

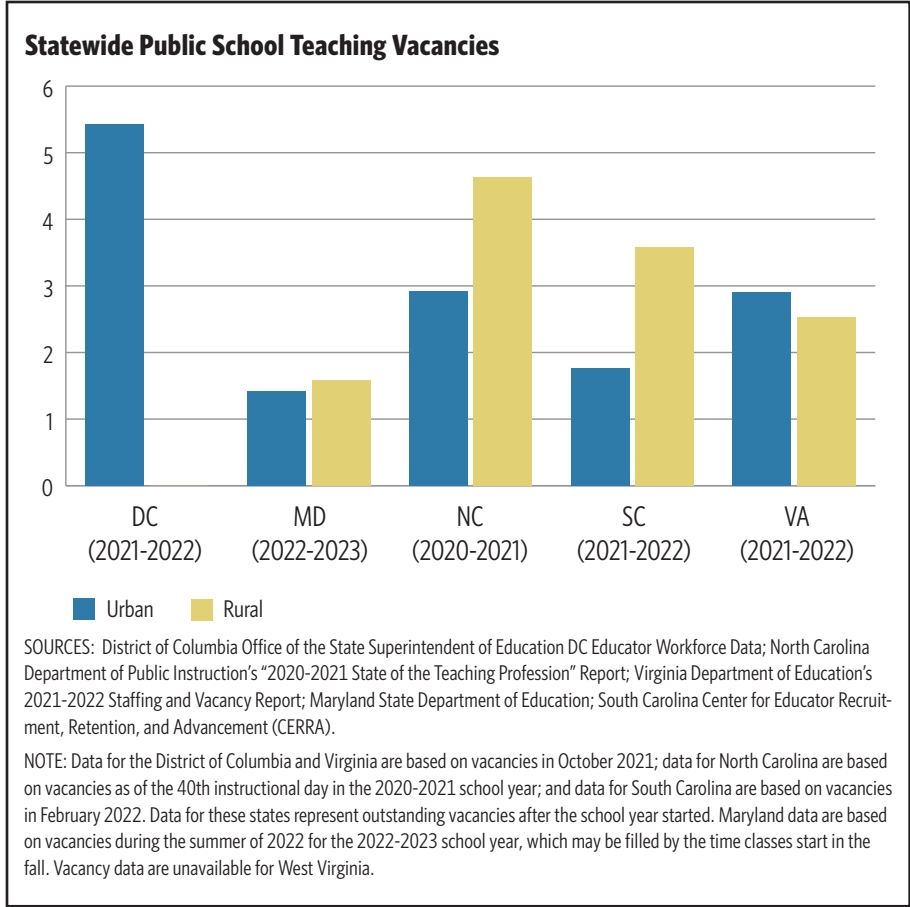
BY SARAH GUNN AND SIERRA LATHAM

# Resolving the Gap in Teacher Supply

“Never seen it this bad’: America faces catastrophic teacher shortage” read an Aug. 4 headline from the *Washington Post*. Teacher shortages have been a concern in recent years, as the number of people graduating with a teaching credential has not been sufficient to keep up with teaching job openings. Shortages are particularly severe in certain fields, known as “critical needs areas,” which include science, math, instruction for English language learners, special education, and early childhood education. In many cases, rural school districts have been hit harder than urban and suburban districts.

At the same time, teachers are leaving the profession at a higher rate than usual because of both push and pull factors. COVID-19 put additional strain on the teaching profession, which partially explains the uptick in teacher resignations since the beginning of the pandemic. During stay-at-home orders, teachers adapted to online teaching. Returning to school, teachers were simultaneously held accountable for resolving the learning gaps that emerged due to the pandemic and forced to cope with increased incidence of disruptive behavior among students. In addition to teachers experiencing burnout, the job market outside of teaching is more lucrative than it has been in decades; some teachers’ skills are transferrable directly to non-teaching professions, while other teachers can increase their incomes in other fields through retraining.

