second language, and English.

Subject Areas with Highest Number of Unfilled Positions

Unfilled Positions by Subject, 2006 vs. 2016

Subjects with > 30 unfilled positions in 2016, compared to 2006	Number of unfilled positions (FTEs) 2006	Number of unfilled positions (FTEs) 2016
Special Education	250	316
Elementary Education PreK-6	88	198
Middle Education Grades 6-8	81	81
Mathematics (Secondary)	73	78
Career and Technical Education	31	67
Foreign Languages PreK-12	26	55
English as a Second Language PreK-12	21	54
Sciences (Secondary)	29	36
English (Secondary)	22	31

It must be noted that this data does not provide insight into the positions that are filled, but filled by teachers who lack the qualifications or experience to be effective. For example, 18 percent of the

teacher workforce in Virginia has less than three years of experience, and the figure increases to 23 percent in high-poverty schools.

Less Qualified or Experienced Teachers

Percent Teachers with Lesser Qualifications or Experience in High-Poverty vs. Low-Poverty Divisions

	High-poverty	Low-poverty	Overall
Provisionally Licensed	n/a	n/a	7%
Not Qualified	2%	1%	1%
Inexperienced (<3 years)*	23%	16%	18%

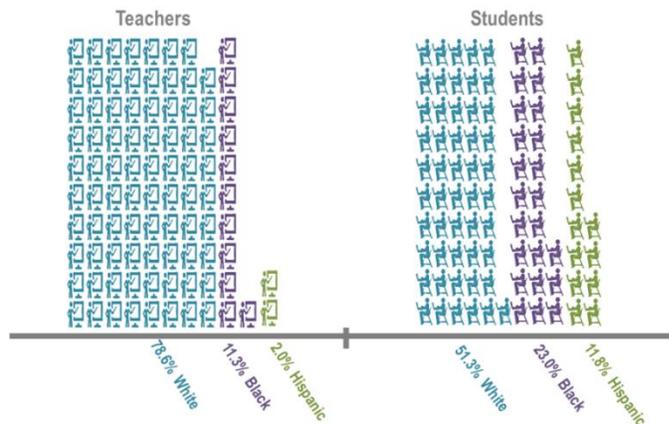
* 2013-2014

Finally, Virginia, like most states, faces a diversity shortage that is compounded by the declining teacher pipeline and increasingly diverse student population. Although this is a national trend, Virginia has a greater disparity than our regional counterparts, and the national average, according to the Teacher Diversity Index, a national tool that ranks states by demographic differences between teacher and student populations.¹ Currently, 79 percent of Virginia teachers are white, but non-white students make up 49 percent of Virginia’s student population.

Research indicates that a racially representative mix of teachers and administrators can have a strong positive effect on educational outcomes for minority students.² Therefore, the disproportionate racial composition of Virginia’s school staff poses a direct threat to the success of Virginia’s increasingly diverse students.

Teacher Diversity vs. Student Diversity

Virginia’s Licensed Instructional Personnel and Students by Race, 2014-15



¹ *Teacher Diversity Revisited*, Center for American Progress (2014)
<https://www.americanprogress.org/issues/race/reports/2014/05/04/88962/teacher-diversity-revisited/>

² Dee, T. S. (2004). Teachers, Race, and Student Achievement in a Randomized Experiment. *Review of Economics and Statistics*, 86(1), 195-210.

B. Conditions Contributing to the Shortage

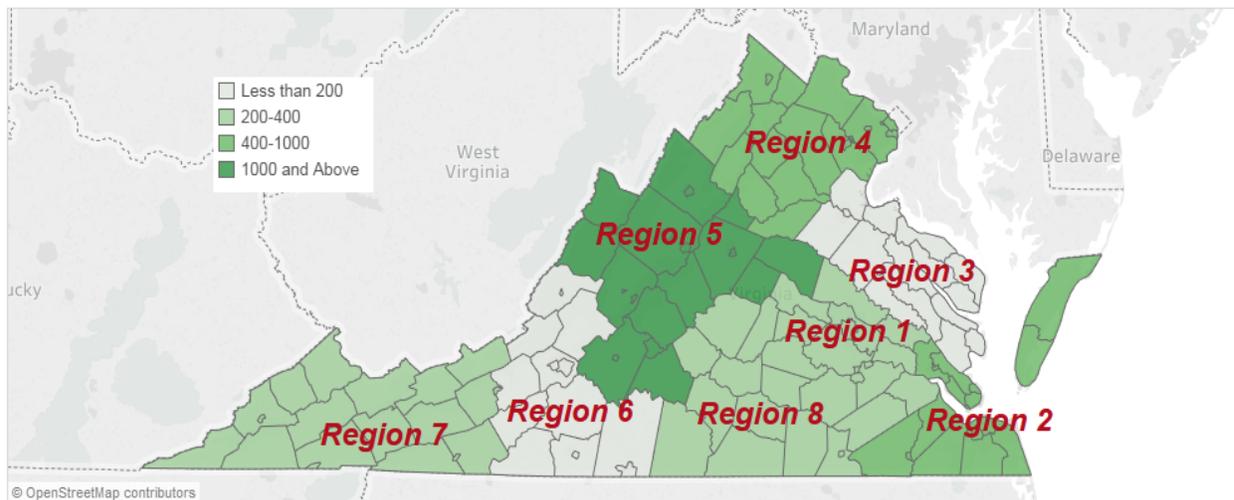
Schools across the nation have experienced worsening teacher shortages in recent years. This trend has been fueled by a steeply declining enrollment in teacher prep programs, combined with high attrition rates and a growing student population. Although the student population is expected to remain stable in future years in Virginia, declining interest in entering the profession and high rates of teachers leaving the profession will continue if no interventions are put into place.

i) Shrinking Teacher Pipeline

The number of students enrolled in teacher prep programs in Virginia has decreased from 13,500 in the 2008-09 school year to 11,400 in the 2014-15 school year.³ While the number of students completing teacher prep programs has remained relatively constant between 2011-2012 and 2013-2014, the impact of declining enrollment is expected to result in fewer degrees in the next few years.

