

TEACHER PAY IN NORTH CAROLINA:

A Smart Investment in Student Achievement



Business for Educational
Success and Transformation

2023

Updated November 2023

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Our state's economy and the prosperity of our public school graduates depends on access to great educators – every student, every day.

Acknowledgements

BEST NC would like to acknowledge the many people who have contributed to this report. First, we want to thank the passionate teachers, principals, superintendents, and students who shared their insights and desire to be surrounded by the best teachers in the nation.

We are especially grateful to the business community in North Carolina for their support during the development of this report and for their dedication to strengthening education in our state.

Thanks also to an extraordinary group of experts who reviewed the report and provided feedback: Chad Aldeman (Edunomics Lab), Dr. Andrew Biggs (American Enterprise Institute), Dr. Dan Goldhaber (AIR/Calder Center & University of Washington), Shannon Holston (National Center on Teacher Quality), David Rosenberg (Education Resource Strategies), Jennifer Schiess (Bellwether Education Partners), and Dr. Matthew Springer (University of North Carolina at Chapel Hill).



BEST NC is a non-profit, non-partisan coalition of business leaders committed to improving North Carolina's education system by convening, informing, and engaging state leaders to identify and advance improved education policies, programs, and initiatives. BEST NC envisions a North Carolina in which every student graduates with the knowledge, skills and behaviors to succeed in a competitive global economy. Our mission is to unite an engaged and informed business perspective to build consensus toward dramatically transforming and improving education in North Carolina.

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INTRODUCTION

Recent declines in student performance during the COVID-19 pandemic have helped to expose inadequacies in public education systems across the United States. However, even before these recent pandemic-related learning disruptions, student achievement in North Carolina and across the country was stagnant and many students were graduating high school without the skills needed to succeed in school, work, and life. The decline in performance as a result of COVID has created an urgent call to make strategic and transformative investments in education – and there is no better place to start than with the educators who are so critical for students' success.

Research has consistently found that teachers are the single-most important in-school factor for student success, with a high-performing teacher producing three times the achievement growth of a low-performing teacher.^{i, ii} Therefore, recruiting, supporting, and retaining high-quality teachers in every classroom should be of paramount importance to the state of North Carolina. And yet, there is an often meandering and oversimplified debate within education and policy communities as to how much to pay teachers and which compensation strategies will result in the improvements that are needed. This report seeks to provide the clarity necessary to move teacher pay forward based on research, data, and best practices.

In short, we have a teacher pay problem in North Carolina; one that is not just about *how much* teachers are paid, but also how that pay is *structured*.

How do we know? As economist Dick Startz wrote, "The bottom line on deciding on compensation is whether you're paying enough to get a sufficiently large supply of sufficiently good employees. In other words, if you think we have more great teachers than we need, you should be okay with lower compensation rates. Contrariwise, if you think we need more great teachers than we have on board then you should want to raise salaries."ⁱⁱⁱ The evidence in this report clearly demonstrates that North Carolina's current compensation model is not adequate to ensure that every student has access to a high-quality teacher.

While the amount of pay is clearly important, the way in which teachers are paid is fundamentally flawed. Today's teacher pay schedules are based on a 100-year-old pay model that assumed every teacher had roughly equal skills, and that the mostly-female workforce had few alternative career opportunities as well as a spouse with a higher income to help support a family. While other high-skilled professions, like nursing, have evolved with both modernized compensation structures and opportunities for advancement, teacher pay structures nationwide have remained stagnant.

This report identifies five major challenges in our teacher pay system in North Carolina, each of which negatively impacts our ability to place an effective teacher in every classroom across the state:

- Teaching is a mostly female workforce, yet teacher pay has not kept up with increasing opportunities and pay for female, college-educated professionals, nor with pay for other public sector employees. (Pages 6 & 24)
- Under the existing salary schedule, teachers must wait far too long before their salaries provide a living wage to support a family, with as many as one-third of North Carolina teachers falling into this gap. (Pages 25-26)
- The current teacher compensation model does not provide meaningful professional promotions that attract top talent and keep effective educators in the classroom, incentivizing them to take on roles in school administration or leave the profession altogether. (Page 8)
- Existing pay structures are not designed to fill hard-to-staff subject area positions and schools, leading to persistent, critical vacancies and disparities in student access to effective educators. (Pages 9-10)
- Starting teacher pay is not competitive with surrounding states, making it difficult to attract top candidates and compete for talent in our region. (Page 21)

At more than \$50 million per 1% pay increase, teacher pay increases are costly and investments must be mindful of the overall cost of education and the sources of funding available to pay for it. However, increases in teacher pay can produce a high return on investment when designed to increase teacher quality, strengthen recruitment and retention, and, ultimately, improve student outcomes. Research provides evidence of several ways to strategically maximize investments in teacher pay:

- Strategic investments in teacher pay are linked to larger increases in student achievement than broad, undirected increases in education funding.^{iv}
- Significant increases in teacher salaries are necessary to recruit highly-qualified teachers to hard-to-staff schools.^v
- Raising starting teacher salaries increases the aptitude of those entering teacher preparation, resulting in more high-quality teacher candidates.^{vi}
- Increased teacher pay reduces turnover, with competitive early career pay having an outsized impact on teacher retention.^{vii}
- Teacher pay schedules based upon years of experience and educational attainment disadvantage traditionally marginalized communities by reinforcing systemic inequities in the distribution of highly qualified teachers.^{viii}
- Leveraging differentiated pay that rewards excellent performance boosts student achievement.^{ix}
- Using pay incentives to retain high-performing teachers in hard-to-staff schools decreases teacher turnover in those schools.^x
- Innovative staffing models, such as Advanced Teaching Roles, make the teaching profession more attractive and support the retention of effective teachers seeking additional pay and leadership opportunities.^{xi}

Teachers are high-skilled professionals who have valuable knowledge and abilities that can translate to other industries. They also have professional expectations that are consistent with employees in many other industries. This report examines pay along with other high-skilled professions, not just in the vacuum of the education industry. It includes insights into how other industries attract, motivate, and retain talent. Like teachers, professionals across industries desire to be paid competitively and to be able to support themselves and their families, and they are motivated to enhance their professional experience through intrinsic factors such as mastery, autonomy, and purpose.

This report reviews numerous studies and data that help convey the urgency of our state's teacher pay needs and demonstrates that the outdated step-and-lane salary structure is not conducive to recruiting top talent to the teaching profession. Based on identified best practices, this report makes recommendations for a clear and effective pay strategy, one that recognizes teachers' tremendous contributions to the future of our state and that increasing students' access to great teachers is a critical investment for the future of our economy, workforce, and the well-being of our state's youth. This type of investment is not unprecedented. North Carolina has made a similar effort twice in the last several decades, including more than a \$1 billion teacher pay increase from 2014 to 2018.

Based on the evidence, BEST NC finds that North Carolina can strengthen the education system foundation by increasing and improving teacher compensation using modern, evidence-informed compensation strategies that will:

- Raise the Floor,
- Raise the Ceiling,
- Attract and Retain Teachers in Hard-to-Staff Positions, and
- Reframe the Compensation Context.

I. TEACHER PAY:

A SMART INVESTMENT IN STUDENT ACHIEVEMENT

Research shows that teacher effectiveness has a striking impact on the trajectory of students' performance. When students have access to highly effective teachers in consecutive years, their achievement gains are substantial. In contrast, exposure to an ineffective teacher in consecutive years has sizable damaging effects on a student's academic trajectory (see Exhibit I.1 to the right).^{xii}

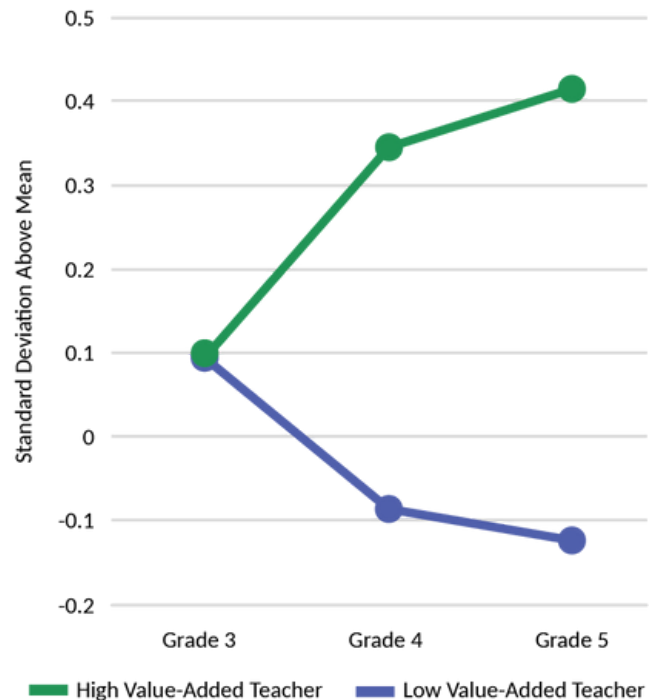
Research also shows that having an effective teacher can increase a student's chances of college attendance as well as future earnings.^{xiii, xiv} In a 2014 study of the impact of effective educators, Raj Chetty determined that a teacher who is one standard deviation above median effectiveness can be expected to increase lifetime earnings for their students by \$780,000 for a class of 20 students.^{xv}

For a class of 20 students, effective teachers can increase lifetime earnings by an estimated

\$780,000

Source: [Chetty, R., Friedman, J., and Rockoff, J. \(2014\)](#).

EX I.1 – Impact of Teacher Quality on Math Test Scores (2012 to 2019)



Source: Springer, M. 2023.

Any examination of teacher pay should start with a consideration of the history of teacher pay, the purpose of investing in teacher compensation, and the way the workforce has changed over the last several decades. When used strategically, teacher pay has the potential to improve student achievement, reduce teacher turnover, and redress inequities in student access to high-quality teachers.

Evidence within this report will show that North Carolina is not investing enough in teacher pay, thwarting our ability to attract and retain the most talented teachers in the country and to ensure each student in North Carolina has access to high-quality learning experiences.

However, it is not enough to say there is a need for more pay. A teacher pay investment must be thoughtfully designed to improve student outcomes by increasing the quantity, quality, and diversity of the educator workforce, including a strategic and actionable plan to meet the following objectives:



**Fill Critical
Vacancies with
Effective Educators**



**Retain Effective
Educators with
Meaningful Career
Advancement
Opportunities**



**Attract & Support
High-Quality
Beginning Teachers**



**Ensure Equitable
Student Access to
Effective Educators**



**Make the Job
Sustainable by
Providing a Positive
and Supportive
Work Experience**

In a 2018 analysis of over five decades of education finance research, C. Kirabo Jackson concluded that broad increases in education spending lead to improved student outcomes, such as higher student test scores, increased high school graduation rates, and greater college enrollment. This was in contrast to most studies published prior to 1995, which found that there was minimal correlation between spending and student outcomes and led some policymakers to conclude that any new spending on education was wasteful.^{xvi}

However, in recent decades, researchers have refined their methods, taking advantage of significant historical changes in school spending levels (e.g., large-scale school finance reforms or the Great Recession) to design quasi-experimental studies that more accurately isolate the impact of changes in education spending. These recent studies confirm that increased spending does have positive impacts on student outcomes.

Moreover, these studies also bear out that not all spending increases are equally impactful. For instance, when spending is focused on capital expenditures such as school renovations or new construction, the impacts on student learning are not as large or meaningful as when spending is focused on classroom instruction.^{xvii}

Studies isolating the effects of increases in teacher base pay, in particular, have shown promise. For instance, a 2013 study found that raising teacher base pay increased student performance through improved teacher retention.^{xviii} Another recently published study found statistically significant, positive impacts of increased teacher base pay on the ability of teachers to raise student achievement and close achievement gaps.^{xix}

This vast body of research establishes an essential truth: while education spending more broadly can yield improvements in student outcomes, investing specifically in teachers yields larger and more significant positive results. Importantly, how teacher pay increases are designed and distributed matters because impacts become even more pronounced when investments are focused on efforts that attract highly qualified candidates, improve retention, and reward excellence.^{xx}

Take, for example, a \$200 million investment in education. Here are three possible ways in which those funds could be invested and what research says about the impact of those investments on student learning.



II. NORTH CAROLINA TEACHER PAY BY THE NUMBERS

Number of Teachers* (2022-23)
101,808

Number of Students* (2022-23)
1,548,758

Number of Schools* (2022-23)
2,700

*Traditional and Public Charter Schools

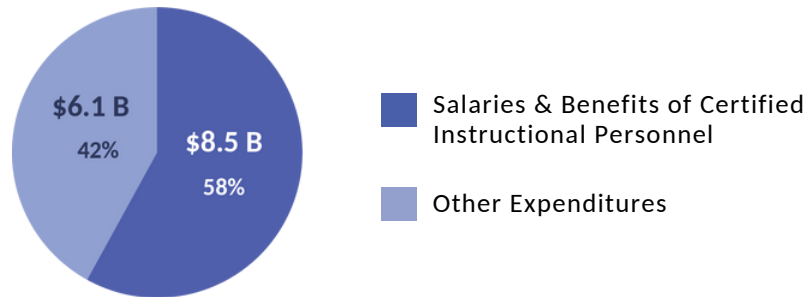
Sources: [NC DPI Highlights of the Public School Budget, 2022-23](#)

NC Average Teacher Pay
(2022-23)
\$57,805

NC Average Starting Pay
(2020-21)
\$37,127

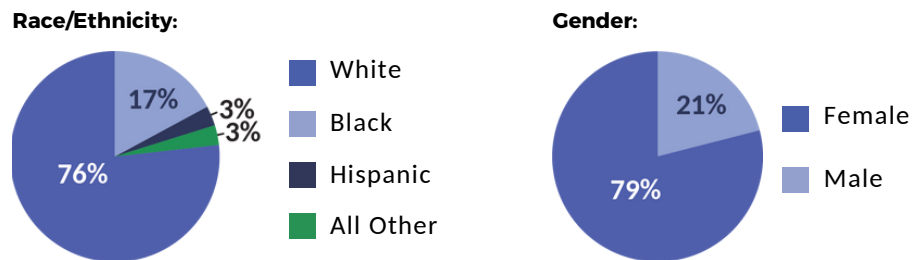
Sources: [NEA Rankings and Estimates Report](#); [NEA Teacher Salary Benchmark Report](#); [NC DPI Highlights of the Public School Budget, 2022-23](#)

EX II.1 – Salaries & Benefits of Instructional Personnel as a Percentage of Total Education Expenditures in North Carolina (FY2019-20)



Sources: [NC DPI Statistical Profile](#); [US Census Public Education Finance Data](#)

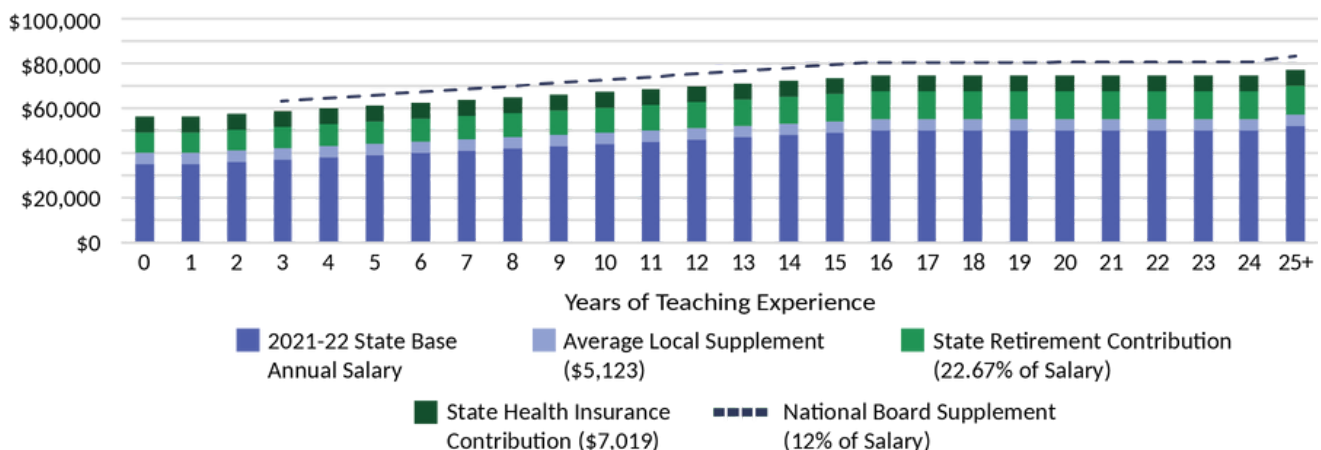
EX II.2 – Distribution of K-12 Public School Teachers, by Gender and Race/Ethnicity (2021-22)



Sources: [NC DPI Statistical Profile](#); [US Census Public Education Finance Data](#)

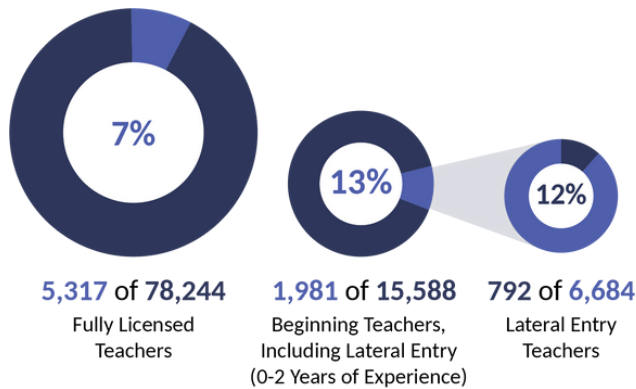
North Carolina has a single statewide salary schedule for all traditional public school teachers. This traditional “step-and-lane” schedule pays teachers based on years of experience and credentials. Exhibit II.3 below shows the base salary with average supplements and benefits. More details can be found in Appendix D-I.

EX II.3 – Average Compensation (Including Benefits) for K-12 Public School Teachers, by Years of Experience (2021-22)



Sources: [NC DPI Teacher Salary Schedules](#); [Current Operations Act of 2021](#); [NC Treasurer's Office \(Data Request\)](#); [NC DPI Statistical Profile](#)

EX II.4 – Teacher Attrition Rates in K-12 Traditional Public Schools, by Teacher Category (2021-22)



Sources: [NC DPI State of the Teaching Profession Report](#)

Each year, North Carolina public schools hire around

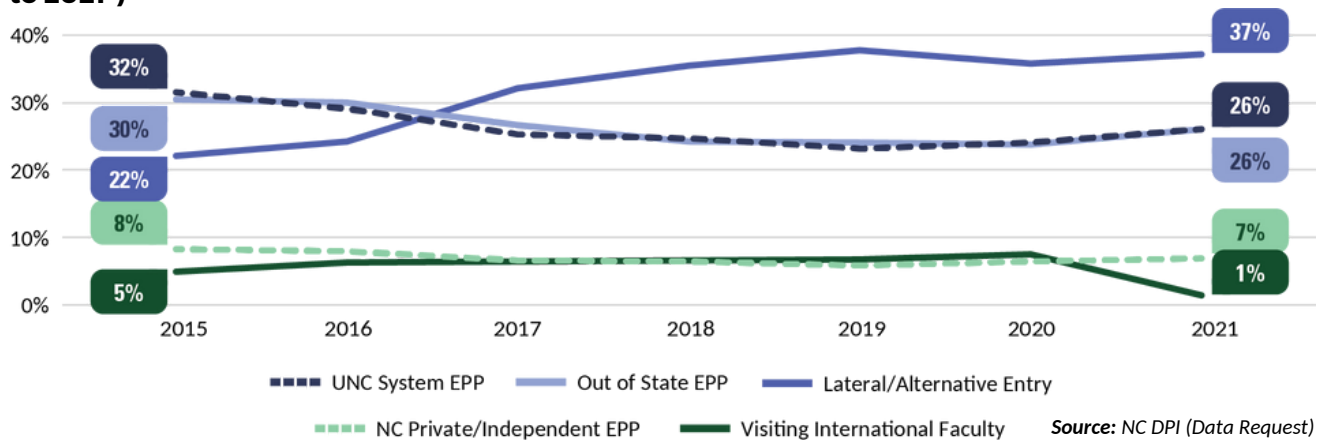
8,000 new teachers,

more new hires of bachelor's degree holders than some entire industries, including Public Administration, Real Estate, Arts and Recreation, and Agriculture & Forestry.

Sources: [US Census Job to Job Explorer](#); [NC DPI State of the Teaching Profession Report](#)

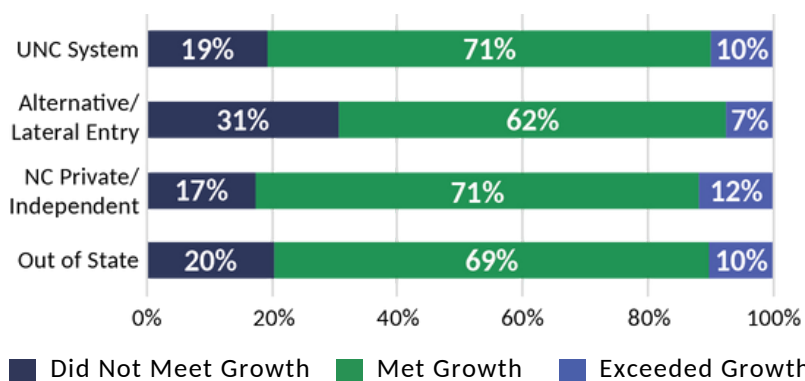
In 2021, the largest source of new teachers came from alternative entry routes, many of whom enter the profession on a residency license. This continues a dramatic increase from only 20% of new hires in 2015 to 37% in 2021. Alternative entry is also the route that has the highest turnover rate and lowest average level of student growth, which warrants serious consideration about how these new teachers are being prepared and supported.

EX II.5 – Distribution of Preparation Routes for Newly-Hired K-12 Public School Teachers (2015 to 2021*)



*Beginning in 2019-20, the route for alternate certification changed from lateral entry to residency licenses. See [NCedFacts.org](#) for more details.

EX II.6 – Distribution of EVAAS Scores for First-Year Teachers, by Preparation Route (2018 to 2021*)



*EVAAS scores were not calculated for the 2019-20 academic year due to the COVID-19 pandemic.

Source: NC DPI (Data Request)

Median Starting Age for Teachers, by the Three Primary Routes of Entry (2021-22)

Traditional Entry	25
Residency/Lateral Entry	31
Out-of-State	35

Source: NC DPI (Data Request)

III. TEACHER PAY BACKGROUND

The History of Teacher Pay

The Step-and-Lane Salary Schedule

In a paper on the history of teacher pay, the Consortium for Policy Research in Education reports that teacher pay in the United States has been characterized by slow, gradual changes in structure. In fact, since the 1800's, there have been only three major changes in the structure of teacher pay: an initial rural tradition of paying the teachers' room and board, the move to a salary schedule based on the grade taught by the teacher, and finally the shift to the single, step-and-lane salary schedule that exists today.^{xxiv}

Despite being a male-dominated field in the earliest days of public schools, by the 20th century, teaching had become an almost all-female profession with at least 75% of teachers being female.^{xxv} It is believed that teacher certification credentials, which were first required in the late-1800s, led to men – who had more lucrative job opportunities at the time – to leave the profession, as certification costs reduced the effective pay for teachers. At this time, many schools and districts transitioned to minimum teacher pay schedules which based pay on teachers' "years of experience, gender, race, and the grade level that they taught." ^{xxvi}

		LANES: Your Degrees or Credentials	
		Bachelor's Degree	Master's Degree
STEPS: Your Years of Experience	0	Begin Career	
	1		
	2		
	3		
	4		
	5		You Are Here
	6		
	7		

Between 1920 and 1950, school systems began to adopt a single salary schedule, recognizing that the prior model was "overtly sexist and racist." This led to the step-and-lane schedules that are still used to pay teachers today. In an attempt to increase fairness in the teacher compensation system, these schedules base compensation solely on a teacher's level of education and years of experience. These measures are objective and, at the time, were believed to be good proxies for teacher quality.^{xxvii} Now, more than 100 years later, most teacher pay systems still rely on these measures, even though new measures exist that are more strongly correlated with teacher effectiveness.

It is important to note that education is not the only industry where step-and-lane schedules have been used. Many industries have used this approach, but most have evolved to other approaches in recent decades including traditional, broadband, and market-based pay. The most common pay structure in use today is market-based pay or a hybrid market-based model.^{xxviii}

Unfortunately, industries that utilize market-based pay seem to be attracting our best talent away from teaching, particularly in hard-to-staff subject areas. In their study, "Pulled Away or Pushed Out? Explaining the Decline of Teacher Aptitude in the United States," Hoxby and Leigh argue that the compressed "uniform pay schedule," which limits overall earning potential, discourages high-aptitude individuals from pursuing a teaching career.^{xxix} In a separate study, Leigh finds that raising starting teacher salaries increases the aptitude of those entering teacher preparation, resulting in more high-quality teacher candidates.^{xxx}

Women in the Workforce

Teaching salaries have not kept up with increases in median income levels for women over the last several decades. In 2020-21, the average salary of a public school teacher in the United States was \$65,090. Adjusting for inflation, the increase was only 10% over a 35-year period.^{xxxi} At the same time, women, who are still the large majority of the teaching workforce, have more professional opportunities than ever before, and their incomes have increased 22%, more than twice the rate of teaching salaries.