Education researchers use several indicators to measure the teacher shortage. Teaching position vacancies are a measure of the teacher shortage at a given point in time. Enrollment in and completion of teacher credentialing programs is a measure of future supply. In addition to these metrics,



researchers also consider the share of teachers with provisional or emergency credentials; a high share indicates that a school was unable to attract traditionally credentialed teachers to apply for open positions.

States and school districts are trying different policies to address the teacher shortage. Teachers in many districts received commitment bonuses and pay raises to try to improve retention. (Of course, not all school districts have the extra financial resources to do so.) Other state and federal programs are designed to increase the pipeline of new teachers. Some states are also expanding the options for provisional certification to make it easier for career switchers to enter the classroom.

### TEACHER VACANCY RATES: DOES GEOGRAPHY MATTER?

Teacher vacancy rates within the Fifth District vary by state and by whether the school district is urban or rural, among other factors. Rural school districts tend to face additional challenges in recruiting and retaining teachers compared with urban and suburban areas. Research has shown that new teachers are hesitant to work in communities that are different from where they completed teacher education training. As few teacher preparation programs provide experience in rural areas, new teachers may not be confident in their ability to teach in a rural context.

Most states in the Fifth District allow school districts to set their own

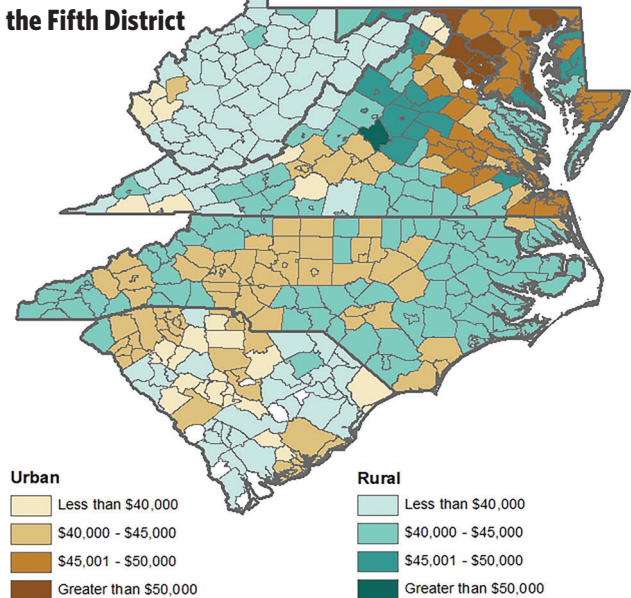
## SETTING TEACHER SALARIES

To the best of their ability, school districts set salary and benefit schedules to be competitive with outside employment opportunities. To compete in a strong job market, schools may also issue signing bonuses to attract new teachers and appreciation bonuses to retain existing teachers. Yet public schools face limitations when competing; they must adhere to budgets determined by state and local resources, which limit their ability to use financial incentives to attract and retain qualified teachers.

In most states throughout the Fifth District, teacher salary schedules vary across school districts. The two exceptions are the District of Columbia and North Carolina. The District of Columbia has a single public school district and thus needs only one salary schedule. North Carolina sets teacher salary schedules at the state level but permits individual school districts to provide local supplements.

For a new teacher with a bachelor's degree, starting salaries tend to be highest in the Washington, D.C., metro area, several urban districts in Maryland, and in rural Nelson County, Va. (Nelson County made a policy decision to front-load its salary schedule and decrease the value of step increases over the course of a teacher's career.) School districts with relatively low starting salaries tend to be located in rural areas in West Virginia and South Carolina. (See map.)

### Starting Salary for a Teacher with a BA in the Fifth District



SOURCES: D.C. Public Schools "FY 2019 ET15 Salary Schedule"; Maryland Public Schools "Professional Salary Schedules Maryland Public Schools 2020-2021"; North Carolina Department of Public Instruction "Salary Schedules 2021-2022"; South Carolina Department of Education "Fiscal year 2021-2022 District Minimum Salary Schedules"; Virginia Department of Education "2020-2021 Teacher Salary Report"; West Virginia Department of Education "Professional Salary Schedules by County" 2020-2021.

