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# Larger Pay Increases and Adequate Benefits Could Improve Teacher Retention

## Findings from the 2024 State of the American Teacher Survey

**F**ew K–12 public school teachers—only one out of every three—think that their pay is adequate (Doan, Steiner, and Pandey, 2024; Steiner, Woo, and Doan, 2023). Low pay is a top reason teachers consider leaving their job and is a top source of job-related stress for one in three teachers (Diliberti, Schwartz, and Grant, 2021; Doan et al., 2023; Doan, Steiner, and Pandey, 2024).

Reports of teacher dissatisfaction and higher-than-average teacher attrition following the coronavirus disease 2019 (COVID-19) pandemic, particularly among teachers in schools with historically underserved student populations (Bastian and Fuller, 2024; Goldhaber and Theobald, 2022; Redding and Nguyen, 2024; Zamarro et al., 2024), prompted state and district education leaders to quickly adopt policies designed to recruit and retain teachers and increase job satisfaction. Many of these policies included increasing pay (Aranda-Comer, 2023; Thymianos and DiMarco, 2024).

As of spring 2023, at least nine states and numerous school districts had recently enacted, or negotiated through collective bargaining, changes to teacher pay (Heubeck, 2023; “LAUSD Approves 21% Teacher Salary Raises in New Union Contract,” 2023; Peroza, 2023; Thymianos and DiMarco, 2024). The content of these changes varied. Some involved small percentage-point increases in salary, and others specified bonuses, new minimum salaries, or statewide targets for average or starting salaries (Aranda-Comer, 2023; Duncombe and Francies, 2022). Few of these new policies addressed working conditions, despite evidence that raising pay and improving working conditions are both necessary to improve teacher retention (Edwards et al., 2024; Jamieson and Perez, 2023; Steiner, Woo, and Doan, 2023).

Although research on these new policies is ongoing, early results add to the existing literature that suggests that increasing teacher pay can reduce teacher attrition or, in some cases, help dis-

## KEY FINDINGS

- At least two-thirds of teachers reported receiving a pay increase between the 2022–2023 and 2023–2024 school years, but the amounts were small—\$2,000 on average—compared with desired salary increase of \$16,000.
- Teachers who received larger pay increases were more likely to say that their base pay in the 2023–2024 school year was adequate and were less likely to intend to leave the profession even after accounting for base pay. Black teachers earned lower salaries than other teachers and also reported the smallest pay increases.
- One in four teachers nationally were not paid for the extra work that they performed for their school or school system. Black teachers were more likely than White teachers to report that they performed extra work for no pay.
- Teachers in single-earner households spent larger shares of their household incomes on housing, child care, and student debt payments than similar working adults in single-earner households.
- Employer-provided benefits that could help teachers pay for these household expenses were uncommon, and teachers held less favorable views of their benefits than similar working adults.
- Larger pay increases, providing benefits that mitigate major household expenses, and improving the quality of benefits could improve teacher retention.

tricts attract higher-quality teachers (Biasi, 2021; Pham, Nguyen, and Springer, 2021; Sun et al., 2024; Zamarro et al., 2024).

But it is telling that according to national surveys, teachers’ perceptions of pay adequacy have not changed—or have worsened—from January 2023 to January 2024 (Doan, Steiner, and Pandey, 2024). In 2024, the gap between teachers’ current base salaries and the base salaries that they would consider completely adequate—what we call their *desired salaries* throughout this report—was on average \$16,000 (Doan, Steiner, and Pandey, 2024). This gap was consistent with teachers’ reports in 2023 (Steiner, Woo, and Doan, 2023).

### Abbreviations

ALP	American Life Panel
COVID-19	coronavirus disease 2019
NCES	National Center for Education Statistics
NEA	National Education Association
NTPS	National Teacher and Principal Survey
SoT	State of the American Teacher

Black teachers were especially likely to say their base pay is inadequate and that it is a key reason that they are considering leaving their job (Doan, Steiner, and Pandey, 2024; Steiner, Woo, and Doan, 2023). Black teachers also reported lower base pay, on average, than White teachers (National Center for Education Statistics [NCES], 2023). In 2024, nearly half of Black teachers said that low pay was a top source of job-related stress—higher than in 2023.

These patterns are worrying because Black and other racially minoritized students and students living in poverty are especially likely to be negatively affected by Black teacher turnover. The presence of Black teachers benefits all students, especially Black and other minoritized students (Blazar, 2021; Egalite and Kisida, 2018; Gershenson et al., 2022), and Black teachers are more likely to teach in schools that serve large shares of these students (Schaeffer, 2021). Already, Black teacher turnover is substantially higher than other teacher turnover (Carver-Thomas and Darling-Hammond, 2017). This means that elevated Black teacher turnover stemming from low pay could disproportionately harm these vulnerable student groups.

In this report, we use the 2024 State of the American Teacher (SoT) survey to explore a set of

factors that could relate to teachers' unchanged negative perceptions of their pay between the 2022–2023 and 2023–2024 school years. RAND has conducted the SoT survey since 2021. We document teachers' reports of how much their pay increased between these two school years, which teachers received pay increases, the sources and amounts of those increases, and how reported increases compare with desired pay, and we explore differences by state collective bargaining requirements. We discuss extra pay for additional school-related activities; describe teachers' reported spending on housing, child care, and student loan payments; and report teachers' perceptions of employer-provided benefits.

We examine the relationships of teachers' pay increases, benefits, and expenses with their intentions to leave and compare teachers' reports with those of similar working adults. We focus on Black teachers because of the worrying changes in their perceptions of their pay and the high impact of their attrition on students.

Our findings provide critical information to federal, state, and district policymakers who are designing teacher pay initiatives and other programs to improve teacher retention. The sections that describe our data, methods, and limitations contain recycled text from prior SoT reports that address related topics (Doan, Steiner, and Pandey, 2024; Steiner, Woo, and Doan, 2023).

## We Surveyed Teachers and Similar Working Adults

We use data from two sources: the 2024 SoT survey, which is a nationally representative survey of 1,479 K–12 teachers (see the box on what makes a survey nationally representative), and the 2024 American Life Panel (ALP) companion survey. Black teachers and Hispanic teachers were oversampled in the SoT survey to allow for representative estimates of teachers who identify as belonging to these groups. The ALP companion survey is a nationally representative survey of 501 working adults in which we asked parallel questions about expenses and household income to provide context for teachers' responses (Doan, Steiner, and Pandey, 2024). In this report, we com-

### What Makes a Survey Nationally Representative

Respondents are a probability-based sample, meaning that they were randomly selected (not volunteer or opt-in) to participate from among the known population of U.S. K–12 public school teachers. Probability-based samples are less likely than opt-in surveys to include automated or fake responses, which tend to be biased (Mercer and Lau, 2023). Thus, SoT survey respondents reflect teachers nationally. SoT survey responses are carefully weighted to represent teachers on multiple dimensions across the country.

pare teachers' responses with those of similar working adults. We use a subset of the full ALP sample to define *similar working adults* as employed adults who are between the ages of 18 and 64, have at least a bachelor's degree, and report working at least 35 hours per week (Allegretto, 2022).

We explored whether teachers' survey responses differed according to their demographic characteristics, school context, and the bargaining status of teachers' states.<sup>1</sup> Unless otherwise noted, we discuss only differences among teacher subgroups that are statistically significant at  $p < 0.05$ . In select cases, we tested the robustness of significant differences across teacher subgroups to adjust for teacher- or school-level characteristics or other contextual factors that were highly likely to be associated with teacher pay, such as years of experience, highest degree earned, state bargaining status, or cost of living. These tests are not evidence of any causal effect of any teacher or school characteristic and are intended only to highlight differences in reported experiences across subgroups of teachers. Because the intent of this report is to provide exploratory, descriptive information, we did not make statistical adjustments for multiple comparisons.

It is possible that numerous factors unmeasured by this survey, such as spousal employment or local economic conditions, could have played a role in teachers' responses or the differences across educator subgroups that we observe. In addition, we acknowledge that aspects of state context correlated with bargaining status that we do not measure could contribute to the patterns that we observe. For

instance, states that prohibit collective bargaining also have among the lowest levels of per-pupil spending on education (NCES, undated-d). In addition, we were unable to explore how *specific* state policies for increasing pay affected teachers' perceptions because we did not obtain state-representative samples.

More details about our data and analysis can be found in the “How This Analysis Was Conducted” box at the end of this report. We provide the SoT and ALP survey responses in our technical report (Doan et al., 2024).

## How We Measured Pay, Expenses, and Intention to Leave

We measured pay by asking teachers to report their base teaching salary for the entire current school year (2023–2024) and the prior school year (2022–2023), rounded to the nearest \$1,000. Consistent with the National Teacher and Principal Survey (NTPS) (U.S. Department of Education, undated), we defined *base salary* as salary before adding any extra pay for additional school-related activities.<sup>2</sup> We asked teachers how adequate they considered their current base teaching salary to be given their role and work responsibilities, using the same question asked in the 2023 SoT survey (Steiner, Woo, and Doan, 2023). We did not ask teachers to report the amount or value of their benefits or pay from work outside their school.

We measured pay increases by subtracting teachers' reported base salaries in the 2022–2023 school year from their reported base salaries in this school year (2023–2024). We report pay increases in averages, as dollar amounts, and as percentage increases from teachers' reported 2022–2023 base salaries. We sometimes report pay increases in categories of dollar amounts to illustrate the variation in amount of increase experienced by different groups of teachers. We also asked teachers to report the reasons for their pay increase (e.g., an additional year of experience).

We asked teachers to report the additional annual pay they had earned, or will earn, from the school or school system where they worked for extracurricular or additional activities (e.g., athletic coaching or sponsoring student activities) in 2023–2024, to report that

they were not compensated for such activities, or to report that they did not perform any such activities. We sometimes refer to these extracurricular or additional activities as *extra work* in this report. We did not ask teachers what their extra work entailed.

Teachers reported the number of hours that they spent each week performing extra work. We estimated hourly rates for reported pay for extra work by dividing reported annual pay for extra work by the estimated number of hours spent annually on such work. More information on what goes into teacher pay can be found in the box.

We measured expenses for three large, common household expenses that are often cited as barriers to teacher retention—housing, child care, and student loan payments (Fiddiman, Campbell, and Partelow, 2019; Saenz-Armstrong, 2023; Sparks, 2018)—as one way to understand the extent to which the teaching profession provides adequate pay. We asked teachers to report their monthly expenses in each of these categories, rounded to the nearest \$100, and used these reports to estimate yearly costs. We report teachers' expenses in these three categories relative to their reported household income and compare teachers with similar working adults in single- and dual-earner households. We focused our analysis on the set of teachers and working adults who paid for each expense.

