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# All Work and No Pay— Teachers’ Perceptions of Their Pay and Hours Worked

## Findings from the 2023 State of the American Teacher Survey

**A**fter three years of uncertainty, stress, and strain during the coronavirus disease 2019 (COVID-19) pandemic, there is some good news: Well-being appears to have improved for many K–12 public school teachers. More teachers feel resilient, and, on average, teachers’ experiences of job-related stress appear to have returned to prepandemic levels (Doan et al., 2023). A 2023 survey conducted for *EdWeek* suggests that teacher job satisfaction has improved slightly in the past year (Kurtz, 2023).

Despite these improvements, in some states, more teachers left their jobs at the end of the 2021–2022 school year than in the two previous school years and at rates higher than prepandemic averages (e.g., Goldhaber and Theobald, 2023; Diliberti and Schwartz, 2023). When teachers leave their jobs—either to take another teaching job at a different school or to leave the profession—student achievement can suffer, and the cost of replacing teachers can be high (Watlington et al., 2010). Even though some teacher turnover is considered healthy, the recent increases appear to signal more than the usual number of vacant teaching positions in many districts (Henry, Bastian, and Fortner, 2011; Goldhaber and Theobald, 2023).

The higher rate of departures could be related to the job demands and stressors that teachers experienced during the pandemic (Camp, Zamarro, and McGee, 2023); current job demands; a combination of the two; or external family or financial factors, such as the need to move for a spouse’s job. Even though well-being has improved in some ways, most teachers—58 percent—reported experiencing frequent job-related stress in January 2023, and teachers were still almost twice as likely as all employed U.S. adults to experience frequent job-related stress (Doan et al.,

## KEY FINDINGS

- Most teachers feel overworked. During the school year, teachers worked more hours per week, on average, than working adults—53 hours versus 46. On average, one out of every four hours teachers worked each week were uncompensated. Perhaps as a result, only 24 percent of teachers were satisfied with their total weekly hours worked compared with 55 percent of working adults.
- Most teachers feel underpaid. Only 34 percent of teachers said their base salary was adequate, compared with 61 percent of working adults. Teachers who said their base salary was inadequate desired, on average, a \$17,000 increase in base pay. Teachers in high cost-of-living areas desired higher base salaries, on average, than their counterparts.
- Recent gains in racial and ethnic diversity in the teacher workforce could be in jeopardy. Black teachers reported working more hours per week; they also were less satisfied with their base salary and more likely to consider leaving their jobs than White teachers were.
- Teacher dissatisfaction with hours worked, base salary, and working conditions appears to drive poor well-being and lead teachers to consider leaving their jobs.
- Pay increases alone—without improvements in teachers’ hours worked or working conditions—are unlikely to induce large shifts in teachers’ well-being or intentions to leave.

2023). Fifty-six percent of teachers reported experiencing burnout in January 2023—a figure that has not changed since January 2021 (Doan et al., 2023).

As of the 2017–2018 school year, teachers of color accounted for roughly 20 percent of the K–12 teaching workforce, an increase of about 7 percentage points from data captured 30 years earlier (Schaeffer, 2021). However, there is emerging evidence that the recent increase in resignations threatens the racial and ethnic diversity of the teaching workforce. Recent analyses of state administrative data in Arkansas, Pennsylvania, and North Carolina have found that, during the pandemic, Black teachers were more likely than their White peers to resign, continuing a prepandemic trend (Bastian and Fuller, 2023; Camp, Zamarro, and McGee, 2023; Fuller, 2023; Sun, 2018). About 80 percent of K–12 public school teachers nationally are White, so even small increases in turnover among teachers of color can have large effects on workforce diversity (National Center for Education Statistics [NCES], 2022). All students benefit academically, socially, and emotionally from having racially diverse teachers, but Black students and students in other minoritized groups are particularly likely to benefit (Carver-Thomas, 2018; Gershenson et al., 2022).

In January 2023, 25 percent of all teachers—and 35 percent of Black teachers—said they were very or

somewhat likely to leave their current teaching jobs before the end of the school year, suggesting that a nontrivial proportion of teachers—particularly Black teachers—are dissatisfied with their jobs (Doan et al., 2023). Although intentions to leave are a weak predictor of turnover (Grant and Brantlinger, 2023), teachers who say they intend to leave are more likely to resign than their counterparts who do not say they intend to leave (Nguyen et al., 2022). Thus, intentions to leave may be an indicator of job dissatisfaction (Zamarro et al., 2021; Steiner et al., 2022).

In addition, many teachers of color experience discriminatory treatment. For example, they experience racial discrimination at school (often from fellow staff), often receive less supplemental or total pay than their White colleagues, experience social isolation in a predominantly White profession, and tend to have less access to school-based social resources (e.g., administrator support and supports from colleagues) (Steiner et al., 2022; Grissom and Keiser, 2011; Mahatmya et al., 2022; Mason-Williams et al., 2023). There is also some evidence that Black teachers experience worse well-being than their White colleagues (Doan et al., 2023; Steiner et al., 2022).

It is not clear whether the recent increase in teacher turnover is temporary or whether turnover

will remain higher than prepandemic averages in future years, but these reports raise concerns for workforce sustainability, workforce diversity, and pandemic recovery. Thus, it is worth investigating whether factors that were commonly linked to teacher turnover prior to the pandemic are becoming more salient.