PROGRAM COMPLETERS by REGION-- TRADITIONAL PROGRAMS
(Source: 2015 Title II Reports)

Superintendents Region	Academic Year 2011-2012	Academic Year 2012-2013	Academic Year 2013-14
1	331	293	297
2	682	662	635
3	78	89	89
4	392	660	469
5	1,165	1,257	1,339
6	144	145	131
7	359	302	296
8	357	275	279
Closed	35		
Grand Total	3,543	3,683	3,535



³ US DOE data https://title2.ed.gov/Public/Report/StateHighlights/StateHighlights.aspx?p=2_01

Several factors account for the declining pipeline of teachers who want to enter the profession, including costly and outdated pathways into the profession, an increasingly negative perception of the profession, and undesirable working conditions once in the classroom. In Virginia, most traditional pathways require individuals to obtain a master’s degree in order to become teachers. In addition to the extra year spent in school before entering the workforce, students must face the prospect of a low salary combined with a large amount of student debt associated with obtaining a master’s degree. While the average starting salary is about \$43,000 for Virginia teachers, their average debt load upon receiving a master’s degree is nearly \$51,000, or \$8,000 higher.

Mechanisms that exist to facilitate alternative pathways into teaching, such as those for individuals switching careers, are cumbersome and can act as barriers to entry. These alternative pathways are often not well-known among potential teachers who do not wish to pursue traditional teacher preparation programs, or decide later to pursue teaching, and may therefore be deterred from entering the profession. Young adults have also been exposed to a very different perception of the teaching profession, where teachers do not feel as valued and respected as they once did.

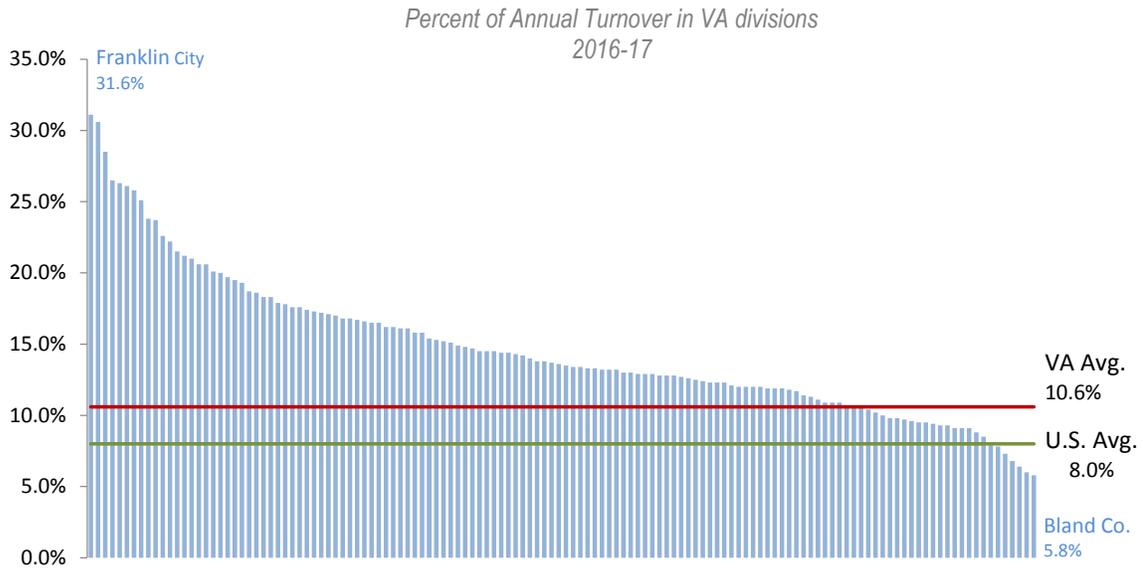
ii) Teacher Turnover

The declining interest in entering the teaching profession is only part of the reason for growing teacher shortages in Virginia. The other, perhaps larger contributing factor is the high rates of attrition among teachers, especially when most of them stop teaching for reasons other than retirement. During the 2016-2017 school year, the average turnover across all Virginia schools divisions was 10.2 percent, more than two percentage points higher than the national average (eight percent). In 19 divisions, teacher turnover is particularly acute, exceeding 30 percent. In addition to exacerbating teacher shortages, high turnover rates also undermine stability for students, lead to more inexperienced teachers hired to replace those leaving, and result in additional training and productivity costs for schools.