We measured teachers' intentions to leave their current teaching job and intentions to leave the teaching profession before the end of the 2023–2024 school year. Although intentions to leave are not a perfect predictor of whether teachers will resign, teachers who state an intention to leave are more likely to resign than those who do not state such an intention (Grant and Brantlinger, 2023; Nguyen et al., 2024).<sup>3</sup>

We relied on information provided by the National Education Association (NEA) to group states into three categories of state-level collective bargaining: states where bargaining is required if teachers choose to vote for union representation; states where bargaining is allowed but not required; and states where bargaining is prohibited. More details about the measures we used can be found in the “How This Analysis Was Conducted” box at the end of this report.

## What Goes into Teacher Pay

Teacher pay consists primarily of teachers' annual base salaries. In addition, teachers can earn extra pay from taking on additional responsibilities at school, receiving bonuses, taking on summer jobs, or working outside their school system. However, the amounts that teachers earn from these sources tend to be small relative to their base salaries—from about \$3,000 for extra work within their school system to \$6,000 for working outside their school system (NCES, undated-a). Benefits are another important component of teachers' compensation because teachers receive a larger share of their total compensation through benefits than other workers (Allegretto, 2022).

Teacher pay is often set through salary schedules that typically pay teachers more for gaining more experience and/or education. In the 44 states in which teachers' unions are required or allowed to engage in collective bargaining, unions and districts negotiate numerous aspects of teachers' contracts, including pay.

In some districts, unions have recently negotiated significant increases to teachers' salaries. For instance, in 2023, the Los Angeles Unified School District agreed to increase teachers' wages by 21 percent (Evans and Blume, 2023). In New York, the United Federation of Teachers' 2023 contract increased pay through percentage increases, bonuses, higher starting salaries, and a modified salary schedule that enables teachers to reach the higher end of pay rates in less time (United Federation of Teachers, undated-a).

Teachers can earn additional pay for extracurricular duties. According to a 2019 analysis of states' collective bargaining laws, extracurricular duties were a mandatory subject of bargaining in six states but were not addressed in nearly half of states (National Council on Teacher Quality, 2019). Many districts have a salary schedule that specifies annual stipends for such extracurricular activities as coaching a sport, sponsoring a club, or acting as department chair. Level of additional pay can vary by job, and, in some districts, the amount is set as a percentage of base teacher pay.

Teachers' unions can also negotiate teachers' benefits. In 2018, the United Federation of Teachers in New York negotiated six weeks of paid parental leave, which was further expanded in the 2023 contract to 12 weeks of leave (United Federation of Teachers, undated-b).

States can enact policies that influence teacher pay. In 2023, at least nine states enacted policies to raise teacher pay through different avenues. For instance, the Arkansas LEARNS Act increased minimum salaries for new teachers from \$36,000 to \$50,000 and provided teachers with a raise of at least \$2,000. At the same time, districts are no longer required to set salary schedules that require additional pay for teachers with more experience or education (Aranda-Comer, 2023; Zamarro et al., 2024).

In Utah, policymakers enacted a law in 2023 that makes teachers eligible for a \$6,000 compensation increase annually and, in 2024, established a pay-for-performance program that provides bonuses to high-performing teachers (Aranda-Comer, 2023; Thymianos and Di Marco, 2024). Thus, state policies can take many different forms, influencing minimum salaries, salary schedules, and access to bonuses.

## Pay Increases

### Teachers' Average Reported Pay Increase Was Small Compared with Desired Salaries

Teachers reported an average one-year pay increase of \$2,055, a number well below the average desired salary increase of \$16,000 (Figure 1) (Doan, Steiner, and Pandey, 2024). Teachers' average reported pay increases were roughly consistent with NEA's most

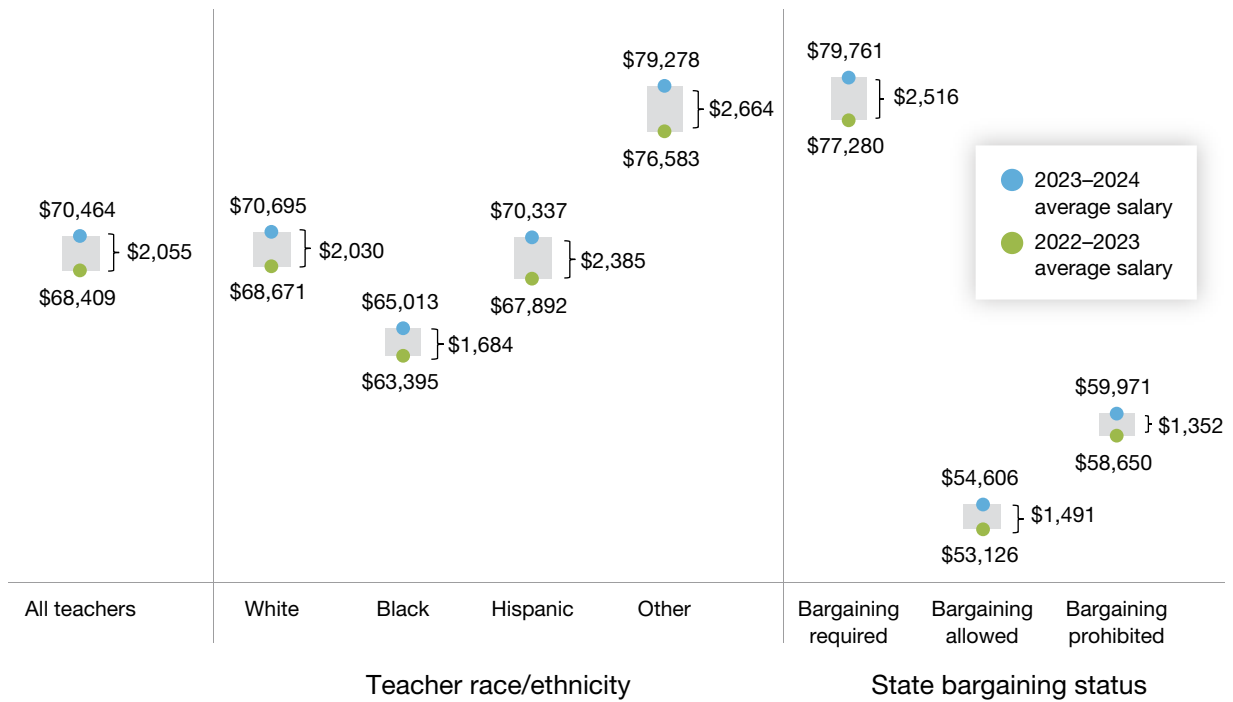
recent analysis of teacher salary schedules (Walker, 2024). On average, teachers reported a 3-percent increase, which varied by only one or two percentage points across an array of teacher and school characteristics and state bargaining requirements.<sup>4</sup>

The average amount of the reported pay increases varied by some teacher characteristics. Black teachers reported an average pay increase of \$1,684 compared with \$2,030 reported by White teachers, \$2,385 reported by Hispanic teachers, and \$2,664 reported by teachers of other races or ethnicities, although only



FIGURE 1

Average Reported Pay Increases by Teacher Race/Ethnicity and State Bargaining Status



NOTE: This figure displays teachers' reported base salaries for the 2023–2024 and 2022–2023 school years and their reported salary increases by teachers' race/ethnicity and state bargaining status. When examining teachers' responses by teachers' race or ethnicity, we compared the responses of teachers in four categories—White, Black, Hispanic, and other (teachers who did not identify as exclusively White, Black, or Hispanic). Salary increases were calculated by subtracting teachers' reported 2022–2023 base salaries from their reported 2023–2024 base salaries for teachers who reported both their 2022–2023 and 2023–2024 base salaries. Differences in the size of teachers' reported pay increase were significant at the  $p < 0.05$  level between the following subgroups, without controlling for any teacher- or school-level characteristics: Black teachers versus teachers of other races or ethnicities, teachers in states that require bargaining versus teachers in states that allow bargaining, and teachers in states that require bargaining versus teachers in states that prohibit bargaining. All teachers who reported their 2023–2024 base salaries:  $n = 1,462$ ; all teachers who reported their 2022–2023 base salaries:  $n = 1,449$ ; all teachers who reported both:  $n = 1,444$ .

the difference between Black teachers and teachers of other races or ethnicities (i.e., teachers who did not identify as White, Black, or Hispanic) was statistically significant. Thus, Black teachers reported the smallest average salary increases. One possible reason for this is that Black teachers reported the lowest average salaries among teachers of different races and ethnicities (Doan, Steiner, and Pandey, 2024), even though they reported similar percent increases (3 to 4 percent).

Among teachers who reported a pay increase, about half received an increase of \$2,000 or less and about one-quarter received an increase of \$2,001 to \$4,000. Larger increases were relatively less common (Figure 2). Eight percent of Black teachers who received a pay increase reported an increase of more than \$7,000—which is about 10 percent of the

national average teacher salary. White teachers who received a pay increase were as likely as Black teachers to receive a pay increase of more than \$7,000, but Hispanic teachers were significantly more likely to report receiving such an increase, even after controlling for education level, years of experience, and cost of living.

State bargaining status might underlie many of the differences in pay increase amounts we observe by teacher race and ethnicity because of variation in where teachers of different races and ethnicities reside. Teachers in states where bargaining was prohibited received the smallest pay increases—roughly half the size of increases received by teachers in states where bargaining was required (Figure 1). Among teachers who received a pay increase, teachers in states where bargaining was prohibited were also

FIGURE 2

Reported Pay Increases, by Teacher Race/Ethnicity and State Bargaining Status, Among Teachers Who Reported Receiving a Pay Increase



NOTE: This figure displays the percentage of teachers who received each amount of pay increase, among teachers who reported receiving a pay increase. Pay increases were calculated by subtracting teachers' reported base salaries in the 2023–2024 school year from their base salaries in the 2022–2023 school year. This method for estimating pay increases might underreport the number of teachers who received increases of less than \$2,000 because of the construction of the survey question, which asked teachers to round their pay to the nearest \$1,000. See "How This Analysis Was Conducted" for more details. Results are shown for all teachers who reported a pay increase and disaggregated by teacher race/ethnicity and state bargaining status. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group (ref.) before controlling for any teacher- or school-level characteristics. All teachers who received a pay increase:  $n = 854$ . Totals might not sum to 100 because of rounding. Black bars represent 95-percent confidence intervals.