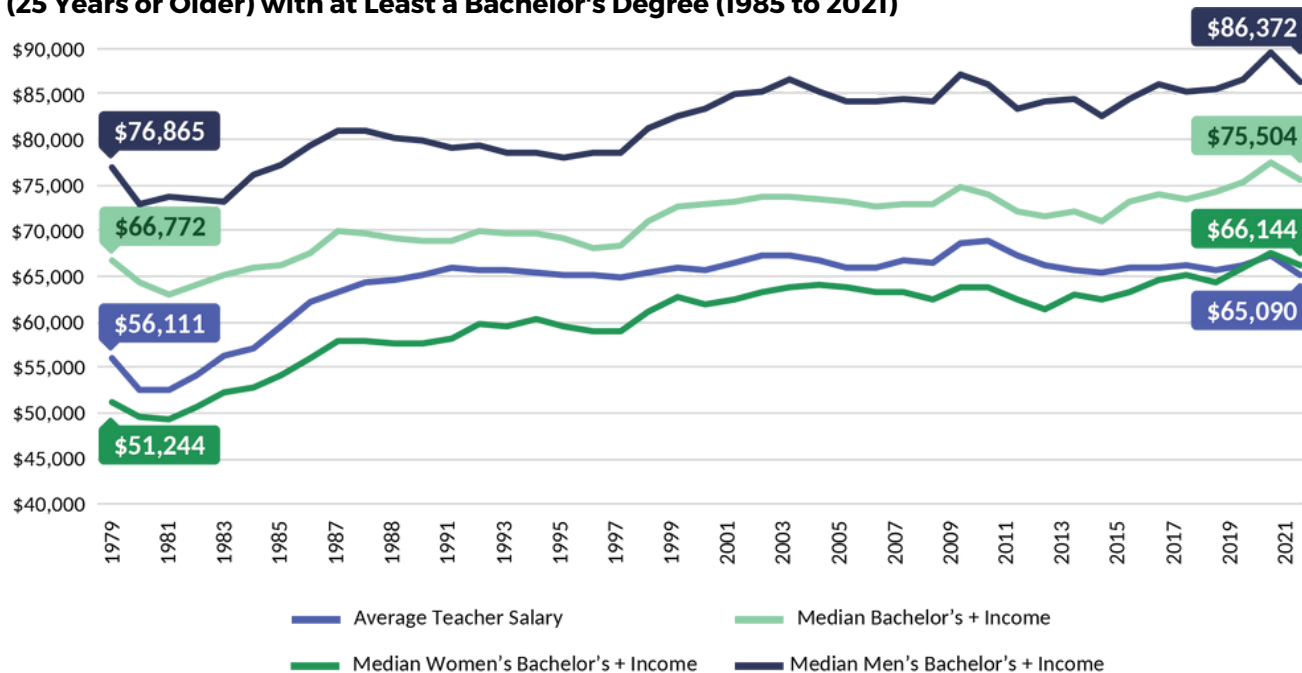
In other words, teacher pay was significantly higher than average pay for college-educated women for decades and, therefore, teaching was an attractive profession for that talent pool. College-educated female pay has now met and surpassed average teacher pay making teaching arguably less attractive to both female and male talent pools, particularly for top-tier candidates.

Change in Median Income (Adjusted for Inflation) 1985 to 2021

Women with a Bachelor's Degree:	Teachers:
+22%	+10%

Sources: [NCES Digest of Education Statistics](#); [Federal Reserve Bank of St. Louis](#); [Federal Reserve Bank of Minneapolis](#)

EX III.1 – Inflation-Adjusted Average Public School Teacher Salary and Median Incomes for Adults (25 Years or Older) with at Least a Bachelor's Degree (1985 to 2021)



Sources: [NCES Digest of Education Statistics](#); [Federal Reserve Bank of St. Louis](#); [Federal Reserve Bank of Minneapolis](#)

Historically, schools have depended on a female workforce to fill teaching roles based on the assumptions that they had a working spouse who was the "breadwinner" and that women had fewer professional opportunities with competitive earnings. These assumptions no longer hold true in modern society, so compensation structures and levels must be adjusted to meet this changing workforce.

More than a decade ago, a 2007 study found, "Attracting the most academically talented women into the teaching profession in the modern era will require a recognition that female graduates look at the labor market much differently today than they did in decades past. Only through a substantial reengineering of the level and structure of compensation, pathways into teaching, levels of professionalism and autonomy, and opportunities available to working teachers are we likely to see a significant reversal in past trends."^{xxxi} One could argue that a similar reimagining of teacher compensation is also required to attract academically talented men into the profession, particularly since they represent only about 20% of the educator workforce in North Carolina.

A Nationwide Challenge

Despite the importance and value of great teachers, states across the country often struggle to create and maintain pay and staffing structures that recruit and retain enough high-quality teachers for our nation's public schools. There are three specific indications that existing teacher pay structures are failing to produce a robust workforce of effective and motivated educators for every child: a declining interest in teaching, retention challenges resulting from a lack of professional pay and advancement, and inequitable student access to effective educators.

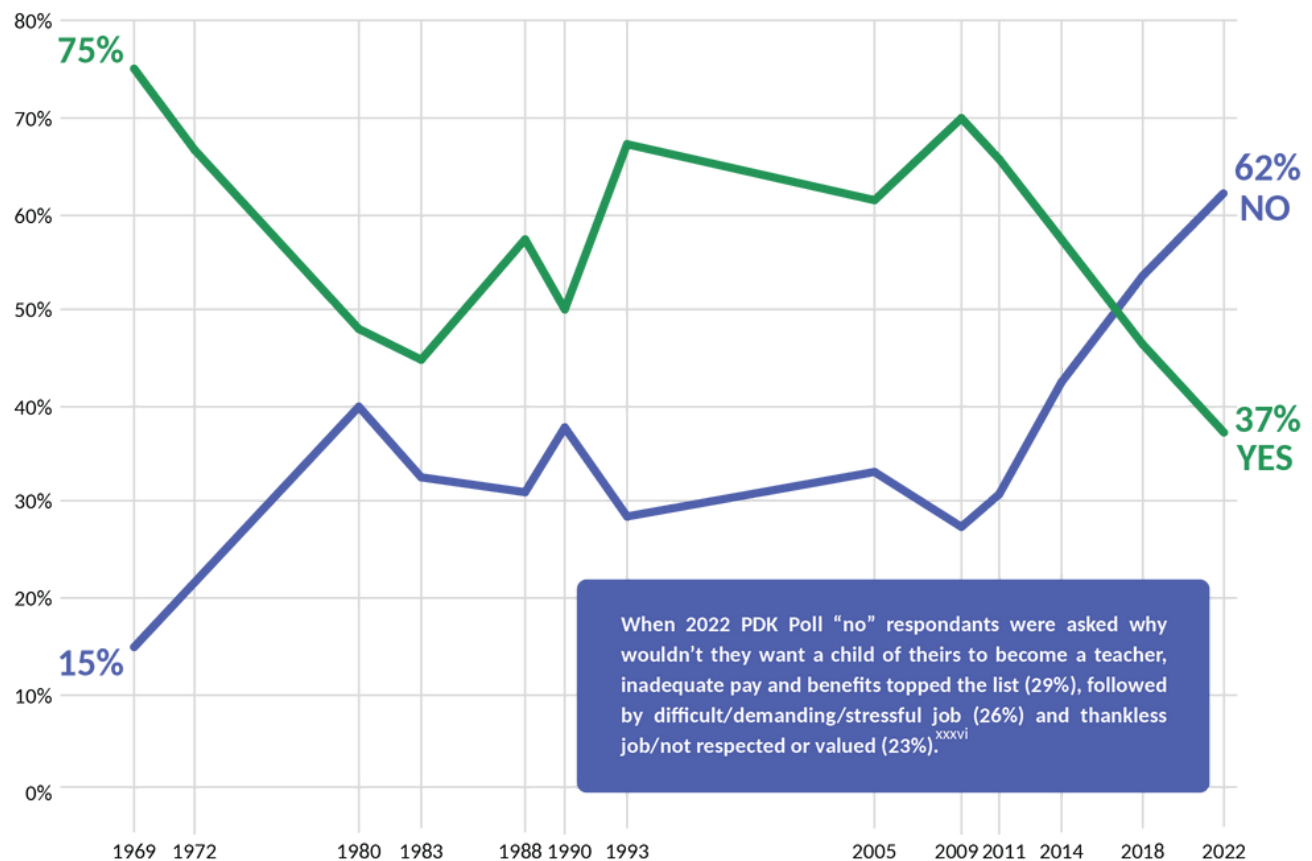
Declining Interest in Teaching

Trends in teacher preparation program enrollment are often cited as evidence of a declining interest in the teaching profession. However, teacher preparation enrollment often follows trends in the economy, as does postsecondary enrollment writ large, and therefore may not be as strong an indicator as other factors.^{xxxiii}

There is, however, evidence that top-tier college students are less likely to become teachers than in the past, likely a side effect of more professional opportunities being available to women over the last few generations.^{xxxiv} Teaching also provides limited compensation growth and fewer professional advancement opportunities than other professions.

Perhaps an even better indicator of a declining interest in the profession is the historically low enthusiasm of parents for their children to become teachers and parents' related concerns about inadequate compensation. According to a nationwide survey, there has been a dramatic decline in the percentage of parents who say they would want their children to be a teacher, with 62% of parents in the 2022 survey saying that they would *not* want their child to become a teacher.^{xxxv}

EX III.2 – PDK Poll Responses: Would You Like Your Child to Become a Teacher? (1969 to 2022)



Source: [2022 Poll Results](#) | [PDK Poll](#)

The Lack of Professional Pay and Advancement Hurts Retention

Traditional step-and-lane teacher salary schedules that have persisted over time require teachers to stay in the profession for decades before reaching adequate base pay, with no opportunities for professional advancement without leaving the classroom. These outdated teacher pay models act to the detriment of those seeking opportunities to grow and advance in their careers while remaining in the classroom. In fact, many teachers explicitly cite a lack of career opportunities as a reason for leaving the profession.^{xxxvii}

Reasons Cited for Leaving the Teaching Profession

1 in 10

Lack of Opportunities for Advancement

1 in 8

Wanted or Needed a Higher Salary

Source: *NCES National Teacher Follow-Up Survey, 2012-13*

Additionally, a survey of college graduates in the top third of their class who did not plan to go into teaching provides insights into the gap between their career expectations and their perception of the teaching profession:

EX III.3 – Perceptions of Teaching vs. Preferred Occupation for "Top-Third" College Graduates Not Planning To Teach (2010)

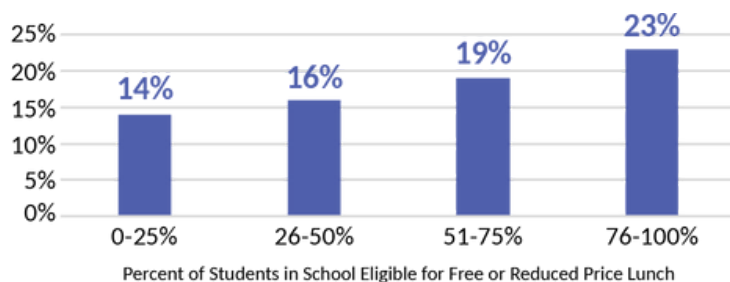
	Percentage that Agree/Strongly Agree this Attribute Rates Highly for:		
	Preferred Occupation	Teaching	Gap between Preferred Occupation and Teaching
There are opportunities to continue to advance professionally in this career.	87%	35%	52
I could support a family with this career.	81%	33%	48
If I were to do well in this job, I would be rewarded financially.	75%	13%	62
Pays appropriately for the skills and effort I will bring.	72%	17%	55
Offers a salary that would increase substantially over the next seven to ten years.	71%	18%	53
This job offers a competitive starting salary.	65%	10%	55

Source: *McKinsey Research, 2010.*

Inequitable Student Access to Effective Educators

As stated above, research has repeatedly found that teachers are the greatest in-school factor for student success. And yet, research also shows that our highest quality teachers are disproportionately clustered in our most affluent schools, often leaving students with the greatest academic needs with limited access to effective educators.^{xxxviii} Traditional step-and-lane teacher salary schedules contribute to this problem because they fail to incorporate meaningful mechanisms to attract and retain highly effective teachers to hard-to-staff positions, helping to ensure all students have equitable access to great educators.

EX III.4 – Teachers Certified via an Alternative Route, by Percentage of Students Eligible for Free or Reduced Price Lunch (2017-18)

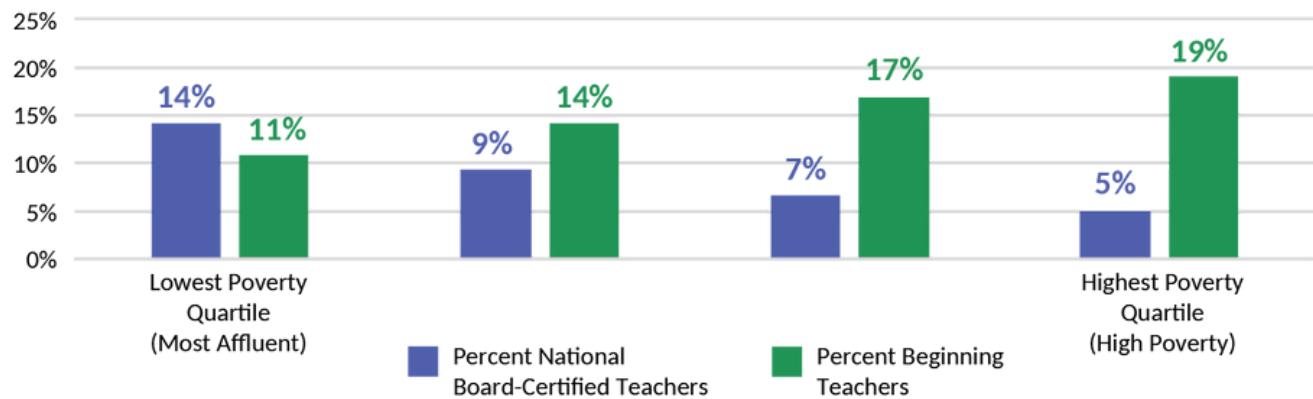


Source: *NCES Digest of Education Statistics*

Across the United States, students in higher-poverty schools are taught by higher proportions of teachers who are certified by an alternative route (see Exhibit III.4). Although the performance of these teachers varies based on a number of factors, in North Carolina, these teachers have, on average, lower student growth scores than teachers who enter through traditional routes, holding constant for other factors such as poverty. They also leave the profession at significantly higher rates (see Exhibit II.4 on page 4).^{xxxix, xl, xli}

Longitudinal studies of school staffing data clearly demonstrate that schools with higher poverty levels and higher percentages of minority students have greater difficulty staffing teaching positions than their peer schools, and high schools generally have more difficulty staffing teaching positions than middle schools or elementary schools.^{xlii} In addition to having a greater percentage of vacant positions, higher-poverty schools often also have a shallower applicant pool made up of less experienced, less qualified teachers. The exhibit below illustrates the relationship between school poverty and key teacher characteristics in North Carolina.

EX III.5 – Percent Beginning Teachers* and National Board Certified Teachers in North Carolina Traditional Public Schools, by School Poverty Quartile** (2021-22)



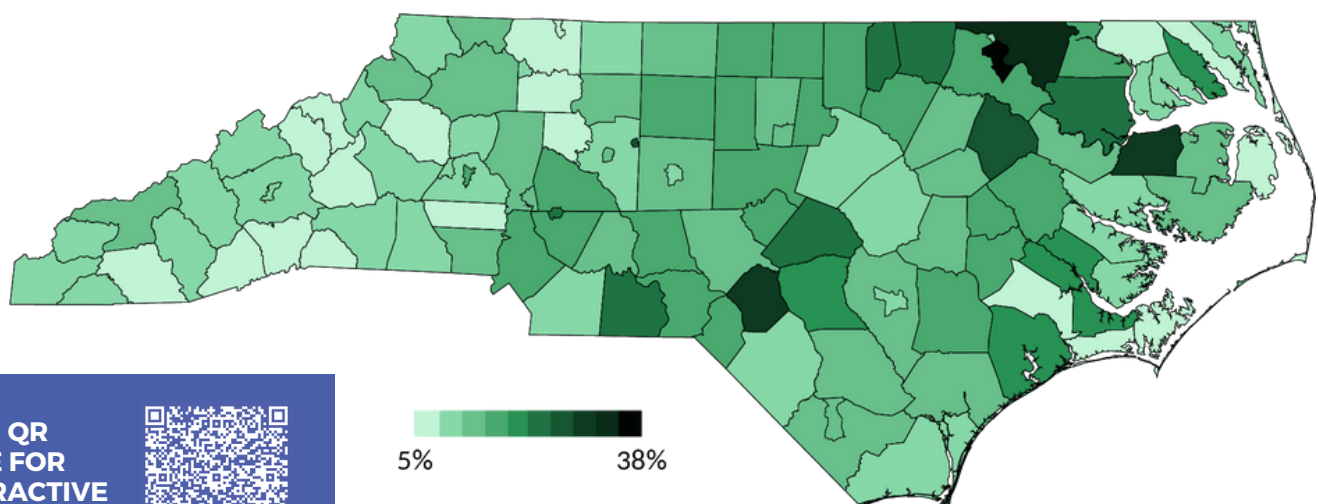
*Beginning Teacher is defined as a teacher in their first three years of teaching.

**Poverty calculation methodology can be found at [NCEdFacts.org](https://nces.ed.gov/ipeds/data/ipedsdatacenter/ipedsdatacenter.asp).

Sources: NC DPI (Data Request); [NC DPI School Report Cards](#)

In addition to being less experienced, beginning teachers also have higher rates of attrition than more experienced teachers, which creates a perennial staffing challenges for some schools and districts. The map below shows how the percentage of beginning teachers varies widely from district to district. On average, 13% of teachers are beginning teachers, but 15 of 115 districts have 20% or more beginning teachers. The five districts with the highest percentage of beginning teachers are Weldon City (38%), Northampton County (35%), Washington County (30%), Hoke County (29%), and Thomasville City (26%).

EX III.6 - Percent Beginning Teachers*, by School District (2020-21)



*Beginning Teacher is defined as a teacher in their first three years of teaching.

Sources: [NC DPI School Report Cards](#); [Tableau Public](#)

SCAN QR
CODE FOR
INTERACTIVE
ONLINE MAP

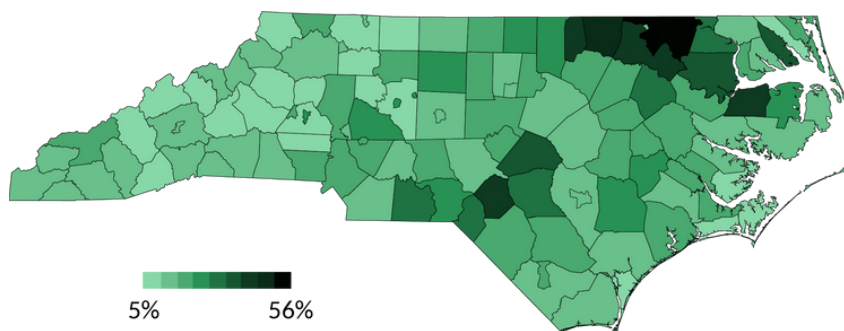


Hard-to-staff schools and subjects can be difficult to precisely quantify because vacancies are often underreported, in part because schools fill positions with temporary employees or perhaps with less qualified candidates, such as teachers on an emergency license. They also may trade in positions altogether, opting to receive funds in exchange for a position they cannot fill.

We do, however, have limited, self-reported data that indicates where we face the largest vacancy challenges. In 2020-21, North Carolina school districts reported that secondary school positions in math, science, and Special Education have been most difficult to staff and national studies find similar trends.^{xliii} At the beginning of the 2022-23 school year, the North Carolina School Superintendents' Association reported 4,467 teacher vacancies with about twice as many vacancies in middle and high school positions as compared with elementary school.^{xliv}

We can also examine geographic variations in school staffing by looking at the percentage of fully licensed teachers in each school district. Several districts are 95% staffed with fully licensed teachers but most are not.

EX III.7 – Percentage of North Carolina Teachers Not Fully Licensed, By School District (2020-21)

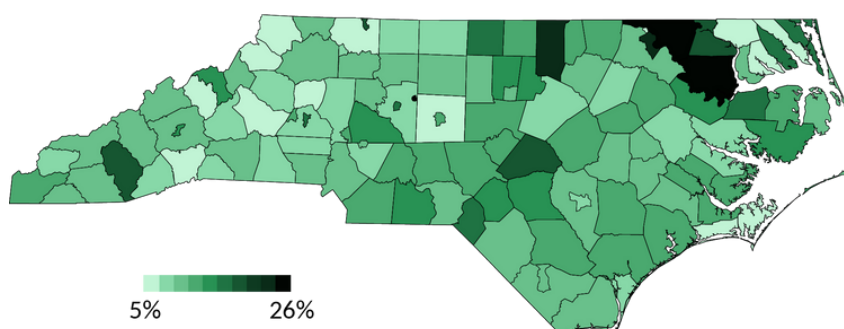


Sources: NC DPI (Data Request); [Tableau Public](#)

Note: Fully licensed is defined as having a Continuing Professional License (CPL) and does not include teachers with an Initial Professional License (IPL), who are generally beginning teachers, or those with other license types such as Residency, Visiting International Faculty, Emergency, or Permit to Teach. The five districts with the highest percentage of teachers who are not fully licensed are Weldon City (56%), Northampton County (54%), Warren County (47%), Halifax County (44%), and Hoke County (41%).

Teacher departure rates – or the rate at which teachers leave a district from one year to the next – also vary significantly across districts. As one might expect, there is a significant correlation between a district's departure rate and the percentage of beginning teachers it employs, as those districts often must hire the least experienced teachers to replace teachers who leave the district each year.

EX III.8 – K-12 Traditional Public School Departure Rates, by School District (2021-22)



Sources: [NC DPI State of the Teaching Profession Report](#); [Tableau Public](#)

Note: The five districts with the highest departure rates are Thomasville City (26%), Bertie County (26%), Northampton County (24%), Granville County (24%), and Weldon City (24%).



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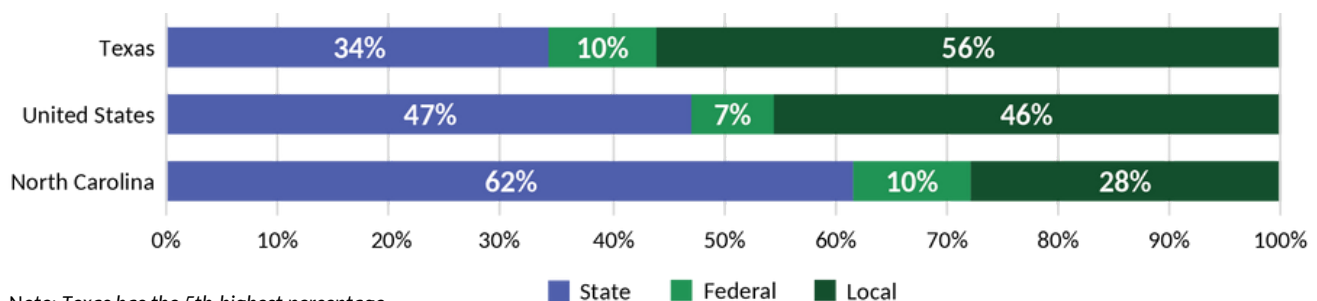
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IV. TEACHER PAY IN NORTH CAROLINA

North Carolina's Unique State-Level Funding Model

Unique to North Carolina, K-12 education operating costs have been the responsibility of the state since the passage of *The Machinery Act* in 1931. Under this legislation, the state of North Carolina assumed responsibility for the financial costs of operating schools while localities were deemed responsible for building and maintaining public school facilities. This sets North Carolina apart from most other states where local property taxes are the main source for education funding.

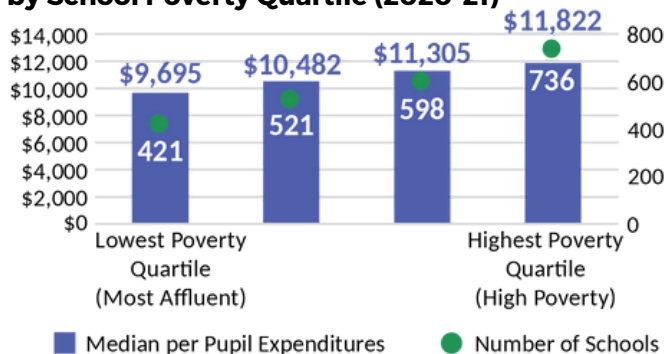
EX IV.1 – Public School Revenue in Texas, the United States, and North Carolina, by Funding Source (2019-20)



Note: Texas has the 5th-highest percentage of locally-funded public school revenue, while North Carolina has the 9th lowest.