NOTE: Teacher salary schedules in North Carolina are set at the state level. Individual school districts may provide local supplements, but data on school district supplements are not collected at the state level.

salary schedules. Rural school districts have a limited tax base and are less able to offer salaries that can compete with wealthier suburban or urban school districts. (See box.) At the same time, in addition to budget constraints, salary schedules also take into account local cost of living and income characteristics. Across Fifth District states that set salary schedules at the district level, starting salary for a new teacher with a bachelor's degree is positively correlated with median rent, median mortgage payment, and median income across school districts.

Even though rural areas face additional challenges, the highly urban District of Columbia has the highest overall vacancy rate of state-level Fifth District jurisdictions for which we have data. (Maryland tends to have the lowest vacancy rates.) Comparing urban and rural areas within Fifth District states, vacancy rates are higher in rural school districts in Maryland,

North Carolina, and South Carolina; the reverse is true in Virginia. (See chart.)

## MINIMIZING TEACHER TURNOVER

One way to reduce the number of teacher vacancies is to encourage more teachers to stay in the profession for longer. Based on national survey data collected between the 2011-2012 and 2012-2013 school years, about 8 percent of teachers were leaving the teaching profession every year; more than half of those who left teaching were older than age 50, suggesting they left due to retirement as opposed to a career switch. Another 8 percent moved to a different school, which does not affect the overall supply of teachers but creates a new teaching job opening at the school they leave.

Many states and school districts have offered one-time retention or commitment bonuses to teachers and school staff. For example, teachers

in Howard County, Md., received an \$1,800 commitment bonus this spring. Henrico County in Virginia is planning to pay every teacher who returns for the 2022-2023 school year a \$500 bonus. In the fall of 2021, teachers in Roanoke County, Va., each received an appreciation bonus of \$1,200; special education teachers received an additional \$2,300 stipend, indicating the challenge faced in retaining and recruiting qualified special education teachers. Teachers there will receive another \$575 bonus in December 2022.

In addition to those bonuses, states and school districts are increasing teacher salaries for the long term. West Virginia approved a 5 percent pay increase for its teachers. Virginia approved a statewide 10 percent increase in teacher pay over two years, and some districts are adding more. In July, North Carolina approved a 4.2 percent increase in teacher salaries. South Carolina has raised the

minimum teacher salary in the state to \$40,000. A number of school districts there are raising all teacher salaries. For example, teachers in the Lexington-Richland 5 school district near Columbia, S.C., raised first-year teacher salaries for the 2022-2023 school year by 4.3 percent, and all teachers in Greenville County Schools in South Carolina will receive at least a 3 percent increase in pay. In Maryland and the District of Columbia, teacher unions play more of a role in determining teacher salaries; as recently as August, negotiations between unions and school districts on salaries for the 2022-2023 school year were still under way in many places.

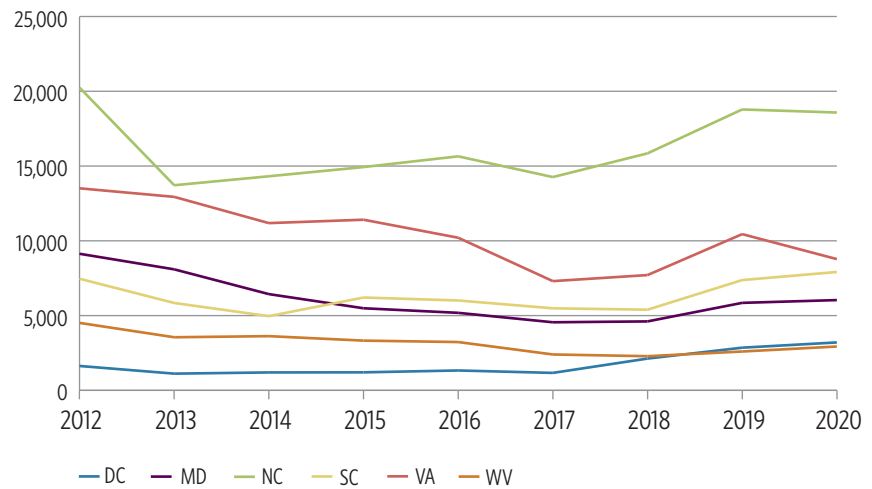
While many states are increasing teacher salaries, the increases in pay may not be enough to keep up with inflation. Typically, teachers move up their state's or district's salary schedule on a regular, usually annual, basis, but increases in the overall salary schedule for teachers are not guaranteed to take place and can vary from year to year and state to state based on local and state government circumstances. The national average increase in teacher pay for all years from the 2011-2012 school year to the 2020-2021 school year ranged from 0.56 to 2.85 percent, calculated in current dollars.