One way that federal and state education policymakers have responded to concerns about teacher shortages and teacher stress is by proposing and implementing policies to increase teacher pay. At the federal level, the proposed Pay Teachers Act of 2023 aims to increase federal funding in public education, requires states to establish a minimum teacher annual salary of \$60,000, and requires that states pay teachers a competitive salary that is on par with the salaries of similarly experienced college-educated workers in the region.

At the state level, nearly half of governors named increasing teacher pay as a priority in their 2023 State of the State addresses (Aranda-Comer, 2023; Perera, 2023). States' proposed policies vary. Some involve small percentage point increases in salary, while others specify bonuses, new minimum salaries, or statewide targets for average salaries (Duncombe and Francies, 2022; Aranda-Comer, 2023). However, the potential impacts of these policies on teacher pay are not clear-cut. For example, some of these proposals are packaged with policies that require changes to the structure of teacher pay (e.g., eliminating salary schedules that pay teachers more for more experience) or with policies that could affect teachers' working conditions (e.g., expanding the use of public school funds for private school choice) (U.S. Senate, 2023a; Aranda-Comer, 2023).

Prior to the pandemic, low pay, perceptions of poor administrator support, high workload, and poor or negative relationships with colleagues were some of the school-specific factors that were important in teachers' decisions to leave their jobs (Kraft, Marinell, and Yee, 2016; Nguyen et al., 2020). During the pandemic, lack of administrator support and a salary of less than \$50,000 were both associated with teachers' intentions to leave their current teaching jobs (Steiner et al., 2022). Among teachers who left the profession early in the pandemic, low pay was a top reason (Diliberti, Schwartz, and Grant, 2021).

## Abbreviations

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

Moreover, both before and during the pandemic, long working hours, low pay, and perceptions of poor administrator support were all linked to poor teacher well-being (Agyapong et al., 2022; Steiner et al., 2022). Although national and state policymakers are focused on increasing teacher pay to ameliorate teacher shortages, improve job satisfaction, and boost recruitment and retention, it is not clear whether teacher pay is the highest-impact policy lever to pull or how districts would fund pay increases in the long term, when COVID-19 relief funding expires in 2024 (Diliberti and Schwartz, 2022).

The size and structure of the increases to teacher pay proposed by federal and state policymakers vary, but we know little about *how much* additional pay is likely to make meaningful shifts in teachers' perceptions of their pay or their intentions to leave their jobs. It is also not clear whether additional pay could create meaningful improvements in the racial and ethnic diversity of the teacher workforce or improve recruitment and retention of the teachers at the heart of the teacher shortage, such as teachers with specialized skills and teachers in schools serving high-needs students (Carver-Thomas and Darling-Hammond, 2017).

In this report, we present teachers' perceptions of key workplace factors, such as base salary, total weekly hours worked, and administrator support, that were related to teacher well-being and decisions to leave before and during the pandemic. Our findings provide unique information about teachers' desired base salary and the factors that underlie variation in desired base salary. We identify potential

high-leverage changes to policy or practice that could improve teachers' well-being and perceptions of their working environment, which together are key drivers of teacher retention.

The findings in this report are drawn from the 2023 State of the American Teacher (SoT) survey, which RAND has conducted annually since 2021. Our findings provide critical information for federal, state, and district policymakers who are designing teacher pay initiatives and other programs to improve teacher retention.

## **We Surveyed Teachers and Working Adults**

We use data from three sources: the 2023 SoT survey, which is a nationally representative survey of 1,439 K–12 public school teachers; the 2023 American Life Panel (ALP) companion survey; and the 2021 and 2022 administrations of the SoT and ALP companion surveys (Steiner and Woo, 2021; Doan et al., 2022). Black teachers and Hispanic teachers were over-sampled in the 2022 and 2023 SoT surveys to allow for representative estimates of teachers who identify in these groups.<sup>1</sup> The 2023 ALP companion survey is a nationally representative survey of 527 working adults on which we asked parallel questions about hours worked, pay, and perceptions of a variety of working conditions to provide context for teachers' responses (Doan, Steiner, and Woo, 2023).

We explored whether teachers' survey responses differed according to their demographic characteristics and their school context (e.g., locale). Unless otherwise noted, we discuss only differences among teacher subgroups that are statistically significant at  $p < 0.05$  and that remain significant after controlling for an array of observable teacher and school characteristics.

We provide information from tests of statistical significance to identify noteworthy differences in teacher well-being and workplace factors that could be relevant to education policymakers, researchers, and practitioners. These tests are not evidence of any causal effect of any teacher or school characteristic, in part because there is substantial evidence that many teacher and school characteristics of interest

are correlated with one another (Hansen and Quintero, 2018). Our results are strictly descriptive and do not describe causal relationships. Our findings are intended to highlight differences in reported experiences across subgroups of teachers and encourage additional research on the sources and causes of these differences.

For select results, we tested the robustness of significant differences across educator subgroups by adjusting for observable teacher- and school-level characteristics (e.g., teacher race, gender, and experience and school poverty level, student racial and ethnic composition, urbanicity, and grade level). These regression analyses are useful for understanding drivers of differences, but we do not present regression-adjusted statistics because these adjustments might “control away” the underlying factors that contribute to the gaps and inequities we observed.