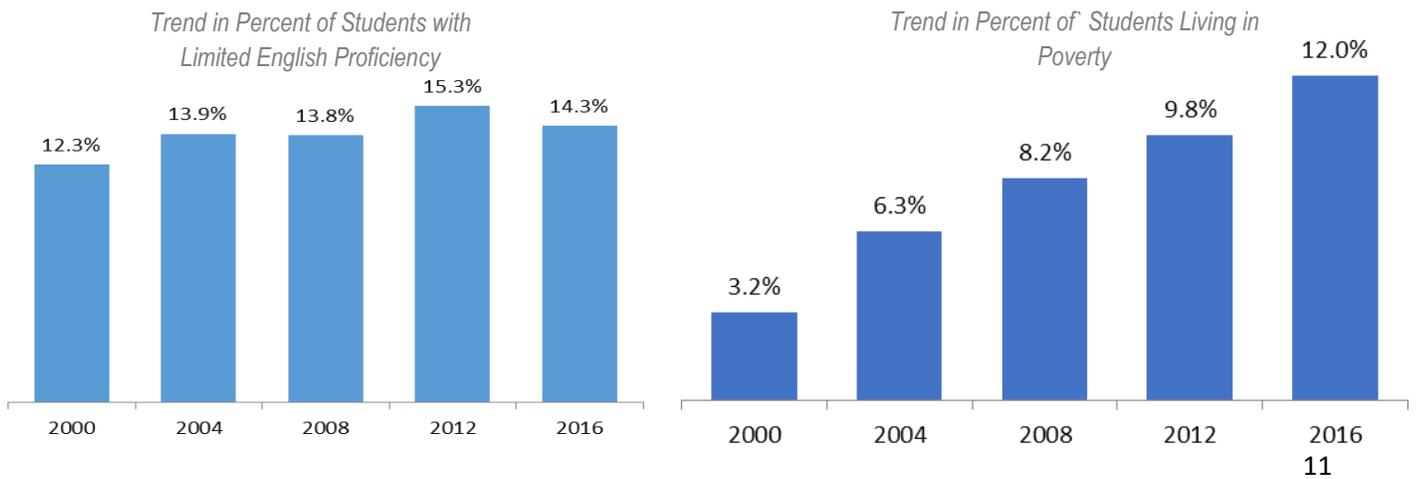
Highest Teacher Turnover Rate
Top 10 Divisions with Highest Teacher Turnover Rates, 2015-2016 to 2016-2017

Top 10 divisions with highest turnover rates	From SY2015-16 to SY2016-17
Franklin City	31.1%
Lancaster Co	30.6%
Petersburg City	28.5%
Buena Vista City	26.5%
Caroline Co	26.3%
Charles City Co	26.1%
Lunenburg Co	25.8%
Prince Edward Co	25.1%
Essex Co	23.8%
Falls Church City	23.7%

Nationally, about half of the teacher turnover rate is attributable to teachers leaving the profession altogether, while the remainder go to a different school. Of those teachers who leave the profession, only about 40 percent retire. Of the remaining 60 percent of teachers turning over, most continued to work for a school but outside of the classroom (30 percent), some left to care for family members (nine percent), and some took a job outside of education (eight percent).



Teachers leaving the profession attributed their decision most frequently to concerns over testing and accountability (25 percent), which creates stress and can stifle creativity. Unhappiness with the school administration (21 percent) was the second most common reason cited for leaving, reinforcing the importance of school leadership and climate that have been established in the research literature. Finally, 21 percent of teachers reported leaving the profession due primarily to dissatisfaction with their career. Dissatisfaction with a career in teaching has often been linked to a lack of adequate preparation for the challenges encountered in the classroom, particularly as the student body has increasingly presented a wider and more acute set of challenges. In particular, the proportion of students who speak limited English has nearly tripled since 2000, and the proportion of students living in poverty has increased by two percentage points.



C. The Advisory Committee on Teacher Shortages

In May 2016, Governor McAuliffe requested that then-President of the State Board of Education, Dr. Billy Cannaday, Jr., and then-Chair of the State Committee on Higher Education of Virginia (SCHEV), Mr. G. Gilmer Minor, III, convene a working group and develop policy recommendations on Virginia’s growing teacher shortage (see Appendix A for letter). The Co-Chairs established the Advisory Committee on Teacher Shortages (ACTS), which includes education professionals such as teachers, principals, human resource officers and superintendents; subject matter experts, school board members, representatives from institutions of higher education, and business leaders (see Appendix B for a roster of the Committee). The ACTS was charged with developing a report by October 2017 to include statewide policy recommendations on its findings.

The Advisory Committee was briefed by VDOE on their understandings of the statewide shortage; and was provided previous Virginia reports on the issue, including the report from the *Taskforce on Diversifying Virginia’s Educator Pipeline (2017)*⁴ and the report on *The Shortage of Qualified Teachers in the Commonwealth of Virginia and Recommended Strategies for Addressing the Shortage (2016)*⁵. They also examined a number of recent national research publications on the teacher shortages, and effective strategies for recruitment and retention.

SCHEV staff conducted an online survey of the workgroup members to identify the most pressing concerns in the area of teacher shortages. They identified the following issues as areas to target their discussion, research and recommendations:

Area of Concern	Reason for Concern
Pathways	The current pathways are cumbersome and impractical for the modern needs of our schools.
Transition/induction	New teachers need help with management strategies, curriculum development, and navigating the administrative side of teaching as they transition from the classroom to teaching.
Compensation	There are few financial incentives attracting candidates to the teaching profession and inadequate incentives enticing teachers to remain in the field. Student loan debt is also a major factor for graduates looking to enter the workforce.
School climate	Working conditions play a significant role in attrition, transferring to other schools, or leaving the profession entirely.
Retention	While teacher retention is challenging in many of Virginia’s school divisions, teacher attrition is particularly acute in some schools and subject areas.

⁴ *Final Report, August 2017*. Task Force on Diversifying the Virginia Educator Pipeline. <https://education.virginia.gov/media/9535/final-tdvep-report.pdf>.