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## Black teachers disproportionately reside in states that prohibit collective bargaining.

more likely than teachers in states where bargaining was required to report receiving the smallest pay increases of \$2,000 or less. Conversely, more teachers in states where bargaining was required received larger pay increases (Figure 2).

Black teachers disproportionately reside in states that prohibit collective bargaining. Black teachers make up only 6 percent of the national K–12 public school teacher workforce but are 15 to 20 percent of that workforce in many of the states that prohibit collective bargaining, such as Georgia, Mississippi, North Carolina, and South Carolina (NCES, undated-b).

When we controlled only for state bargaining status in a regression, the differences in the amount of pay increase received by teachers of different races and ethnicities were no longer significant, suggesting that residence in a state that requires or prohibits collective bargaining might be related to differences in reported pay increases by teacher race or ethnicity.<sup>5</sup>

These results were supported when we examined pay increases within states that require and prohibit bargaining. Within states that require bargaining, teachers of different races or ethnicities received similar pay increases. There were also no differences in the amount of pay increases among teachers of different races and ethnicities in states that prohibit bargaining. However, on average, the pay increases for each racial or ethnic group in states that prohibit bargaining were smaller than in states that require bargaining.

Although our data suggest that variation in where Black teachers live, in combination with state bargaining status, appears to largely explain the lower base pay and smaller salary increases reported by Black teachers relative to other teachers, we cannot rule out the possibility that other aspects of state

context (e.g., variation in state spending on public education) or different treatment of Black teachers is a factor in these results.

A recent study using NTPS data found that female teachers earned less than male teachers in base pay and extra pay, regardless of state bargaining context, and that the gap in extra pay increased when the principal was male (Quintero, Hansen, and Zerbino, 2023). Earlier work found that Black teachers earned less in extra pay when working for a White principal (Grisson and Keiser, 2011). Although not conclusive, these results suggest that, if different treatment occurs, it can affect pay regardless of bargaining context.

## The Amount of the Pay Increases That Teachers Received Depended on the Number and Type of Pay Increases

Teachers reported multiple types of pay increases. The most commonly reported type was an increase given for an additional year of experience, which was reported by 59 percent of teachers nationally. Pay increases from a new union-negotiated contract, a new state policy increasing teacher pay, or an additional degree or credential were much less common, reported by 25 percent, 11 percent, and 6 percent of teachers, respectively.

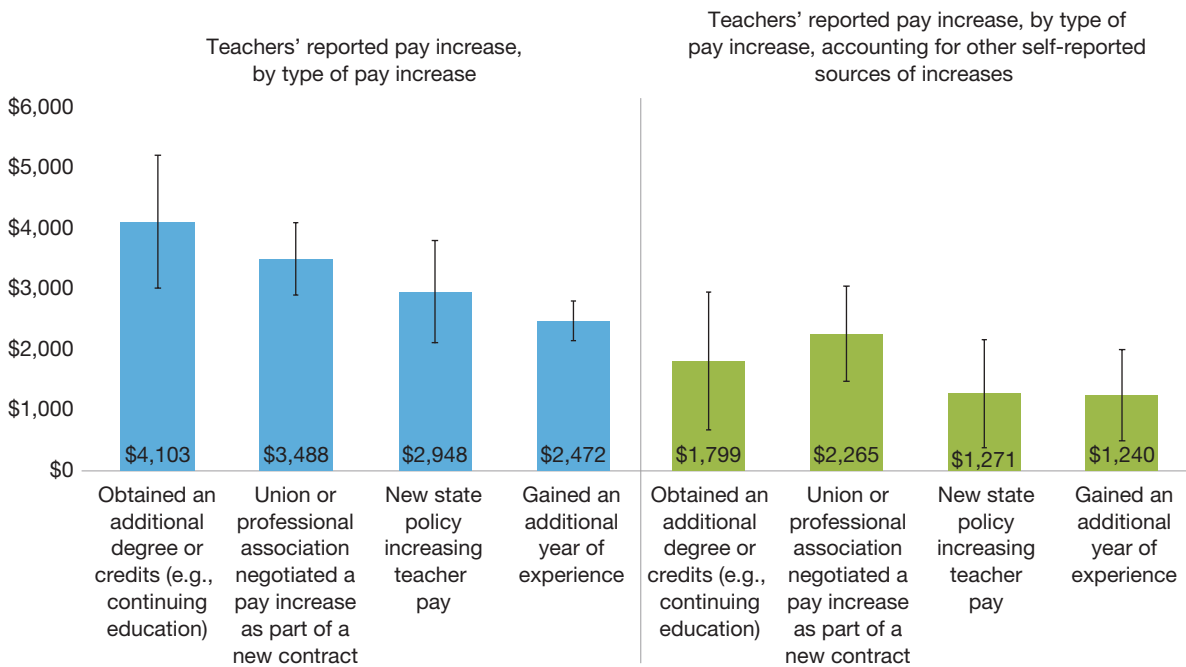
The amount of the pay increase that teachers reported depended on the number and type of increases that teachers received. Teachers who reported receiving an increase because they obtained an additional degree or credential received the largest pay increases (\$4,103 on average), and teachers who reported receiving an increase for an additional year of experience received the smallest increases (\$2,472 on average) (Figure 3).

One reason for this difference is that nearly all teachers who received increases for additional education also received other types of increases. Eighty-four percent of teachers who received an increase for additional education also received an increase for an additional year of experience, and 30 percent also received an increase because their union negotiated a new contract. However, most teachers who received an increase for an additional year of experience—65 percent—said it was their only type of increase.



FIGURE 3

Teachers' Average Reported Pay Increase, by Type of Increase



NOTE: The left side of this figure displays the amount of pay increases reported by teachers who reported receiving each type of pay increase. Some teachers received multiple types of increases, and the left side of this figure does not account for all types of increases that teachers received. The right side of this figure displays the amount of pay increase by type of increase, after accounting for teachers' other self-reported sources of increases. Teachers reporting each type of pay increase: *n* = 109–799. Black bars represent 95-percent confidence intervals.

Of the four types of pay increases that we discuss in this report, 56 percent of teachers reported receiving just one type of increase, 19 percent reported receiving two types of increases, and just 2 percent of teachers reported receiving three types of increases. Teachers in states that required or allowed collective bargaining were more likely than teachers in states that prohibited collective bargaining to report that they received two types of increases.

Because the pay increases that teachers received sometimes overlapped, we used a regression model to estimate the amount of pay increase associated with each type of increase, accounting for other self-reported sources of pay increases. We estimate that teachers who reported that they received a pay increase because of a new union contract received increases that were \$2,265 higher than those who did not. This was larger than the estimated size of the pay increases associated with teacher reports of receiving a pay increase because of earning an additional degree or credential (\$1,799), an additional year of

experience (\$1,240), and a new state policy increasing teacher pay (\$1,271).

Although pay increases because of new state policies and negotiated contracts might take different forms, these data suggest that teachers who received pay increases because of newly negotiated contracts, on average, saw larger increases than those who reported other types of increases.

Black teachers were more likely than teachers of other races and ethnicities to report that they received a pay increase because of a new state policy. However, they were less likely to report that they received an increase because of a new union-negotiated contract. This finding is important because our analyses suggest that union-negotiated increases were slightly larger than other types of increases after accounting for other reported sources of pay increases. Ultimately, the relatively smaller amounts of the pay increases reported by Black teachers appear to be related to the type of increase they received.

## Pay for Extra Work

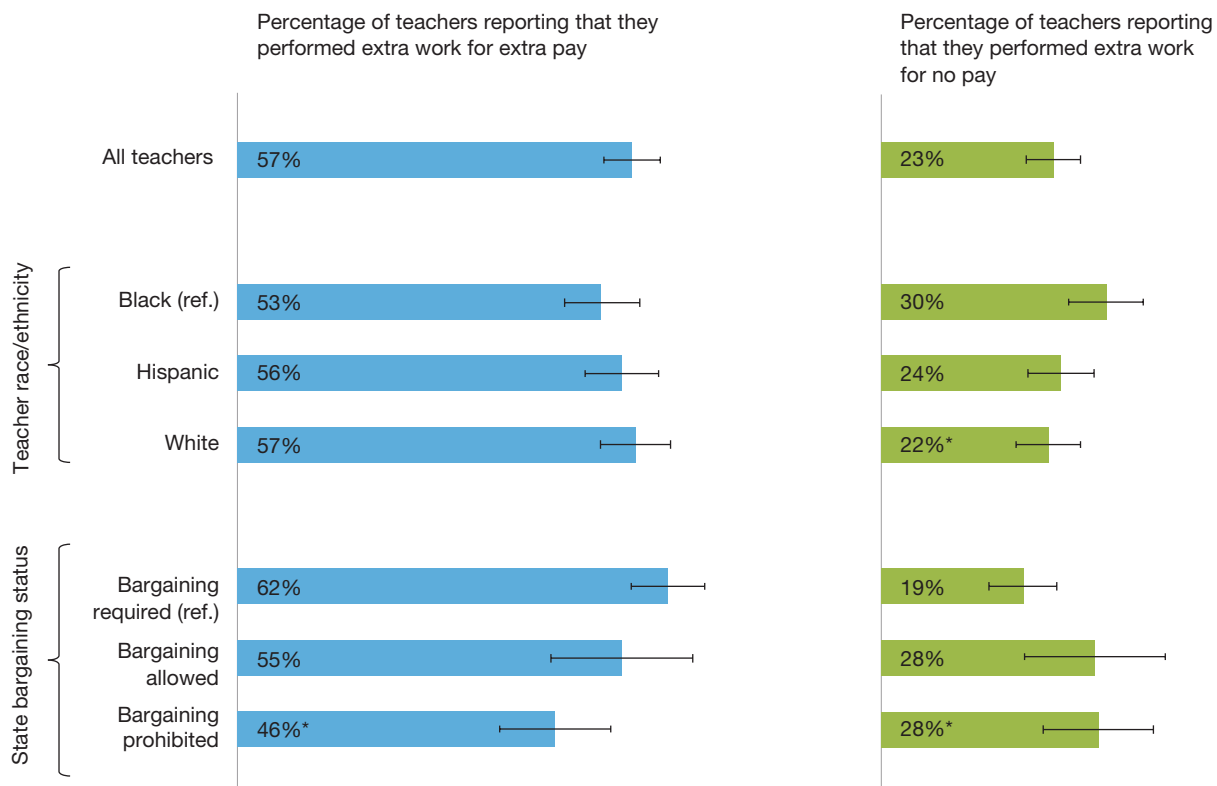
### Pay for Extra Work Was Only 4 Percent of Teachers' Total Pay

Sixty-five percent of teachers reported performing extra work for their school or school system, such as athletic coaching, sponsoring student activities, mentoring teachers, or teaching evening classes. Nearly all teachers who performed extra work received some pay for this work. Fifty-seven percent of teachers nationally earned additional pay for their extra work (Figure 4).