Additionally, it is possible that numerous other factors unmeasured by this survey, such as financial circumstances or caregiving responsibilities, could have played a role in the differences across educator subgroups that we observe. More details about our data and analysis can be found in the “How This Analysis Was Conducted” text box at the end of this report. We provide the 2023 SoT and ALP survey responses in our technical report (Doan, Steiner, and Woo, 2023).

## **How We Measured Hours Worked and Pay**

We measured hours worked during the school year by asking about total hours worked per week, total contracted hours worked per week, and total hours worked per week for extra pay. Our definitions for each of these variables were consistent with the National Teacher and Principal Survey (NTPS) (2021). We defined *total hours worked per week* as hours spent during the school day, before and after school, and on the weekends on all teaching and other school-related activities during a typical full week at their current school during the 2022–2023 school year.

We defined *contracted hours* as the number of hours a teacher’s contract required them to work during a typical full week at their current school during the 2022–2023 school year. We defined *hours worked for extra pay* as the number of hours spent on school-related activities for which the teacher received extra pay during a typical full week at their current school during the 2022–2023 school year. Teachers were instructed to include only teaching and other school-related activities at the school at which they currently work. We also asked teachers how satisfied they were with the total hours they worked per week.

We compared teachers’ hours worked during the 2022–2023 school year with the hours worked by U.S. working adults. We asked U.S. working adults how many hours they worked in a typical full week since September 2022, including any hours that were unpaid or for which they received overtime pay.

We created two additional measures using these variables. One is the hours teachers worked beyond their contracted hours during the school year. We created this measure by subtracting reported contracted hours worked per week from total hours worked per week. We refer to the resulting number as *uncontracted time* or *uncontracted hours*. For example, if a teacher reported they worked 50 total hours per week and 40 contracted hours per week, we calculated that they worked 10 uncontracted hours per week.

The other measure captures the hours teachers worked beyond their contracted hours for which they do not receive extra pay. We created this measure by subtracting the number of weekly hours teachers reported working for extra pay from the uncontracted hours they worked each week. We refer to this as *uncompensated time* or *uncompensated hours*. For example, if a teacher worked 10 uncontracted hours per week and received extra pay for 5 of those hours, we calculated that they worked 5 uncompensated hours per week. Therefore, all teachers’ contracted hours are compensated, while their uncontracted hours may be a mix of compensated and uncompensated hours. We provide a quick summary of the structure of teachers’ working hours during the school year in the “Teachers’ Working Hours During the School Year” text box.

Together, all these activities—those that are required during contracted hours, those that are done outside of contracted hours and are compensated, and those that are done outside of contracted hours but are uncompensated—make up the total hours that teachers work each week during the school year.

We measured pay by asking teachers to report their base teaching salary for the entire school year rounded to the nearest \$1,000. Consistent with the NTPS (2021), we defined *base salary* as salary before adding any extra pay for additional school-related activities. We asked teachers how adequate they considered their base teaching salary to be given their role and work responsibilities. We asked teachers who said their base teaching salary was somewhat or completely inadequate to report their desired base salary, rounded to the nearest \$1,000.

We defined *desired salary* as the amount a teacher’s base teaching salary would have to be for them to consider it completely adequate assuming their role and responsibilities remained the same. We did not ask teachers to report the total amount they made during the school year, the amount of extra pay they received from any additional activities at their school, the value of their benefits, or income from work outside of their school. We provide a brief summary of the structure of teacher salaries and extra pay in the “What Goes into Teacher Pay” text box.

We measured teachers’ perceptions of five workplace factors: total weekly hours worked during the school year; base salary; administrator support; relationships with other teachers at school; and mental health and well-being supports provided by their employers, health insurance, or professional association. We asked teachers to report how adequate they perceived each of these five factors to be or how satisfied they were with each. We sometimes refer to administrator support, relationships with other teachers, and mental health and well-being supports collectively as *working conditions* throughout this report.

We measured five indicators of well-being: frequent job-related stress; difficulty coping with job-related stress; symptoms of depression; burnout, which we have used consistently in the SoT since 2021 (Steiner and Woo, 2021); and resilience, which we have used since 2022 (Doan et al., 2022). We provide

## Teachers' Working Hours During the School Year

During the school year, teachers allocate their working hours across several different activities. Some of these working hours are required and compensated under teachers' contracts while others are not contractually required or compensated. Typically, teacher contracts detail the length of the workday and work year and the required duties expected of teachers. Most teachers work for nine or ten months out of the calendar year and have a workday of 7.5 or 8 hours (NCES, 2020; National Council on Teacher Quality, undated). Local education agencies must or can negotiate teachers' work hours with unions in states that require or allow collective bargaining (National Council on Teacher Quality, 2019). Educators' professional associations can collaborate with districts and advocate for policies on behalf of educators in states where collective bargaining is not legally permitted or required (National Education Association, 2017).

Most of teachers' contracted hours are spent instructing students (NCES, 2021b). During their contracted hours, teachers might also attend on-site school meetings, supervise student lunch or recess, or engage in planning during their preparation periods. All these activities are considered essential duties and are enumerated, required, and compensated under teachers' contracts.