⁵ *The Shortage of Qualified Teachers in the Commonwealth of Virginia and Recommended Strategies for Addressing the Shortage*. Virginia Department of Teacher Education Division of Teacher Education and Licensure. [http://leg2.state.va.us/dls/h&sdocs.nsf/fc86c2b17a1cf388852570f9006f1299/4c92ee4903bdb20985257e2800628f52/\\$FILE/RD64.pdf](http://leg2.state.va.us/dls/h&sdocs.nsf/fc86c2b17a1cf388852570f9006f1299/4c92ee4903bdb20985257e2800628f52/$FILE/RD64.pdf)

Over the course of the summer the Committee met in person and by phone to discuss concerns and potential recommendations. Staff from SCHEV and the Secretary of Education's office drafted the report which was approved by the Committee.

III. Recommendations to Address Declining Teacher Pipeline Through Recruitment Initiatives

Both in Virginia and nationwide, there are some commonly identified barriers that impact the recruitment of teachers into the profession. First and foremost, the length and cost of the pathways into the profession are disproportionate to the salary and benefits earned in the workplace; and second, too often students are not aware of pathways into the profession early enough to make an economical or timely decision about pursuing teaching as a profession. The recent *Task Force on Diversifying Virginia's Educator Pipeline* identified both the length and cost of pathways and lack of awareness about options leading to the profession as the top two barriers for minority teaching candidates in particular. This section elaborates on these challenges, and identifies strategies that state policy makers and local divisions can deploy to minimize those barriers and more easily recruit teachers into the profession.

A. Modernized Pathways into the Profession

Typically, teachers in Virginia enter the profession via one of three major pathways – the traditional teacher preparation program at the university level, career switchers, or those entering teaching via a provisional license. Those entering via the traditional route have university level teacher preparation program experience. Currently this is most commonly, but not exclusively, done via a five year master's program. Career switchers are those individuals with a bachelor's degree and at least five years of work experience that receive formal teacher training and practicum experience as part of their preparation to switch into the teaching field. Finally, individuals may teach with the issuance of a three year provisional license by the state, without formal teacher training, upon the recommendation of the local school division employing them. Within three years they must meet certain requirements in order to obtain full licensure from the state.

In order to build a robust pipeline of teacher candidates, Virginia needs a traditional pathway that starts with dual enrollment at the high school level, and includes robust community college coursework that articulates seamlessly into four and five year programs.

But in the Commonwealth, the end of that pathway also presents major barriers for students. Currently, students interested in becoming teachers must major in a subject matter discipline in conjunction with completing a teacher training program, resulting in both increased costs and time to completion. Undergraduate majors in teaching are not permitted in Virginia, therefore most programs offer a five year program with a masters in teaching built on top of a bachelor's degree in a specific subject. The average Virginia teacher with a master's degree enters the profession with \$50,879 in debt— more than the average Virginia teacher's starting salary of \$42,752 for those with a master's degree.

There is a clear and pressing need for state policy to be effectuated to facilitate the development of high-quality, rigorous four year teaching majors at our universities that prepare students for the realities of the classroom without burdening them with an additional year's worth of debt.

But we also need to create and advertise additional entry points that align with the realities of the modern economy. Career switcher programs should be available to more individuals, residency models expanded for those seeking the skills the serve high-poverty divisions, and opportunities for retirees to lend their life experience to the next generation without unduly burdening them with licensure requirements. To that end, the council has made recommendations that Virginia modernize its reciprocity policies for out of state teachers (drawing on the work of a VDOE Reciprocity Workgroup, see Appendix C for workgroup roster); increase flexibility for interested career switchers; and expand nontraditional but highly effective preparation models targeted to shortage areas. If deployed, divisions around the commonwealth will benefit from a larger and more diverse pool of teacher candidates able to prepare the next generation of students for success.

Pathways Recommendations of the Council:

1. Virginia should make stackable, economic pathways into the profession available to all students. This pathway should include career exposure at the middle school level, teachers for tomorrow programs in high school, to include dual enrollment coursework, and articulation agreements between community colleges and 4 year institutions. To achieve this, the following is required:
 - i. Drawing on successful existing models, VDOE should develop and share a model “Grow Your Own” program based on best practices, which local school divisions can implement. These models expose high school students to careers in teaching, provide for dual enrollment coursework, work based learning opportunities, and in some cases, financial incentives for students to return to the division to work after obtaining a degree. VDOE should provide technical and financial supports for the design and implementation of these programs at the local level. *(Recommended by TDVEP, VDOE 2016 Report)*
 - ii. Articulation agreements between community colleges and four-year institutions should be strengthened to ensure maximum credits transfer for students.
2. The Virginia Board of Education (VBOE) should revise the Approved Program Regulations to allow education-based majors in teaching/education through the development of a four-year undergraduate major in teaching. *(Recommended by TDVEP, VDOE 2016 Report)*
3. The Virginia Board of Education should evaluate the existing assessment requirements for licensure, and take action to eliminate those that are not absolutely essential, align assessment requirements with skills and competencies of high-quality teaching, and provide candidates multiple types of assessment opportunities to demonstrate their skills.
4. Reduce the number of years of full-time work experience (currently five years) required to enter Virginia’s Career Switcher Program or to become eligible for the experiential route to licensure. *(Recommended in VDOE 2016 Report)*
5. Virginia should offer “full” reciprocity for an individual who holds an out-of-state, District of Columbia, or territory of the United States renewable teaching license (with no deficiencies) with

comparable endorsements that is in force at the time the application for a Virginia license is received by the Department of Education. With “full” reciprocity, such individuals would not be required to meet prescribed Board of Education initial licensure assessments. *(Recommended by VDOE Reciprocity workgroup)*