This extra pay was only about 4 percent of teachers' total salaries for the school year. On average, teachers who were paid for their extra work earned

\$3,275 for this work during the school year, on par with data reported by NCES (undated-a). Teachers with more years of experience reported earning significantly more for their extra work than novice teachers did, a difference that held after controlling for the cost of living and state bargaining status. Teachers with 21 or more years of experience earned \$3,883 for extra work, on average; novice teachers earned about half that amount—\$2,003. We did not observe any significant differences in the additional amounts earned by teachers of different races or ethnicities. Like pay increases, the amount of this extra pay is small compared with the gap between teachers' actual and desired salaries.

FIGURE 4  
Teachers Performing Extra Work, With and Without Extra Pay



NOTE: This figure displays teachers' responses to the question, "During the current school year (2023–2024), how much additional compensation do you, or will you, earn from the school system where you work for extracurricular or additional activities, such as coaching, sponsoring student activities, mentoring teachers, or teaching evening classes?" The left side of the figure displays the percentage of teachers who responded that they earned extra pay for their extra work. The right side of the figure displays the percentage of teachers who responded, "This school year (2023–2024), I do extracurricular or additional activities for my school system, but I don't earn any additional compensation for these activities." Teachers were allowed to report that they both earned extra pay for their extra work and also that they performed extra work for no pay. Those who reported performing a combination of paid and unpaid extra work are represented on both sides of the figure. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group (ref.) before controlling for any teacher- or school-level characteristics. All teachers:  $n = 1,462-1,463$ . Black bars represent 95-percent confidence intervals.

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## One-Quarter of Teachers—and Nearly One-Third of Black Teachers—Were Not Paid for Their Extra Work

One-quarter of teachers nationally said that they were not paid for the extra work they performed for their school or school system. When we look only at teachers who reported performing extra work, 35 percent of teachers said that they were not paid for some or all of their extra work. Some teachers—15 percent of teachers nationally and 22 percent of teachers who performed any extra work—performed a combination of paid and unpaid work. Eight percent of teachers nationally reported that they performed only unpaid extra work.

Black teachers were particularly likely to report that they were not paid for their extra work. Thirty percent of Black teachers reported they performed extra work for no pay, in comparison with 22 percent of White teachers. This difference between Black and White teachers did not remain statistically significant after controlling for state bargaining status and school demographic composition, suggesting that the large shares of Black teachers who reside in states that prohibit bargaining is one reason that Black teachers were more likely to report performing extra work for no pay.

Another possible reason Black teachers were more likely to perform extra work for no pay is because they receive different treatment at their schools. Although we did not explore this possibility in our survey, prior research has found that Black teachers are more likely to be tasked with some duties, such as managing student behavior (Bristol and Mentor, 2018). Black teachers could also be carrying out additional activities to meet heightened student needs because they are more likely to work in high-poverty schools (Bristol and Carver-Thomas, 2024; Carver-Thomas and Darling-Hammond, 2017).

State bargaining status appeared to be associated with whether teachers received pay for their extra work. Teachers in states that require bargaining were more likely than teachers in states that prohibit bargaining to report that they received pay for extra work (62 percent versus 46 percent, respectively) (Figure 4). In contrast, teachers in states where bargaining was prohibited were more likely than teachers in states

Black teachers who were paid for their extra work earned roughly half as much per hour as White teachers.

where bargaining was required to report that they were not paid for *any* of their extra work (17 percent versus 5 percent, respectively). A 2019 analysis of states' collective bargaining laws found that extra work activities are subject to collective bargaining in only a handful of states. More commonly, they are not addressed or are a prohibited issue in the bargaining process (National Council on Teacher Quality, 2019).

## Black Teachers Earned Less, on Average, for Their Extra Work Than White Teachers

On average, we estimate that teachers who performed extra work for pay earned \$31 per hour for that work.<sup>6</sup> This average masks important differences. Black teachers who were paid for their extra work earned roughly half as much per hour as White teachers—\$19 per hour versus \$33 per hour. This difference stems from the fact that Black teachers who worked extra hours for pay worked more hours per week on such activities—13 hours per week compared with 9 hours worked by White teachers. There were no differences in the amount of pay Black and White teachers reportedly earned for their extra work.

The difference in hourly pay between Black and White teachers held after controlling for teachers' years of experience, education level, cost of living, and state bargaining status, but not after also controlling for teachers' school context (i.e., locale, school poverty, the racial composition of the student body), suggesting that Black teachers might be spending more hours on extra work for which they are paid in part because they are more likely to work in high-needs schools.

## Expenses and Benefits

### Teachers and Similar Working Adults Spent Similar Shares of Household Income on Major Expenses

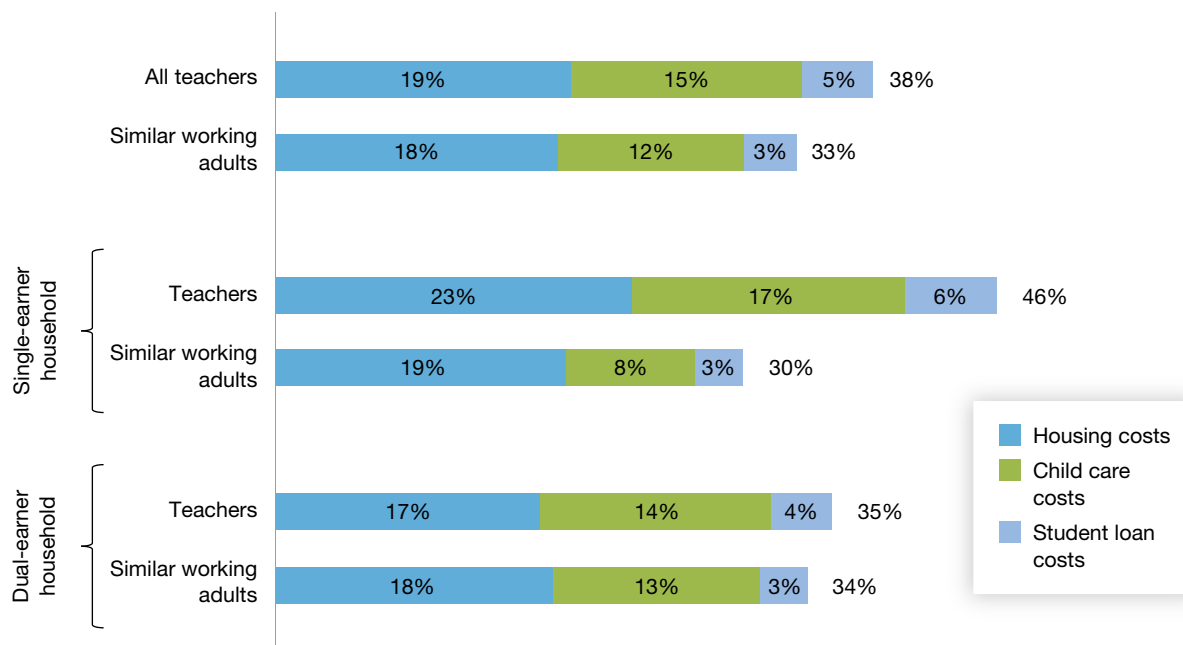
On average, teachers and similar working adults spent comparable shares of their household income on housing, child care, and student loan payments (Figure 5). Although both teachers and similar working adults spent just under 20 percent of their household income on housing costs, teachers spent, on average, less than similar working adults on housing (\$1,742 per month for teachers versus \$2,078 for similar working adults).<sup>7</sup>

Although teachers' housing costs were lower than those of similar working adults, their reported child care costs were slightly higher. On average, teachers who paid for child care reported spending \$1,827 per month on child care, in comparison with

\$1,306 reported by similar working adults. Teachers and similar working adults reported that they were responsible for child care at similar rates (27 percent for both). Teachers' reports of monthly student loan payment amounts were very similar to those of similar working adults (\$342 per month for teachers and \$382 for similar working adults). About 40 percent of teachers and similar working adults were currently paying their student loans.

Of course, many individuals do not ever incur all three of these expenses, and those that do might not incur them all at once. Relatively few teachers—only 10 percent in our sample—were paying all three expenses at once. Black teachers were about twice as likely as White teachers and Hispanic teachers to report paying for all three expenses simultaneously. This is likely because Black teachers were far more likely than White teachers and Hispanic teachers to report that they were currently paying student loans,

FIGURE 5  
Teachers' and Similar Working Adults' Reported Expenses as a Percentage of Household Income



NOTE: This figure displays the percentage of reported household income that teachers and similar working adults spent on housing costs, child care costs, and student loan costs by household composition. *Single-earner households* are those where the survey respondent is the only adult in their household who pays for household expenses. *Dual-earner households* are those where the survey respondent and another adult in their household pays for household expenses. For more on how these percentages were calculated, see "How This Analysis Was Conducted." Teachers reporting housing costs:  $n = 1,380$ ; teachers reporting child care costs:  $n = 282$ ; teachers reporting student loan costs:  $n = 591$ . Similar working adults reporting housing costs:  $n = 204$ , similar working adults reporting child care costs:  $n = 31$ ; similar working adults reporting student loan costs:  $n = 66$ .

a finding that aligns with a recent analysis of data from the NTPS (García et al., 2023).

Sixty-six percent of Black teachers reported currently paying their student loans, in comparison with 47 percent of Hispanic teachers and 34 percent of White teachers. Notably, the statistical significance of this difference held even after controlling for teachers' years of experience. These results are consistent with other research that student loan repayment might be more of a burden for Black teachers, potentially contributing to their increasingly negative perceptions of their pay (Doan, Steiner and Pandey, 2024; Fiddiman, Campbell, and Partelow, 2019; Herschopf et al., 2021).

Underlying these reports are differences in pay and household income between teachers and similar working adults. Teachers earn roughly \$18,000 less than similar working adults (Doan, Steiner, and Pandey, 2024) and reported lower annual household incomes. Teachers reported roughly \$120,000 in household income, on average, and similar working adults reported about \$150,000.