### FILLING VACANCIES WITH EXISTING TEACHERS

Another way to fill vacancies in one district is to attract teachers from other districts. Some school districts are doing that through signing bonuses. In the summer of 2021, Guilford County Schools in North Carolina began offering teachers up to a \$20,000 signing bonus if they committed to teach there for a period of time. Henrico County in Virginia is adding a referral bonus of \$500 for current employees who refer a candidate who is eventually hired.

Additionally, districts can retrain their current teachers and staff to fill critical need positions. South Carolina created a program, SC CREATE, to

### Traditional and Alternative Teacher Credential Program Enrollment



SOURCE: 2020 Title II Reports

increase special education teachers by providing funding to current employees for training that would add a special education certification to their existing teaching license or to obtain a traditional or alternative special education license.

Allowing retired public employees to return to the classroom without jeopardizing their pensions is another way, at least temporarily, to fill vacancies. In April 2021, South Carolina passed a law increasing the earnings limit from \$10,000 a year to \$50,000 a year for eligible state retirees who work in the public school system. But of course, retired teachers can be expected to return to the classroom for only so long.

### TRENDS IN TEACHER PREPARATION PROGRAMS

When vacancies do occur, it helps to have a pipeline of people who are new to the profession to fill them. There are two primary avenues to the teaching profession: through a traditional teacher preparation program at a college or university that usually results in a bachelor's degree in education, or alternative preparation programs that usually require candidates to already have a bachelor's degree but often allow a candidate to begin teaching while earning their credential.

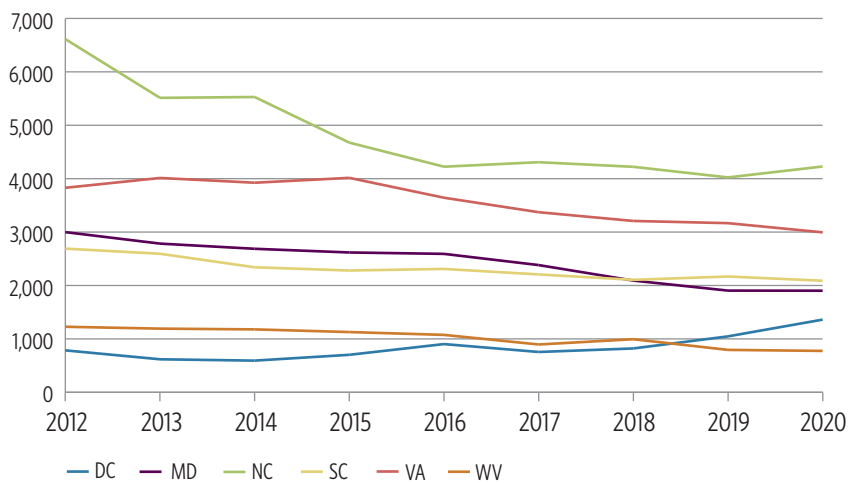
In most states in the Fifth District, however, total enrollment in teacher

preparation programs has declined since a decade ago. (See chart.) Enrollment has decreased since 2012 by over a third in Maryland, Virginia, and West Virginia. The notable exception is the District of Columbia, which saw enrollment in teacher preparation programs nearly double between 2012 and 2020. Much of the growth there can be attributed to increased enrollment over the period in a newer alternative teacher preparation program offered online to students located throughout the country by Moreland University, an online institution based in the District of Columbia.