Although working outside of contracted hours is not required, teachers might spend time on school-related activities outside of their contracted hours. Sometimes, this time is compensated, such as when a teacher coaches athletics, sponsors student clubs, or takes on leadership roles like department chair.

Other work that teachers might do outside their contracted hours is uncompensated. Teachers might choose, for example, to spend time outside their contracted hours engaging in activities that could help them educate students more effectively. These activities might include preparing for lessons, grading, communicating with families, or mentoring students.

definitions of each of these measures in the “How This Analysis Was Conducted” text box in this report.

## Teachers Worked More Hours Per Week, on Average, Than Working Adults

On average, teachers reported working 53 hours per week during the school year—even though nearly all teachers reported that they were contracted to work 40 hours per week or less. Teachers reported working 7 more hours per week, on average, than working adults in our dataset, who reported working 46 hours per week on average. Eighty-eight percent of teachers reported that they worked more than 40 hours each week compared with 47 percent of all working adults. Nearly half of teachers said that they work more than 50 hours per week, and 16 percent of teachers said that they work more than 60 hours per week, as shown in Figure 1.

Teachers reported working more hours per week, on average, than working adults throughout the pandemic. Teachers reported working about the

same average number of total hours throughout the pandemic—53 hours per week in 2021, 54 in 2022, and 53 in 2023, (Doan et al., 2022; Taie and Lewis, 2022). There was no change in the average hours worked per week reported by the general population of working adults between 2022 and 2023. Teachers reported working the same number of weekly hours, on average, in 2023 as they did in the 2015–2016 school year, which was the last time the question was asked on the NTPS prior to the pandemic (Taie and Goldring, 2020).

We observed differences in total weekly hours worked by teacher race and years of experience, which may reflect how responsibilities are assumed or distributed across different types of teachers. Black and Hispanic teachers, on average, reported working more hours per week than their White counterparts (Figure 2), and they were statistically significantly more likely to report working more than 60 hours per week (Figure 1). Twenty-seven percent of Black teachers and 21 percent of Hispanic teachers reported working more than 60 hours per week, in comparison with 14 percent of White teachers.

## What Goes into Teacher Pay

Teachers' total compensation is composed of benefits—such as health insurance or retirement benefits—and pay. Pay consists of teachers' annual base salaries and any extra pay they might earn from taking on additional school-related responsibilities or from bonuses. Benefits are an important component of teachers' compensation because teachers receive a relatively larger proportion of their total compensation through benefits than do other workers (Allegretto, 2022). In this report, however, we focus on teachers' pay.

Most districts use salary schedules to set teachers' base salaries, which is the minimum amount of pay a teacher will receive for the year. Salary schedules typically pay teachers more for obtaining more experience and/or education, but some use factors other than experience and education—such as performance—to determine salary increases. Among at least some of the small number of districts that do not use salary schedules, school boards establish teachers' pay (Nittler, 2019).

As of 2022, 25 states had established minimum salary requirements or minimum salary schedules, although some of these requirements have not been recently updated; in the remaining states, districts are allowed to establish their own salary schedules (Education Commission of the States, 2022). Districts can—and often do—pay more than states' minimum requirements. Teachers' unions and district leaders are required or allowed to negotiate such issues as compensation in 44 states. In the six states where collective bargaining is prohibited, educators may still organize as professional associations, but districts do not engage in binding contract negotiations with these associations (National Education Association, 2017; Winkler, Scull, and Zeehandelaar, 2012). However, they can engage in collaborative discussions about compensation.

Differences in state policy, the outcomes of local bargaining, and differences in cost of living can result in significant differences in teacher salaries. For example, in 2022, the average base salary for teachers in New York state was about \$90,000, while, in Mississippi, it was about \$48,000 (National Education Association, 2023).

Teachers have opportunities to earn additional pay for school-related tasks beyond their base salary. This extra pay (sometimes called *supplemental pay*) makes up a relatively small proportion of teachers' total pay; on average, extra pay ranged from about \$1,400 to just under \$3,000 (NCES, 2021a).

Some states and districts pay teachers more for working in schools or in subjects that are more difficult to staff. This additional compensation might take the form of recruitment incentives, stipends, or higher salary schedules. As of 2021, 28 states supported higher pay for teachers to teach in high-needs schools, and 22 states supported extra pay to teach in shortage subject areas. However, in some states, these initiatives are not funded (National Council on Teacher Quality, 2021).