6. Change state code to allow for the issuance of a Provisional License before all the Code of Virginia licensure requirements are met. If an individual is eligible for a renewable license, allow for a notation on the license that the “ancillary” requirements must be completed “during the first year of employment in Virginia or, if not so employed, during the renewal period.” Allowing time for licensees to meet and pay for these requirements is less burdensome on the individual and provides additional flexibility to employing divisions. *(Recommended by VDOE Reciprocity workgroup)*
7. Virginia should expand state funding for Teacher Residency Programs that include a residency year devoted to combined roles of co-teacher in a classroom under the guidance of mentor teachers and university faculty and full-time graduate student, earning a master’s degree, followed by a commitment to teach in a hard-to-staff school *(Recommended in VDOE 2016 Report)*. Residency programs have a strong record of students successfully completing programs and being retained by high-poverty, hard to staff divisions. Only two exist in Virginia presently (VCU and ODU), but other universities are interested in fostering such programs as well.
8. Divisions with the most severe teacher shortages should do more to recruit teachers, in a targeted way to meet their particular needs. The state should provide flexible financial support to the human resource departments in divisions with the greatest shortages to support aggressive recruitment strategies.

B. Building Awareness of Pathways into the Profession

In addition to adopting policies to streamline and modernize pathways into the teaching profession, the state should make a concerted effort to make information about those pathways widely and publicly available. Rather than spending funds on a marketing campaign, VDOE should think creatively and collaboratively about what materials they develop and with whom they partner to ensure it is communicated to a targeted segment of the population who may be interested in entering the teaching profession – members of the military separating from service; retirees; recent college graduates; etc.

Awareness Recommendations of the Council:

9. As part of the implementation of the proposed Standards of Accreditation, VDOE should support divisions in their effort to introduce students to teaching careers, and provide work based learning opportunities for them during high school. VDOE should make relevant information about the teaching profession available to middle school students; and provide technical assistance to divisions so that they can offer age appropriate internships and externships to high school students interested in teaching careers.

10. VDOE should develop and make widely available a set of materials targeted to a variety of audiences, from middle school students to retirees, to communicate available pathways into the profession and any available financial incentives.

C. Enhancing Total Compensation While Reducing Cost of Entry Into Teaching

Even after adjusting for the shorter work year, teachers nationally earn about 20 percent less than individuals with college degrees who enter other fields. As a result, individuals considering the teaching profession are often concerned about their ability to meet their financial needs, especially when faced with other career options that would be more lucrative and require less time to achieve. The large amount of debt that many students must repay upon graduation further compounds the impact of low starting salaries on their choice of major. Further, individuals who wish to enter the field through alternative pathways, such as career switchers, tend to be older and face additional financial pressures associated with having a family. All potential teachers must contend with the high cost of tests and exams required to become and remain licensed. Financial challenges tend to be particularly pronounced for first-generation and low-income students, who are often minorities.

Virginia should continue to look for opportunities to improve teacher salaries, but taking action on compensation across the board to mitigate teacher shortages would be very costly. Shortages are currently especially acute in certain divisions and subject areas. One strategy would be to target enhanced compensation to economically-challenged divisions where shortages are most severe, critical shortage subject areas, and teachers of color, at a time when it matters most to individuals' career decisions. Enhanced compensation could be maximized for teachers who meet at least two of these criteria.

Lastly, the issue of compensation does not have to be addressed solely by direct increases in salaries. Other incentives can be very effective if they help potential teachers meet their financial obligations, such as student debt, housing, or child care.

Total Compensation Recommendations of the Council:

Compensation actions should be targeted at students who: plan to teach in economically-challenged divisions; have a degree in a critical shortage subject area; would help a school or division's workforce better reflect their students' diversity.

11. The state should evaluate and leverage the Virginia Teacher Student Loan Program to ensure that existing financial incentive programs are designed and implemented to best address severe teacher shortages (*Recommended by TDVEP*).
12. The Department of Education should partner with school divisions to raise awareness during job fairs, induction, mentoring, and other support programs about the availability of

- i. federal loan forgiveness programs specifically for teachers, which are estimated to be utilized by only 19 percent and 0.8 of eligible teachers (TEACH grant and Stafford Teacher Loan Forgiveness program, respectively).
 - ii. federal loan forgiveness programs available to public servants more broadly, such as the Public Service Loan Forgiveness Program, which is thought to be underutilized but to an unknown extent.
 - iii. the Income-Based Repayment (IBR) program, which caps loan repayments to 10 percent of eligible borrowers.
13. Virginia should establish a Commonwealth’s Teaching Fellows program which pays for the college education of future teachers, similar to the one that existed in North Carolina. The program would be highly competitive and recruit students, especially those who would contribute to greater diversity, interested in teaching in high-need locations and subject areas. In exchange for a scholarship to complete a degree in Education, fellows would commit to four years teaching in a high-needs school. Students who do not complete their commitment would have to pay back the portion of their scholarship for which they did not fulfill their commitment.
14. Virginia should offer financial and other incentives that make living more affordable for teachers, including:
- i. Paying for or subsidizing child care for teacher candidates to allow them to complete classroom observations, practicums, and student teaching. *(Recommended in VDOE 2016 Report)*
 - ii. Providing assistance with housing, such as funding for a down payment on a first home or subsidized rent; providing grants to purchase and refurbish an urban house, or identifying housing options in rural areas. *(Recommended in VDOE 2016 Report)*
 - iii. Offering additional retirement credit, or providing higher contributions toward health insurance premiums and retirement accounts. *(Recommended in VDOE 2016 Report)*
15. The state should provide sign-on bonuses, or relocation bonuses to help teachers relocate to a Virginia school division. *(Recommended in VDOE 2016 Report)*
16. The state should cover or subsidize the cost of Praxis tests, the Virginia Communication and Literacy Assessment, and the test prep programs for low-income and minority students *(Recommended by TDVEP)*.