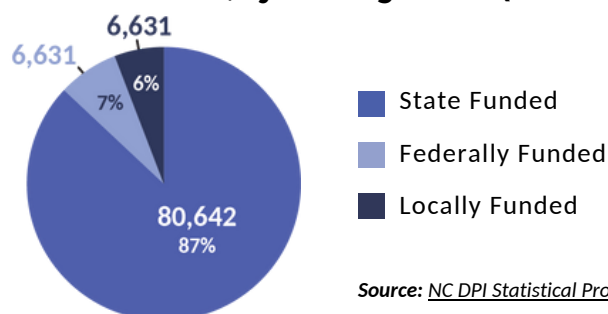
Source: [US Census Bureau](#)

EX IV.2 – Median per Pupil Expenditures in North Carolina Traditional Public Schools, by School Poverty Quartile (2020-21)



Source: [NC DPI School Report Cards](#)

EX IV.3 – North Carolina K-12 Public School Teacher Positions, by Funding Source (2022-23)



Source: [NC DPI Statistical Profile](#)

In other states, relying primarily on local funding creates tremendous disparities because affluent communities have larger tax bases than more impoverished communities, and the latter generally require greater financial resources to meet their educational goals. Although this phenomenon occurs in North Carolina as well, its impact is mitigated by the fact that the state provides the majority of the funding, including additional funding for low-wealth school districts, small counties, and disadvantaged students, among other needs.

Since funding for teaching positions is generally the responsibility of the state, North Carolina funds the vast majority of teaching positions (see Exhibit IV.3).

With base pay and other operating expenses being the responsibility of the state, districts have the flexibility to add local salary supplements and other investments. Local salary supplements generally help buffer higher local costs of living in some areas of the state, e.g., more expensive housing markets. Local supplements are reviewed in more detail on pages 17-18.

Base Pay vs. Average Pay

As previously mentioned, school districts often supplement teacher salaries with local funding, meaning the “top” of the state salary schedule is not actually where teacher pay maxes out. The state salary schedule actually sets the minimum, or base, pay for teachers. The exhibit below illustrates how additional pay and benefits can stack on top of base pay.

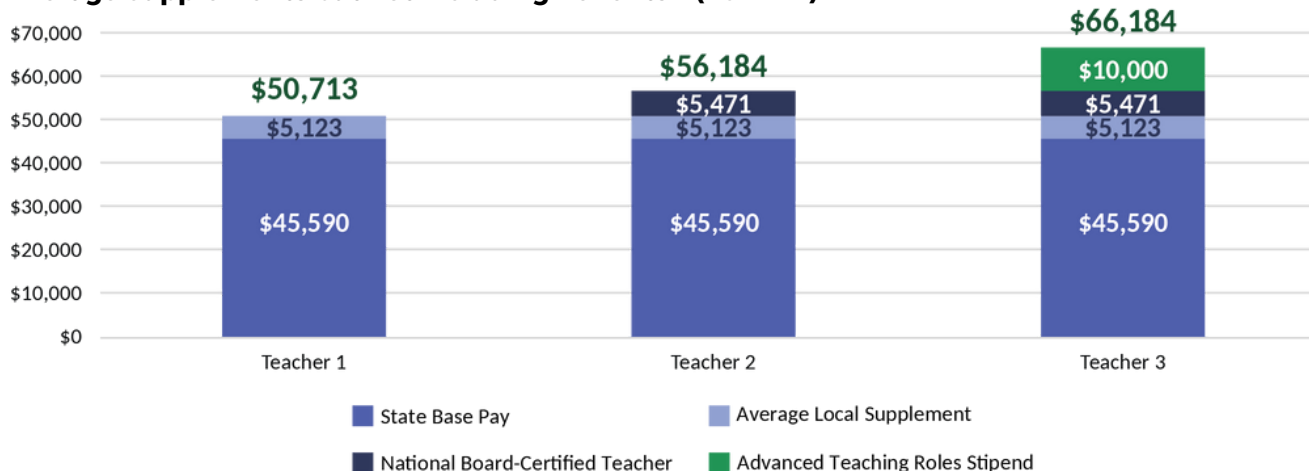
The North Carolina General Assembly also increases the state salary schedule with the enactment of new state budgets. These increases are generally meant to account for increases in cost of living. For example, starting base pay was \$30,800 in 2012-13 and is \$37,000 in 2022-23.

In other words, the state salary schedule should be considered the floor, not the “ceiling,” for teacher pay. Pay increases occur in multiple ways including legislated increases, local salary supplements, and opportunities for additional pay, such as for National Board Certification status and Advanced Teaching Roles.

Fact Check

Average teacher pay in North Carolina was \$57,805 in 2022-23, but the “top” of the state salary schedule was \$54,000. This can be confusing. Find out why in this section.

EX IV.4 – Compensation Package Scenarios* for North Carolina Public School Teachers, Including Average Supplements but not Including Benefits** (2021-22)



*The teachers in these scenarios each have 10 years of experience. Teachers 2 and 3 are National Board Certified. Teacher 3 holds an Advanced Teaching Roles (ATR) “Lead Teacher” position and earns an additional \$10,000 salary supplement (ATR Lead Teacher position stipends ranged from \$6,000 to \$20,000 in 2021-22.)

**Benefits packages include retirement and healthcare contributions, which cost the state, on average, \$17,454 per teacher. Additional information can be found on pages 44-47.

Sources: [NC DPI Salary Schedules](#); [NC DPI Highlights of the Public School Budget](#); [NC DPI Statistical Profile](#); [Current Appropriations Act of 2021](#); Interviews with ATR District Personnel (2022)

While teacher pay is generally the responsibility of the state, any major increase in teacher pay will create a financial burden for local school districts. If state pay increases by 10%, local school districts will generally have to find 10% funding to match it. However, local salary supplements are entirely at the discretion of the district, and local policymakers can decide whether to continue with existing resources or raise their supplement by a commensurate amount.

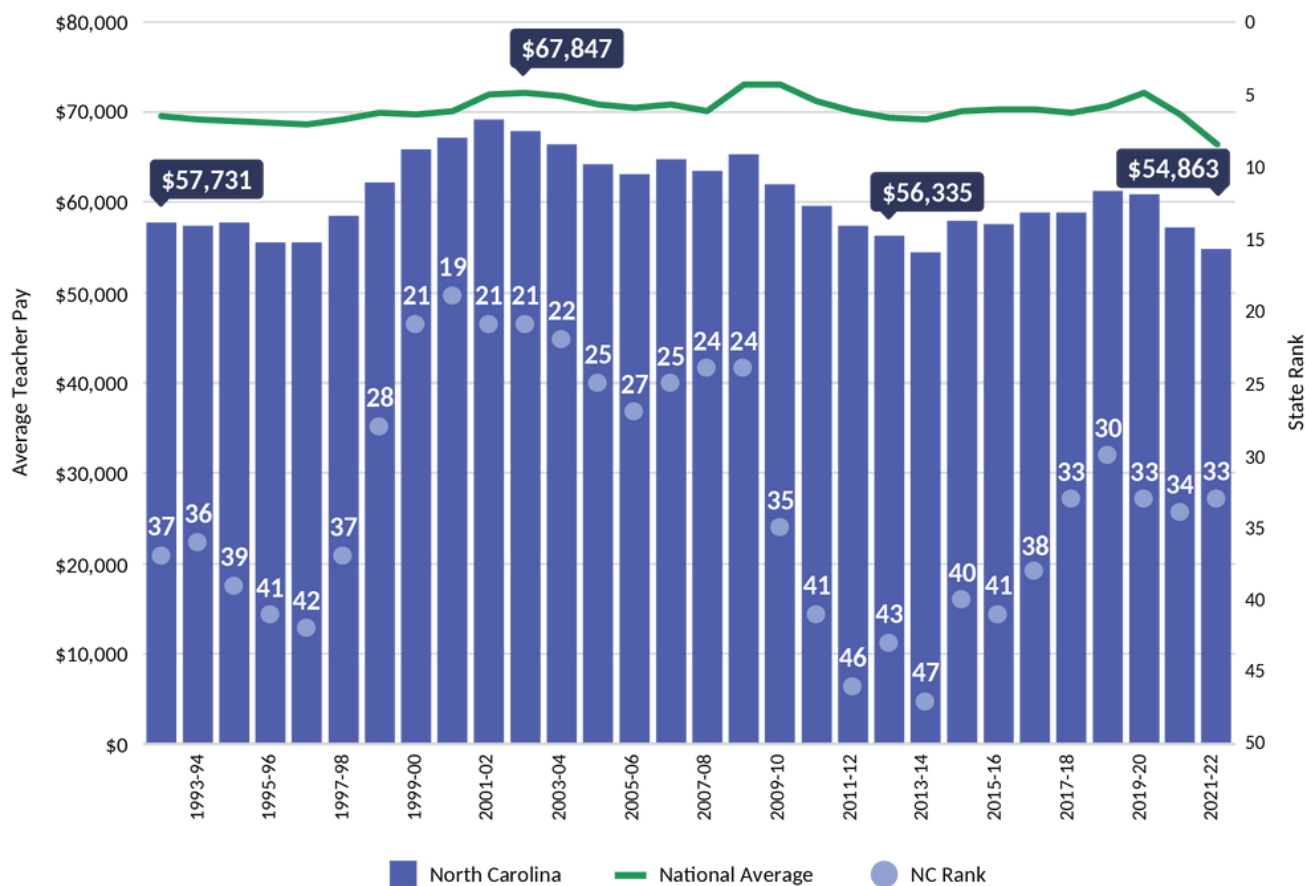
Teacher Pay Over Time

In North Carolina, inflation-adjusted average teacher pay increased by 28% from 1980 to 2000, resulting in the state's highest recorded national pay ranking of 19th in the country in 2000-01. This rate of increase was part of a national trend, but was higher than the national increase of 20% during the same timeframe.^{xlv}

Between 2001 and 2007, before the Great Recession began, average teacher pay in North Carolina ranked in the top half of all states and near the top of the Southeast region. For example, in 2004-05, North Carolina ranked 26th in the nation in teacher pay and second only to Georgia in the Southeast.^{xlvi} It is interesting to note that at no point during the timeline below was North Carolina above the national average (in nominal dollars) because of significantly higher pay at the top of the rankings, typically aligned with higher cost-of-living in those states. This report uses cost-of-living adjusted pay for this reason, except in the 30-year chart below.

The Great Recession had a negative impact on teachers' salaries across the country and, in North Carolina, resulted in five consecutive years of salary freezes from 2009-10 to 2013-14. The outcome was a decline in North Carolina's average teacher pay ranking and an overall flattening of the teacher salary schedule, especially for teachers early in their career. Teachers who began their careers in 2008-09 were in their sixth year of teaching in 2013-14, but earning the same as teachers with no experience (see Exhibit IV.6 on the next page).

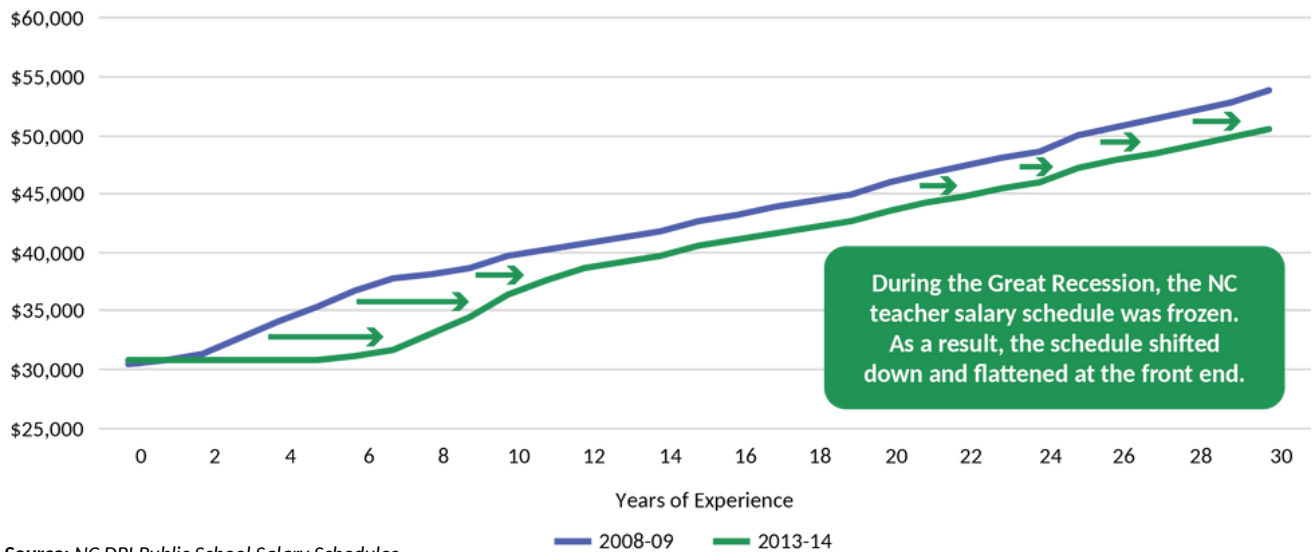
EX IV.5 – Average K-12 Teacher Salary in North Carolina, Inflation-Adjusted to 2022 Dollars (1992-93 to 2021-22)



Note: These figures are adjusted for inflation. Nominal income rose over the last few years, but effective income declined with inflation, both nationally and in North Carolina. Rankings are based on nominal pay, not cost-of-living adjusted. While 2022-23 figures have been released for North Carolina, they are not yet available for other states.

Sources: [NEA Rankings and Estimates](#); [NCES Digest of Education Statistics](#); [US Bureau of Labor Statistics Consumer Price Index](#)

EX IV.6 – State-Funded Teacher Pay in North Carolina, by Years of Experience (2008-09 and 2013-14)

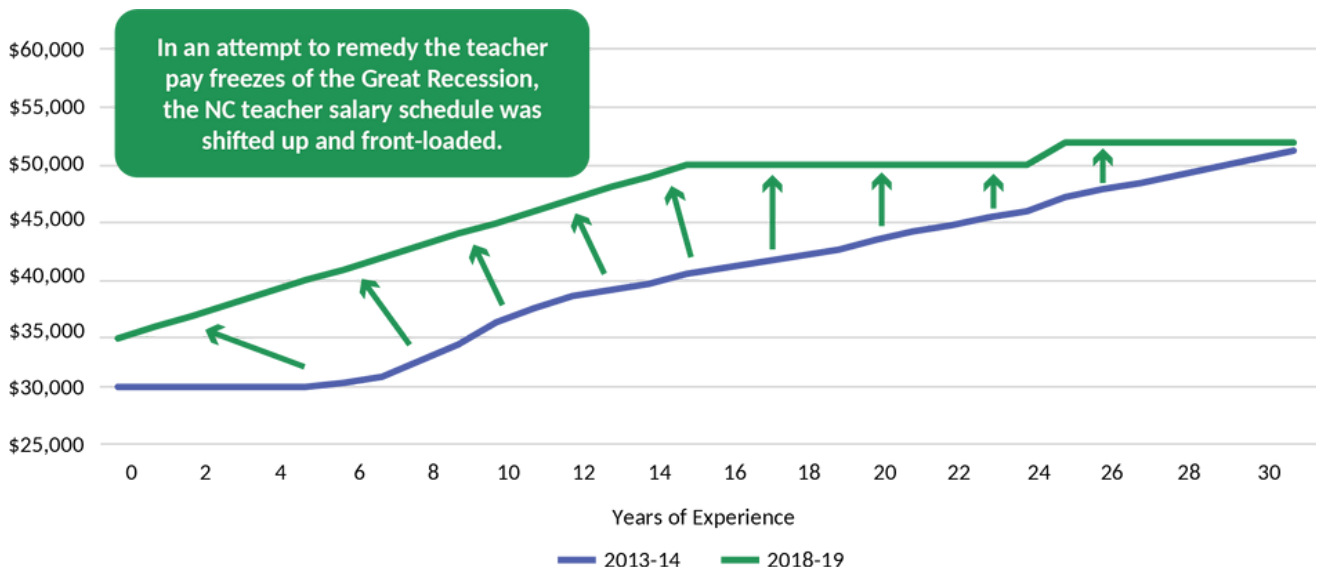


Source: [NC DPI Public School Salary Schedules](#)

Faced with less competitive pay, both regionally and nationally, in 2013, the North Carolina General Assembly created the North Carolina Educator Effectiveness & Teacher Compensation Task Force to determine steps to strengthen teacher pay across the state. Based on those discussions, the legislature initiated a multi-year strategy to raise average pay with a focus on front-loading the pay schedule.^{xlvii} This strategy, which is examined in more detail in Section V on page 24, proposed that high-skilled professionals should expect substantial boosts in pay earlier in their careers when their skills are growing most rapidly, followed by additional pay increases if they take on more responsibilities or unique challenges. During this time, the longstanding practice of providing longevity pay for teachers was eliminated, and those funds were embedded within the new pay schedule. A hold harmless provision was also put in place so that no teacher would earn less under the new structure.^{xlviii}

Exhibit IV.7 below shows changes in the state teacher salary schedule between 2013-14 to 2018-19. As a result of investments totaling over \$1 billion, North Carolina rose from 47th in average teacher pay in 2013-14 to 30th in 2018-19. The annual increases during this time are shown in Appendix B.

EX IV.7 – State-Funded Teacher Pay in North Carolina, by Years of Experience (2013-14 and 2018-19)



Source: [NC DPI Public School Salary Schedules](#)

As a result of a state budget stalemate and the COVID pandemic, teacher pay did not rise in 2019-20 or 2020-21. There was a 1% increase in 2021-22, as well as one-time bonuses paid from federal COVID relief dollars, followed by a 3% increase in 2022-23.^{xlix, l} As of 2021-22, North Carolina ranked 33rd in the nation in average teacher pay.^{li} The recent sharp increases in inflation will likely result in a decline in inflation-adjusted average teacher pay for 2022-23 and beyond, unless the state makes a significant investment.

The 2013 *North Carolina Educator Effectiveness & Teacher Compensation Task Force* recommended that the General Assembly should "increase the salaries for all teachers, while modernizing North Carolina's educator compensation system to more closely align compensation with student outcomes and educator responsibilities," and that it should "direct the North Carolina State Board of Education to study sustainable and effective educator compensation models, and submit recommendations to the General Assembly regarding development of the most effective educator compensation model for the State."

This is notable because in 2021 the State Board of Education charged The Professional Educator Preparation & Standards Commission to develop a new, comprehensive licensure and compensation plan, which is currently in development as the *Pathways to Excellence for Teaching Professionals Plan*.



Beginning Teacher Pay

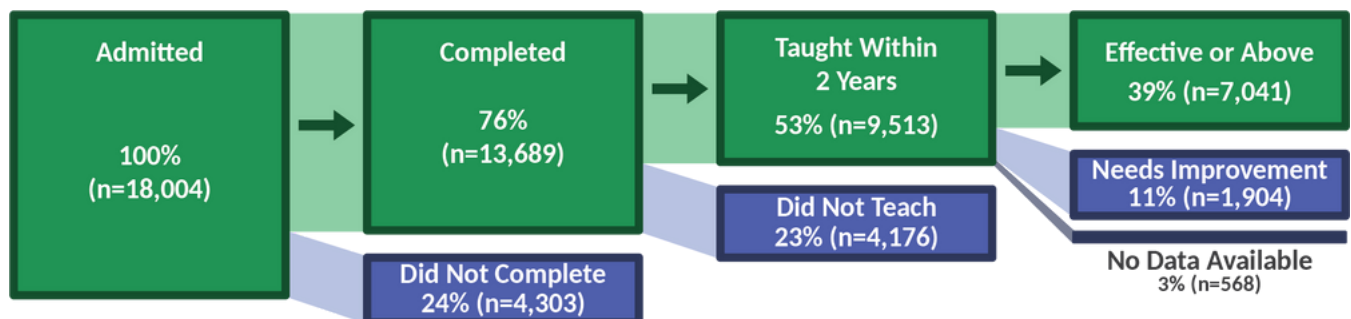
Nationally, beginning teacher pay has been demonstrated to be a powerful predictor of teacher attrition. A National Center for Education Statistics analysis of first-year teachers in 2007-08 revealed that teachers with beginning salaries above \$40,000 had 10% less attrition after one year and 9% less attrition after four years than teachers with beginning salaries less than \$40,000.ⁱⁱⁱ Today, more than a decade after this analysis was completed, average pay for beginning teachers in North Carolina has still not reached \$40,000 (according to 2021-22 data, which is the latest available for beginning pay).ⁱⁱⁱⁱⁱ

The NCES study is notable because beginning teachers have substantially higher attrition rates than fully licensed teachers. From 2015-16 to 2020-21 the average rate of attrition for beginning teachers was 12%, compared with 7% for fully licensed teachers.^{iv} A reduction in the attrition rate for beginning teachers would reduce replacement costs but, more importantly, would increase overall teacher quality, since teacher effectiveness rises until the 5-to-7-year experience range and too many teachers leave before then.

A comparison with other states in the Southeast region shows that North Carolina average beginning pay was second to last in the 2020-21 school year (see Exhibit IV.16 on page 21). While evidence shows that current beginning pay likely contributes to higher turnover rates, it is also clear from this comparison that beginning pay in North Carolina is not regionally competitive to recruit top talent into the teaching profession.^v

For example, between 2013 and 2017, a full 23% of the 13,689 graduates of North Carolina educator preparation programs were not employed as teachers in North Carolina within two years of graduation.^{vi} Given the research around the importance of starting pay, this is another indicator that early teacher pay in North Carolina is not attractive enough to keep these North Carolina educator preparation program graduates teaching in-state, or perhaps teaching at all.

EX IV.8 – Outcomes of Students Admitted to a North Carolina Educator Preparation Program (2013 to 2017)



Source: [NC DPI Educator Workforce Demography Overview](#)

RECOMMENDATION: Significantly increase starting pay, particularly for well-prepared candidates, to be competitive with surrounding states and similar industries.

Local Salary Supplements

In North Carolina, all teachers are paid a state base salary that is set annually by the General Assembly. Local school districts can supplement teacher salaries using local tax revenue. Each Board of County Commissioners determines the amount of local funds that will be available, then school district leaders determine how to allocate local salary supplements based on years of experience, degrees, or other factors. These supplements are often distributed as a percentage of the base, meaning that less experienced teachers receive a smaller nominal supplement.

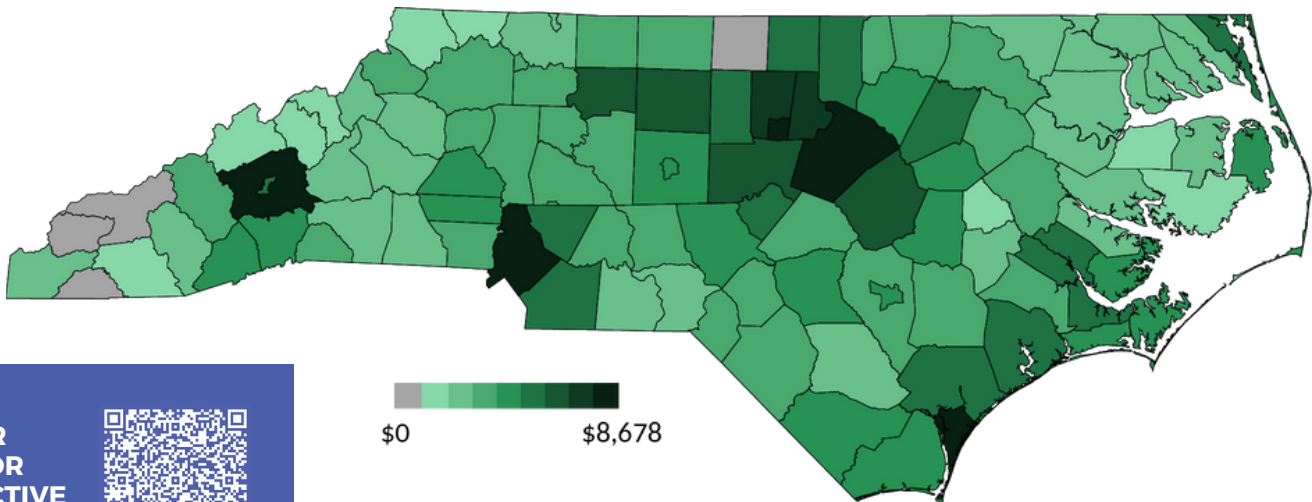
In 2022-23, the
statewide average local
salary supplement was
\$5,984

Source: [NC DPI Public Statistical Profile](#)

Local funding for education is generated through property tax. Since wealthier counties have larger property tax bases than poorer counties, those counties are able to generate more funding per pupil. This disparity has existed for decades in North Carolina and the gap is widening. In 2019-20, the North Carolina Public School Forum's *Local School Finance Study* found that even though the ten poorest counties taxed themselves at 1.7 times the rate of the ten wealthiest counties, those poorer counties cannot provide the same level of local funding per student.^{lvii}

In 2021-22, the statewide average local supplement was \$5,123 and supplements ranged from \$8,678 in Charlotte-Mecklenburg Schools and \$8,670 in Wake County Public Schools to \$0 in four school districts: Caswell County Schools, Clay County Schools, Graham County Schools, and Swain County Schools.^{lviii}

EX IV.9 – Average Local Salary Supplements for Teachers in North Carolina Traditional Public School Districts (2021-22)



Note: These figures do not include the Teacher Supplement Assistance Allotments described below.