The most recent teacher preparation program enrollment data available are for the 2019-2020 academic year — before the pandemic. Preliminary data on overall college enrollment rates at most types of institutions indicate that enrollment has declined since the start of the pandemic. Assuming that a similar share of incoming students will choose to pursue traditional teacher preparation programs, this could indicate that enrollment in teacher preparation programs has also dropped. Moreover, the future is expected to bring a decline in the number of students graduating with bachelor's degrees, which will limit the number of potential teaching job candidates seeking alternative certification.

While enrollment has declined in most places, the number of people who

### Traditional and Alternative Teacher Credential Program Completers



SOURCE: 2020 Title II Reports

actually completed teacher preparation programs has declined even more. (See chart.) Between 2012 and 2020, Maryland, North Carolina, and West Virginia saw the number of program completers fall by between 36 and 37 percent. Both South Carolina and Virginia saw a decline of 22 percent. Only the District of Columbia saw an increase in the number of program completers between 2012 and 2020, again due in part to the Moreland University online program that is training teachers across the country.

#### BOOSTING THE TRADITIONAL TEACHER PIPELINE

The cost of earning a bachelor's degree to become a teacher is seen as one barrier to building the pipeline of quality teachers. Some local, state, and federal programs have been put in place or expanded to reduce the cost to students.

Students pursuing coursework required to become a teacher might be eligible for a federal Teacher Education Assistance for College and Higher Education (TEACH) grant that awards up to \$4,000 a year toward their education if they agree to teach in a high-need field at a low-income school for four years. If, after a period of eight years, the requirements have not been met, the grant converts to a student loan.

Teachers with student loan debt

might also be eligible for forgiveness programs after certain requirements are met. The federal Teacher Loan Forgiveness program will forgive up to \$17,500 in student loan debt for teachers with qualified loans who taught certain subjects at low-income schools for five consecutive years. The Public Service Loan Forgiveness program, which forgives all student debt after 10 years of public service, is another option for teachers. While the TEACH grant, Federal Teacher Loan Forgiveness program, and Public Service Loan Forgiveness program have been in place for a long time and uptake has been lower in some programs than would be expected, recent administrative changes might make it easier for future prospective teachers to benefit.

One important component of a traditional educator preparation program is student teaching. These experiences offer students an opportunity to get real-world experience in a classroom setting alongside a mentor teacher. But the programs require student teachers to be in the classroom full time for between 12 and 16 weeks, during which it is difficult to maintain other employment. Typically, student teachers are not paid, which can be a barrier for completing a teacher preparation program.

Some state and local efforts are underway to change that. In August

2021, Oklahoma announced that it would use \$12.75 million of its federal COVID-19 relief funds to pay student teachers a stipend of up to \$3,250. The first half would be paid to the student teacher at the start of student teaching, and the second half would be paid when they are hired by an Oklahoma public school district. The program is currently in place for students enrolled in teacher preparation programs in the state from fall 2021 to spring 2024. Other states, though none in the Fifth District, have pending legislation to provide a stipend to students during their student teaching.

#### ALTERNATIVE TEACHER PIPELINES

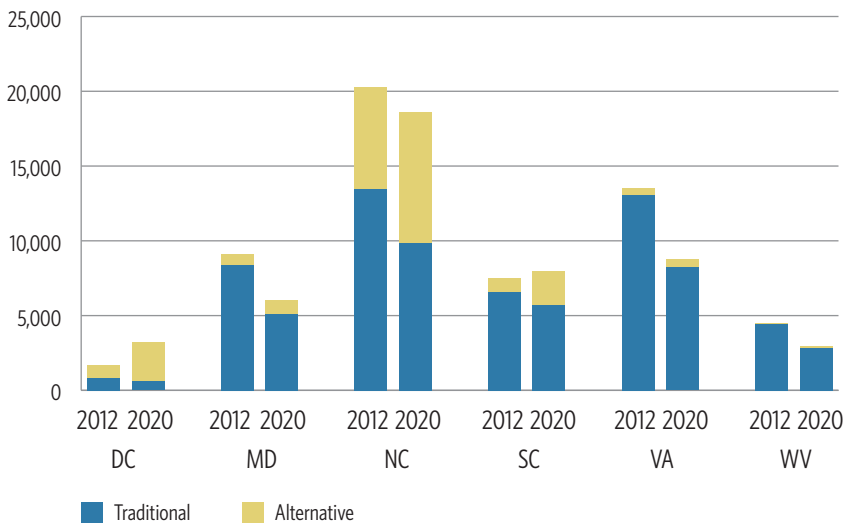
Since 2012, a larger share of enrollment in teacher preparation programs has been in alternative programs. (See chart.)