### Teachers in Single-Earner Households Spent More of Their Household Incomes on Major Expenses Than Similar Working Adults

Teachers in single-earner households spent a larger portion of their household incomes on the three major household expenses that we examined than similar working adults in single-earner households. Across the three major expenses that we examined, teachers in single-earner households appeared to spend slightly more of their household income on each expense, particularly for child care (see Figure 5). Teachers in single-earner households spent 16 percent more of their household income on these three expenses than similar working adults in single-earner households.

This comparison is instructive because it allows us to compare teachers with similar working adults who rely on a single income to cover their expenses. However, we have limited ability to explain the differences between teachers and working adults in single-earner households because we were not able to ask detailed questions about household composi-

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Teachers in single-earner households spent 16 percent more of their household income on three major expenses than similar working adults in single-earner households.

tion beyond the number of adults who contributed to household expenses. For example, our data do not allow us to distinguish between teachers who are the sole adults in single-earner households and teachers who are the sole earners among multiple adults in their households.

The differences in child care costs between teachers and similar working adults in single-earner households stand out among these three expenses. Our data suggest that this difference is related to teachers spending more on child care in addition to having lower household incomes. As we noted earlier in this report, teachers reported higher monthly child care costs, on average, than similar working adults regardless of the number of earners in the household—\$1,827 per month for teachers compared with \$1,306 for similar working adults, a difference of \$521. Teachers in single-earner households reported \$2,117 in monthly child care costs, and similar working adults reported \$692, a difference of \$1,425. Although we did not gather detailed information about household composition, one possible explanation for this large difference is that more similar working adults might have another adult in their household (e.g., spouse, grandparent) who can provide low- or no-cost child care. Another possible explanation is differences in the number or ages of children who require child care.



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Among teachers who had access to paid parental leave, child care assistance, and housing assistance, fewer than half perceived such benefits to be adequate.

The U.S. Department of Housing and Urban Development considers a household to be housing cost-burdened if its housing costs exceed 30 percent of household income (Office of Policy Development and Research, undated). Twenty percent of teachers in single-earner households spent more than 30 percent of their base salary on housing costs. Black teachers who were the only earners in their household were more likely than White teachers in single-earner households to report that they spent more than 30 percent of their base salary on housing (36 percent versus 17 percent, respectively). This difference appears to be driven by the lower base pay of Black teachers in single-earner households, because Black and White teachers in single-earner households spent similar amounts on monthly housing costs (roughly \$1,400).

Among all types of households, 11 percent of teachers reported that they spent more than 30 percent of their household incomes on housing costs. Black and Hispanic teachers were more likely than White teachers to report spending more than 30 percent of their household income on housing. This finding is driven by Black teachers' lower household incomes because Black teachers spent less on housing than White and Hispanic teachers, even after accounting for cost of living. Black teachers reported monthly housing costs of \$1,556, while Hispanic teachers spent \$1,783 and White teachers spent \$1,742.

## Housing Assistance, Paid Parental Leave, Child Care Subsidies, and Tuition Reimbursement Were Reportedly Rare Benefits

Employer-provided benefits associated with these major expenses, such as housing assistance, paid parental leave, child care subsidies, and tuition reimbursement, were reportedly rare. Two percent and 5 percent of teachers reported access to employer-provided housing assistance and child care subsidies, respectively (Figure 6). Tuition reimbursement and paid parental leave were relatively more prevalent but were reported by only about one-quarter to one-third of teachers. Similar working adults reported access to these benefits at similar or slightly higher rates than teachers. The largest difference between teachers and similar working adults—14 percentage points—was for paid parental leave.

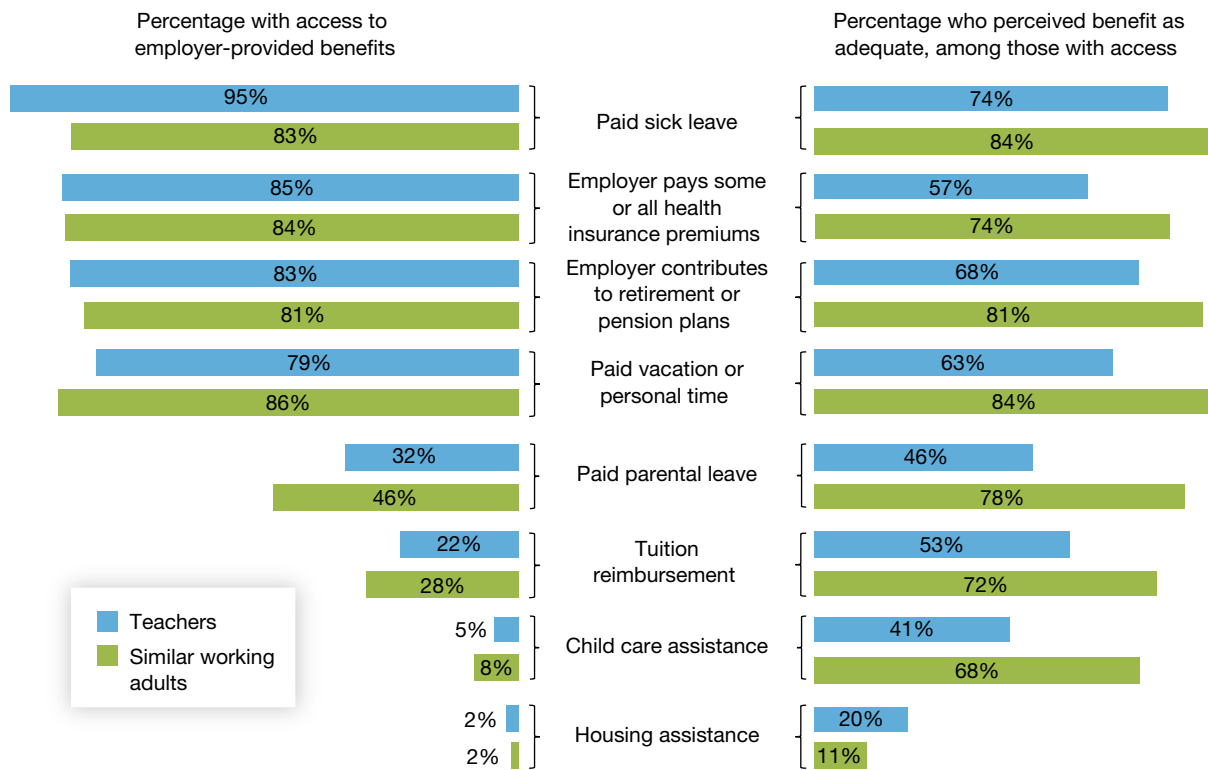
More teachers in states that require collective bargaining reported having an array of benefits than teachers in states that prohibit collective bargaining. More teachers in states requiring collective bargaining reported having employer contributions to retirement plans, paid parental leave, employer contributions to health insurance premiums, paid sick leave, and tuition reimbursement. The differences ranged from 7 percentage points (for paid sick leave) to 27 percentage points (for tuition reimbursement). For example, 32 percent of teachers in states that require collective bargaining reported having tuition reimbursement, compared with 5 percent of teachers in states that prohibit collective bargaining.

Many teachers who had access to the benefits associated with the major expenses that we examined did not hold favorable views of those benefits. Among teachers who had access to paid parental leave, child care assistance, and housing assistance, fewer than half perceived such benefits to be adequate (Figure 6). In contrast, half or more of teachers who had retirement benefits, paid personal time off, paid sick leave, health insurance, and tuition reimbursement perceived them to be adequate. For nearly all the benefits that we asked about, similar working adults who had each benefit reported more favorable views than teachers.



FIGURE 6

## Teachers' and Similar Working Adults' Access to and Perceptions of Employer-Provided Benefits



NOTE: This figure displays teachers' responses to the question, "During this current school year (2023–2024), which benefits do you receive from the school or school system in which you work, and how inadequate or adequate do you consider each benefit?" and similar working adults' responses to the question, "This year (2024), which benefits do you receive from working in your job or business, and how inadequate or adequate do you consider each benefit?" The left side of the figure displays the percentage of teachers and similar working adults who responded that they have the benefit listed. The right side of the figure displays the percentage of teachers and similar working adults who responded that they consider the benefit somewhat or completely adequate, as a percentage of the teachers or similar working adults who responded that they have the benefit. Teachers:  $n = 1,479$ ; similar working adults:  $n = 229$ .

### Relationships with Perceptions of Base Pay and Intentions to Leave

#### Teachers Who Reported Larger Pay Increases and Adequate Benefits Were More Likely to Say Their Base Pay Was Adequate

Only 29 percent of teachers who received no pay increases considered their base pay to be adequate. In contrast, 43 percent of teachers who received an increase of 5 to 10 percent and 49 percent of teachers who received an increase of more than 10 percent said that their base pay was adequate (Figure 7).<sup>8</sup> Teachers who received larger salary increases were

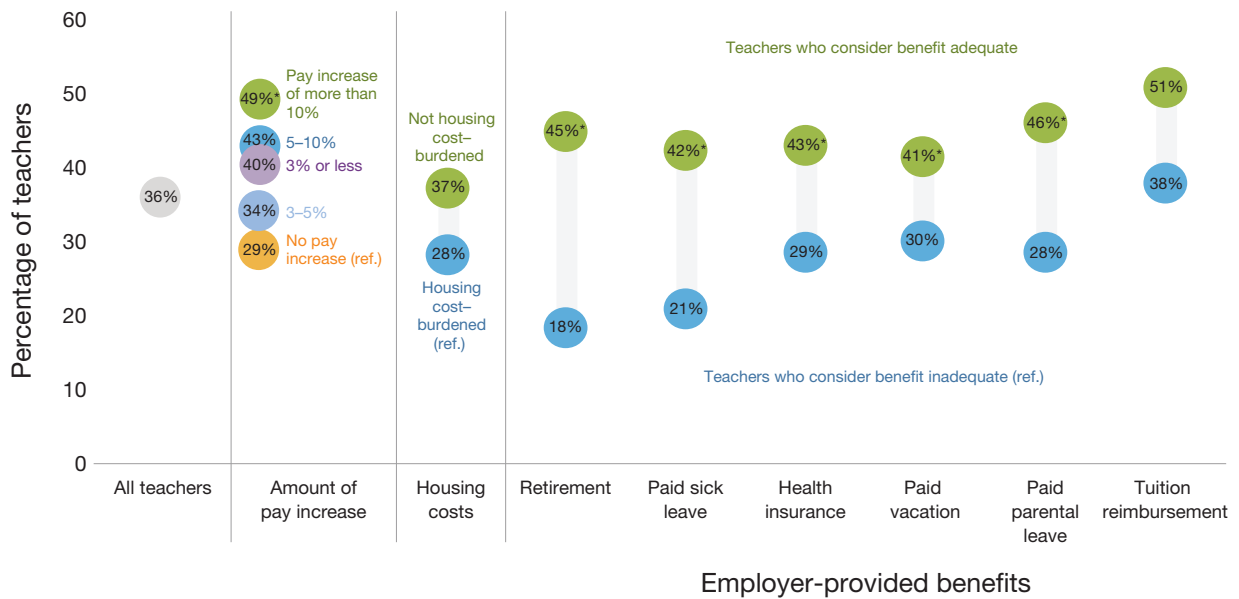
still more likely to say that their base pay was adequate even after controlling for teachers' current base pay and state bargaining status, which suggests that pay increases have the potential to shift teachers' perceptions about their pay, even after accounting for their current pay.