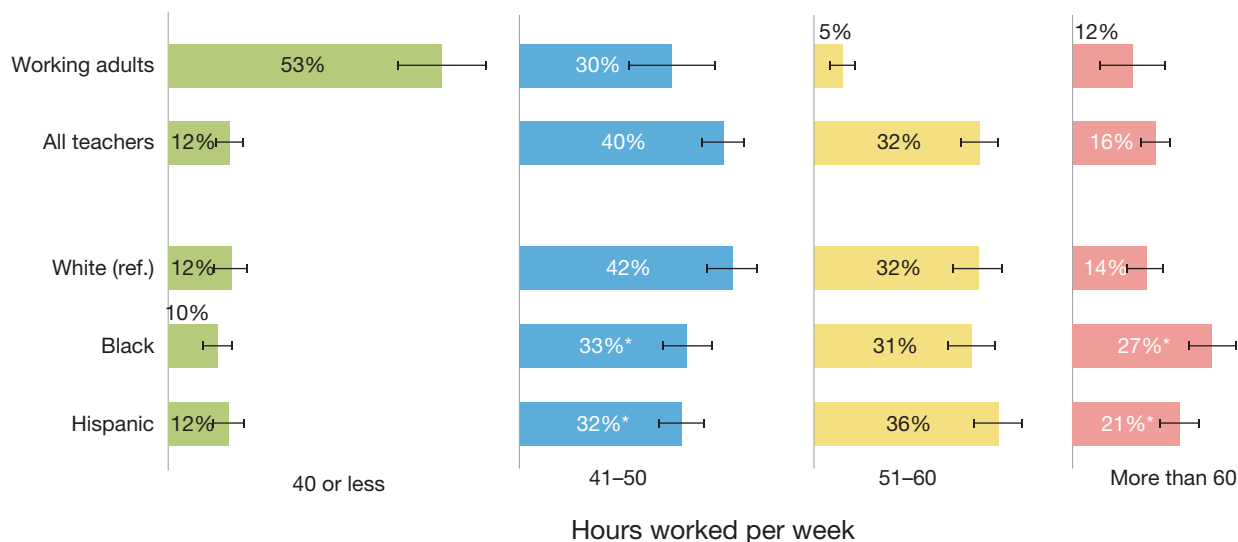
Teachers may also earn extra pay by working outside of their school system. Nearly one in five teachers has an outside job during the school year, through which they earn an average of about \$6,000 per year (NCES, 2021a). About one-third of teachers reported working a summer job in 2015–2016 and earned, on average, about \$3,700 (NCES, 2016).

Although teachers of color are generally more likely than White teachers to work in high-needs schools—and thus potentially likely to work more hours to address the academic, social, and emotional needs of students—we observed these differences in reported weekly hours worked even after controlling for school poverty. This suggests that differences in reported hours worked by teacher race and ethnicity may be driven by the different responsibilities teachers take on, or are assigned, rather than by school

characteristics. For example, teachers of color may be more likely than their White peers to engage in practices that are aligned to culturally responsive teaching, such as spending time planning and differentiating instruction or developing relationships with students and families (Blazar, 2021). These practices might take more time to plan, leading to teachers of color working more hours. Or teachers of color—and particularly Black male teachers—may be viewed by their administrators or peers as taking

FIGURE 1

## Reported Total Hours Worked per Week for Teachers and Working Adults



NOTE: For teachers, this figure displays their responses to the question, “Including hours spent during the school day, before and after school, and on the weekends, how many total hours do you spend on ALL teaching and other school-related activities during a typical FULL WEEK at THIS school this school year (2022–2023)?” For working adults, this figure displays their responses to the question, “How many total hours have you worked in a typical full week since September 2022? Include any hours you work that are unpaid, or for which you receive overtime pay.” An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group, which is indicated by (ref.), both before and after controlling for various teacher-level and school-level characteristics. Rows may not sum to 100 because of rounding. Error bars depict 95 percent confidence intervals for each estimate.  $N$  working adults = 524;  $N$  all teachers = 1,415.

on the role of disciplinarian in their schools, which could place additional responsibilities on these teachers (Bristol and Mentor, 2018). As we discuss next, it is also possible that teachers of color experience greater financial pressure to work more hours to increase their total pay. However, in discussing differences in hours worked by teacher race and ethnicity, we are not able to distinguish between voluntary and assigned activities.

### Teachers Worked 15 Uncontracted Hours per Week, on Average

On average, teachers reported that they work 15 uncontracted hours per week, as shown in Figure 2. Nearly all teachers—93 percent—reported that they work more than their contracted hours each week. When we look only at teachers who said they worked more than their weekly contracted hours, they reported working 17 uncontracted hours each week. The number of uncontracted hours teachers reported

working in 2023 is consistent with their reports during the 2015–2016 school year (Taie and Goldring, 2020). Most of the uncontracted hours teachers work each week—12 out of the 15, on average—appear to be uncompensated.