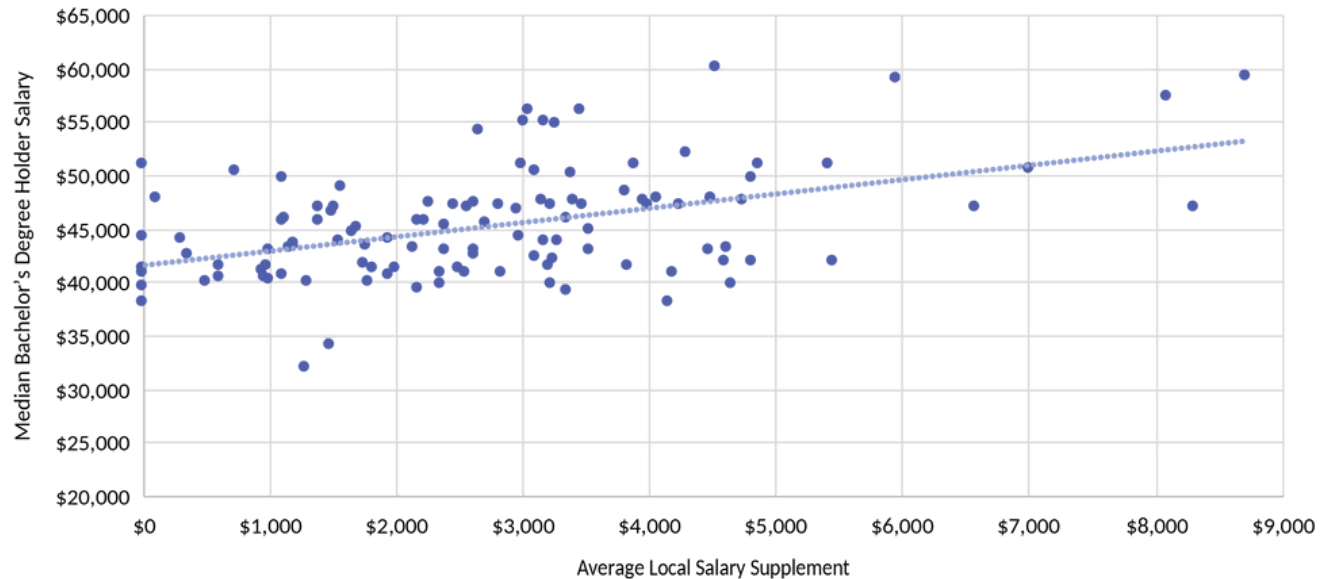
Sources: [NC DPI Statistical Profile](#); [Tableau Public](#)

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Importantly, using median salaries as a proxy for variations in cost of living, average local salary supplements are positively correlated with the median income of bachelor's degree holders in each school district (see scatter plot on the next page). While this does not indicate whether local salary supplements are adequate, they seem to be a viable mechanism for adjusting state pay to account for local cost of living. For more detail on why local cost-of-living adjustments are important, see "The Purchasing Power of Teacher Pay" on pages 41-42.

EX IV.10 – Average Local Salary Supplement for Teachers and Median Bachelor's Degree Holder Salary in the County Where the School District is Located (2019)



Source: NC DPI Statistical Profile, US Census Bureau

North Carolina's New Salary Supplement Assistance Fund

One challenge with local salary supplements as a mechanism to adjust for cost of living across the state occurs when a more affluent district borders a less affluent district. In these cases, teachers can simply cross a border to earn a higher income, while enjoying the lower cost of living in their home district.

In an effort to help lower-wealth districts provide more competitive local salary supplements to teachers, the North Carolina General Assembly created the Teacher Supplement Assistance Allotment in 2021 with \$100 million in recurring funding.^{lvix} In 2022, an additional \$70 million in recurring funds were added for this purpose.^{lx} In 2021-22, districts qualified for funds if they had less than or equal to \$43 billion in taxable property. Under these criteria, all but four school districts (Wake County Public Schools, Durham Public Schools, Guilford County Schools, and Charlotte-Mecklenburg Schools) qualified for funding.^{lxi}

The salary supplement assistance fund allows for eligible districts to receive up to \$4,250 per state-funded teacher but actual amounts vary based on the specific level of taxable property in each district. In 2021-22, the amount districts received ranged from \$490 per state-funded teacher in Union County to the maximum \$4,250 per state-funded teacher in nine counties, with greater amounts going to lower-wealth counties. Districts have significant freedom in how they use these funds, provided that no salary supplement is greater than the per-teacher funding amount provided to the district and that the funds are used to supplement rather than supplant existing local funds for teacher salary supplements.^{lxii}

North Carolina has several other state categorical allotments that aim to lessen some of the local differences in tax base and student population across school districts. All of these categorical allotments can be used to hire teachers, and the Low-Wealth, Small County, and Disadvantaged Student Supplemental Funds can be used to provide local salary supplements.

The 2022-23 North Carolina State Budget includes:^{lxiii}

- \$299 Million for Low Wealth Districts
- \$55 Million for Small Counties
- \$120 Million for English Language Learners
- \$1.063 Billion for Students with Disabilities
- \$106 Million for Disadvantaged Students

State Position Allotments and Hidden Teacher Pay Inequities

The classroom teacher allotment is - by far - the largest single state allotment: salary and benefits for instructional personnel represent approximately 58% of total state funding for education.^{lxiv} In North Carolina, the state allots teaching positions to each school district based upon the number of students in each grade, according to ratios set by the General Assembly (see Figure IV.11 below). When a school district hires a teacher, the state provides the district with the teacher's state base pay, depending on where the individual falls on the state salary schedule.

In concept, the position allotment system is intended to provide equal access to teachers for all schools and districts. For example, in 2023-24, a first-year teacher earned a state base salary of \$39,000, while a National Board Certified Teacher with 15 years of experience earned a state base salary of \$59,430. Because the state funds positions rather than dollar amounts, districts can hire teachers without regard to how much the teacher will cost to employ. The reality is, however, that teachers are not evenly distributed across the state, and they can choose to which schools they want to apply. Researchers call this phenomenon teacher sorting.^{lxv, lxvi, lxvii}

A 2016 study by the Program Evaluation Division of the North Carolina General Assembly study found that teacher sorting is exacerbated by the state's position allotment system. The study found that the allotment system enables wealthier districts that offer higher salary supplements and greater supports for students, teachers, and families to take advantage of applicant pools rich with experienced, National Board Certified teachers to accumulate greater numbers of highly qualified teachers, depriving hard-to-staff schools with more economically disadvantaged students of access to these educators.

The impact of this significant funding inequity embedded in North Carolina's education system comes into clearer focus when comparing a school district's average state-funded teacher salary to the statewide average for state-funded teacher pay. Below are two examples, one urban and one rural.

EX IV.11 – State-Funded Classroom Teacher Allotment Ratios for North Carolina Public Schools (2022-23)

Grade	2022-23
K	1:18
1	1:16
2-3	1:17
4-6	1:24
7-8	1:23
9	1:26.5
10-12	1:29

Note: The state also allots one program enhancement teacher per every 191 students in grades K-5.

Source: [NC DPI Allotment Policy Manual](#)

EX IV.12 – Average State Funding per Teacher, Urban and Rural Comparison Examples (2021-22)

	Avg. State Funding per Teacher	Difference from State Average
State Average	\$49,131	-
Wake County	\$50,331	\$1,201 more per teacher
Charlotte-Mecklenburg	\$48,785	\$345 less per teacher

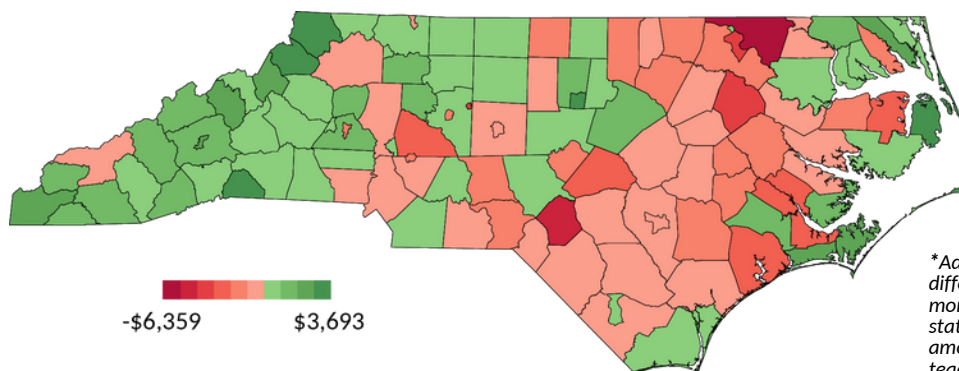
	Avg. State Funding per Teacher	Difference from State Average
State Average	\$49,131	-
Dare County	\$52,823	\$3,693 more per teacher
Hoke County	\$44,649	\$4,482 less per teacher

Source: NC DPI (Data Request)

With 420 state-funded teachers in Hoke County and 7,719 in Charlotte-Mecklenburg Schools, these districts received \$1,948,997 and \$3,874,047 less funding, respectively, in 2020-21 than if they had received dollar allotments for teachers based on the average state pay.

With that additional funding, Hoke County could, for example, pay every teacher \$4,638 more, making themselves more competitive with surrounding districts that have higher salary supplements, or could use a portion of those funds to establish significant financial incentives to attract teachers into hard-to-staff schools and subjects.

EX IV.13 – Average Advantage or Penalty* per State-Funded Teacher in K-12 Traditional Public Schools, by School District (2021-22)



Sources: NC DPI (Data Request); [Tableau Public](#)



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*Advantage or penalty is defined as the difference between the average amount of money a district receives in pay for its allotted state-funded teachers, compared with the amount that district would get if all classroom teacher allotments were funded at the average state-funded teacher salary level.

RECOMMENDATION: Convert state-funded position allotments into a hybrid teacher allotment method that is based on positions (calculated by ADM) but allotted in dollars to increase equity of these allotments across schools and districts, empowering districts to optimize their teaching funds.

Longevity Pay

Retention pay, or additional pay based on years of service in a given position, is a practice found primarily in the public sector, but also in some private-sector jobs. However, perhaps considered redundant with the experience-banded step-and-lane schedule, longevity pay was discontinued for North Carolina teachers in 2014. Since research supports a move away from a step-and-lane schedule to a front-loaded schedule where all fully licensed teachers reach a professional pay level earlier in their career (see "Front-Loaded Base Pay Schedule" on page 24), a return to a meaningful retention strategy may be a relatively cost-effective way to recognize and reward long-term service. For example, the estimated cost to put in place for teachers the longevity pay plan that exists for other state employees is around \$100 million.

North Carolina's State Employee Longevity Pay policy states: "Longevity pay is to recognize long-term service. An eligible employee who has at least ten (10) years of total State service shall receive a lump sum payment annually as outlined below. Payment shall be made during the same monthly pay period or by the second biweekly pay period following the date the employee is eligible to receive longevity pay. This includes employees on workers' compensation leave."^{lxviii}

EX IV.14 – NC State Employee Longevity Rate, by Years of Total State Service

Years of Total State Service	Longevity Pay Rate
10, but Less than 15 Years	1.5%
15, but Less than 20 Years	2.25%
20, but Less than 25 Years	3.25%
25 or More Years	4.5%

Source: [North Carolina Office of State Human Resources](#)

RECOMMENDATION: Develop a meaningful teacher retention strategy (see page 28).

Falling Behind in Our Region

As in other professional industries, competition for talent supply is regional. In order to compete for talent, particularly beginning teachers as they enter the profession, North Carolina must stay competitive with surrounding states.

How is Average Pay Calculated?

Base teacher pay in North Carolina is set by the statewide salary schedule. Local funds supplement teacher pay in most districts, with a statewide average of \$5,984 per teacher. The teacher pay averages used in this brief include all sources of pay and all funding sources, including those paid for using federal, state, and local funds.

Looking at neighboring states, teacher pay in North Carolina is not as regionally competitive as it once was, with a growing disparity at the front end of the pay schedule. Based on estimates from 2022-23, after adjusting for cost of living, average teacher pay in North Carolina ranked 31st out of all states and 7th out of 13 states in the Southeast region. Worse yet, average beginning teacher pay in 2021-22 (latest data available) ranked last in the region after adjusting for cost of living.

EX IV.15 – Cost of Living-Adjusted Average Teacher Pay, by State in the Southeast Region (2022-23)

State	Avg. Teacher Pay
Georgia	\$67,007
Texas	\$63,537
Alabama	\$62,973
South Carolina	\$59,793
Tennessee	\$59,658
Kentucky	\$59,648
North Carolina	\$59,355
Arkansas	\$57,884
West Virginia	\$57,316
Mississippi	\$56,787
Virginia	\$56,561
Louisiana	\$55,933
Florida	\$48,591

EX IV.16 – Cost of Living-Adjusted Average Beginning Teacher Pay, by State in the Southeast Region (2021-22)

State	Avg. Beginning Teacher Pay
Texas	\$47,607
Alabama	\$47,109
Tennessee	\$44,191
Mississippi	\$44,148
Louisiana	\$43,716
Florida	\$42,072
South Carolina	\$41,693
West Virginia	\$41,146
Georgia	\$40,464
Arkansas	\$40,352
Kentucky	\$40,273
Virginia	\$39,932
North Carolina	\$39,538

Note: The 2021-22 Beginning Teacher pay figures do not reflect the additional \$70 million in Supplement Assistance Allotment funds that was appropriated in the 2022 state budget. See Appendix A for average teacher pay in all states. *These figures were updated in the online version of this report in April 2023.*

Sources: 2023 NEA Rankings and Estimates Report; 2021-22 NEA Teacher Salary Benchmark Report; Insure.com

The average and beginning teacher pay comparisons on the previous page do not reflect significant investments in teacher pay that other states are implementing in the 2022-23 school year and beyond, which will further imperil North Carolina's regional competitiveness. Below are just a few of the reported increases in our region in the coming years.

EX IV.17 – Anticipated Pay Increases in Other Southeastern States (2022-23 and Beyond)

State	Teacher Pay Investment Highlights
Mississippi	<ul style="list-style-type: none"> \$246 million investment in teacher pay raises Average teacher pay increase will be \$5,140, a raise of greater than 10% Beginning teacher salary increased by 11% to \$41,638
Alabama	<ul style="list-style-type: none"> Teacher raises between 4% and 21% Beginning teacher salary increased by 4% to \$43,358 Increases to TEAMS program, which pays qualified math and science teachers on a higher pay scale
Georgia	<ul style="list-style-type: none"> \$287 million investment in teacher pay raises Teacher pay raise of \$2,000 per teacher
Florida	<ul style="list-style-type: none"> \$800 million investment in teacher pay raises Beginning teacher salary increased to \$47,500
Maryland	<ul style="list-style-type: none"> Initial 10% salary increase for all teachers by 2024 Beginning teacher salary increased to \$60,000 by 2026
Arkansas	<ul style="list-style-type: none"> Minimum teacher salary will be moved from \$36,000 to \$50,000 For the 2023-2024 school year, all teachers will receive a raise of \$2,000
South Carolina	<ul style="list-style-type: none"> Increases starting teacher pay by \$2,500 to \$42,500 Increases pay of all teachers by \$2,500 if making less than \$50,000 and by 5% if making more than \$50,000

Note: Maryland is considered a part of the Southeast region for the purposes of data collection in some contexts, but not others. A \$60,000 starting salary would equate to \$50,875 when adjusted for cost of living in North Carolina. *These figures were updated in the online version of this report in August & September 2023.*

Sources: [AL.com Education Lab](#); [US News & World Report: Alabama](#); [FLGov.com](#); [Florida Phoenix](#); [Clarion Ledger](#); [US News & Report: Mississippi](#); [Georgia Budget & Policy Institute](#); [US News & World Report: Georgia](#); [Maryland Association Boards of Education](#); [Post & Courier](#)



V. KEY TEACHER PAY STRATEGIES

“

Of course, the starting point for any discussion of motivation in the workplace is a simple fact of life: People have to earn a living. Salary, contract payments, some benefits, a few perks are what I call 'baseline rewards.' If someone's baseline rewards aren't adequate or equitable, her focus will be on the unfairness of her situation and the anxiety of her circumstance. You'll get neither the predictability of extrinsic motivation nor the weirdness of intrinsic motivation. You'll get very little motivation at all.

”

Daniel H. Pink, *DRIVE*

In his book *Drive: The Surprising Truth About What Motivates Us*, Daniel H. Pink examines professional compensation and how it does (and does not) motivate employees. He contends that base pay is fundamentally important to fulfill a biological need to support oneself and one's family. It also matters that individuals feel that they are fairly paid for the skills they hold and the work they do.^{lxix}

The traditional “step-and-lane” pay schedule, though objective, is inconsistent with a desire for fair pay because it ignores the performance and skill level of individual teachers, the reach and responsibility level of individual teachers, and the market value of the skills individual teachers bring to the job. Under the 2022-23 pay schedule, for example, a teacher with 25 years of experience earns at least \$15,000 more than their colleagues with 10 years of experience, even if they are doing the exact same job, equally as well. Pay is also rarely adjusted for the many teachers who do more work, either by having a larger classroom, taking on a more challenging group of students, or spending extra time guiding their peers.

Similarly, the current pay schedule is not fair for teachers who have skills that are in high demand in the labor market. A math teacher, for example, might reasonably find it unfair that their math major peers are earning around \$9,000 more five years into their career (see Exhibit V.7 on page 29). This unfairness, or lack of market-based pay, might help explain why there are generally higher vacancy rates in higher-demand majors. The remedy does not have to fully close the pay gap for a high-demand major because teaching also has intrinsic value, but research finds that substantial pay supplements for hard-to-staff subjects can help fill these critical vacancies.^{lxx}

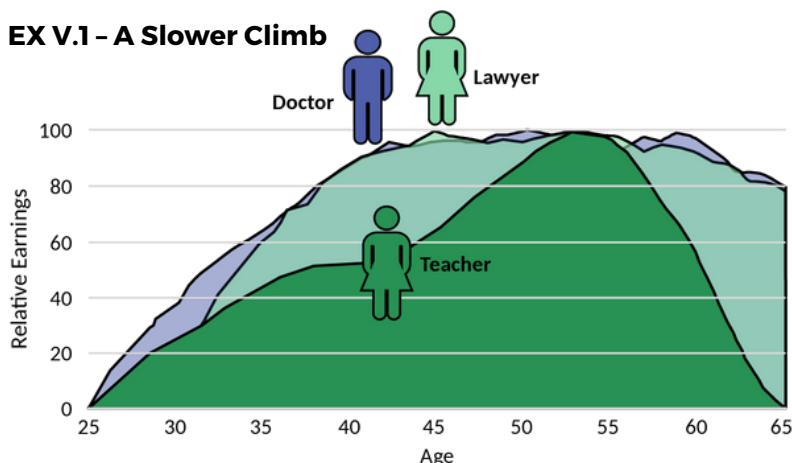
And while there are many dimensions of fairness, equitable pay also should examine the difficulty of one's job. Research makes it clear that more effective teachers are drawn to teach in more affluent schools.^{lxxi} In an equitable (or fair) pay system, that disparity would at least partially be addressed with additional pay.^{lxxii}

Once basic pay needs are met, Pink contends that professionals are driven by intrinsic motivators like better working conditions, more career opportunities, and the satisfaction of working with a great leader. While compensation is generally thought of as extrinsic, this report highlights compensation strategies, such as Advanced Teaching Roles, that are designed to expand teacher access to intrinsic motivators, such as embedded professional support.

Front-Loaded Base Pay Schedule

When it comes to baseline pay, research shows that high-skilled professionals are generally rewarded with substantial pay increases earlier in their career, commensurate with the rapid acquisition of skills (see Exhibit V.1 to the right).^{lxxiii} Then, as skill acquisition slows and performance levels out, additional compensation is based on increased workload or unique, high-demand skills. In education, however, teacher salary schedules require decades of employment to reach an adequate level of pay. And unlike other professions, like nursing, there are few professional opportunities for career growth and added compensation while remaining a teacher.

EX V.1 – A Slower Climb



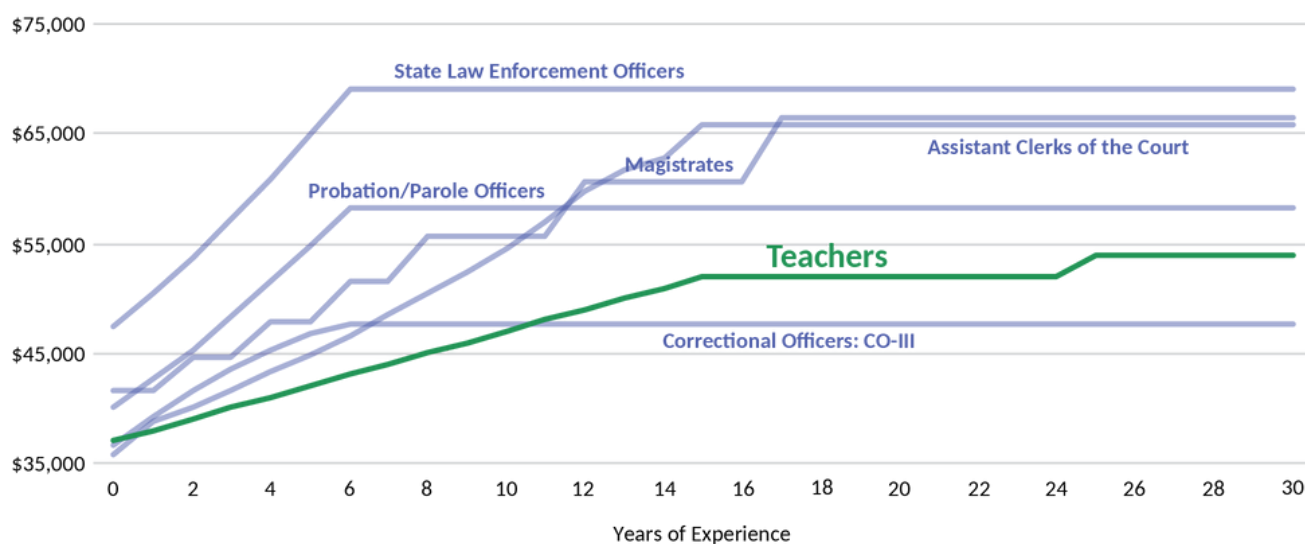
Note: the figure plots five-year moving averages of annual earnings measured relative to the difference between earnings at age 25 and peak earnings for each profession.

Source: Vigdor, J. 2008.

This challenge is further illuminated when we look at how teacher pay in North Carolina fails to align with that of other state employees. Even with the substantial investment in teacher pay between 2014-15 and 2018-19 that halved the time it took to get to \$50,000 (from 30 years to 15 years), a recent analysis from the North Carolina General Assembly's Fiscal Research Division shows that teachers progress more slowly up the salary schedule than other state employees (see Exhibit V.2 below). For example, law enforcement officers and prison system employees reach maximum base pay at six years of experience, while teachers do not reach their maximum base salary until 25 years into their careers.^{lxxiv}

While these data illustrate the need for a steeper salary schedule, in which teachers reach their earning potential much faster, this chart also shows that teacher pay is below that of other state employees, signaling an overall need to increase the competitiveness of teacher pay.

EX V.2 – Comparison of State Salary Schedules for NC Public Sector Employees (2021-22)



Source: North Carolina General Assembly Fiscal Research Division

Front-Loading Base Pay to Provide a Living Wage

A front-loaded pay schedule also addresses biological pay motivators – the need to reasonably support oneself and one's family.^{boxv} Exhibit V.6 on page 27 shows that teacher attrition rates are higher in the years when teachers are starting to build their families. This section will show that this is at least partially due to the fact that the traditional step-and-lane schedule does not meet the growing need for a living wage to support a family.

While compensation levels are generally a function of market forces, it seems reasonable that the minimum bar for high-skilled public employees should be at or above the living wage. Massachusetts Institute of Technology's (MIT) Living Wage Calculator provides living wage data for North Carolina as a whole, as well as each county. A large affluent district like Wake County requires a higher living wage, for example, than rural counties like Halifax in the east or Caldwell to the west.

EX V.3 – MIT's Living Wage Calculator, North Carolina (2022-23)

	1 Adult	2 Adults (Both Working)
	0 Children	2 Children
North Carolina	\$35,006	\$52,790
Wake County	\$38,501	\$59,384
Halifax County	\$31,970	\$48,693
Caldwell County	\$31,595	\$47,653

The living wage is calculated for a wide range of household circumstances, based on the number of adults, children, and working adults. For simplicity, we examine two scenarios: a single adult with no children and a two-parent household with two children and two incomes, e.g., two working teachers.