Teachers' perceptions of employer-provided benefits were also related to whether they thought their base pay was adequate. For example, 45 percent of teachers who said that employer contributions to their retirement or pension plans were adequate also said that their base pay was adequate. Only 18 percent of teachers who perceived that benefit as inadequate said that their base pay was adequate.

We observed a similar pattern for other benefits, such as paid parental leave, paid sick leave, paid

FIGURE 7

Percentage of Teachers Who Said Their Base Salary Was Adequate, by the Amount of Pay Increase Received, Amount Spent on Housing Costs, and Perceptions of Benefits



NOTE: We present the percentage of teachers who responded “somewhat adequate” or “completely adequate” to the question, “This school year (2023–2024), how adequate do you consider your base teaching salary to be given your role and work responsibilities?” Results are shown for all teachers and disaggregated by the size of teachers’ reported pay increase, whether teachers were cost-burdened by housing, and teachers’ perceptions of their benefits. We calculated the size of teachers’ pay increases by subtracting their reported 2022–2023 base salary from their reported 2023–2024 base salary. Teachers are defined as housing cost-burdened if they spent more than 30 percent of their household income on housing costs. For benefits, we focus on the perceptions of teachers who had access to the listed benefit and considered the benefit either adequate or inadequate. We exclude child care assistance and housing assistance from this figure because very few teachers reported access to those benefits. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group (ref.). All teachers:  $n = 1,468$ .

health insurance premiums, and housing assistance (although very few teachers had housing assistance). These differences held even after controlling for teachers’ current base salaries and state bargaining status. These findings suggest that improving teachers’ access to employer-provided benefits and the quality of those benefits could improve how teachers feel about their salary.

### Teachers Who Received a Pay Increase Were Less Likely to Intend to Leave the Teaching Profession

Teachers who did not receive a salary increase or received only a very small increase were more likely than their counterparts who received larger increases to say that they intended to leave the teaching profession. This finding is consistent with recent evidence from Oregon, which finds that increases in salary are

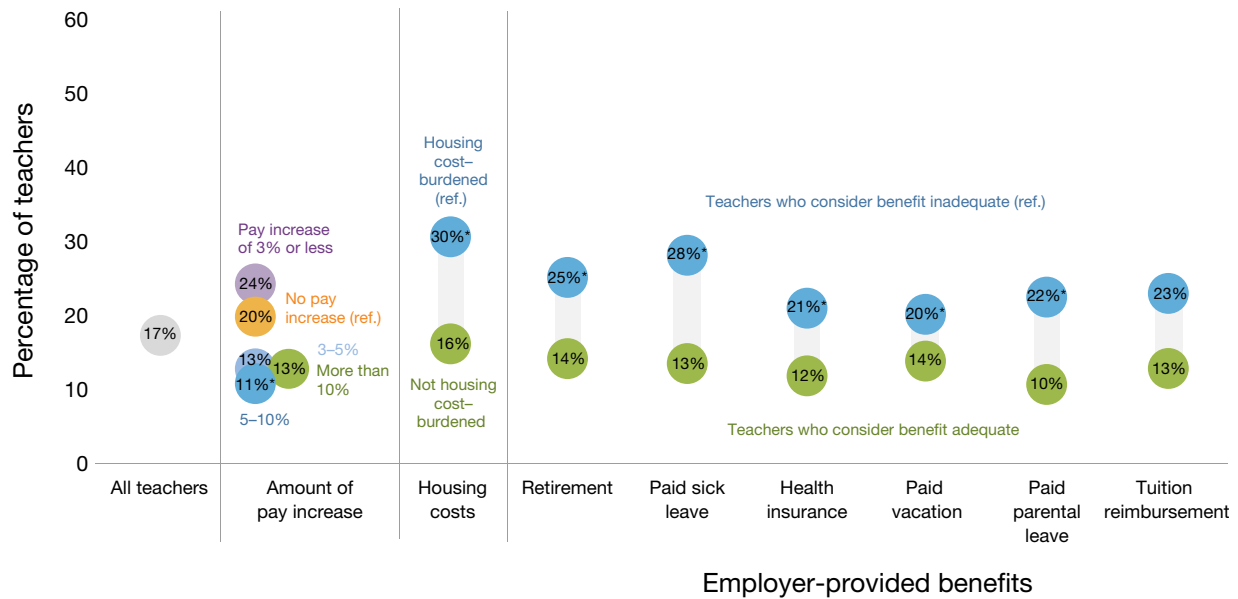
associated with decreases in teacher turnover (Candelaria et al., 2024).

In our data, 20 percent of teachers who did not receive an increase and 24 percent of teachers who received less than a 3-percent increase said that they intended to leave the teaching profession, in comparison with 11 percent of teachers who received an increase of 5 to 10 percent (Figure 8). These results held after controlling for teachers’ current base salaries and state bargaining status. Notably, teachers in different base salary quartiles were equally likely to say that they intended to leave their schools or the profession, suggesting that pay increases might provide a unique signal to teachers about their future earning potential.

Teachers who reported greater expenses were also more likely to report an intention to leave their schools and the teaching profession. Thirty-seven percent of teachers who were housing cost-burdened said that they were likely to leave their schools, and

FIGURE 8

Percentage of Teachers Who Intend to Leave the Teaching Profession, by the Amount of Pay Increase Received, Amount Spent on Housing Costs, and Perceptions of Benefits



NOTE: We present the percentage of teachers who responded “somewhat likely” or “very likely” to the question, “What is the likelihood that you will leave the teaching profession by the end of the current school year (2023–2024)?” Results are shown for all teachers and disaggregated by the size of teachers’ reported pay increases, whether teachers were housing cost-burdened, and teachers’ perceptions of their benefits. We calculated the size of teachers’ pay increases by subtracting their reported 2022–2023 base salary from their reported 2023–2024 base salary. Teachers are defined as housing cost-burdened if they spent more than 30 percent of their household income on housing costs. For benefits, we focus on the perceptions of teachers who had access to the listed benefit and considered the benefit either adequate or inadequate. We exclude child care assistance and housing assistance from this figure because very few teachers reported access to those benefits. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group (ref.). All teachers:  $n = 1,425$ .

30 percent said that they were likely to leave the profession, in comparison with about half as many teachers who spent less than 30 percent of their household income on housing. These results held even after controlling for teachers’ current base salaries, suggesting that teachers’ salaries in the context of their household expenses might lead some teachers to consider leaving their jobs.

Finally, for most of the benefits we asked about, teachers who considered that benefit inadequate were more likely to intend to leave the profession than teachers who considered the benefit adequate.

### Implications

The large share of teachers who consider their base pay to be inadequate, combined with the sharp increase in low pay as a top source of job-related

stress—particularly among Black teachers—is concerning because low pay, combined with difficult working conditions, is one reason teachers consider leaving their job (Doan, Steiner, and Pandey, 2024). Prior research has found that only about one-third of teachers report feeling that their base pay is adequate, compared with half of similar working adults (Doan, Steiner, and Pandey, 2024).

Our findings show that pay increases and pay for extra work (e.g., athletic coaching) were small relative to teachers’ desired salary increases. The average reported pay increase was \$2,055, and the average yearly amount earned for additional work was \$3,275; both amounts are relatively small compared with teachers’ average desired salary increase of \$16,000. Moreover, not all teachers received pay increases or were paid for their extra work. In fact, one in four teachers said that they performed extra

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Our data suggest that offering a broader set of benefits and improving the quality of those benefits could improve teachers' perceptions of their pay and improve retention.

work for which they were not paid. Consistent with other research, our findings show that teachers who received smaller or no pay increases were more likely to say they intended to leave the profession (Candelaria et al., 2024).

Comparisons with similar working adults—who have at least a bachelor's degree, work 35 hours per week, and are between 18 and 65 years of age—illustrate other factors that could relate to teachers' dissatisfaction with their pay. First, teachers reported working nine hours per week more than similar working adults and earning roughly \$18,000 less per year, a finding that is consistent with other analyses of teacher pay compared with similar workers (Allegretto, 2023; Doan, Steiner, and Pandey, 2024).

Pay increases and pay for additional work were small relative to teachers' household expenses. Teachers reported pay increases of about 3 percent, on average, and pay for additional work was about 4 percent of teachers' total pay. In contrast, housing, child care, and student loan payments were about 38 percent of teachers' household income, on average, and 46 percent for teachers in single-earner households.

A larger share of teachers' total compensation, on average, goes toward benefits when compared with similar working adults, which might lead some to conclude that teachers have better benefits (Allegretto, 2023). Our data suggest otherwise. Although comparable shares of teachers and similar working

adults reported having paid sick leave, retirement or pension benefits, paid health care, and paid vacation or personal time, fewer teachers reported paid parental leave or tuition reimbursement. Only one-third of teachers reported paid parental leave, compared with nearly half of similar working adults.

Moreover, teachers had less favorable views of their benefits than similar working adults. Although we are not able to compare the amount or value of teachers' benefits with those of similar working adults, fewer teachers who had each of the benefits that we asked about said that they were adequate than similar working adults. The differences were large, ranging from 9 to 32 percentage points. The largest difference was for paid parental leave—78 percent of similar working adults who had this benefit said that it was adequate, compared with 46 percent of teachers. Teachers' perceptions of their pay were related to perceptions of their benefits, and benefits that could help with some of the major expenses that teachers face—housing, child care, and student loan payments—were rare.

Black teachers experienced multiple conditions that could drive their unfavorable perceptions of their pay. The lower base pay, smaller pay increases, and lower likelihood of being paid for extra work that Black teachers reported appear to be related to the fact that Black teachers disproportionately teach in states that prohibit collective bargaining. We found that teachers in states where bargaining is prohibited reported lower base pay and smaller pay increases and were less likely to be paid for extra work, regardless of their race and ethnicity. Our results are consistent with data reported by the NEA (Walker, 2024).