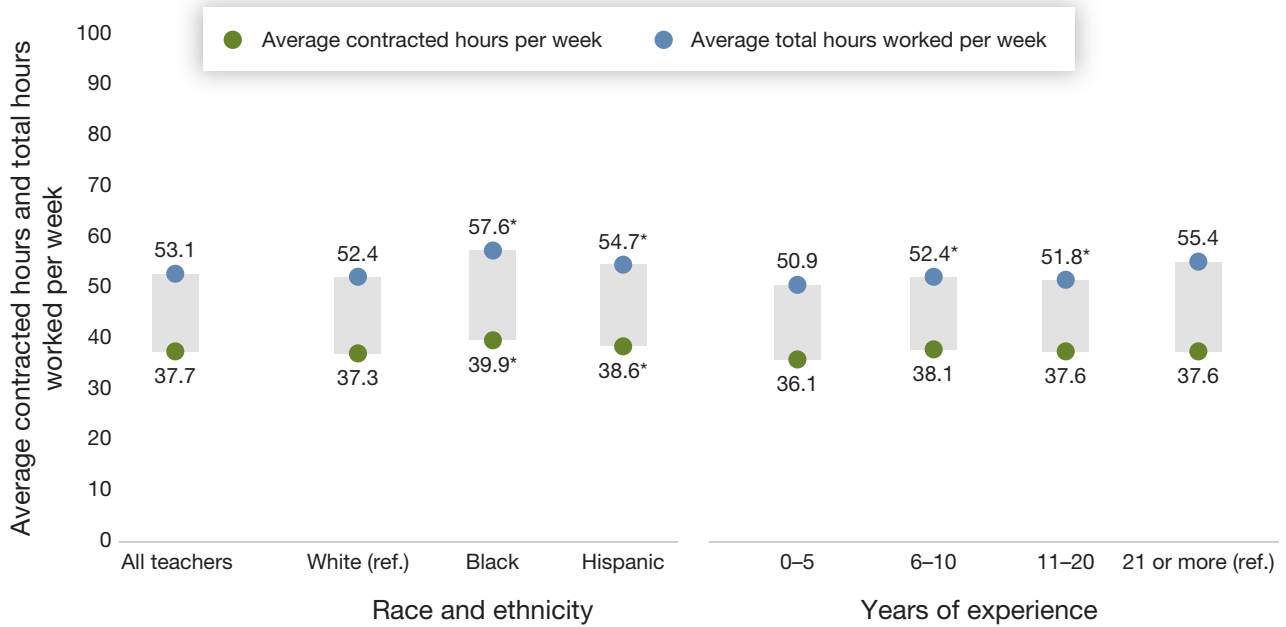
Just under half of teachers—45 percent—reported working for extra pay, as shown in Figure 3. Teachers who do work for extra pay reported working relatively few such hours. Twenty-eight percent of teachers reported that they spent 1 to 5 hours per week on work for which they receive extra pay, and 18 percent of teachers reported that they spent 6 or more hours per week on such activities.

Black teachers and Hispanic teachers who worked more than their contracted hours reported working, on average, more uncontracted hours than their White counterparts. However, they reported working more hours for extra pay. After accounting for teachers’ additional hours of work for extra pay, White, Black, and Hispanic teachers worked similar numbers of uncompensated hours. This suggests that Black and Hispanic teachers may be working more total hours during the school year because



FIGURE 2

Teachers’ Reports of Average Contracted Hours and Average Hours Worked Per Week, by Race and Ethnicity and Years of Experience



NOTE: This figure displays the weighted mean of teachers’ responses to the questions, “Including hours spent during the school day, before and after school, and on the weekends, how many total hours do you spend on ALL teaching and other school-related activities during a typical FULL WEEK at THIS school this school year (2022–2023)?” and “How many hours does your contract require you to work during a typical FULL WEEK at THIS school, this school year (2022–2023)?” An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group, which is indicated by (ref.), both before and after controlling for various teacher-level and school-level characteristics.  $N$  all teachers = 1,415.

they are working more hours for additional pay. Our survey did not ask teachers about the amount of time they spent on specific activities while they were working, so we cannot shed light on how teachers used their time.

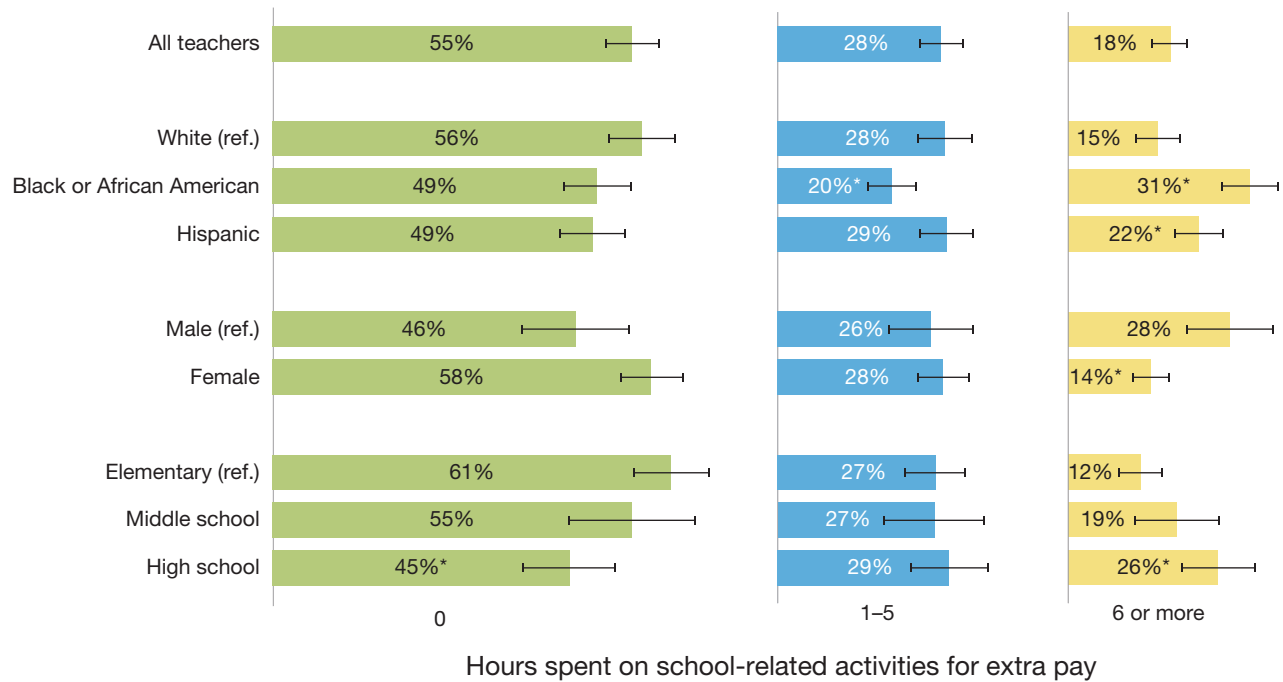
We did not find statistically significant differences in reported total weekly hours worked by teacher gender or grade level. Male teachers and high school teachers were more likely than their female and elementary school counterparts to work 6 or more hours per week for additional pay, suggesting that male and high school teachers may be more likely to take on additional work that is compensated or to be compensated for their extra hours of work.