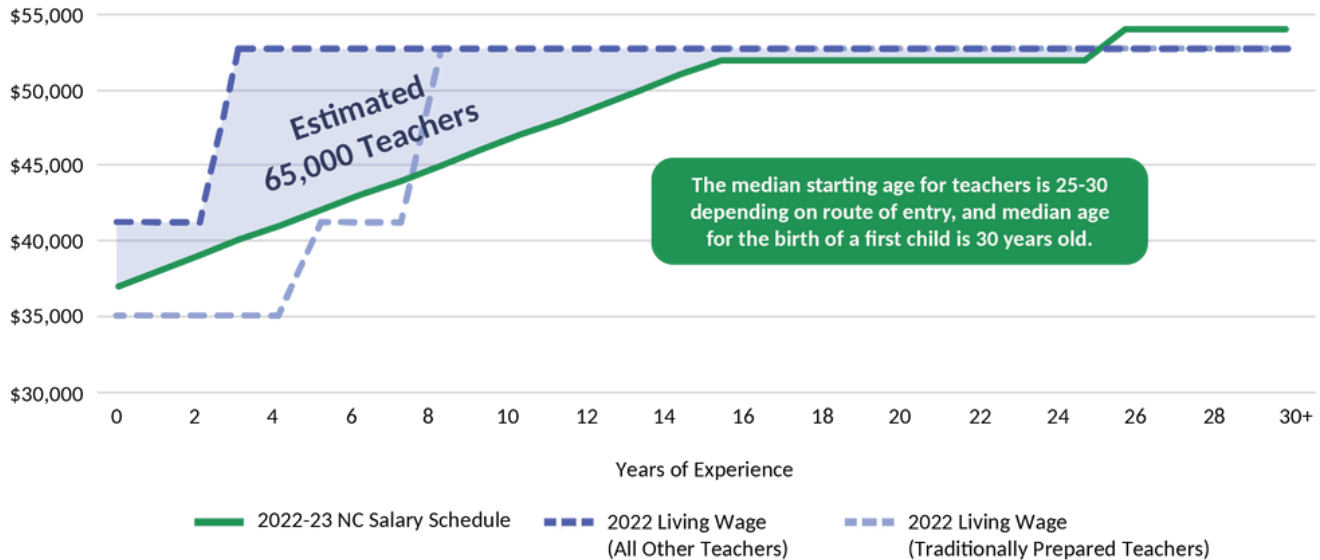
Note: The living wage calculator includes a minimal cost of healthcare, which is a benefit provided for teachers on top of their salary. These figures are from 2020 and do not reflect recent inflation increases. *These figures were updated in the online version of this report in August 2023.*

Source: [MIT Living Wage Calculator](#)

While average teacher pay is at a living wage level, the structure of our pay schedule creates a significant gap early in a teacher's career when they are reaching their full professional capacity, but still far from the peak of their earning potential.^{boxvi}

Exhibit V.4 on the next page shows the current pay schedule for North Carolina teachers overlaid with the living wage trajectory for a typical professional educator (two tracks – traditionally prepared, who start at age 25, on average, and all other teachers, who have a median starting age around 30 years old).^{boxvii, boxviii} The gap between the current salary schedule and the living wage clearly illustrates the inadequate income levels at the front of the salary schedule. We estimate that, in any given year, nearly a third of all North Carolina teachers fall into this gap.

EX V.4 – North Carolina State Teacher Salary Schedule vs. Typical Living Wage Trajectory of Teachers (2022-23)



Note: These figures were updated in the online version of this report in October 2023.

Sources: [MIT Living Wage Calculator](#); [NC DPI Teacher Salary Schedules](#)

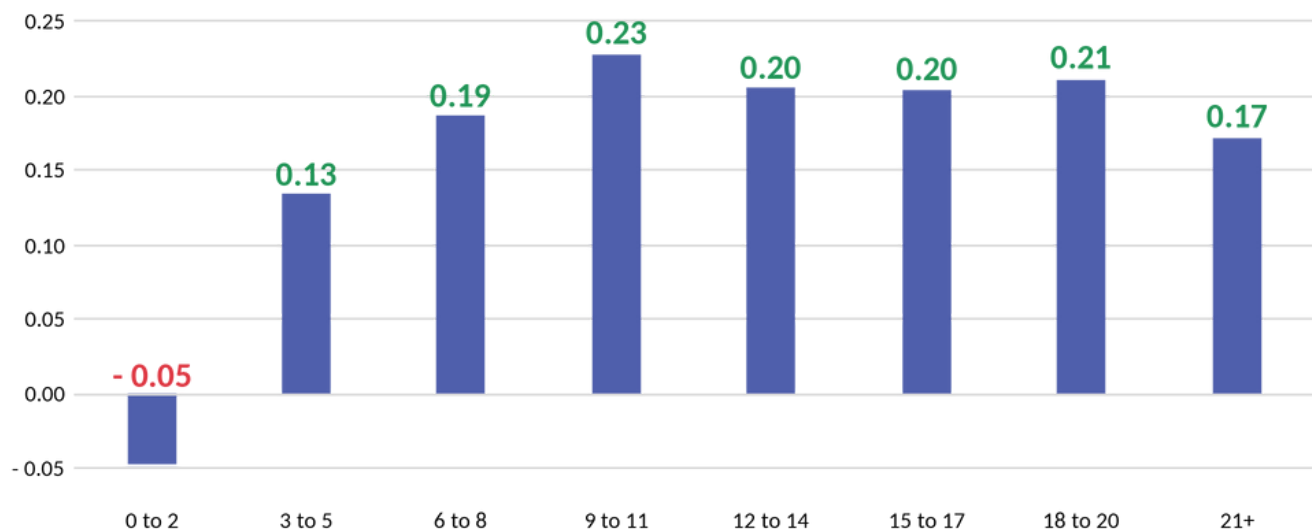
Local salary supplements are not included in this analysis, because we do not have data capturing average salary supplement figures for teachers with different years of experience. However, while local salary supplements likely raise some teachers above the living wage threshold, it is important to remember that a living wage only allows residents to meet “minimum standards of living,” and therefore represents a low bar.

Front-Loading Base Pay for Professional Growth

boxix, boxx, boxxi

Front-loading the teacher pay schedule is also supported by research that suggests increases in teacher effectiveness are most significant during the first three years of a teacher’s career and level out after year five. This can also be seen when examining student growth data for teachers at various points in their careers (see Exhibit V.5 below). The most significant gains are seen between 0-2 and 3-5 years of experience and peak, on average, around the eighth year of teaching.

EX V.5 – Average EVAAS Scores of Teachers in K-12 Traditional Public Schools, by Years of Experience (2018-19)

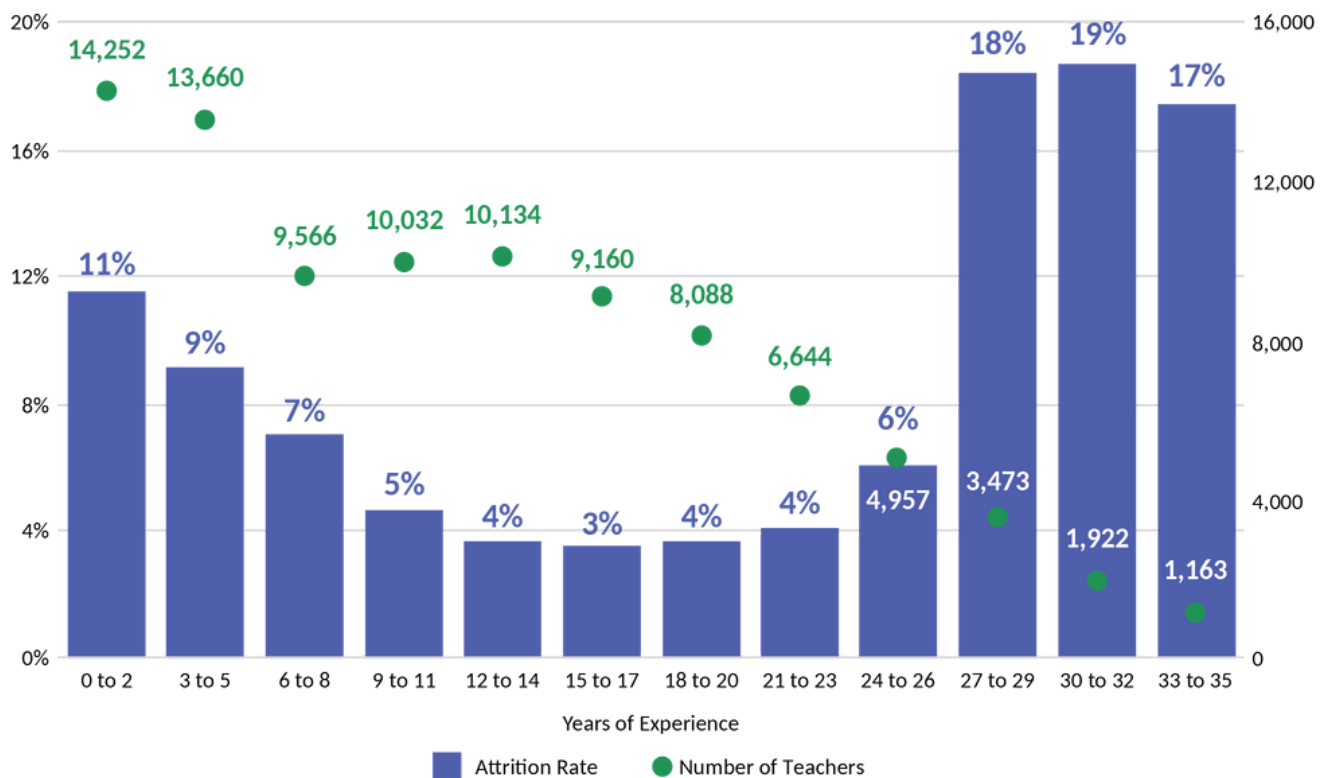


Source: NC DPI (Data Request)

Increasing early-career teacher pay also has implications for teacher retention. A study of teacher pay and retention in Texas from 1996 to 2012 found that increases in teacher base pay had greater positive impacts on teacher retention during the early parts of a teacher's career (years 1 to 7) and no effect on the retention of teachers with 12 or more years of experience.^{lxxxii}

The following graphic shows the number of teachers in North Carolina by years of experience and their attrition rates, affirming that – other than retirement which typically occurs at or near year 30 – the greatest attrition happens in the first 10 years of teaching. Increasing and front-loading North Carolina's teacher salary schedule to be more in line with other high-skilled professions will provide an incentive for more early-career teachers to continue in their careers.

EX V.6 – Attrition Rate and Number of Teachers in K-12 Traditional Public Schools, by Years of Experience (2018-19)



Source: NC DPI Highlights of the Public School Budget

RECOMMENDATION: Replace the outdated step-and-lane schedule with a front-loaded pay structure in which effective teachers earn full base teacher pay earlier in their career; ensuring that all licensed teachers can support a family and have access to additional career and compensation advancement opportunities.

Under the proposed Pathways licensure plan, it is recommended that most beginning teachers would start at or above \$40,000 and all fully licensed teachers (the vast majority of teachers) will earn \$56,000. On top of this state base pay, they could earn more through local salary supplements, National Board Certification, Advanced Teaching Roles, etc.

Opposition to a Front-Loaded Schedule

While the benefits of a front-loaded pay schedule are clear, including pay that rises both as one's professional capacity increases and with their increased biological need, recent efforts to frontload the pay schedule have been met with claims that there is now a "ceiling" on how much a teacher can make. While there has always been a years of experience-based end point on the state teacher salary schedule, this is not a ceiling. The state salary schedule is a floor on top of which other pay is added (local supplements, NBCT pay, Advanced Teaching Roles salary supplements, etc.).

In contrast to the implication that a front-loaded pay schedule suppresses teacher wages, a front-loaded pay schedule that moves a professional to full compensation for their position sooner significantly increases lifetime earnings.

Further, since the state salary schedule is the floor, not the ceiling, any strategic pay plan should include a robust set of career opportunities, with commensurate pay. Beyond a competitive base salary, teachers who strive to increase their compensation should be afforded several opportunities to do so, including working in a hard-to-staff school or subject area, extending their reach by taking on a more challenging classroom, or becoming a lead teacher who can increase the impact of their entire team of teachers.

RECOMMENDATION: Develop a meaningful teacher retention strategy to enhance the front-loaded base pay structure and to recognize the long-term service of effective educators.

Research and private-sector practices indicate that modest but meaningful rewards for effective professionals who stay in the profession are helpful for retaining veteran employees. Since research supports a move away from a step-and-lane schedule to a front-loaded schedule where all fully licensed teachers reach a professional pay level earlier in their career, establishing a retention strategy can be a relatively cost-effective way to recognize and reward long-term service.



Differentiated Pay

Inequities in teacher pay can be found in precisely the places where students see the greatest inequities in access to educators, particularly in hard-to-staff schools and subject areas. For example, it is inequitable for a teacher to work in a higher-need school or classroom, only to be paid the same as a similar teacher in a lower-need environment. It is similarly inequitable if the lack of market-based pay ensures that vacancies in key subjects are clustered in high-poverty and rural schools.

Like most states, teacher staffing inequities in North Carolina are driven, in part, by the structure of the state teacher salary schedule, which relies on just two variables – teacher experience and degrees. This means base pay is the same regardless of what, where, or how well a teacher teaches.

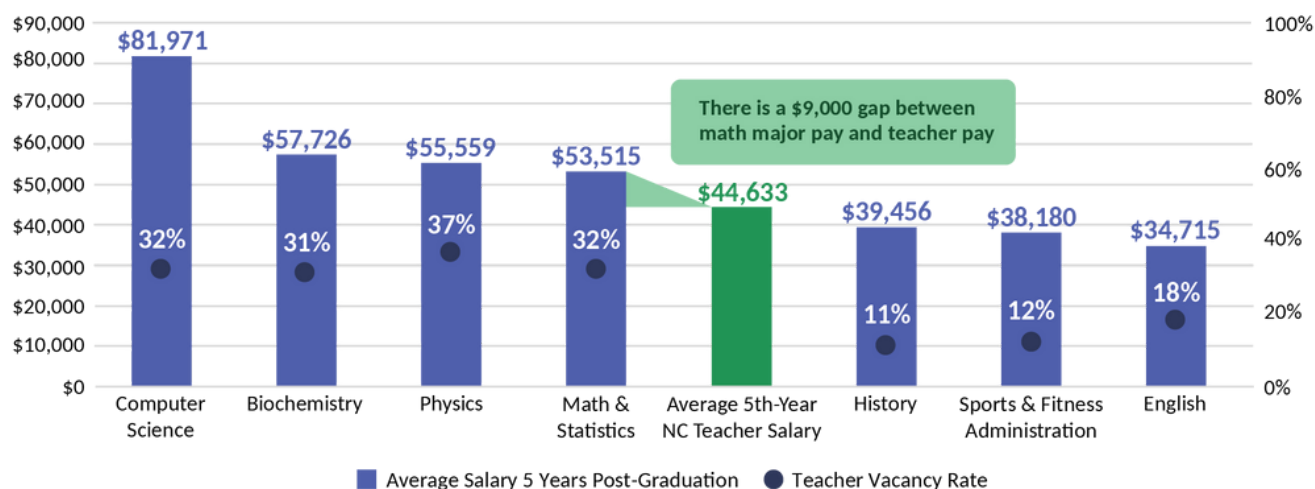
The hard-to-staff data on pages 9-10 make it abundantly clear that any change in the way teachers are compensated must be designed intentionally to ensure that all students have access to effective educators, especially those in high-poverty schools and hard-to-staff subjects. Fortunately, there is substantial evidence that providing additional compensation for teaching in hard-to-staff schools or subject areas and for highly effective teachers has positive effects for both students and teachers, including increased teacher retention and improved student achievement.^{lxxxiii, lxxxiv}

The Current Landscape

There is a notable disconnect between the uniform teacher pay structure and the wide variation in market demand for specific skills. For example, certain college degrees, specifically those in STEM subjects, yield higher salaries in the market but the teaching profession rarely pays more for this high-demand expertise. Given that pay levels and pay parity matter when choosing a career, this disparity likely reduces the supply of STEM teachers, resulting in the higher vacancies we see in these subject areas.

A recent examination of the most valuable college majors shows that STEM majors like physics and computer science can command median income levels over \$80,000 just five years after graduation, while majors like history, English, and the arts have median income levels in the \$40,000 range.^{lxxxv} The exhibit below examines this in detail for recent UNC System graduates in key subject areas, as well as the national vacancy rates for teaching positions in related subject areas.

EX V.7 – Average Wages of UNC System Graduates Five Years Post-Graduation (Class of 2016) and Percentage of U.S. Schools with Difficulty Filling Teacher Vacancies (2020-21), by Subject Area

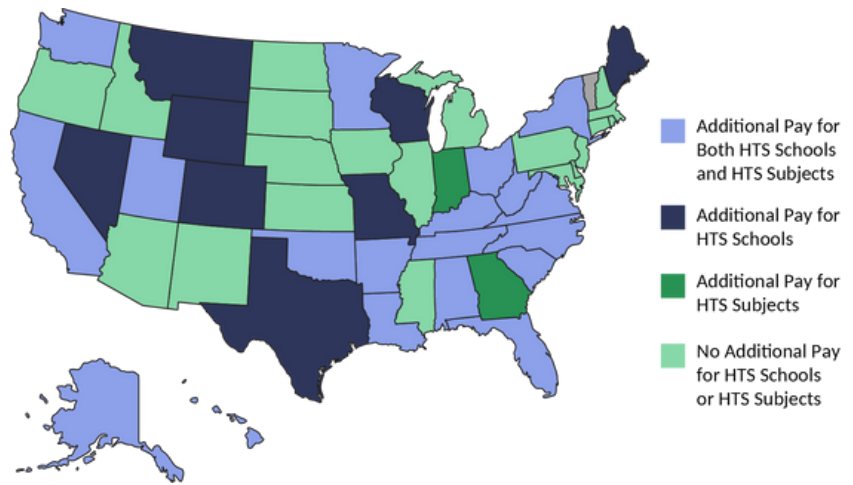


Note: The average 5th-year teacher salary estimate is likely higher than actual because it factors in the average local salary supplement, not the actual. Local salary supplements are often higher for teachers with more years of experience.

Sources: NC TOWER; NC DPI Public School Salary Schedules; NC DPI Statistical Profile; Education Week

In his report on the long-term trends in the quality of teachers, Sean P. Corcoran notes that “[t]argeted pay increases in specific settings such as hard-to-staff subjects or schools have shown considerably more promise than merit-based bonuses” (which will be examined in the Performance Pay section on page 36).^{lxxxvi} Research shows that providing bonuses to recruit and retain teachers in hard-to-staff subjects and schools can significantly reduce teacher turnover in those positions, helping to reduce vacancies.^{lxxxvii, lxxxviii} The size and sustainability of these efforts significantly affect their impact, which is covered on page 33.

EX V.8 – Additional Pay for Teaching in Hard-to-Staff Schools and Subjects, by State (2021)



Source: *National Center for Teacher Quality*

Currently, 32 states incentivize teachers to work in high-needs schools using either additional compensation, loan forgiveness, or both. Meanwhile, 34 states offer additional compensation, loan forgiveness, or both to incentivize teachers to teach hard-to-staff subjects.^{lxxxix}

In North Carolina, there are several ways in which pay incentives are used to recruit teachers to work in hard-to-staff schools and subject areas:

- Highly qualified graduates of in-state educator preparation programs are eligible for salary increases during their first three years of service. Eligible teachers working in low-performing schools are paid the salary of a fourth-year teacher during their first three years of service, and eligible teachers working in Special Education or STEM positions at any school are paid the salary of a third-year teacher for their first two years of service.^{xc}
- While not a pay incentive, scholarship programs can be an effective recruitment incentive.^{xcⁱ} The North Carolina Teaching Fellows program offers a forgivable loan of up to \$4,125 per semester for those enrolled in participating educator preparation programs. Eligible candidates must pursue certification in Special Education or a STEM subject, and accelerated forgiveness is available for teachers who elect to teach in low-performing schools.^{xcⁱⁱ}
- Beginning in 2021, North Carolina invested \$4.3 million to provide low-wealth and small county recruitment bonuses of \$1,000 per teacher in school districts that receive funding through the Small County or Low-Wealth allotments. State funding must be matched 1:1 with local funding and signing bonuses may be up to \$2,000 per teacher.^{xcⁱⁱⁱ}

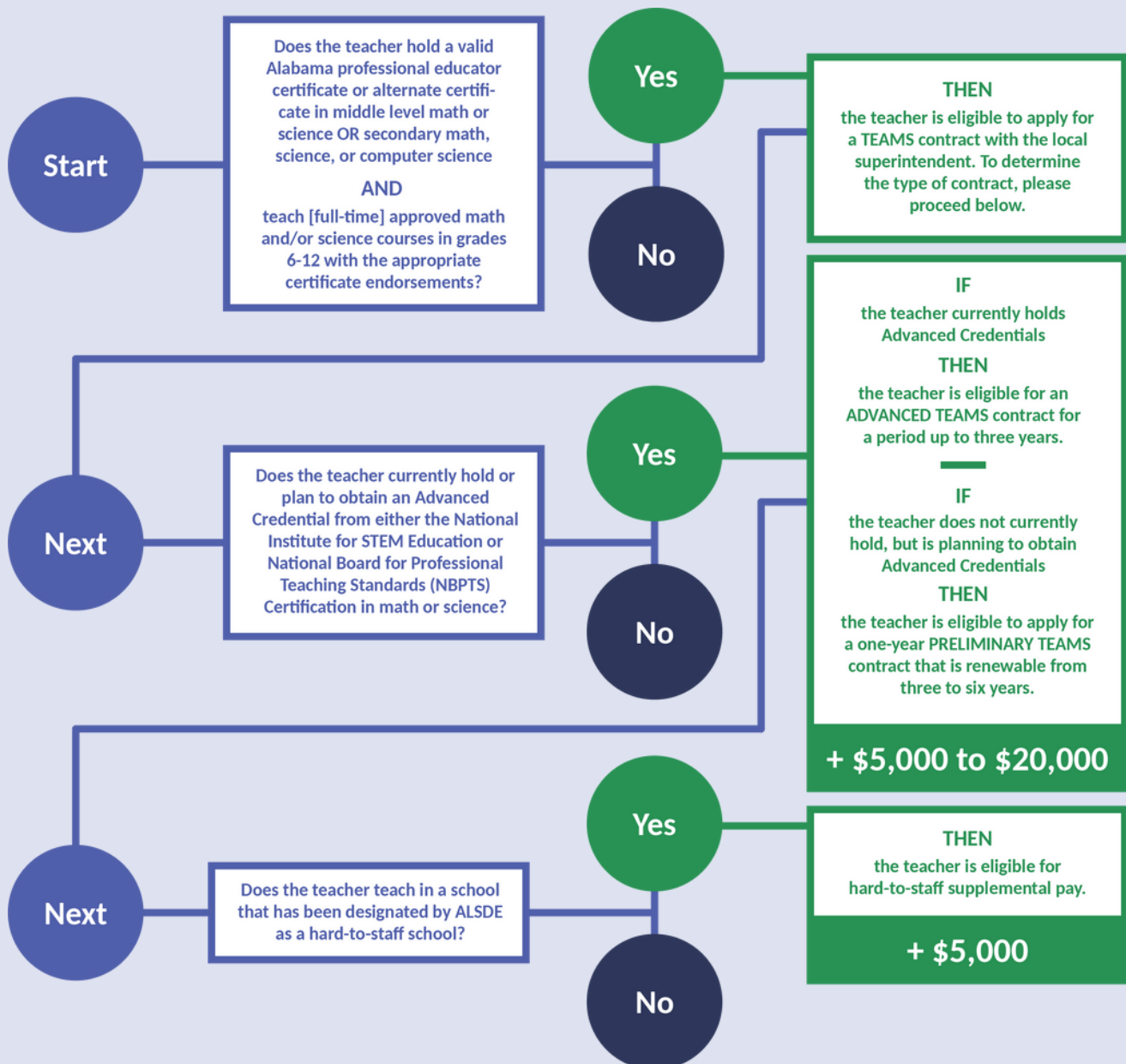
Each of these efforts is promising but has limited reach, with only a small subset of teachers affected. For example, although well-focused on hard-to-staff schools and subjects, the Teaching Fellows program is currently graduating around 100 teachers per year and, in the most recent year of data, nearly 20% of graduates chose to pay back the forgivable loan instead of fulfilling their teaching obligation.^{xc^{iv}} It is worth examining whether a larger scholarship or other modifications to the program might produce a greater impact, while staying focused on statewide recruitment priorities.

Alabama Teacher Excellence and Accountability for Mathematics and Science (TEAMS)

A new initiative in Alabama provides an example of an effort to provide more market-based pay for STEM teachers. Math and science teachers in grades 6-12 are now eligible for annual salary increases of between \$5,000 and \$20,000. Teachers must provide evidence of effectiveness (see eligibility graphic below) and an additional \$5,000 per year is available to teachers who work in hard-to-staff schools.