The expenses that Black teachers faced could also contribute to their negative perceptions of their pay. Black teachers were about twice as likely as teachers of other races and ethnicities to report paying for housing, child care, and student loans simultaneously. This is likely because Black teachers were far more likely than teachers of other races and ethnicities to say that they were currently paying student loans. Regardless of the number of earners in the household, Black teachers were more likely than White teachers to report being housing cost-burdened.

The good news is that our data suggest that offering a broader set of benefits and improving the qual-

ity of those benefits could improve teachers' perceptions of their pay and improve retention. Providing larger pay increases could also shift teachers' perceptions about their pay for teachers across the pay scale.

At the same time, an increasing body of research suggests that pay increases alone are not sufficient to improve teachers' perceptions of their conditions in ways likely to improve retention—working conditions must also be improved (Edwards et al., 2024; Steiner, Woo, and Doan, 2023). Improving pay and improving working conditions are not mutually exclusive. American workers, including teachers, value improvements in their working conditions in lieu of a salary increase (Lovison and Mo, 2022; Maestas et al., 2017).

Of course, these things might be easier said than done. However, we urge state policymakers, district leaders, and leaders of teachers' professional associations to consider the variety of factors that we identify in this report when making changes to teacher compensation.

## Recommendations

### Support Equitable Distribution of Extra Pay for Additional Work

Our data reveal two key inequities in extra pay. A large share of teachers—roughly one in four—reported that they are not paid for their additional work. Black teachers reported earning less per hour for their additional work because they spent more hours on these activities. Although the inequities in extra pay that we observed appear to be related to state bargaining status, extra pay is not always a subject of bargaining, even in states where bargaining is required. In cases where opportunities and amounts for extra pay are left to principals' discretion, there is suggestive evidence that different treatment based on teachers' race, ethnicity, or gender can lead to differences in extra pay, even across bargaining contexts (Grissom and Keiser, 2011; Quintero, Hansen, and Zerbino, 2023). This suggests two actions that education leaders in all states—and especially nonbargaining states—should consider taking in collaboration with collective bargaining units where applicable.

First, leaders could examine the slate of additional or extracurricular activities that teachers in their school system are asked to perform, and which of those activities are compensated, to ensure that all types of additional work receive some pay. Leaders could create policies for how paid extra work is allocated, such as posting the opportunities and awarding them according to clear, predetermined criteria.

Second, leaders should review how much teachers are paid for extra work alongside the amount of time teachers actually spend doing such work and the support that is provided for them. Some teachers might be spending more time carrying out extracurricular activities because they are given additional responsibilities. Clear job descriptions that include expected time commitments or paying hourly for additional work could mitigate these inequities.

### Increase Teachers' Access to and Quality of Benefits, Particularly Paid Parental Leave

We find that teachers with greater household expenses were more likely to intend to leave their job and that teachers' benefits are not commensurate with those of similar working adults. Increasing

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access to benefits that could reduce large household expenses could, therefore, improve retention.

For example, providing paid parental leave is a clear action that could improve teachers' perceptions of their salary and improve retention (Brummet et al., 2024; Moyer, 2022). Media reports suggest that more teachers are demanding paid parental leave and that some districts are working to provide it (Modan, 2024; Swisher, 2022). One recent study found that teachers who have children under 12 years of age value child care as much as a 10-percent salary increase (Lovison and Mo, 2022).

Benefits that target housing and tuition could be especially beneficial for Black teachers, but tuition reimbursement and housing assistance were both relatively rare. Providing teachers with financial support to earn degrees or credentials that are in high demand, such as those related to special education, science, or math, could help teachers earn more and alleviate financial stress (García et al., 2023).

To increase teachers' access to high-quality benefits, state leaders could set minimum expectations for teachers' benefits, just as they set minimum salary requirements. Already, some states have moved in this direction. For instance, in 2023, Oklahoma, Tennessee, North Carolina, and South Carolina enacted

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We urge education leaders, teachers' professional associations, and researchers to document inequities and increase transparency of information about all forms of compensation.

policies that provided school employees with six to eight weeks of paid parental leave (A Better Balance, 2023; Cease, 2023; Oklahoma State School Board Association, 2023; Schlemmer 2023).

Our data do not allow us to explore why fewer teachers reported that their benefits were adequate than did similar working adults. Comparing teachers' benefits with those of similar workers in the public and private sectors could shed light on why teachers hold these perceptions and suggest opportunities for improvement. Of course, any changes to teachers' benefits will require contractual adjustments and the involvement of teachers' associations or unions in states where collective bargaining is required or allowed.

### **Make Detailed, Disaggregated Information About Pay and Benefits Easily Available to Teacher Jobseekers**

Residing in a non-bargaining state appears to be a key driver for low pay, low pay increases, and lower access to employer-provided benefits, which are related to teachers' dissatisfaction with their pay. These conditions might be particularly salient for Black teachers, who make up a larger share of the teacher workforce in states where bargaining is prohibited. Fair allocation of extra pay and pay increases and improving access to and quality of benefits across and within states with different bargaining policies—particularly in states where teachers do not have access to collective bargaining—is critical for attracting and retaining teachers.

We urge education leaders, teachers' professional associations, and researchers to document inequities and increase transparency of information about all forms of compensation. Although public employee salaries are required to be publicly accessible in most states, this information might not include important aspects of compensation, be easily accessible to teacher jobseekers, or be disaggregated by teacher characteristics.

Ideally, districts and states would report a variety of information about different aspects of pay by teacher and school characteristics for teachers at different points in their career who are at different



points in the salary schedule. For example, reporting might include the mean, median, and range of base pay; pay increases; and extra pay by teacher race or ethnicity or gender for early-, mid-, and late-career teachers. Such reporting should also include the amount or value of employer-provided benefits and benefit eligibility.

Although publishing more-detailed information about pay alone is unlikely to lead to pay equity, it is an important first step. Research examining a variety of international policies to reduce the gender pay gap suggests that increasing worker access to a variety of information about pay can increase wages for women (Cullen, 2024; Kim, 2015). For example, in one United Kingdom study of public university faculty, female faculty both negotiated for higher salaries and also moved to institutions where pay was more equitable; less equitable institutions adjusted to compete (Gamage et al., 2020).

## Limitations

Our findings are subject to several limitations. First, survey responses consist of self-reported information. Although this is a limitation present in all survey research, it is particularly salient for this research because we have no way to verify the accuracy of teachers' reports of their base salary, pay increases, or household expenses. We drew on widely used source material for questions about pay and household expenses and, where possible, compared our results with other data sources. For example, our questions for base salary and pay for extra work were based on those used on the NTPS, and our results were consistent with the most recent (2020–2021) NTPS results.

Second, rounding in the reports of pay and expenses might affect the precision of our estimates. Teachers were asked to round to the nearest \$1,000 when reporting their base pay, total pay, and household income and were asked to round to the nearest \$100 when reporting their pay for extra work, monthly housing costs, child care costs, and student loan payments. Thus, it is possible that we did not detect pay increases or differences in the percentage of household income spent on expenses that were relatively small.

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Although publishing more-detailed information about pay alone is unlikely to lead to pay equity, it is an important first step.

Third, because of limited space on the survey, we were not able to ask about all the factors that could be related to teachers' perceptions of their pay or gain a complete picture of aspects of household composition that could influence expenses. For example, our prior research found that teachers' working conditions were associated with their perceptions of their pay (Steiner, Woo, and Doan, 2023), but this survey largely did not ask about teachers' working conditions. We did not ask teachers about the number of dependents (including children who do not require child care) that they supported, the employment status of any other adults in the household, or how they made decisions about how much of their household income to spend on household expenses.

Fourth, survey space constraints prohibited us from asking teachers detailed questions about the new state policies or union-negotiated contracts under which they received a pay increase. As we noted earlier in this report, at least nine states have recently enacted a variety of changes to teacher pay. According to analyses of state legislative actions, some changes involved small percentage-point increases in salary, and others specified bonuses, new minimum salaries, or statewide targets for average or starting salaries (Aranda-Comer, 2023; Duncombe and Francies, 2022). Depending on their content, these policies could increase the state minimum salary, thus triggering pay increases for teachers at the bottom of the salary distribution, as was the case in Arkansas (Zamarro et al., 2024). Or they could combine a higher state minimum salary with reforms to improve equity of pay for extra work and to offset

rising housing costs, as was the case in Washington (Sun et al., 2024). Pay increases that were the result of a new union-negotiated contract could be similarly varied.

Fifth, our survey questions about teachers' perceptions of the adequacy of their pay and employer-provided benefits were broad, and it is likely that teachers' reasons for considering them adequate vary. We present these broad data on teachers' perceptions of adequacy of pay and benefits to understand how teachers' perceptions vary across teacher subgroups, how they compare with similar working adults, and how they relate to intentions to leave. There are also specific aspects of pay and benefits that we were not able to ask about. For example, we did not ask teachers what activities or duties they performed for extra pay, or which they performed for no pay. Although we asked teachers whether they had an array of employer-provided benefits, we did not ask them to report the value of those benefits, whether they used them, or their specific provisions. These are potential areas for future research.

Sixth, intentions to leave a teaching job or the teaching profession is an imperfect predictor of teacher behavior. Although some estimates suggest that roughly 30 percent of teachers who express an intention to leave do so within one year, teachers' reports of intentions to leave should not be interpreted as actual turnover (Grant and Brantlinger, 2023; Nguyen et al., 2024).

Finally, it is possible that numerous other factors unmeasured by this survey, such as holding another job in addition to teaching, marital status, or family size, could have contributed to the differences across educator subgroups that we observe. Although we explore patterns in teachers' responses by their states' bargaining status, it is possible that other aspects of the state context (e.g., low spending on education) could be correlated with state bargaining status. These unobserved factors could also influence the results we observe. Thus, our findings should be strictly interpreted as descriptive characterizations of educators' responses. They are not intended to suggest causality.

### How This Analysis Was Conducted

Each SoT survey respondent was assigned a weight to ensure that estimates reflect the national population of teachers. Characteristics that factor into this process include descriptors at the individual level (e.g., gender, professional experience) and school level (e.g., school size, grade level, locale). The 2024 SoT survey purposefully oversampled African-American or Black and Hispanic or Latino teachers, allowing for representative estimates of survey responses from these groups. Each ALP respondent was assigned a weight to ensure that estimates reflect the national population of working adults. More information about SoT survey sampling and weighting is available in our technical report (Doan, Steiner, and Pandey, 2024).