The differences between high school teachers and elementary teachers might be at least partly explained by the fact that high schools tend to offer more opportunities for additional pay (e.g., leading student clubs and coaching sports), than elementary schools.

Working in a state that required or allowed collective bargaining was unrelated to the number of total hours teachers reported working per week. That is, after controlling for an array of school and teacher characteristics, teachers who worked in a state where collective bargaining was required or allowed were equally likely to say they worked more than their contracted hours as teachers who worked in states where collective bargaining was not required or allowed.

FIGURE 3

### Teachers’ Reports of Weekly Hours Worked for Extra Pay



NOTE: This figure displays teachers’ responses to the question, “Outside of your required contract hours, how many hours do you spend on school-related activities for which you receive extra pay during a typical FULL WEEK at THIS school this school year (2022–2023)?” An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group, which is indicated by (ref.), both before and after controlling for various teacher-level and school-level characteristics. Rows may not sum to 100 because of rounding. Error bars depict 95 percent confidence intervals for each estimate.  $N$  all teachers = 1,406.

### Teachers Were Less Satisfied with Their Hours Worked and Base Salary Than Working Adults

Only one-quarter of teachers said that they were mostly or very satisfied with the total hours they worked in a week, compared with half of all working adults (Table 1). Only one-third of teachers said they were satisfied with their base salary, compared with about two-thirds of working adults.

The long hours that teachers reported working each week—about one-quarter of which were uncompensated—may largely explain teachers’ dissatisfaction with their weekly hours worked. As teachers’ reported total hours worked increased—and as the number of hours they worked over their contracted hours increased—teachers were increasingly dissatisfied with their hours worked. For example,

31 percent of teachers who worked 41–50 hours per week were satisfied with their total hours worked per week. Only 8 percent of teachers who worked more than 60 hours per week were satisfied.

Female teachers and elementary school teachers were significantly less likely than their male and high school counterparts to be satisfied with the total number of hours they worked per week. One possible explanation for this difference is that male teachers were more likely to receive extra pay for the additional hours they worked; another is that the pay they received for extra duties might be higher (Quintero, Hansen, and Zerbino, 2023). Another possible explanation, which we could not explore in our data, is that female teachers’ dissatisfaction with their working hours may stem from other reasons, such as taking on a larger share of household or caregiving work, on average, than men (U.S. Bureau of Labor Statistics, 2023).

TABLE 1  
 Teachers' and Working Adults' Satisfaction with Pay, Hours Worked, and Selected Working Conditions

Percentage Satisfied	Base Salary	Total Hours Worked per Week	Well-Being and Mental Health Supports	Administrator Support	Teacher Relationships
Working adults	61	55	82	Not asked	Not asked
All teachers	34	24	54	73	91
White (ref.)	35	25	52	73	92
Black	<b>24*</b>	21	<b>68*</b>	73	89
Hispanic	30	20	63	71	89
Male (ref.)	33	34	70	71	90
Female	34	<b>22*</b>	<b>49*</b>	74	92
0–5 YOE	33	27	43	77	87
6–10 YOE	37	25	57	74	<b>94*</b>
11–20 YOE	33	27	53	<b>78*</b>	92
21+ YOE (ref.)	34	21	54	66	89
Low poverty (ref.)	37	23	48	73	93
High poverty	30	26	60	72	89
Elementary (ref.)	30	19	50	73	90
Middle	37	26	62	74	93
High	37	<b>30*</b>	53	71	91
Urban (ref.)	29	22	54	72	93
Suburban	36	23	56	71	93
Town or rural	35	27	51	74	87

NOTE: We defined teachers as satisfied with their base salary, well-being and mental health supports, administrator support, and teacher relationships if they responded that they considered each working condition “somewhat adequate” or “completely adequate.” We defined teachers as satisfied with their total hours worked per week if they responded that they were “mostly satisfied” or “very satisfied” with the hours that they worked during the school day, before and after school, and on the weekends. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group, which is indicated by (ref.), both before and after controlling for various teacher-level and school-level characteristics.  $N$  working adults = 344–527;  $N$  all teachers = 1,049–1,420. YOE = years of experience.

Black teachers were less likely than White teachers to be satisfied with their base salaries. Only 24 percent of Black teachers considered their base salary to be adequate, compared with 35 percent of White teachers. We did not find differences in teachers’ perceptions of their base salary or hours worked per week by years of teaching experience, school locale, or school poverty.