IV. Recommendations to Address Teacher Turnover Through Retention Initiatives

Teacher turnover, or the loss of teachers from one school or the profession entirely, has a significant impact on the teachers shortage in Virginia and around the county. National estimates indicate that

approximately 90 percent of the demand for teachers is created by teachers leaving the profession, with “two-thirds of teachers leaving for reasons other than retirement.”⁶

Virginia has an annual turnover rate of approximately 10.6 percent⁷, which is higher than the national average (8 percent) but lower than the average in the southern United States (16.7 percent).⁸ However, the state average reflects both divisions with turnover rates 3 and 4 times the national average, and divisions well under it. As is true with all the components of Virginia’s teacher shortage, there is great regional variation in the experiences of our teachers and divisions.

Nationally there are greater turnover rates in high poverty schools, and in the fields of math, science and special education – mirroring the challenges that Virginia faces in its shortage. In order to maximize impact on the shortage, Virginia should enhance its preparation programs to equip new teachers for the realities of hardest to staff schools and subjects, provide targeted mentoring supports and incentives for teachers in critical shortage areas, foster positive school climates and working conditions, and provide support for individuals provisionally licensed seeking full licensure.

A. Enhancing Teacher Preparation Programs

There is a robust body of evidence to support the importance of high quality teacher preparation, both the for the benefit of the child being served and to improve retention rates of teachers. One recent study found that teachers who received little pedagogical training were more than twice as likely to leave teaching after their first year than teachers who had received a comprehensive preparation, including observing others teaching, student teaching a full semester, receiving feedback, and taking five or more courses in teaching methods, in addition to receiving training in learning theory and selecting instructional materials.”⁹

Therefore, the Commonwealth must be careful not to lose rigorous preparation in any of our pathways; but must make them targeted to the needs of our current students, and ensure they are truly accessible to teacher candidates, including low income candidates. Policies around the practicum experience, and investments and targeted technical support to divisions to support student teachers will help support this pipeline and ultimately the retention of high quality teachers in our schools.

Teacher Preparation Recommendations of the Council:

17. Traditional teacher preparation programs should strengthen coursework so the clinical and practical experiences help all educators develop an understanding of the needs of 1) schools in diverse

⁶ *Teacher Turnover: Why it Matters and What We Can Do About It*. Learning Policy Institute, August 2017. https://learningpolicyinstitute.org/sites/default/files/product-files/Teacher_Turnover_REPORT.pdf

⁷ VDOE; on SY 15-16 and 16-17

⁸ *Teacher Turnover: Why it Matters and What We Can Do About It*. Learning Policy Institute, August 2017. https://learningpolicyinstitute.org/sites/default/files/product-files/Teacher_Turnover_REPORT.pdf

⁹ *A Coming Crisis in Teaching*. Learning Policy Institute, September 2016. P59. https://learningpolicyinstitute.org/sites/default/files/product-files/A_Coming_Crisis_in_Teaching_REPORT.pdf

settings, and 2) different subgroups of students, such as students in poverty, English language learners, and students with disabilities. *(Recommended in VDOE 2016 Report)*

18. Divisions should leverage student teachers to help meet critical shortage areas and the state should provide financial and technical support for students to obtain practicum experience in schools and divisions with the most critical shortages. This should include:
 - i. Paying for or subsidizing child care for teacher candidates to allow them to complete classroom observations, practicums, and/or student teaching. *(Recommended in VDOE 2016 Report)*
 - ii. Virginia should offer a student teaching stipend for low income students, and students serving in critical shortage areas like math, science and special education. *(Recommended by TDVEP)*
 - iii. VDOE should provide technical assistance to help innovative districts provide compensation to student teachers during their student teaching experience, perhaps by hiring them as paraprofessionals or teachers' aides. *(Recommended by TDVEP)*

19. The Commonwealth should incorporate new data systems that will allow it to understand the nature of the issues surrounding the teacher shortage and provide a basis for improvement.¹⁰ The Southern Regional Education Board (SREB) recently released the following recommendations regarding data systems “with the goal of meaningfully improving teacher preparation, the skills of the nation’s teachers and the learning outcomes of students.”¹¹
 - i. States should synthesize data for teacher education from various state and local agencies.
 - ii. States should disseminate data widely, tailored to the needs of specific audiences.
 - iii. States should use data to empower change.

According to the SREB, three states (Louisiana, North Carolina, and Tennessee) are developing integrated teacher preparation and workforce data systems.¹² These states track teachers as they embark on their careers, focus on outcome measures, break down data silos, and make the data transparent and widely available. By capitalizing on data that already exists in the Commonwealth, creating data systems that can do all of the above will provide better teacher preparation, and therefore better outcomes for Virginia students.

20. Additionally, the 2016 VDOE report on teacher shortages¹³ outlined potential strategies for institutions of higher education (IHE) and the VDOE to implement to improve upon teacher induction:

¹⁰ *Teacher Preparation Data Systems: State Policy and Recommendations*. Southern Regional Education Board, September 2017. Retrieved September 22, 2017.

¹¹ *Ibid.*

¹² *Teacher Preparation Data Systems: State Policy and Recommendations*. Southern Regional Education Board, September 2017. Retrieved September 22, 2017.

¹³ *The Shortage of Qualified Teachers in the Commonwealth of Virginia and Recommended Strategies for Addressing the Shortage*. Virginia Department of Teacher Education Division of Teacher Education and Licensure.