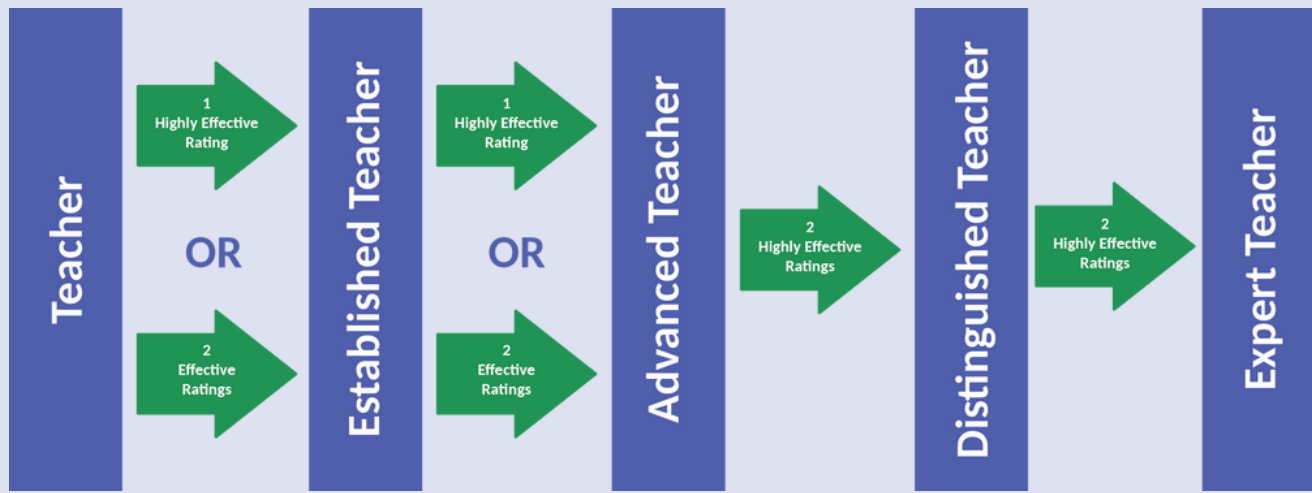
Funding is provided by the state legislature, with an allocation of one math and one science position for every 105 students in grades 6-12.^{xv} The TEAMS initiative provides sustained salary increases from year to year, which is more effective at recruiting and retaining teachers in hard-to-staff subjects and schools than short-term or one-time bonuses.

To date, \$48.7 million has been allocated for 2,428 TEAMS positions in 2022-23. Alabama has authorized up to 7,466 possible TEAMS positions statewide. The average allocation per teacher is \$20,321, including benefits.^{xvi} This is a new initiative and will be closely monitored for effectiveness in the coming years.



Washington, D.C. Leadership Initiative for Teachers (LIFT) and IMPACTplus

The Leadership Initiative for Teachers (LIFT) is a five-stage career ladder that provides high-performing teachers in Washington D.C. public schools with opportunities for advancement inside the classroom, as well as additional responsibility and compensation. Teachers are evaluated annually using the IMPACT evaluation framework, which utilizes multiple measures, including principal observations, student test scores, and student survey results.^{xvii} In their 2013 report "Incentives, Selection, and Teacher Performance: Evidence from IMPACT," Dee and Wyckoff find that DC IMPACT effectively retained great teachers and improved student outcomes in Washington, D.C. public schools. Teachers progress up the LIFT Career Ladder according to their annual IMPACT ratings:



Teachers rated as highly effective can earn additional compensation – between \$2,000 and \$25,000. These performance-based bonuses are highest for teachers who work in high-poverty schools, those who work in low-performing schools (“CS1” in the following chart), and those whose ratings are most dependent upon student achievement data (“Impact Group 1 or 1A” in the following chart).

Your Impact Rating	Your School's Poverty Level	Your Bonus	Your Add-On if You are in Impact Group 1 or 1A	Your Add-On if You are in One of the CS1 Schools	Your Total Possible Annual Bonus
Highly Effective	High	\$10,000	Additional \$5,000	Additional \$10,000	\$25,000
	Low	\$2,000	Additional \$1,000	N/A	\$3,000

Additionally, teachers at the Advanced and Distinguished/Expert LIFT stages who teach in high-poverty schools receive additional “years of experience” credits on the pay schedule of 2 and 5 years, respectively, and teachers at the Distinguished and Expert LIFT stages move to a new lane on the salary schedule.

Your School's Poverty Level	Your LIFT Stage	Your Service Credit
High	Advanced	2 Years
	Distinguished/Expert	5 Years*

Source: Dee, T. and Wyckoff, J. (2015).; *District of Columbia Public Schools Leadership Initiative for Teachers Guidebook*

The Importance of Size and Sustainability

Many industries, including the military, offer substantial financial incentives to fill hard-to-staff positions. According to education think tank Public Impact, “The cross-sector research does not offer a concrete formula for determining the most effective level of hard-to-staff incentives. What is clear, however, is that employers across sectors are providing much larger incentives than the majority of hard-to-staff pay programs in education. Incentives between 10 percent and 30 percent of a teacher’s salary would be more in line with other sectors.”^{xcviii}

Differentiated pay for teachers in hard-to-staff schools and subjects takes many forms, including one-time bonuses, annual salary supplements, student loan forgiveness, tuition reimbursement, and mortgage assistance.^{xcix} Their level of effectiveness can depend on a number of factors including whether teachers are aware of the bonus, whether they trust it will continue beyond a few years, and whether it is accompanied by other supports, such as improved school leadership.

State-level studies in North Carolina, Washington, Georgia, and Tennessee have documented the effects of additional compensation for hard-to-staff schools and subjects on teacher recruitment and retention. Stipends and bonuses in these state-level studies proved to be effective at retaining teachers across a number of contexts, including low-performing schools, high-poverty schools, and in hard-to-staff subjects.^c However, the recruitment and retention benefits of these programs generally last only as long as teachers are receiving the additional compensation, suggesting that one-time bonuses are not as effective as annual stipends or increases in base salaries.^{ci}

The amount of additional compensation also matters. While not offering a precise amount, studies of salary bonuses and loan forgiveness programs for teachers working in hard-to-staff schools and subjects have found that larger bonuses or larger amounts of loan forgiveness are effective at recruiting and retaining teachers, while smaller bonuses and smaller amounts of loan forgiveness are less successful.^{cii}

Additionally, the perception of sustainability matters for teachers to fully trust the long-term intent and viability of differentiated pay plans. An analysis of Washington, D.C.’s teacher evaluation and performance pay framework (DC IMPACT) suggested that, in IMPACT’s first year, its effects on teacher performance and retention were significantly muted relative to those same effects in the program’s second year. The implication is that, as the program became more established and incentives were perceived to be more durable, the program began to more reliably produce changes in teacher performance and retention. In order to result in improved student achievement and/or teacher retention, then, it is important that performance pay be sustainable (see page 32 for more on the DC IMPACT system).^{ciii}

RECOMMENDATION: Establish competitive, differentiated pay for high-demand degrees like STEM and special education.

RECOMMENDATION: Increase or broaden incentives for teaching in hard-to-staff schools.

Strategic Staffing: Pay for Increased Reach & Responsibility

As noted earlier, Daniel H. Pink's groundbreaking examination of what motivates professionals clearly demonstrates that, once baseline pay needs are met (i.e., they are adequate and equitable), high-skilled professionals are inherently motivated to perform at their best. He provides evidence that what drives them to improve their performance are intrinsic motivators like better working conditions, more career opportunities, and the satisfaction of working with a great leader – specifically, jobs that offer mastery, autonomy, and purpose.^{civ}

While compensation is, by definition, an extrinsic motivator, it can also fund and fuel organizational structures that can provide intrinsic motivators to both the recipient and their colleagues. For example, most schools operate outdated, flat organizational models that provide teachers with minimal opportunities for professional advancement without leaving the classroom. In these scenarios, all teachers are stuck on the same pay schedule, regardless of whether they have the skills and willingness to extend their reach beyond a traditional teaching position. Data from the National Center for Education Statistics School Staffing Survey indicate that almost one in ten teachers leaving the profession cite a lack of opportunities for professional advancement among the reasons for their departure.^{cv}

Instead, compensation systems should facilitate the development of innovative organizational structures that provide intrinsic motivators such as the opportunity for leadership and greater professional support, as opposed to the “one teacher, one classroom” system that exists now. These modernized organizational structures allow effective teachers to extend their reach to additional students and/or teams of teachers. Strategic staffing models help increase the instructional skill and capacity of the entire staff while also enhancing the level of purpose experienced by lead teachers, empowering an entire community of educators to be more satisfied and impactful in their work.

Autonomy as an Intrinsic Motivator

One might think that the current “one teacher, one classroom” model would be motivating to teachers who value autonomy. Indeed, effective teachers have an innate desire and capacity for self-direction. However, that does not mean they want to work in a vacuum. Being autonomous and being part of a team are complementary concepts, not mutually exclusive. Team teaching empowers teachers to feel more confident in their classroom, multiplying the level of autonomy in the school building.

In North Carolina, 24 school districts are offering career advancement opportunities to teachers through the state's Advanced Teaching Roles program (see page 35). In each of these models, eligibility for a leadership position is based on teacher effectiveness and the leadership roles provide additional compensation for taking on additional responsibilities.

A 2022 evaluation of the Advanced Teaching Roles program by BEST NC found that funding is needed to expand beyond the positions, schools, and districts that are currently implementing these new roles and organizational structures. Under the existing ATR program, schools are creating about half the roles (<10%) that are needed for a 6-8 direct report model and the initiative is clustered in elementary and Title I schools where more flexible funding is available. Expansion of the Advanced Teaching Roles program is a high-impact strategy to increase pay, while extending the reach and purpose of highly effective educators and improving the instructional capacity and mastery of all teachers.^{cvi, cvii, cviii}

RECOMMENDATION: Implement Advanced Teaching Roles (ATR) statewide to provide well-paid professional advancement opportunities to effective teachers who want to extend their reach while transforming the organizational structure of schools.

Advanced Teaching Roles compensation should be higher for hard-to-staff schools.

Strategic Staffing in North Carolina: Advanced Teaching Roles



Advanced Teaching Roles (ATR) is an example of a strategic staffing policy that pairs increased compensation with intrinsic motivators, such as extended reach, leadership opportunities, and increased self-efficacy. In schools using ATR, highly effective teachers are elevated to leadership positions in which they receive substantial, ongoing pay increases for taking on additional responsibilities and extending their reach. These teachers, in turn, provide intrinsic motivators to their colleagues by elevating their mastery and impact in the classroom.

Approximately
1,000 NC TEACHERS
are currently working in Advanced
Teaching Roles positions in their schools,
earning up to \$20,000 additional pay.

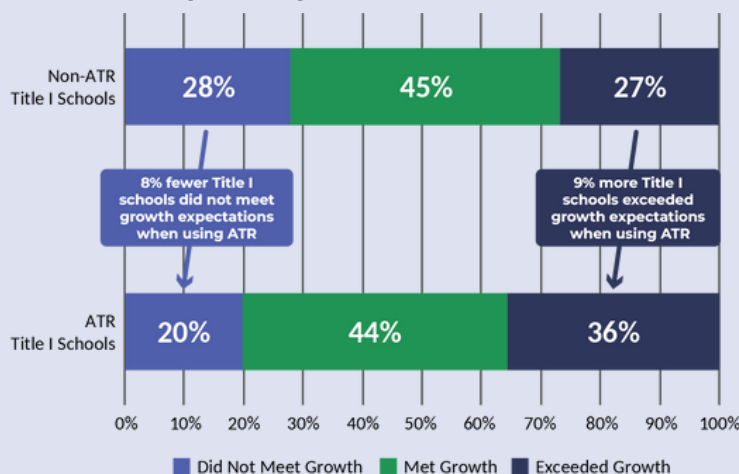
In ATR models, teachers extend their reach by either directly teaching more students or – more often – by leading a team of teachers and providing instructional support for all the teachers on the team. As a result, ATR teachers increase the instructional capacity of the entire staff; provide embedded, intentional support for novice teachers; and ensure more students get access to effective instruction. Additionally, since leadership is distributed in a more balanced and purposeful way, principals are more accessible and can focus on other critical school operations like staffing, curriculum, family and community relations, and more.

In 2022-23, 24 districts across North Carolina are designing or implementing Advanced Teaching Roles models. Salary supplements for ATR positions range from \$2,000 to \$10,000 for Extended Reach Teachers, who directly teach a greater number of students, and from \$6,000 to \$20,000 for Lead Teachers, who lead groups of teachers and are responsible for the learning of all the students on their team.

Research indicates that students in schools with Advanced Teaching Roles experience higher learning gains in math and reading than their peers in other schools.

A study of ATR programs in Charlotte-Mecklenburg Schools, Cabarrus County Schools, and Syracuse City School District (New York) found that teachers on teams of Multi-Classroom Leaders (MCL) benefitted immensely from that support. Teachers joined the MCL-led teams, on average, at the 50th percentile in student learning gains. After one year on an MCL team, they produced learning gains equivalent to teachers in the 75th to 85th percentiles in math, and the 66th to 72nd percentiles in reading.^{cix, cx}

EX V.9 - School Growth Status of Traditional Public Schools, by Title I Eligibility and Advanced Teaching Roles Status (2021-22)



In 2021-22, Title I schools implementing ATR staffing models had higher student growth scores, on average, than Title I schools not using ATR (see image to left). Most schools implementing ATR (83%) in North Carolina receive Title I funding, because the flexibility of that funding allows schools to fund the stipends for teachers in advanced roles sustainably within their local budgets.^{cx}

Note: These figures were updated in the online version of this report in August 2023.

Source: NC DPI School Performance Grades

Performance Pay

As indicated in Exhibit III.3 on page 8, top-tier college students prioritize professions in which they will be rewarded financially if they do well in their job. This is generally not how teacher compensation has been structured, but some states and districts have begun to leverage this strategy to attract and retain great talent.

There are two primary objectives for performance pay (sometimes called merit pay). The first is to motivate teachers to increase their efforts toward specific, prioritized outcomes. The second is to attract and retain higher-performing teachers. In most of these policies, teacher performance is measured by student growth on standardized assessments, though other measures of effectiveness including evaluation ratings and student surveys are also used.

Research demonstrates a link between performance pay policies and improved student achievement. A 2021 meta-analysis of 37 studies published between 1997 and 2017 found a statistically significant positive correlation between teacher performance pay programs and student test scores. Student achievement gains were present in math and in reading, but were almost twice as large in math.^{cxii}

Researchers synthesized findings in those 37 studies to determine which programmatic elements of performance pay were most positively associated with student achievement gains. The following elements are associated with the largest student gains:

- Incentives were accompanied by embedded professional development for participating teachers;
- Incentives were awarded at the individual teacher level, rather than to groups of teachers;
- Programs used multiple measures of teacher effectiveness (e.g., using student test scores and principal evaluations or student surveys), rather than a single measure; and
- Financial incentives were substantial.

Implementation is critical to the success of performance pay policies. An analysis of Florida's statewide performance pay policy, passed by the state legislature in 2011, found several weaknesses. Most notably, effectiveness ratings were based upon Florida's teacher evaluation system, which did not reliably distinguish teachers who were making the greatest contributions to student growth. (In 2015-16, 98% of Florida's teachers earned a rating of Highly Effective or Effective). Additionally, salary supplements for effective teaching were substantially lower than supplements for measures less correlated with teacher effectiveness, such as master's degree attainment.^{cxiii}

The Current Landscape

Currently, 10 states explicitly require districts to consider performance in teacher pay, with 14 other states suggesting, but not requiring, teacher performance to be considered.^{cxiv} In North Carolina, there is no statewide policy that ties teacher compensation to performance. However, there are several state-funded bonuses for North Carolina teachers that reward excellence based upon various measure of student achievement. These include:

- Third-grade reading teachers with student growth scores in the top-25% of their district or in the state can earn up to \$3,500.
- Fourth- and fifth-grade reading and math teachers in grades 4-8 with student growth scores in the top 25% of their district or in the state can earn up to \$2,000.
- Teachers of advanced high school courses can earn \$50 for each student who achieves proficiency on Advanced Placement, International Baccalaureate, or Advanced International Certificate of Education exams, up to \$3,500.
- Career and Technical Education teachers can earn \$25-50 for each student obtaining an industry certification or credential, up to \$3,500. The amount is based upon the academic rigor and employment value of the certification or credentials earned by their students.^{cxv}



Pay for Credentials

Within the typical step-and-lane structure that is common to most teacher salary schedules in the United States, the “lanes” are usually driven by teacher credentials. The most common credential considered is teachers’ educational attainment, but some states and districts provide additional pay for other credentials.

National Board Certification

The National Board for Professional Teaching Standards is an organization that provides certification to teachers who meet the Board’s standards for accomplished teaching practice. To receive the certification, teachers with at least three years of experience must demonstrate proficiency in four core areas: content knowledge, differentiation of instruction, teaching practice and learning environment, and becoming an effective and reflective practitioner. Teachers complete a content knowledge exam and submit various forms of evidence, including lesson plans, assignment and assessment artifacts, student work samples, videos of effective teaching, and lesson reflections.^{cxvi} The certification process can take anywhere from several months to two years. Initial certification lasts for 10 years, with an opportunity for teachers to renew every five years thereafter.

Evidence of Effectiveness

Attaining National Board certification is highly correlated with teacher effectiveness. Multiple studies using data from North Carolina, Florida, Washington, Kentucky, and the Chicago Public School System have found that National Board Certified Teachers (NBCTs) are more effective, as measured by student growth, than teachers who are not certified. The magnitude of the differences in effectiveness varies across studies, with some studies suggesting that NBCTs affect increases in student achievement equivalent to one month of additional instruction in English/language arts and two months of additional instruction in math in a single school year.^{cxvii, cxviii}

The Current Landscape

States have a variety of mechanisms for providing support and compensation to teachers who decide to pursue National Board certification. In 2021, 27 states provided additional compensation to teachers who achieve National Board certification, with stipends ranging from \$1,000 to \$10,000. Additionally, 23 states provided financial support to cover fees associated with obtaining certification.^{cxix}

EX V.10 – Compensation for National Board Certified Teachers in the Southeast Region (2021)

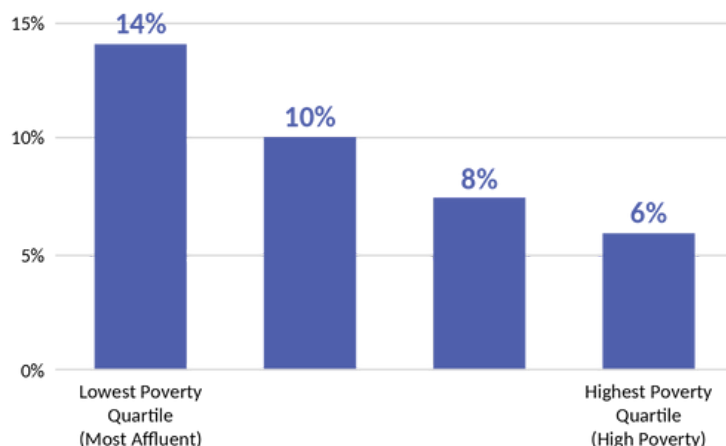
State	Additional Compensation for National Board Certified Teachers
Alabama	<ul style="list-style-type: none"> \$5,000 annual stipend, plus an additional \$5,000 for working in a hard-to-staff school
Arkansas	<ul style="list-style-type: none"> \$2,500 annual stipend if not teaching in a high-poverty school (for up to 5 years) \$5,000 for teaching in a high-poverty school (for up to 5 years) \$10,000 for teaching in a high-poverty school located in a high-poverty district (for up to 5 years)
Kentucky	<ul style="list-style-type: none"> \$2,000 annual stipend
Mississippi	<ul style="list-style-type: none"> \$6,900 annual stipend, plus an additional \$4,000 in 16 high-needs counties
North Carolina	<ul style="list-style-type: none"> 12% salary increase above base pay (a minimum of \$4,200 and, on average, more than \$6,000)
Texas	<ul style="list-style-type: none"> Annual stipend of \$3,000 to \$9,000
Virginia	<ul style="list-style-type: none"> \$5,000 initial reward, then \$2,500 annually
West Virginia	<ul style="list-style-type: none"> \$3,500 annual stipend, plus an additional \$2,000 for teaching in a low-performing school

Source: *National Board for Professional Teaching Standards*

In North Carolina, teachers receive a 12% salary supplement during the period of their National Board certification, provided that they are teaching in the content area in which they are certified. In 2021, 9.7% of the teacher workforce received this supplement. Unlike many other states, there is no requirement or incentive to teach in a hard-to-staff school or subject area in North Carolina.

In addition to the pay supplement, North Carolina also provides a low-interest loan to cover the \$1,900 cost of board certification with no payments due in the first 12 months, provides all initial candidates with three days of paid professional leave to work on their certification, and grants eight continuing education credits upon certification, which satisfies current requirements to renew a teaching license.^{cxx}

EX V.11 – Percent National Board Certified Teachers in K-12 Traditional Public Schools, by School Poverty Quartile* (2020-21)



Currently, NBCTs disproportionately teach in lower poverty (more affluent) schools in North Carolina. To address this issue, the Hunt-Lee Commission recommends financial incentives for NBCTs to work in high-poverty or low-performing schools.^{cxi}

*Schools were sorted by their percentage of economically disadvantaged students and grouped into poverty quartiles. Visit [NCedFacts.org](https://www.ncedfacts.org) for more details.

Sources: NC DPI (Data Request); NC DPI School Report Cards

Graduate Degrees

The most common teacher credential considered in teacher salary schedules is the attainment of an advanced degree, typically a master's degree. In 2017-18, more than half of all teachers in the United States (58%) had attained a master's degree or higher.^{cxxii} Although advanced degrees are very common, research does not support the idea that encouraging teachers to obtain master's degrees through pay incentives is an effective investment in student achievement.

Prevalence of Compensation for Master's Degrees

Compensating teachers for earning master's degrees is a common practice in the United States, often based upon the assumption that teachers with graduate degrees are more effective. Of the 124 school districts included in the National Center for Teacher Quality's database of the nation's largest districts, 92% offer additional pay to teachers who hold graduate degrees.^{cxxiii} While salary increases for teachers with advanced degrees vary across states and school districts, nationally, the pay premium ranges from 14% to 22% for master's degrees (with larger increases for doctoral degrees).^{cxxiv}

Evidence of Effectiveness

Despite the significant investment states and districts have made in pay increases for advanced degrees, research finds that, with few exceptions, master's degree attainment does not correlate with teacher effectiveness. In a meta-analysis of 102 studies analyzing the relationship between advanced levels of education for teachers and the academic achievement of students, 90 percent showed that graduate degrees had either no impact at all or, in some cases, had a negative impact on student achievement. Of the 10 percent that had a positive impact, none reached a level of statistical significance.^{cxxv}

A recent study found that North Carolina middle school and high school math teachers with in-area master's degrees (e.g., degrees in mathematics) had statistically significantly higher student growth scores and higher ratings on North Carolina's teacher evaluation system than teachers with only undergraduate degrees. Meanwhile, teachers with out-of-area master's degrees (e.g., those in curriculum and instruction or school administration) had lower student growth scores and statistically insignificant differences in teacher evaluation scores when compared with teachers with only undergraduate degrees. This study suggests that master's degree attainment is a stronger signal of effective teaching when the degree is in the teacher's subject area. While this might make a case for a narrowly defined 'in field' master's degree pay, the study also found that these teachers had higher than average turnover rates, perhaps negating the benefits.^{cxxvi}

Master's Pay in North Carolina

Beginning in 2000-01, North Carolina provided a 10% pay increase for teachers with master's degrees in any field of study (with an additional \$1,260 or \$2,530 per year, respectively, for a 6-year degree or PhD). Prior to 2000, the premium was 6.25% for at least a decade. Beginning with the 2013-14 school year, North Carolina ended pay increases for teachers who earn a new master's degree, grandfathering teachers with existing master's degrees or who were in the process of getting a degree. In 2021-22, North Carolina spent \$210 million to fund the 10% salary increase for the 31,150 teachers grandfathered into the master's degree salary schedule.^{cxxvii} Based on the number of teachers who had master's degrees before the policy change, BEST NC estimates that if the master's pay policy was reinstated, the full cost would rise to around \$285 million within a few years.

VI. OTHER FACTORS TO CONSIDER

Pay as a Factor in Teacher Quality

Ultimately, it is not enough to have a sufficient number of teachers in our system – they have to be good teachers. Countries that perform at the top on international assessments have targeted their teacher recruitment, preparation, and compensation strategies to ensure every student has access to a highly qualified teacher.

A 2007 analysis of what attracts teachers to the profession found that a 10% increase in earnings in professions other than teaching reduced the highest-scoring (top quartile) graduates' likelihood of teaching by 6.4%. Exhibit III.1 on page 6 illustrates how the rise in women's median income has likely reduced the attractiveness of the teaching profession, particularly for high-performing female students.^{xxxviii}

While pay levels are suppressing the attractiveness of teaching for top-tier students, the compensation models themselves are also a barrier. A survey of college students in the top third of their graduating class who do not plan to go into teaching provided several pay-related insights into the ways in which the teaching profession does not align with their compensation and career aspirations. Adequate compensation is important, but opportunities for career advancement and rewards for doing the job well are also high on their list of priorities.^{xxxix}

“

Top performing nations recruit 100% of their new teachers from the top third. In the United States, it is 23% – and 14% in high poverty schools.

”

McKinsey Research. (2010).