Alternative certification requirements vary by state. In all states in the Fifth District and the District of Columbia, school districts are allowed to hire qualified candidates with a bachelor's degree relevant to the subject they are being hired to teach on a provisional (or preliminary) license. The new teacher is permitted to begin teaching while completing coursework for an alternative teacher preparation program, which usually takes between one and three years. After completing the alternative program, the teacher will be awarded a traditional teaching license.

In addition to provisional licenses, some states permit school districts to issue emergency licenses for open teaching positions. As with a provisional license, an emergency license allows a qualified applicant without a traditional teaching certificate to begin teaching while enrolled in an alternative teacher preparation program, though this can vary by state.

The share of teachers with emergency or provisional licenses varies throughout the Fifth District. Virginia has the largest proportion of counties in which more than 10 percent of teachers have provisional licenses,

## Teacher Credential Program Enrollment, by Program Type



SOURCE: 2020 Title II Reports

while North Carolina has the largest proportion of counties with no provisionally licensed teachers. In Maryland, urban teachers are more likely to be provisionally licensed than rural teachers, and the reverse is true in North Carolina. In Virginia, similar shares of teachers are provisionally licensed across urban and rural school districts. (See map.)

Teachers with provisional or emergency licenses do not start out with the same level of education training as teachers who have a traditional license. Education training prepares teachers with the skills they need to manage a classroom and deliver content. Evidence suggests that students of teachers with emergency or provisional licenses do not perform as well as students of teachers with traditional credentials. Once teachers have obtained their alternative credentials, however, these teachers' students perform just as well as those who obtained a traditional credential.

Provisionally or emergency licensed teachers also may experience high turnover relative to traditionally licensed teachers. A recent study conducted by researchers in Oklahoma explored emergency licensed teachers' motivations for entering the teaching profession. While many of them are motivated by student outcomes, several

interviewees indicated that they became teachers with emergency licenses to test whether teaching was a good career fit in the long term. If this is the case, a fraction of emergency licensed teachers are likely to leave teaching within a few years of being hired. So while provisional and emergency licensing might be a short-term solution, school districts should expect some disruption to the continuity of the educational environment for students at schools where emergency or provisionally licensed teachers are placed.

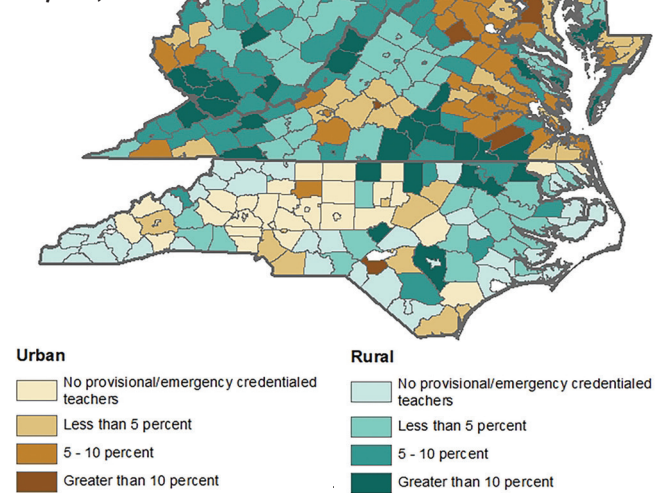
One of the most well-known alternative paths to becoming a teacher is the Teach For America (TFA) program. TFA corps members commit to teaching for two years in a low-income school in one of more than 50 regions throughout the United States. TFA prepares incoming corps members

for their first year of teaching through intensive teacher-leadership training and provides ongoing professional development and support throughout their placement.