- i. IHEs should strengthen alignment of teacher preparation programs, such as clinical experience, and practical classroom experiences. They should consider placing teachers in a variety of schools to gain experience in diverse settings.
- ii. IHEs should strengthen diversity education in teacher preparation coursework so that all educators have an understanding of the needs of different subgroups of students such as students in poverty, English language learners, and students with disabilities.
- iii. The VDOE should strengthen regulatory oversight of teacher preparation programs to ensure consistent program delivery across the state.
- iv. The VDOE should strengthen preparation of teacher candidates to better prepare them for working in challenged schools.

B. Fostering Positive School Climate

The working conditions of a particular school, the extent to which teachers are supported by their principals in their classrooms and in their professional growth, are a critical component of teacher satisfaction and retention of high quality teachers. According to a recent report from the Learning Policy Institute, approximately 66 percent of individuals leaving the profession cited dissatisfaction with the profession as a reason for their departure. The most frequently cited reason for that dissatisfaction was testing and accountability pressures (listed by 25 percent of those who left the profession in 2011-12) and 21 percent cited dissatisfaction with the administration.¹⁴

Additionally, it should be noted that new teachers have the highest rates of turnover of any group of teachers, with the most frequently cited reason for leaving the profession being dissatisfaction with the school and working conditions. New teachers in Virginia would benefit from greater support such as better mentorship, professional development, and classroom observations. Studies show that these types of support make an enormous difference in retaining teachers and helping provisionally licensed teachers make the transition to full licensure.

School Climate Recommendations of the Council:

- 21. Virginia should adopt the Standards of Accreditation recently proposed by the Virginia Board of Education, which proposes a new state accreditation system that takes more than just point-in-time achievement test scores into account. This will further reduce testing pressures on students and teachers alike, contributing to more positive school climates.
- 22. Divisions and the state should consider implementing a working conditions survey to accurately identify sources of stress for teachers that impact long-term stability in employment. The Virginia

[http://leg2.state.va.us/dls/h&sdocs.nsf/fc86c2b17a1cf388852570f9006f1299/4c92ee4903bdb20985257e2800628f52/\\$FILE/RD64.pdf](http://leg2.state.va.us/dls/h&sdocs.nsf/fc86c2b17a1cf388852570f9006f1299/4c92ee4903bdb20985257e2800628f52/$FILE/RD64.pdf)

¹⁴ *Teacher Turnover: Why it Matters and What We Can Do About It*. Learning Policy Institute, August 2017. https://learningpolicyinstitute.org/sites/default/files/product-files/Teacher_Turnover_REPORT.pdf

Board of Education should continue to explore the use of such a survey in state accreditation.
(Recommended in VDOE 2016 Report)

23. Virginia should permit individuals with provisional licenses five years to meet licensure requirements (rather than the three currently allowed); and VDOE should partner with institutions of higher education to support provisionally licensed candidates to obtaining full licensure, to include additional PRAXIS prep and discounted courses. These academic supports should include a focus on teachers in critical shortage areas, including minority recruitment. *(Recommended by TDVEP)*
24. Virginia should provide model teacher induction and mentorship programs to all divisions, and support their implementation and training. Additionally, the state should provide funding to support mentors who are supporting new teachers serving in critical shortage areas – high poverty schools, in the fields of math, science and special education, and with minority teachers.
25. Virginia should provide model principal induction and mentorship programs to all divisions, and support their implementation and training. This should include targeted state resources in the principal development and mentorship programming, and collaborative efforts with institutions of higher education and school divisions to provide supports to principals and other school leaders to ensure that they are able to properly support teachers.

C. Providing Targeted Financial Incentives

Although compensation is often thought to play a major role in teachers' decision to stop teaching, a study¹ found that only 18 percent of teachers who exited the profession cited financial reasons as a major factor, compared to 55 percent who left because they were dissatisfied with their career. Still, compensation is one of the most direct ways for schools to address shortages, and research has shown conclusively that monetary incentives improve retention. For example, studies have found that after controlling for other factors, teachers in districts with higher salary scales were much less likely to leave the profession than teachers in districts with poorer salary scales.

Targeted compensation programs have been used successfully in other states to retain effective teachers in high-need areas. For example, a targeted bonus program used in North Carolina for over three years resulted in a 17 percent reduction in teacher turnover, with experienced teachers exhibiting the strongest response to the program.

Targeted Financial Incentives Recommendations of the Council:

Like for compensation strategies aimed at improving the recruitment of qualified teachers, retention strategies should be targeted to economically-challenged divisions where shortages are most severe, critical shortage subject areas, and teachers of color. Enhanced compensation could be maximized for teachers who meet at least two of these criteria.

26. The state could provide additional funding to support differential compensation or retention bonuses. Offering \$5,000 to teacher to 2,000 teachers statewide would require funding of \$10 million. *(Recommended in VDOE 2016 Report)*
27. The state could provide additional compensation to teachers who help retain other teachers, such as rewarding veteran teachers for mentoring/coaching new teachers. *(Recommended in VDOE 2016 Report)*
28. The state could provide classroom materials and resources so teachers don't have to use their personal funds. *(Recommended in VDOE 2016 Report)*
29. The state could offer opportunities for advancement and additional income by creating career paths for teachers to become instructional leaders without leaving the classroom. *(Recommended in VDOE 2016 Report)*
30. The state could offer richer benefits to non-traditional teachers, such as providing retirement benefits to part-time teachers. *(Recommended in VDOE 2016 Report)*
31. The state could retain teachers who would otherwise leave the classroom by offering opportunities to teach or mentor after retirement. *(Recommended in VDOE 2016 Report)*

V. Areas for Further Review by the Committee

Certain areas of opportunity for addressing teacher shortages require additional review and consideration before meaningful and effective recommendations can be formulated. In particular, the Committee endorsed recommendations previously made related to teacher mentorship programs (24) and principal training programs (25) based on overwhelming research and evidence of the impact of these programs on students out comes and teacher retention, and with a partial understanding of Virginia's strengths and weaknesses in these departments. While important to call these strategies out as those previously recommended and supported by research, the Committee believes additional time is needed to do a statewide needs assessment and make recommendations targeting and maximizing any new state investments.