EX VI.1 – Perceptions of Teaching vs. Preferred Occupation for "Top Third" Students Not Planning To Teach (2010)

	Percentage that Agree/Strongly Agree this Attribute Rates Highly for:		
	Preferred Occupation	Teaching	Gap between Preferred Occupation and Teaching
There are opportunities to continue to advance professionally in this career.	87%	35%	52
I could support a family with this career.	81%	33%	48
If I were to do well in this job, I would be rewarded financially.	75%	13%	62
Pays appropriately for the skills and effort I will bring.	72%	17%	55
Offers a salary that would increase substantially over the next seven to ten years.	71%	18%	53
This job offers a competitive starting salary.	65%	10%	55

Source: *McKinsey Research. 2010.*

Countries that have markedly improved their results on international assessments show that there is a virtuous cycle when raising the bar for being fully licensed as a teacher. Rigorous licensure signals to the community and to future educators that being a teacher is an ambitious career, raising the esteem for the profession.^{xxx} In a related study on teacher quality, Sean P. Corcoran observed that increased certification requirements have helped to stave off reductions in teacher candidate quality, making a case for continued emphasis on rigorous teacher licensure strategies. While licensure may not seem related to compensation, a comprehensive compensation plan that prioritizes teacher quality should consider licensure as an important and connected strategy.^{xxxi}

RECOMMENDATION: Align compensation with an effectiveness-based licensure plan that elevates the status of the profession and attracts high-quality talent.

Teachers as Full-Time Employees

The teaching workday and calendar are often a heated component in the conversation about teacher pay. On one hand, some say teaching is not a full-time job because teachers have summers off. On the other hand, many teachers work more than 40 hours per week and would argue they work a full 12-month job in a 10-month period.^{cxixii}

There is mixed evidence on whether teachers, on average, work a longer work week during the school year and therefore complete the full 2,080 hours per year that is typical for full-time employment. Self-reported data from the Census Bureau's Current Population Survey show that teachers work approximately the same number of hours per week (44 hours) as other professionals during the school year, with the shorter school year resulting in teachers working about 83% of the hours worked in a typical full-time job.^{cxixiii} In contrast, other self-reported data from the National Center for Education Statistics (NCES) say teachers work 52 hours per week, which equates to a full-time, 12-month work year.^{cxixiv}

In either case, these work hour statistics do not paint a full picture of the job requirements for teaching. For example, teachers have very little flexibility during the school day to accommodate personal needs, such as doctor appointments, and they are almost never in a position to work from home, e.g., when they have a sick child. These are benefits that many, if not most, full-time professions enjoy, particularly following the lessons learned from remote work during the pandemic.

Additionally, if we were to, for example, prorate teacher pay to 83%, it is unlikely that more than 100,000 North Carolina teachers could find a job that neatly fits into those weeks during the summer and could supplement 17% of their pay, particularly given the high number of teachers who would all be entering the workplace at the same time each year. Many also spend at least a portion of this time during the summer preparing for the upcoming school year or completing professional development.

For the sake of this analysis, we consider teaching a full-time job and summers off as part of the benefits package for a job that otherwise has an inflexible daily schedule and lacks the general workplace flexibility that many other high-skilled professions enjoy.^{cxixv} Therefore, the annual pay recommendations in this report are for a full year's worth of teaching.

Purchasing Power of Teacher Pay

An important component of any compensation analysis is to consider the purchasing power of salaries. The purchasing power of teacher pay varies across states and school districts.

For example, in the 2021-22 school year, the average teacher in California made over \$87,000, while in Mississippi, that total was just over \$47,000.^{cxixvi} It hardly seems reasonable for average teacher salaries to be almost double in California what they are in Mississippi. However, the prices of goods and services in California are more expensive than they are in Mississippi. Using cost-of-living indices to adjust average teacher salaries, the gap narrows considerably – the average teacher in California earns \$59,375 when adjusted for cost of living, compared to \$55,629 in Mississippi.^{cxixvii} These substantial variations are why this report considers cost-of-living comparisons, when possible, instead of nominal pay.

Even within states, the cost of living varies considerably. When making comparisons of teacher salaries at the school and district levels, it is necessary to consider cost-of-living differences that exist across counties and even municipalities. The following sections examine the purchasing power of teacher pay within the North Carolina context, first looking at cost of living and then the housing market specifically. North Carolina currently has two mechanisms for ameliorating these differences: local salary supplements, which are examined on pages 17-18, and state funds directed at low-wealth and small school districts.

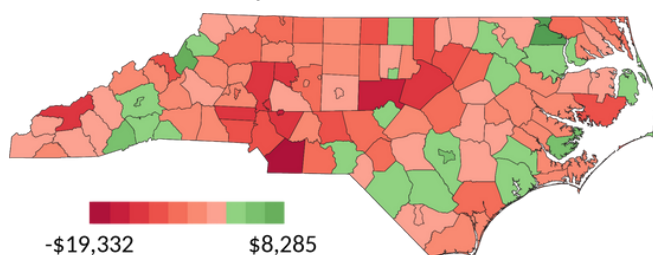
In-State Variations in Cost of Living

In the absence of cost-of-living indices for North Carolina's counties, it can be challenging to evaluate the competitiveness of teachers' salaries across school districts. In a 2019 study, Rickman et al. suggest that the most meaningful measurement for the competitiveness of teacher salaries in a given area is the difference between the tax-adjusted pay of public school teachers and that of college-educated professionals in the same location.^{cxviii} While an imperfect measure, the heat maps below compare average salaries in North Carolina public schools to the median salary of bachelor's degree holders in each county (ages 25 and up) for the 2018-19 school year.^{cxix}

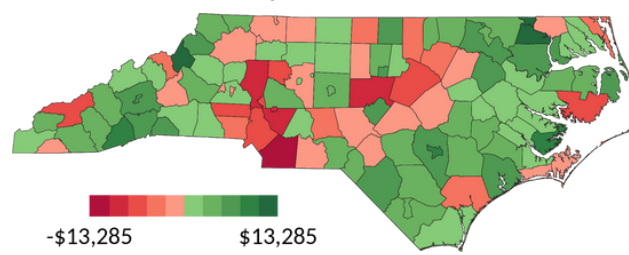
As indicated in these heat maps, very few teachers earn median pay levels in their fifth year in the classroom and many do not reach that level after 10 years. This is inconsistent with many other professions that reach their maximum base pay in 7-10 years (see page 24).^{cxl, cxli} In fact, by the 20th year, teachers in several school districts still haven't reached the median income level for their districts.

EX VI.2 – Teacher Salary vs. Median Bachelor's Degree Holder Salary in County, by District (2019)

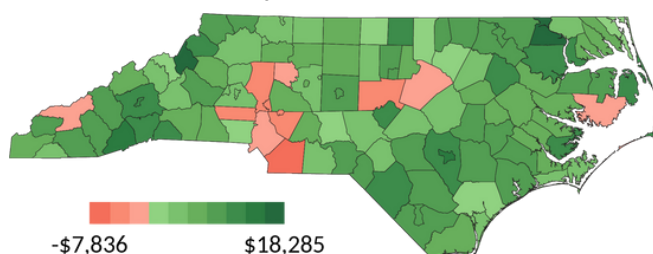
5th-Year Teacher Salary:



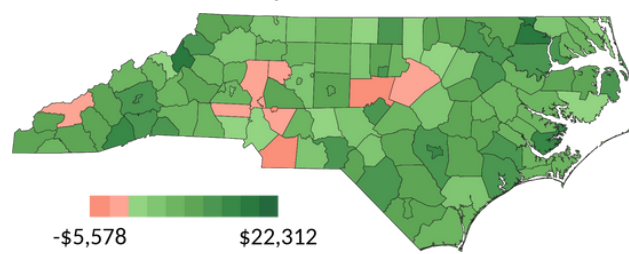
10th-Year Teacher Salary:



15th-Year Teacher Salary:



20th-Year Teacher Salary:



Note: The maps for earlier career teachers may somewhat overestimate the average salary, as compared to the more veteran teacher maps. Teacher salaries were calculated by adding the state base salary and the average local salary supplement in the district for the 2018-19 school year. Local salary supplements are often calculated as a percentage increase over base pay; thus the supplements tend to be higher for more veteran teachers.

Sources: [NC DPI Statistical Profile](#); [NC DPI Public School Salary Schedule](#); [US Census Bureau](#); [Tableau](#)



**SCAN QR CODE
FOR INTERACTIVE
ONLINE MAPS**

Exhibit VI.3 provides an example of how an urban district (Wake County) compares with a rural district (Halifax County). Additional comparisons can be found in Appendix D-I.

EX VI.3 – Cost of Living, Demographics, and Teacher Pay in Halifax County Schools and Wake County Public School System

	Wake County	Halifax County
% Economically-Disadvantaged Students (2019-20)	34%	69%
Median Home Price (2021)	\$411,700	\$109,476
Median Bachelor's Degree Holder Salary (2019)*	\$59,346	\$40,972

*Among adults 25 years and older.

Sources: [National Association of Realtors](#); [NC DPI School Report Cards](#); [US Census Bureau](#)

Teacher Salaries and the Housing Market

One way to consider the effect of regional differences in cost of living on the viability of a teacher's salary is to consider a teacher's ability to participate in the housing market in their home district. A 2017 study by the National Council on Teacher Quality (NCTQ) examined 124 of the nation's largest school districts and assessed the ability of teachers to rent an apartment, save for a down payment on a house, and make a monthly mortgage payment in the school districts in which they worked.

The study found that a teacher's ability to participate in the housing market varied greatly across the country. Key findings included:

- In 27% of districts, first-year teachers could not comfortably afford to rent a one-bedroom apartment.
- Rental costs ranged from 15% to 66% of first-year teacher income.
- In 37% of districts, teachers in their tenth year were not able to place a 20% down payment on a home listed at the median value in their school district (assuming an annual savings rate of 10% per year).
- The time it would take teachers to save for a 20% down payment ranged from 2 years to over 30 years.^{cxliii}

There is little to no evidence that teacher housing can solve this problem, both because the number of teachers is so large and because venturing into the landlord business is outside the general capacity of a school district.^{cxliii} A recent article from the John Locke Foundation suggests that a better short-term solution is to increase teacher pay to ensure teachers have access to existing housing. In the long term, the Foundation suggests, municipalities should look at the housing supply and "adopt zoning and regulatory reforms that would encourage development and better use of existing property to increase the stock of housing and housing options."^{cxliv}

NCTQ Study:



A 2017 analysis of 124 of the nation's largest school districts, analyzing a teacher's ability to rent an apartment, save for a down payment, and make a monthly mortgage payment in the district where they teach.

Data Explorer:



Interactive data dashboard visualizing key findings from the NCTQ teacher housing study.

Housing Strategies for Teachers

To combat rising housing costs and to recruit and retain teachers, some school districts – including Newark, New Jersey; Philadelphia, Pennsylvania; San Francisco, California; and Aspen, Colorado – have chosen to take advantage of state and federal tax incentives to build housing specifically for teachers, often contracting with private developers to manage the project. California passed a law in 2016 incentivizing districts to build affordable housing for teachers, with the bill citing housing as a prominent driver of teacher attrition. The law made federal and state tax credits for low-income housing available to school districts to use for teacher housing.^{cxlv}

In North Carolina, six school districts – Asheville City, Bertie County, Buncombe County, Dare County, Hoke County, and Hertford County – have built apartment complexes for their teachers. All six districts partnered with the State Employees Credit Union Foundation, which provided the districts with zero-interest loans to finance the builds. The apartments are rented at below-market rates and serve as teacher recruitment tools for the districts.^{cxlvi}

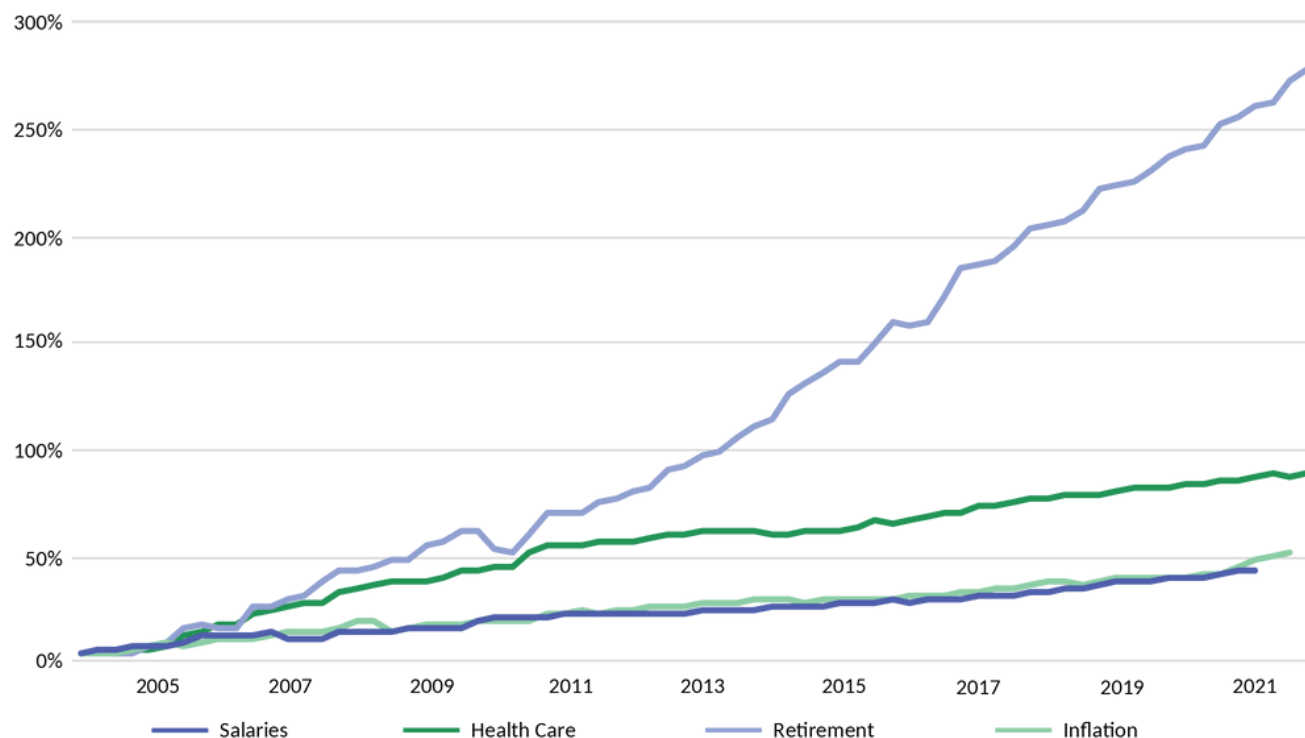
Retirement and Healthcare Benefits

Teacher retirement and healthcare benefits costs have risen sharply in the past two decades and require increasing levels of investment from states in order to maintain benefits levels and to fully fund pension obligations. As the costs of these benefits rise, state funding that could otherwise be used to increase teacher pay is diverted.

Chad Aldeman, policy director of Georgetown's Edunomics Lab, notes that, after adjusting for inflation and rising student enrollment, total education spending in the United States increased by 29% from 1995 to 2015. Yet, despite this increase in education spending, inflation-adjusted teacher salaries actually decreased during this period. Aldeman attributes the stagnant teacher earnings amidst increased education spending to three factors: decreasing student-to-staff ratios, rising healthcare costs, and rising retirement costs.^{cxlvii}

Exhibit VI.4 below illustrates the percentage change in the major components of teacher compensation, compared to inflation. Between 2004 and 2021, teacher salaries have roughly kept up with inflation during that time period, while healthcare costs, and especially retirement costs, have significantly outpaced inflation. With more money paying for healthcare and the pensions of retired teachers, less is left over to support salary increases for teachers currently working in schools.

EX VI.4 - Percentage Change in the Three Major Components of Teacher Compensation in the United States (2004 to 2021)



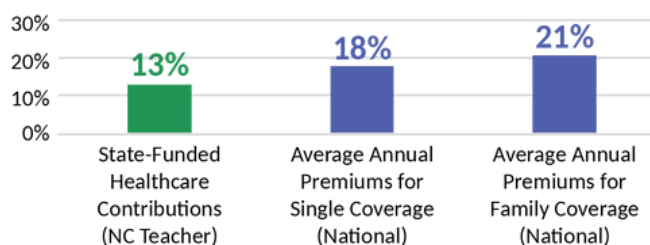
Source: Data from the BLS Employer Cost for Employee Compensation Survey, Compiled by the Edunomics Lab at Georgetown University

In 2021-22, 28% of North Carolina teachers' total compensation was in the form of benefits, compared to 17% in the private sector in the South Atlantic.^{cxlviii, cxlvix} At this level, for every dollar spent on teacher salaries, nearly 40 cents must be spent on pensions and benefits. In other words, a \$100 million investment in teacher pay actually costs the state \$140 million. Exhibit V.17 *North Carolina State Retirement Contribution* on page 46 shows the growth in overall benefits over the last decade, which, as a percentage of teacher salaries, has increased from 22% in 2011-12 to 30% in 2021-22.

Healthcare

Nationally, increases in health insurance premiums for all workers have outpaced increases in earnings for several decades. Since 2012, increases in health insurance premiums for single coverage have increased 18% after adjusting for inflation, while family coverage premiums have increased 21%. Unsurprisingly, as the costs of health insurance have gone up across the country, North Carolina's contributions to teacher health insurance costs have increased by 13% (see Exhibit VI.5 to the right).^{cl, cli} As a percentage of teacher pay, this was an increase from 9% to 16% (see Exhibit VI.7 on the next page).

EX VI.5 - Ten-Year Inflation-Adjusted Increases in Annual Health Insurance Premiums for All Workers & State-Funded Health Care Contributions for NC Teachers (2012 to 2021)



Sources: *NC DPI Highlights of the NC Public School Budget*; *Kaiser Family Foundation*

Across the country, school districts pay a higher percentage of teacher health insurance premiums than do private employers. In an NCTQ study of 124 of the nation's largest school districts, districts covered an average of 92% of health insurance premiums on individual plans, compared with 80% in the private sector. For family plans, the percentages are 79% and 67%, respectively.^{clii, cliii, cliv} Given the rapidly increasing cost of health insurance and the fact that school districts tend to pay larger shares of health insurance premiums, rising healthcare costs increasingly compete with efforts to raise teacher salaries in North Carolina and across the country.

Retirement

Nationally, 90% of all public school teachers are enrolled in defined retirement benefit plans, wherein retirees are paid a guaranteed pension benefit based upon a predefined formula, often based on variables like years of experience and highest salary level. In 2021-22, 36 states used a defined benefit plan as their default option, including North Carolina. Other retirement options offered by states include:

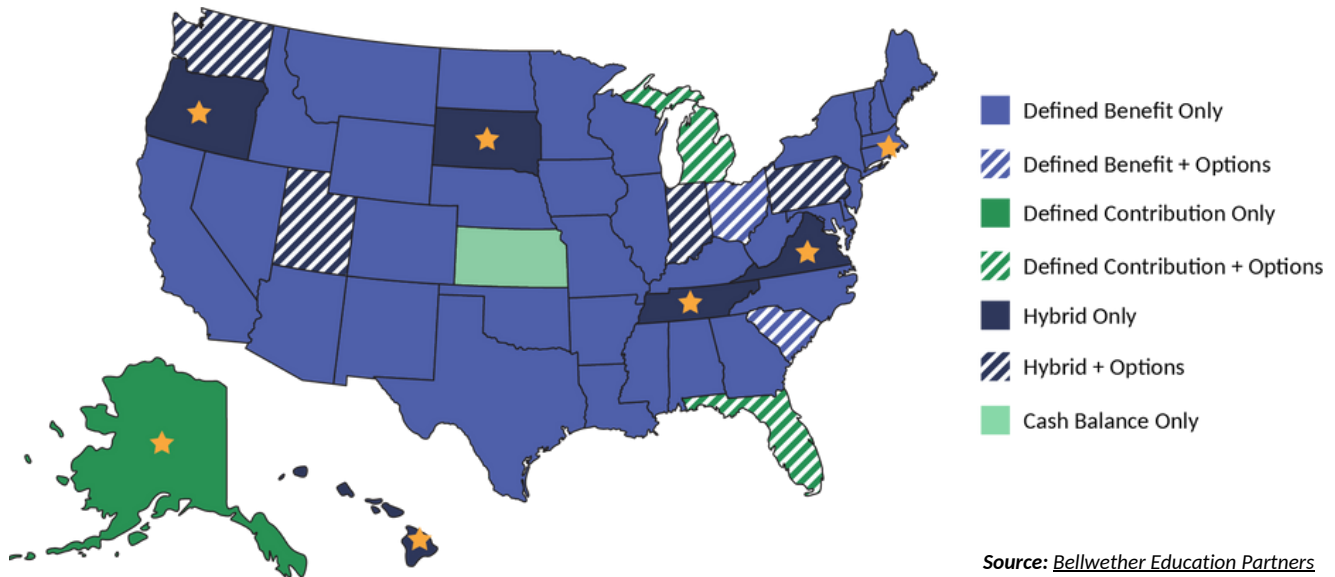
- Direct contribution plans, in which teachers and employers each contribute a percentage of a teacher's salary into an individual account and the funds are invested. The value of the account fluctuates depending upon the performance of the underlying investments.
- Cash balance plans, in which teachers contribute a percent of their salary to retirement. The state manages the funds and guarantees a certain rate of annual interest, with higher rates of guaranteed interest for longer-tenured teachers.
- Hybrid plans, which incorporate features from defined benefit and defined contribution plans.^{clv}

In most states that use defined benefit pension plans, pension formulas consider the retiree's years of experience and highest salary level (often an average over a series of years). In North Carolina, teachers are eligible to begin collecting pension payments at 30 years of experience, regardless of age; at 25 years of experience, if age 60 or older; or at 5 years of experience, if age 65 or older.^{clvi}

Since most teacher salary schedules require decades of experience before reaching the highest salary bands, the longest-tenured teachers receive a much better return on their pension contributions than teachers who work for a lesser number of years.

Both public- and private-sector employees value retirement plans; however, there is higher demand for defined contribution plans than defined benefit plans. A recent MetLife survey found that 81% of employees in the South who earn between \$50,000 and \$99,999 indicated that a defined contribution plan was a "must have" and an additional 16% described it as a "nice to have." Only 48% of these employees said a defined benefit plan is a "must have," with an additional 42% placing it as a "nice to have."^{clvii} In other words, while benefits are important, there is generally more demand from employees in our region for defined contribution plans than for defined benefit plans.

EX VI.6 – Teacher Retirement Options, by State (2021)

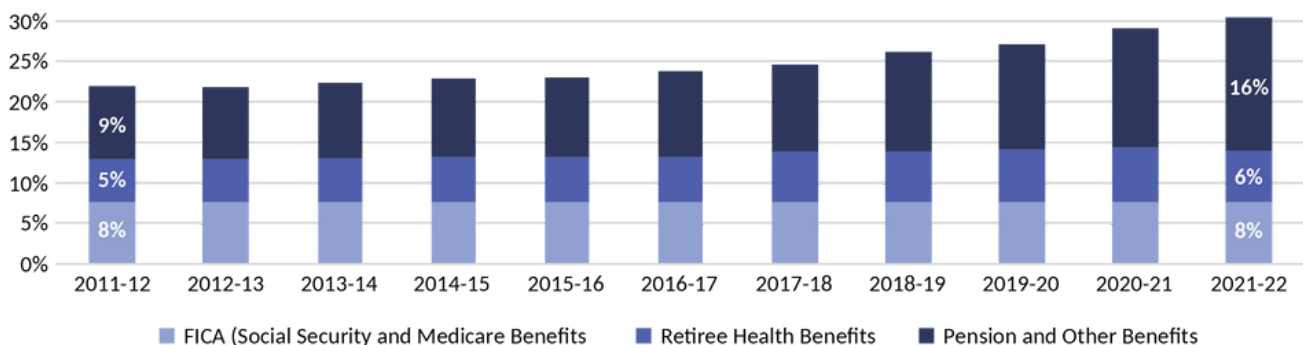


★ In these states, there is a defined benefit plan open to current teachers, but closed to new teachers.