Five TFA regions are located in the Fifth District: Baltimore City and County in Maryland; the D.C. region; Eastern North Carolina; the Charlotte-Piedmont Triad in North Carolina; and South Carolina.

A survey of TFA alumni from 2011 found that nearly two-thirds of teachers continued as public school teachers after their two-year commitment, although they may not have stayed in the low-income school in which they were placed. This suggests that TFA is a somewhat effective strategy for recruiting people into the teaching profession early in their careers and at least temporarily filling teaching vacancies at hard-to-staff public schools. At the same time, more than half of TFA teachers leave the school at which they were placed after their

## Share of Emergency or Provisionally Licensed Teachers (MD, NC, VA, WV)



SOURCES: Maryland State Department of Education; North Carolina Department of Public Instruction, School Report Card Resources for Researchers; Virginia Department of Education, Virginia School Quality Profiles; West Virginia Department of Education, West Virginia Balanced Scorecard Dashboard School Year 2020-2021.

NOTE: Data are unavailable for the District of Columbia and South Carolina.

two-year commitment is over. Critics of TFA point to this as a downside to the program, saying that rapid teacher turnover disrupts the continuity of instruction in a school.

### RESPONSES IN RURAL AREAS

In addition to these modes of recruiting new teachers, rural communities throughout the Fifth District are also implementing additional strategies for attracting teachers to their school districts.

In Maryland, Frostburg State University has established the Maryland Accelerates teacher residency program – a type of alternative certification program. Students enrolled in the program earn a Master of Arts in teaching and receive a \$30,000 annual living stipend. After completing their training, they commit to teaching in one of western Maryland's rural counties (Frederick, Garrett, or Washington). Similarly, the University of South Carolina's Carolina Collaborative for Alternative Preparation (CarolinaCAP) program is

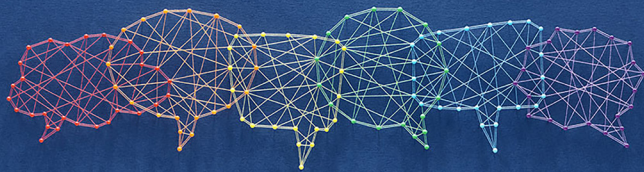
an alternative certification program. CarolinaCAP places participants in teaching positions in rural school districts while they are completing the coursework for their certification. Participants also benefit from ongoing mentoring, coaching, and support throughout their first year teaching.

On a longer time horizon, communities may grow their own supply of teachers. They do this by encouraging graduating high school students to study education in college and then inviting them to teach in their hometown. This strategy has the potential to be effective considering education students often accept teaching positions in the town where they grew up. On the other hand, high school graduates from rural areas are less likely to attend college at all, which dampens the ability for this strategy to fully resolve rural teacher shortages.

### CONCLUSION

The teacher shortage is likely to persist because of retention issues and decreased enrollment in teacher

preparation programs. States and school districts are trying to offer a variety of financial incentives to encourage teachers to stay in the school district or transfer to a new one with higher needs. There are also efforts for school districts to build their own teacher pools and remove financial barriers to encourage potential teachers to enroll in teacher preparation programs, but it will take time for any new enrollees to become teachers. The impact of these policies on teacher turnover and enrollments in programs will become apparent over time, and the policies with evidence of success can be implemented in other areas. Of course, making these programs permanent would require sustained funding after COVID-19 relief funds are spent. It is important to note that much of the additional strain placed on teachers in recent years has not been related to pay. While improving teacher compensation is important, addressing the teacher shortage will likely require finding ways to provide teachers with the support they need to minimize burnout. **EF**



## Community Conversations

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**June 2022: Southern Virginia**

**May 2022: Cecil County, Maryland**

**April 2022: Northeastern North Carolina**

**March 2022: Petersburg, Virginia**