Appendix A: Letter from Governor McAuliffe



COMMONWEALTH of VIRGINIA

Office of the Governor

P.O. Box 1475
Richmond, Virginia 23218

May 19, 2017

Dr. Billy K. Cannaday, Jr.
Board of Education
P. O. Box 2120
Richmond, VA 23218

G. Gilmer Minor, III, Chairman
State Council of Higher Education
312 Oak Lane
Richmond, VA 23226

Dear President Cannaday and Chairman Minor:

During the course of my term as Governor, I have often heard about the teacher shortages our schools and divisions are facing. Earlier this year, I sent letters to retired teachers in Richmond and Petersburg to help those divisions meet their critical shortages for this school year. In recent months, I have increasingly heard more serious concerns about the future of our teaching workforce. It has become clear that Virginia needs bold, new approaches and fresh ideas in order to solve this complex challenge.

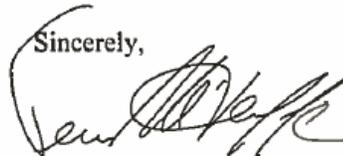
If our graduates are to remain competitive in the global economy we must ensure that we have a strong educator workforce that can provide high-quality teachers for each and every student in the Commonwealth.

With that in mind, I am writing to ask that you jointly convene a statewide Advisory Committee on Teacher Shortages to develop innovative recommendations to address this growing crisis in Virginia. In doing so, I ask that you draw on the expertise and assets of local school divisions, community colleges, and universities; human capital experts; workforce development professionals; as well as the ongoing work of the Taskforce on Diversifying the Virginia Educator Pipeline. The charge to the Committee requires ongoing work beyond my administration; but I am requesting a set of preliminary recommendations by October 1, 2017. These recommendations should include both short and long term policy and process changes, repurposing of existing public funds, need for new initiatives, and need for new state investments.

Dr. Billy K. Cannaday, Jr.
G. Gilmer Minor, III, Chairman
May 19, 2017
Page 2

I have asked Director Blake and his team to provide staff support, and ask that you keep my Secretary of Education, Dietra Trent, fully informed on the work of this Council. If my office or Secretary Trent's office can be of assistance in any way throughout this process, please let us know. We stand ready to support you in this endeavor in any way necessary. I look forward to receiving your preliminary recommendations in the fall.

Sincerely,



Terence R. McAuliffe

Appendix B: Members of the Advisory Committee on Teacher Shortages

- Dr. Billy K. Cannaday, Jr.
Virginia Board of Education
- G. Gilmer Minor, III
SCHEV
- Dr. Bernice Cobbs
Franklin Co. Public Schools, Task Force on Diversifying Virginia’s Educator Pipeline
- Dr. Andrew Daire
Dean, School of Education, VCU; Task Force on Diversifying Virginia’s Educator Pipeline
- Elena Dimitri
Richmond Public Schools
- Sara Dunnigan
VA Board of Workforce Development
- Megan Healy
Virginia Community College System
- Travis Holder
Fairfax Co. Public Schools; Task Force on Diversifying Virginia’s Educator Pipeline
- Robert Hundley
Hanover Co. School Board, Virginia School Board Association
- Cheryl Jordan
Norfolk Public Schools, Virginia Association of Elementary School Principals
- Jim Livingston
VA Education Association
- Keith Martin
VA Chamber of Commerce
- Dr. Charlie Jeff Perry
Wythe Co. Public Schools
- Dr. James Wyckoff
UVA
- Holly Coy
Office of the Secretary of Education
- Dr. Joseph G. DeFilippo
SCHEV
- Ashley Lockhart
SCHEV
- Patty Pitts
VA Department of Education
- Leah Walker
VA Department of Education

Appendix C: Members of the VDOE Reciprocity Workgroup

- Timothy Billups, Executive Director of Human Resources, Norfolk City Schools
- Dr. John Blackwell, President, Virginia Association of Colleges for Teacher Education; Coordinator of Instructional Technology and Assessment, Virginia State University
- Dr. Anthony S. Brads, Superintendent, Culpeper County Public Schools
- Dr. Lyle Evans, Executive Director of Human Resources, Finance, and Operations, Petersburg City Schools
- James Fedderman, Vice President, Virginia Education Association
- Travis Holder, Manager, Office of Licensure, Department of Human Resources, Fairfax County Public Schools
- Dr. Ben Kiser, Executive Director, Virginia Association of School Superintendents
- Cynthia Pitts, Executive Director of Administration, New Kent Public Schools
- Dr. Patricia Stohr-Hunt, Chair of Education, Director of Teacher Education, University of Richmond; Vice-Chair, Advisory Board on Teacher Education and Licensure
- Dr. Tamara Wallace, Assistant Dean and Director of Field Experience Programs, Radford University

VDOE STAFF:

- Patty S. Pitts, Assistant Superintendent, Division of Teacher Education and Licensure
- Dr. Joan Johnson, Director of Teacher Education, Division of Teacher Education and Licensure
- Dr. Kendra Crump, Director of Licensure and School Leadership, Division of Teacher Education and Licensure
- Dr. Cynthia A. Cave, Assistant Superintendent, Division of Policy and Communications
- Zachary Robbins, Director of Policy, Division of Policy and Communications