In the defined benefit plans offered by most states, the retirement benefits drawn down by teachers are not tied to teachers' contributions to the system. The result is that, while employer contributions to teacher retirement plans continue to increase, the majority of those contributions are going to pay down existing pension obligations, and states are cutting benefits in order to make pension plans more sustainable.^{clviii}

This certainly holds true in North Carolina, where 60% of employer pension contributions for teachers working in North Carolina's schools go to paying down existing obligations to current retirees, with just 40% going to active teachers' future retirement benefits.^{clix} At the same time, retirement contributions as a percentage of teacher salary have increased by 38% since 2012, mainly due to the state's efforts to keep pace with its ongoing teacher pension plan obligations.^{clx}

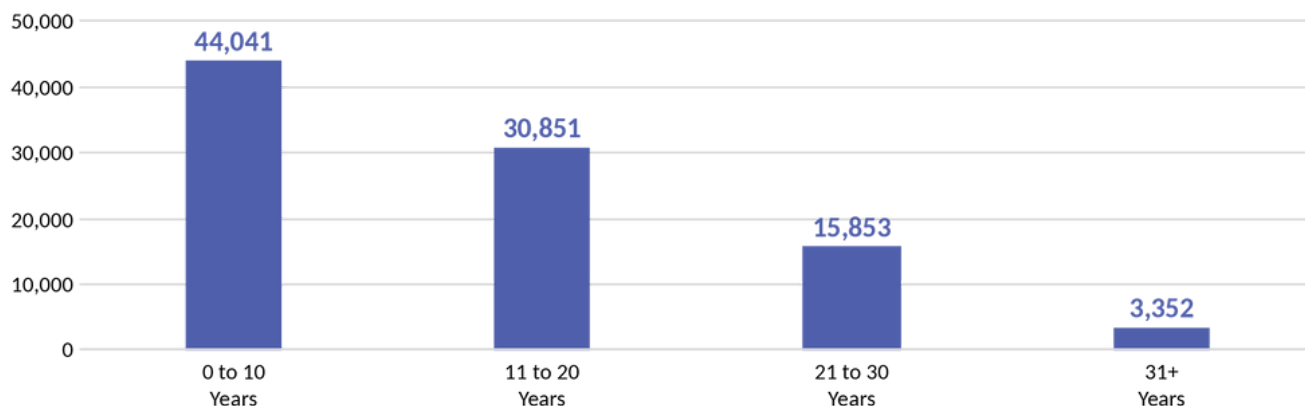
EX VI.7 – North Carolina State Retirement Contributions for K-12 Traditional Public School Teachers and District Personnel, as a Percentage of Employee Salary (2011-12 to 2021-22)



Source: [NC General Assembly Fiscal Research Division: Budget Documents](#)

Conventional thinking suggests that teachers – and public employees more generally – enter the profession knowing that they will accept lower salaries in exchange for increased benefits. However, pensions represent a significant portion of all benefits and the greatest pension benefits accrue to the small subset of teachers who stay in the profession long enough to retire. In fact, research finds that about half of all new teachers leave the profession without qualifying for a pension benefit at all, despite having contributed to the retirement system.^{clxi}

EX VI. 8 – Teachers in NC K-12 Traditional Public Schools, by Years of Experience (2018-19)



Source: NC DPI (Data Request)

Additionally, under the existing system, retirement eligibility criteria act to incentivize retention for teachers between 15 and 25 years of teaching (those teachers who are on track to collect the largest pension benefits) and incentivize retirement for teachers between 25 and 30 years into their career (when most career teachers are first eligible to receive pension payments). This can be visualized by examining the number of state-funded teachers in North Carolina, sorted by years of experience (See Exhibit V.6 on page 27), and noticing the dramatic increase in attrition at 27 to 29 years of experience.^{clxii}

Perceptions of Retirement Benefits

Despite teacher retirement benefits being typically more generous than those of private-sector employees, research shows that teachers have inconsistent knowledge about their retirement benefits. A recent study of a nationally representative sample of teachers found that 45% could not identify what type of retirement plan they had, and that many teachers struggled to identify how much they are contributing to their plans, their retirement eligibility age, and the duration of their retirement benefits. Late-career teachers (20 or more years of experience) were much more adept at answering these questions, likely because they are closer to receiving retirement benefits. However, knowledge gaps of early- and mid-career teachers suggest that they may not know the extent to which retirement benefits disproportionately accrue to teachers who stay in the profession longer.^{clxiii}

Perhaps unsurprising given teachers' inconsistent knowledge of their retirement benefits, when asked how they prioritize salaries and pensions, a plurality of teachers indicated that they would prefer higher salaries at the cost of lower pensions. In 2018's Voices from the Classroom survey, an annual, nationally representative survey of America's teachers, 43% of teachers indicated that they would prefer a higher salary and a smaller pension, compared to 26% who would prefer a lower salary and a larger pension, with 31% unsure.^{clxiv}

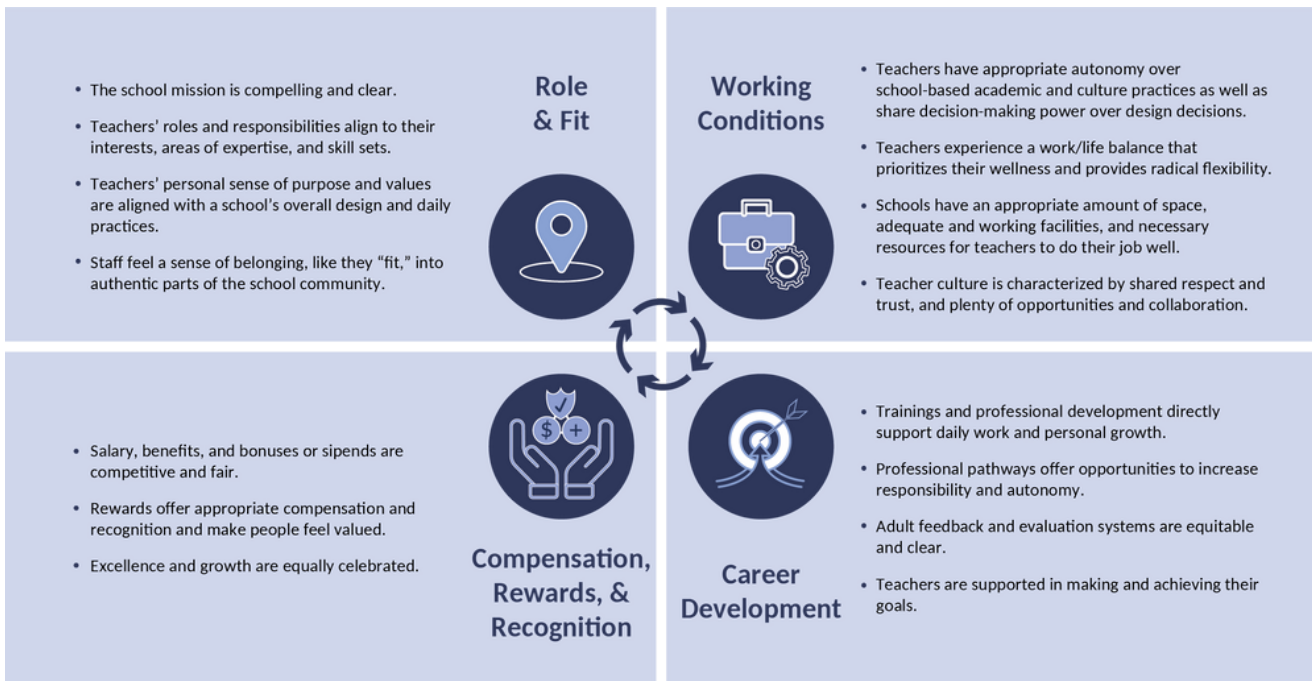
These survey data indicate an openness among teachers to a restructuring of their total compensation package. One possible reform is the introduction of a defined contribution retirement plan option. Under a defined contribution plan, all teachers could see a benefit from their investment, even if they stay in the profession for a short period of time. This option could also reduce the state's pension liability.

RECOMMENDATION: Examine the opportunity to offer teachers defined contribution retirement plans, including options that provide higher take-home pay in exchange for lesser retirement contributions.

Teacher Pay: One of Many Critical Drivers of Teacher Satisfaction

Pay is one of many drivers of teacher satisfaction, most of which are interrelated. A recent report from Transcend, Inc consolidates the drivers of teacher satisfaction into four interrelated areas:^{clxv}

EX VI.9 – Drivers of Teacher Satisfaction: What Attracts & Retains Teachers



Source: [Transcend Education. 2023.](#)

A recent Indeed.com survey included the following among the most common reasons good employees leave their positions: no recognition or appreciation from a company, no opportunity for growth, poor management, and little or no support in the workplace. From stronger school leadership to embedded professional support, surveys like this help identify ways modernized organizational and compensation structures can improve the retention of high-quality employees.

We know from Advanced Teaching Roles (see page 35) that a compensation plan that funds teacher leadership positions also enhances the role and fit of the teacher, creates better working conditions, and provides career development opportunities both to the teachers who receive promotions and to the teachers they support.

RECOMMENDATION: Ensure any teacher compensation strategy is aligned with other efforts to improve the working conditions of teachers, including stronger school leadership, systems of support for students, and reduced administrative burden that allows teachers to focus on teaching, school safety, and more.

A group of North Carolina teachers created a roadmap for professionalizing the teaching profession. Follow the QR code to the right to learn more about the FIT Leaders' vision.



VII. LOOKING AHEAD:

RECOMMENDATIONS FOR STRENGTHENING TEACHER COMPENSATION IN NORTH CAROLINA

North Carolina faces many varied challenges to teacher recruitment and retention. The stakes are high – all students deserve to be taught by competent, qualified, and well-trained teachers. This report provides evidence that now is the time for a significant, strategic investment in teacher pay, one that includes increases in overall base salary levels as well as better strategies for investing in educators who choose to take on leadership roles or work in hard-to-staff schools and subjects.

Based on the research identified in this report, North Carolina should make a substantial, multi-year investment in teacher pay and ensure that teacher pay structures are explicitly working to attract, support, and retain great teachers for every student and classroom. This type of investment is not unprecedented. North Carolina has made a similar effort twice in the last several decades, including more than a \$1 billion teacher pay increase from 2014 to 2018, designed to repair the teacher pay losses from the Great Recession. Specifically, BEST NC offers the following recommendations:

Set Clear Goals for Teacher Compensation

- As a starting point, the North Carolina Educator Effectiveness and Compensation Task Force proposed:

"The primary goal of an updated North Carolina educator compensation system is to improve student learning by increasing the likelihood that every student has a highly effective teacher – the most significant in-school factor in increasing student achievement."

Raise the Floor

- Significantly increase starting pay, particularly for well-prepared candidates, to be competitive with surrounding states and similar industries;
- Replace the outdated step-and-lane schedule with a front-loaded pay structure in which effective teachers earn full base teacher pay earlier in their career; ensuring that all licensed teachers can support a family and have access to additional career and compensation advancement opportunities (see Raise the Ceiling, below);

Raise the Ceiling

- Implement Advanced Teaching Roles statewide to provide well-paid professional advancement opportunities to effective teachers who want to extend their reach while transforming the organizational structures of schools;
- Develop a meaningful teacher retention strategy to enhance the front-loaded base pay structure and to recognize the long-term service of effective educators;

Attract and Retain Hard-to-Staff Positions

- Establish competitive, differentiated pay for high-demand degrees like STEM and Special Education;
- Increase or broaden incentives for teaching in hard-to-staff schools;

Reframe the Compensation Context

- Align compensation with an effectiveness-based licensure plan that elevates the status of the profession and attracts high-quality talent;
- Examine the opportunity to offer teachers defined contribution retirement plans, including options that provide higher take-home pay in exchange for lesser retirement contributions;
- Convert state-funded position allotments into a hybrid-teacher allotment method that is based on positions (calculated by ADM) but allotted in dollars to increase equity of these allotments across schools and districts, empowering districts to optimize their teaching funds; and
- Ensure any teacher compensation strategy is aligned with other efforts to improve the working conditions of teachers, including stronger school leadership, systems of support for students and reduced administrative burden to allow teachers to focus on teaching, school safety, and more.

APPENDICES & REFERENCES



APPENDICES

Appendix A:

Nominal and Cost of Living-Adjusted Average Teacher Salaries, by State (2022-23)

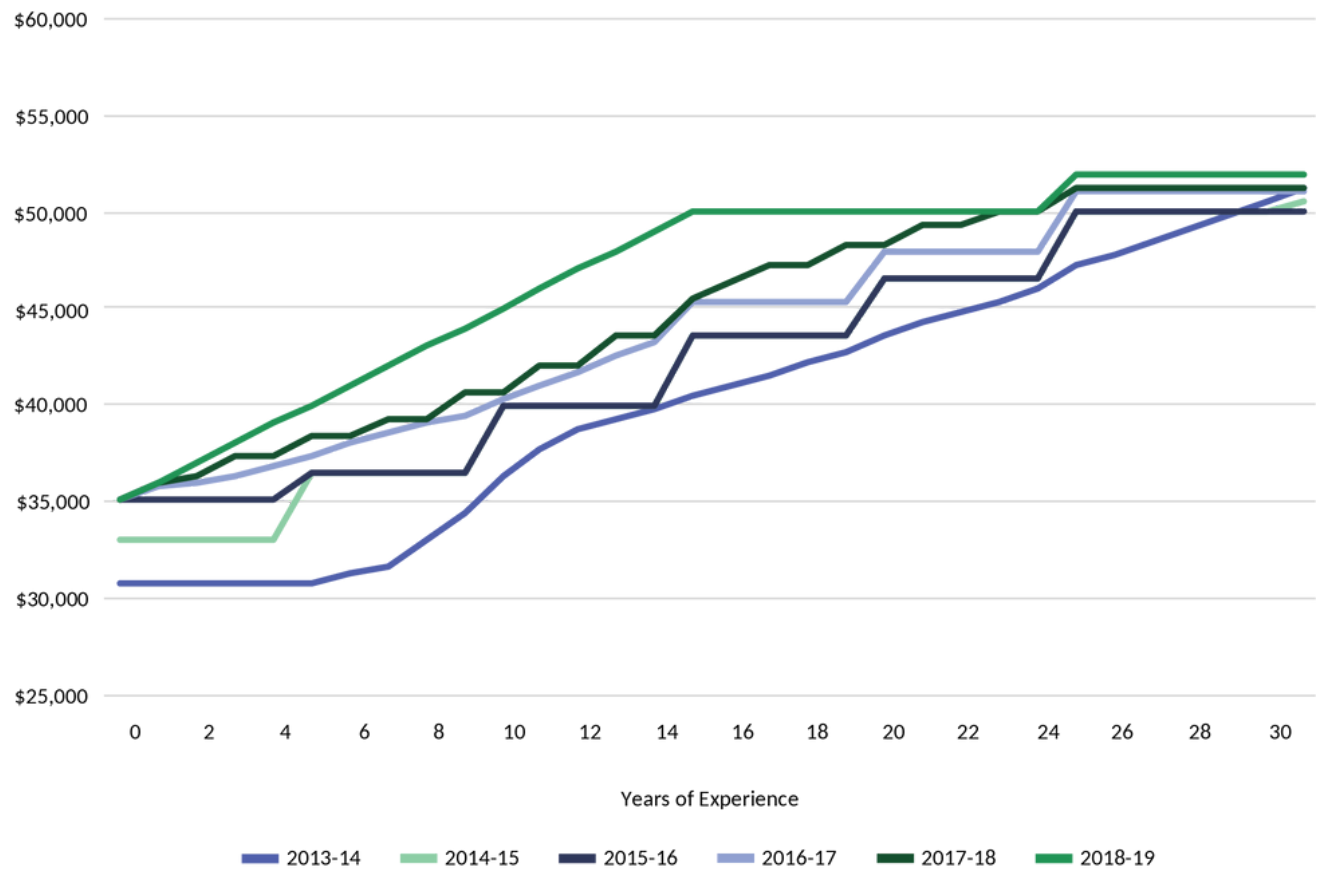
State	Nominal Average Salary	Cost-of-Living Adjusted Avg. Salary	Nominal Rank	Cost-of-Living Adjusted Rank
Alabama	\$56,109	\$62,973	32	15
Alaska	\$75,259	\$60,498	9	24
Arizona	\$60,275	\$57,912	31	43
Arkansas	\$53,317	\$57,884	45	35
California	\$90,151	\$61,415	3	22
Colorado	\$61,907	\$56,531	24	41
Connecticut	\$83,400	\$73,100	5	3
Delaware	\$66,243	\$62,867	14	16
Florida	\$52,362	\$48,591	47	49
Georgia	\$64,461	\$67,007	20	12
Hawaii	\$70,947	\$38,244	13	50
Idaho	\$56,365	\$54,910	41	47
Illinois	\$73,933	\$71,787	11	5
Indiana	\$55,981	\$58,625	38	34
Iowa	\$60,150	\$68,563	26	7
Kansas	\$54,810	\$60,013	34	23
Kentucky	\$56,296	\$59,648	39	30
Louisiana	\$55,362	\$55,933	42	42
Maine	\$60,391	\$53,628	28	48
Maryland	\$79,421	\$63,644	8	21
Massachusetts	\$92,307	\$65,051	2	14
Michigan	\$66,148	\$68,847	15	8
Minnesota	\$66,795	\$69,445	17	9
Mississippi	\$48,530	\$56,787	50	37
Missouri	\$54,029	\$59,061	46	32
Montana	\$55,909	\$56,303	43	46
Nebraska	\$58,763	\$62,963	30	20
Nevada	\$61,719	\$59,916	29	36
New Hampshire	\$64,169	\$57,044	19	39
New Jersey	\$82,126	\$74,484	6	2
New Mexico	\$63,580	\$68,432	40	27
New York	\$92,065	\$66,463	1	11
North Carolina	\$56,559	\$59,355	35	31
North Dakota	\$55,767	\$57,344	33	33
Ohio	\$65,825	\$72,082	16	4
Oklahoma	\$55,541	\$63,115	37	17
Oregon	\$71,842	\$59,032	12	29
Pennsylvania	\$74,116	\$74,503	10	1
Rhode Island	\$79,298	\$70,908	7	6
South Carolina	\$55,778	\$59,739	36	25
South Dakota	\$51,363	\$55,004	48	45
Tennessee	\$54,378	\$59,658	44	26
Texas	\$60,716	\$63,537	27	19
Utah	\$63,257	\$61,426	25	28
Vermont	\$63,291	\$55,344	18	40
Virginia	\$62,104	\$56,561	21	38
Washington	\$83,845	\$66,192	4	13
West Virginia	\$53,006	\$57,316	49	44
Wisconsin	\$61,393	\$62,748	23	18
Wyoming	\$61,437	\$67,086	22	10

Note: This figure was revised in the online version of this report April 2023.

Source: NEA Rankings and Estimates Report; Insure.com

Appendix B:

I. State-Funded North Carolina Teacher Pay, by Years of Experience (2013-14 to 2018-19)



Note: Hold-harmless provisions ensured that no teacher's pay decreased as a result of changes to the salary schedule.

Note: These salary increases do not include investments in teacher retirement benefits, which ranged from 22.68% of teacher salaries in 2014-15 to 26.51% of teacher salaries in 2018-19.

Source: [NC DPI Public School Salary Schedules](#)

II. Investments in North Carolina Teacher Pay (2014-15 to 2018-19)

Year	Salary Investment	Additional Retirement & Social Security Benefits	Total Investment
2014-15	\$276 Million	\$63 Million (22.97%)	\$339 Million
2015-16	\$62 Million	\$14 Million (22.97%)	\$76 Million
2016-17	\$191 Million	\$45 Million (23.77%)	\$236 Million
2017-18	\$102 Million	\$25 Million (24.78%)	\$128 Million
2018-19	\$283 Million	\$75 Million (26.51%)	\$358 Million
Total	\$914 Million	\$223 Million	\$1.14 Billion

Sources: [North Carolina General Assembly Fiscal Research Division: Budget Documents](#); [NC DPI Highlights of the Public School Budget](#)

Appendix C:

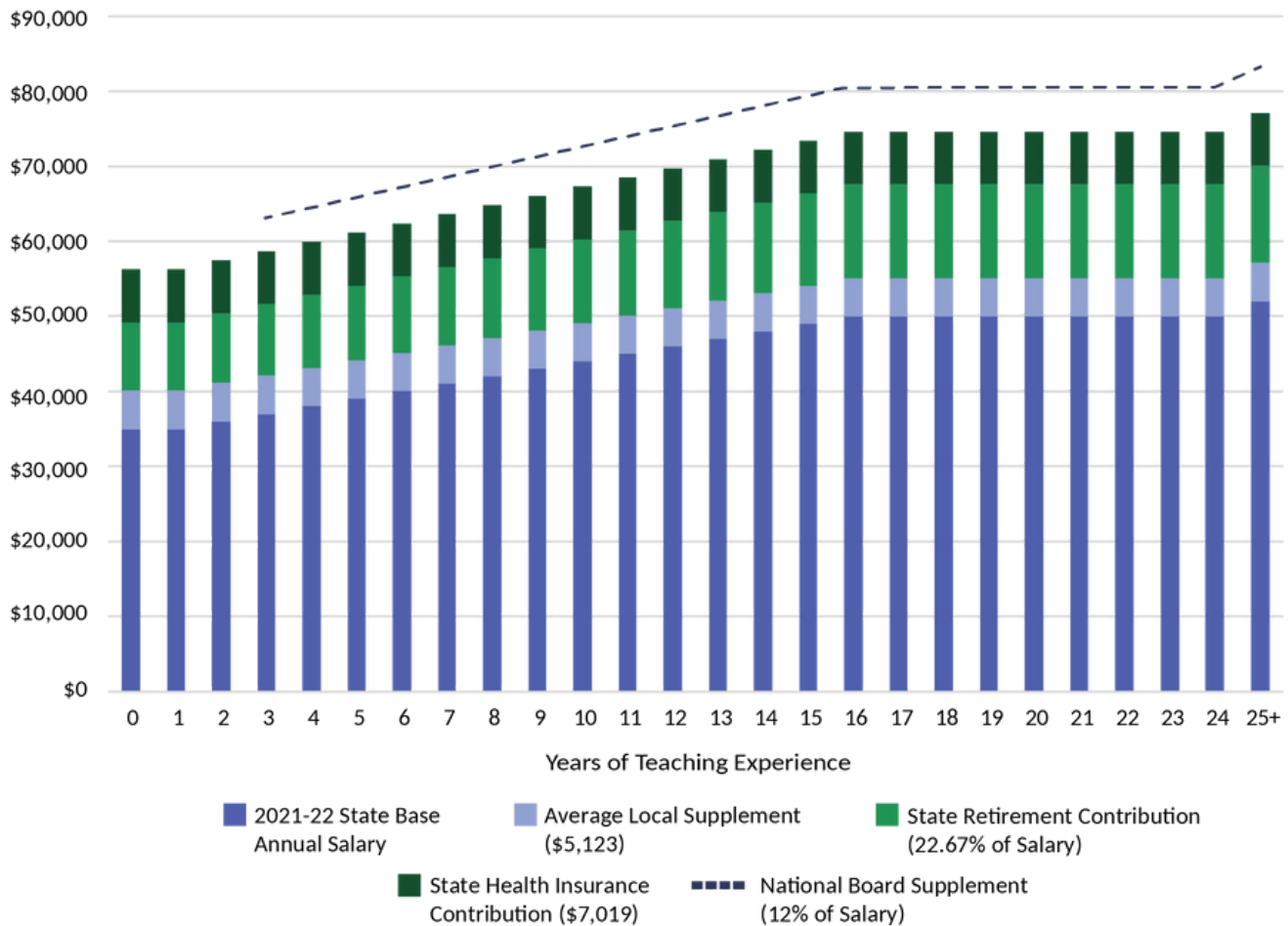
International Comparisons of Policies Aimed at Attracting and Retaining Teachers

Policies to Attract/ Retain Top Teachers	Singapore	Finland	South Korea	United States	
Selective admissions to teacher training	✓	✓	✓	Most programs not selective	
Government-paid teacher training	✓	✓		Students finance own education	
Government regulates supply of teachers to match demand	✓	✓	✓	Oversupply of teachers	
Professional working environment	✓	✓	✓	Variable working conditions	
Competitive compensation	✓		✓	Compensation not attractive to many students	
Cultural respect accorded to teaching	✓	✓	✓	Respect not comparable to other nations	
Teaching considered as a career	✓	✓	✓	Relatively high attrition in early years	
Robust opportunities for career advancement	✓			Limited opportunities for advancement	
Performance pay for teachers	✓		✓	Limited performance pay	
Percent Estimated Annual Teacher Turnover	3%	2%	1%	All Schools	High Needs
				14%	20%

Source: [McKinsey Research. \(2010\).](#)

Appendix D:

I. Average Compensation (including Benefits) for K-12 Public School Teachers, by Years of Experience (2021-22)



Sources: NC DPI Teacher Salary Schedules; Current Operations Act of 2021; NC Treasurer's Office (Data Request); NC DPI Statistical Profile

II. Cost of Living, Demographics, and Teacher Pay in Halifax County Schools and Wake County Public School System

	Wake County	Halifax County
Median Home Price (2021)	\$411,700	\$109,476
% Economically-Disadvantaged Students (2019-20)	34%	69%
Local Salary Supplement (2018-19)	\$8,720 (2nd)	\$2,253 (77th)
Average 5th Year Teacher Salary (2018-19)	\$47,720	\$41,353
Average 20th Year Teacher Salary (2018-19)	\$58,720	\$52,353
Median Bachelor's Degree Holder Salary (2019)*	\$59,346	\$40,972
Years to Surpass Median Bachelor's Degree Holder	26	5
Difference Between 20th Year and Median	-\$626	+\$11,381

*Among adults 25 years and older.

Sources: National Association of Realtors; NC DPI School Report Cards; NC DPI Statistical Profile; NC DPI Teacher Salary Schedules; US Census Bureau

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Spelling List #24

1. cook
2. doctor
3. nurse
4. farmer
5. busdriver
6. teacher
7. police
8. painter
9. hairdresser
10. principal

Writing Challenge

Write these sentences
police officer
teacher
pharmacist



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