This report examines teachers' reported base pay, pay increases, pay for extra work for their school or school system, reported household expenses in relation to household income, perceptions of their pay and benefits, and intentions to leave their job and the profession. Where appropriate, we provide comparisons with the reports of similar working adults. The survey questions we used for each of these measures asked teachers or working adults to round to the nearest \$1,000 for yearly amounts and to the nearest \$100 for monthly amounts. Exact question wording, along with the source, if applicable, are available in our technical report (Doan, Steiner, and Pandey, 2024).

We applied a standard set of criteria to correct obvious errors in reported dollar amounts. For teachers' reported salaries, we set to missing any reports that were below \$20,000 and above \$250,000. We selected these lower and upper bounds based on 2023 data from the NEA describing state minimum and maximum teacher salaries (Walker, 2024). We did not systematically correct working adults' reports of their base salaries because we had no detailed information about their occupation that would allow us to identify reasonable upper or lower bounds. We compared teachers' and working adults' reports of their base salaries and total salaries and set a respondent's total salary equal to their base salary if the reported base salary exceeded the reported

total salary. We also compared teachers' and working adults' reports of household income and total salaries and set a respondent's household income equal to their total salary if the reported total salary exceeded the reported household income.

For monthly household expenses (i.e., housing costs, child care costs, student loan payments) for both teachers and working adults, we set to missing any reported monthly expenses that appeared to be clear outliers (i.e., exceeded \$15,000). We also set responses to missing if respondents reported "0" as their answer so we could focus our analysis on individuals who paid for any of the expenses of interest.

To calculate the percentage of household income that teachers spent on these three expenses, we multiplied teachers' monthly reports of housing costs, child care costs, and student loan payments by 12, with the assumption that teachers, on average, pay for these expenses across the calendar year. We then divided this annual amount by teachers' reported household incomes. We set to missing any reports in which annual expenses exceeded annual household income, which affected the responses of only six teachers when analyzing housing costs and only six teachers when analyzing child care costs.

We also conducted selected manual corrections to respondents' reports of pay and expenses. For instance, where it appeared that respondents systematically entered reports in thousands of dollars across all their responses (e.g., they wrote \$100 to mean \$100,000), we corrected these amounts.

We estimated average hourly pay for teachers' extra work by first estimating the number of hours per year that teachers spend on paid extra work. We estimated yearly hours worked for extra pay by multiplying teachers' reported weekly hours of work on extracurricular activities by 36, the average number of weeks worked during a school year (NCES, undated-c). We then divided teachers' reported yearly pay for extra work by yearly hours worked.

We report on the pay increases that teachers received in two ways. We estimated the amount of pay increase received by teachers by subtracting teachers' reported base salaries in the 2022–2023 school year from teachers' reported base salaries in the 2023–2024 school year. We use these calculations when reporting the size of teachers' pay increases.

We also asked teachers to report on why their base salary changed. Teachers were able to report that their base salary did not change between the 2022–2023 and 2023–2024 school years or that their base salary increased because (1) they have an additional year of experience, (2) they obtained an additional degree or credits, (3) their union or professional association negotiated a pay increase as part of a new contract, (4) a new state policy increased teacher pay, or (5) they moved to a different school or school district. They were also able to respond that their base salary decreased because they moved to a different school or school district, write in a reason for a salary change not presented in the close-ended list, or say that they did not know. We focus on teachers' responses related to pay increases from additional experience, additional education, a union-negotiated contract, and a new state policy because these are the increases that are most likely to be influenced by policy-makers and education leaders.

In some cases, teachers reported that they received some type of increase (e.g., from gaining an additional year of experience), but we did not detect an increase after subtracting their reported base salaries in the 2022–2023 school year from their current reported base salary in the 2023–2024 school year. This is likely because we asked teachers to round their salaries to the nearest \$1,000 for purposes of anonymity, because teachers are public employees. It is possible that our method for estimating the amount of pay increase might not have captured some salary increases smaller than \$2,000 and might overestimate the percentage of teachers who did not receive a salary increase.

When we asked teachers to report why their base salaries in the 2023–2024 school year were different than their base salaries in the 2022–2023 school year in the close-ended question, 15 percent of teachers reported that their base salaries were the same, and 1 percent of teachers reported that their base salaries decreased

because they moved to a different school or district. When we estimated teachers' pay increases by subtracting their 2022–2023 salaries from their 2023–2024 salaries, 35 percent of teachers reported either the same salary in 2023–2024 or a decrease. Altogether, these results suggest that there is a nontrivial percentage of teachers who did not receive a pay increase over this one-year period.

To compare responses for teachers in schools with different demographic profiles, we matched teachers' responses to school-level data from the 2022–2023 Common Core of Data. In this report, we compared teacher responses across subgroups defined by various teacher and school characteristics, testing for whether average responses for certain subgroups differed from a specified reference subgroup. The categories of teacher characteristics we explored included race/ethnicity, gender, and years of experience, and the categories of school characteristics we explored included the percentage of enrollment of students eligible for free or reduced-price lunch, the percentage enrollment of White students, locale, and grade band. In addition, we explored teachers' responses by the bargaining status of their state (i.e., bargaining required, allowed, or prohibited) and the cost of living in the area where their school is located. We do not report exhaustively on all subgroup estimates on all survey items.

All estimates presented in this report are sample-wide or subgroup-specific estimates that are unadjusted for statistical controls unless noted otherwise. We used linear regression models to test whether estimates for a particular subgroup differ at the  $p < 0.05$  level from estimates for the reference subgroup in that category without the use of any statistical controls. In select cases, we tested the robustness of significant differences across teacher subgroups to adjust for teacher- or school-level characteristics that were highly likely to be associated with teacher pay, such as years of experience, degree earned, bargaining status, or cost of living. Because the intent of this report is to provide exploratory, descriptive information rather than to test specific hypotheses, we did not make statistical adjustments for multiple comparisons.

We relied on information provided by NEA to construct our categories of state-level collective bargaining. NEA provided information indicating the states where collective bargaining is required if teachers choose to vote for union representation (Alaska; California; Connecticut; Delaware; Florida; Hawaii; Idaho; Illinois; Indiana; Iowa; Kansas; Maine; Maryland; Massachusetts; Michigan; Minnesota; Missouri; Montana; Nebraska; Nevada; New Hampshire; New Jersey; New Mexico; New York; North Dakota; Ohio; Oklahoma; Oregon; Pennsylvania; Rhode Island; South Dakota; Vermont; Washington, D.C.; Washington; and Wisconsin), states where collective bargaining is allowed but not required (Alabama, Arizona, Colorado, Kentucky, Louisiana, Utah, Virginia, West Virginia, and Wyoming), and states where bargaining is prohibited (Arkansas, Georgia, Mississippi, North Carolina, South Carolina, and Texas). We grouped Tennessee, where collaborative conferencing is permitted, with states where bargaining is allowed but not required.

We used the Comparable Wage Index for Teachers (CWIFT), a measure of average wage levels for a given area developed by the Education Demographic and Geographic Estimates program within NCES, to account for cost of living in our analyses. CWIFT values are generated using American Community Survey data to estimate average wage levels for college-educated workers who are not educators that account for worker demographics (e.g., gender, race, educational attainment) and job characteristics (e.g., hours worked, industry) (Cornman et al., 2019).

## Notes

- <sup>1</sup> We examined teacher survey responses for differences by the following respondent characteristics: gender (male or female), race and ethnicity (White, Black or African American, Hispanic, or other race or ethnicity), and years of teaching experience. We also examined survey responses by the following school characteristics: locale (urban or not urban), high poverty (which we define as schools in which more than 50 percent of enrolled students are eligible for free or reduced-price lunch), majority students of color (which we define as schools in which more than 50 percent of enrolled students are not exclusively identified as White), and school grade configuration (which we categorize as elementary or secondary).
- <sup>2</sup> We asked teachers to report their total pay for the entire 2023–2024 school year. We defined *total pay* in the survey as “pay after adding additional compensation for extracurricular or additional activities, merit pay, bonuses, or pay supplements from your state or school system.”
- <sup>3</sup> In one recent analysis, roughly 30 percent of teachers who stated an intention to leave did so within one year (Nguyen et al., 2024).
- <sup>4</sup> The teacher characteristics we examined were teaching experience, gender, race and ethnicity, subject taught, and highest degree; the school characteristics we examined were grade band, poverty, and locale.
- <sup>5</sup> Cost of living plays a role in explaining the differences in reported pay increases too but appears to have less explanatory power than state bargaining status. Teachers in states where collective bargaining is required reported a larger increase than teachers in states where collective bargaining is prohibited, even after controlling for cost of living and other teacher- and school-level characteristics. Similarly, Black teachers received pay increases that were statistically significantly smaller than their White peers after we controlled for cost of living in addition to other teacher- and school-level characteristics.
- <sup>6</sup> We estimated teachers’ hourly pay for extra work only for teachers who reported both the amount that they earned for performing extra work and the number of hours that they spent performing extra work. There were some teachers who reported working hours for extra pay but did not report extra pay earned, and vice versa.
- <sup>7</sup> We did not adjust for cost of living when presenting the household incomes of teachers and similar working adults. However, both samples are national samples, meaning that it is possible that differences in cost of living might be evenly distributed across both groups. We present average household income for both groups to provide context for the amounts that teachers and similar working adults spend on household expenses.
- <sup>8</sup> Larger pay increases were relatively less common than small pay increases. Forty-two percent of teachers nationally received an increase of five percent or less, 15 percent of teachers received an increase of 5 to 10 percent, and 7 percent of teachers received an increase of more than 10 percent.

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## About This Report

In this report, we draw on the State of the American Teacher survey fielded to teachers on the American Teacher Panel (ATP), which is a nationally representative sample of more than 25,000 teachers across the United States. The ATP is one of three survey panels that comprise the American Educator Panels (AEP), which are nationally representative samples of teachers, school leaders, and district leaders across the country. The panels are a proud member of the American Association for Public Opinion Research's Transparency Initiative.

For technical information about the surveys and analysis in this report, please see *State of the American Teacher Survey: 2024 Technical Documentation and Survey Results* (RR-A1108-11, [www.rand.org/t/RR-A1108-11](http://www.rand.org/t/RR-A1108-11)). If you are interested in using AEP data for your own surveys or analysis or in reading publications using AEP data, please email [aep@rand.org](mailto:aep@rand.org) or visit [www.rand.org/aep](http://www.rand.org/aep).

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