Dissatisfaction with hours worked and with base salary were strongly related. About three-quarters or more of teachers who were dissatisfied with their base salary were also dissatisfied with their weekly hours worked, and vice versa. For example, 85 percent of teachers who were dissatisfied with their salaries were also dissatisfied with their hours worked. Only 15 percent of teachers who were dissatisfied with their base salary were satisfied with their hours

worked. Even though dissatisfaction with base salary and weekly hours worked was widespread, most teachers—even those who were dissatisfied with their hours or salary—were satisfied with the working conditions we asked about.

## **Inadequate Compensation Was a Key Reason for Dissatisfaction with Hours Worked**

Sixty percent of teachers who were not at all or only somewhat satisfied with their total hours worked per week said it was because their compensation was not adequate given the hours that they worked. This finding reflects the strong relationship between dissatisfaction with hours worked and dissatisfaction with base pay we discussed in the previous section. Working too many hours in the evening and on the weekend and feeling that they cannot get the work done no matter how many hours they put in were also selected by 60 percent of teachers who were dissatisfied with the number of hours that they worked. Only 2 percent of teachers said that the number of contracted hours that they worked each week was a reason for their dissatisfaction.

Black teachers were especially likely to cite inadequate compensation as a reason that they were dissatisfied with their weekly hours worked. White teachers and female teachers were especially likely to feel that they cannot get their work done, no matter how many hours they put in. Veteran teachers with 21 or more years of experience were also especially likely to say that working too many hours in the evenings or on the weekends was a top reason they were dissatisfied with their weekly hours worked.

## **Teachers Who Were Dissatisfied with Their Base Salary Earned \$11,000 Less, on Average, Than Teachers Who Were Satisfied**

Teachers who reported that their base salary was completely or somewhat inadequate (66 percent of all teachers), reported significantly lower base salaries

than teachers who indicated that their salaries were adequate. On average, teachers who said their salary was inadequate reported a base salary of \$63,000 whereas teachers who said their salary was adequate reported a base salary of \$74,000. This \$11,000 difference remained statistically significant even after we controlled for differences in teaching experience and highest degrees earned.

Teachers overall reported an average annual base salary of approximately \$67,000 during the 2022–2023 school year, consistent with data reported by the National Education Association (2023). Teachers in the bottom quartile of base salaries reported earning less than \$52,000 per year and teachers in the top quartile reported earning more than \$78,000.<sup>2</sup>

We asked teachers who said their base salary was somewhat or completely inadequate what it would have to be for them to consider their base salary adequate, assuming their role and responsibilities were unchanged. On average, these teachers reported an average desired base salary of \$80,000, a roughly \$17,000 increase over the average \$63,000 they reported making currently. In percentage terms, this equates to a roughly 27 percent pay increase. This figure is comparable with the estimated teacher pay penalty of 24 percent in 2020–2021. The pay penalty suggests that, when comparing weekly wages, teachers earn 24 percent less, on average, than other college-educated workers (Allegretto, 2022).

Extrapolating from our survey data, we estimate it would cost \$37 billion for the full public K–12 teacher population during the 2022–2023 school year to feel that their base salaries were completely adequate without any changes to their role or responsibilities. This amount, for comparison, is roughly 4 percent of the total \$870 billion in public elementary and secondary school expenditures during the 2019–2020 school year (NCES, 2023).

Figure 4 shows how current base salaries and desired base salaries differed according to teachers' current base salaries, grouped into quartiles. Teachers who reported higher current base salaries correspondingly desired higher salaries, with the gap between current and desired base salaries ranging from roughly \$15,800 (Quartile 1) to \$17,300 (Quartile 2).

Teachers who worked beyond their contracted hours for additional pay reported similar desired salaries (conditional on their current salaries)—and reported a similar gap between base salary and desired salary—as teachers who did not work extra hours for additional pay.

## Cost of Living Influences Teachers' Current and Desired Salaries

Another factor influencing both current and desired base salaries is the difference in cost of living across different school districts. As shown in Figure 5, teachers' current and desired salaries are higher in areas with higher costs of living (see the "How This Analysis Was Conducted" text box for more information on how we determined cost of living).<sup>3</sup> Teachers in areas with average or below-average costs of living reported base salaries of approximately \$60,000, nearly \$25,000 lower than average base salaries among teachers living in areas with above-average costs of living. Many of the gaps in base salary across teacher groups—such as school locale and school poverty—cease to be statistically significant after accounting for cost of living.

The average base salary of teachers living in average or below-average cost-of-living areas who considered their salaries to be adequate is approximately \$14,000 lower than the average salary among teachers who considered their salaries to be *inadequate* in above-average cost-of-living areas (Figure 5).

Teachers' desired salaries, among those who indicated that their base pay was inadequate, were linked to cost of living. The average desired base salary among teachers in above-average cost-of-living areas was \$99,770, over \$25,000 more than the average desired salary of \$74,100 among teachers in areas with average or below-average cost of living. When placed into a regression model, we found that cost of living was a significant predictor of a teacher's desired base pay even when accounting for their current base pay. For example, we estimated that a teacher making \$60,000 per year living in an area with average or below-average cost of living would have a desired salary of \$76,000, an increase

FIGURE 4  
The Gap Between Teachers' Current and Desired Base Salaries in 2022–2023



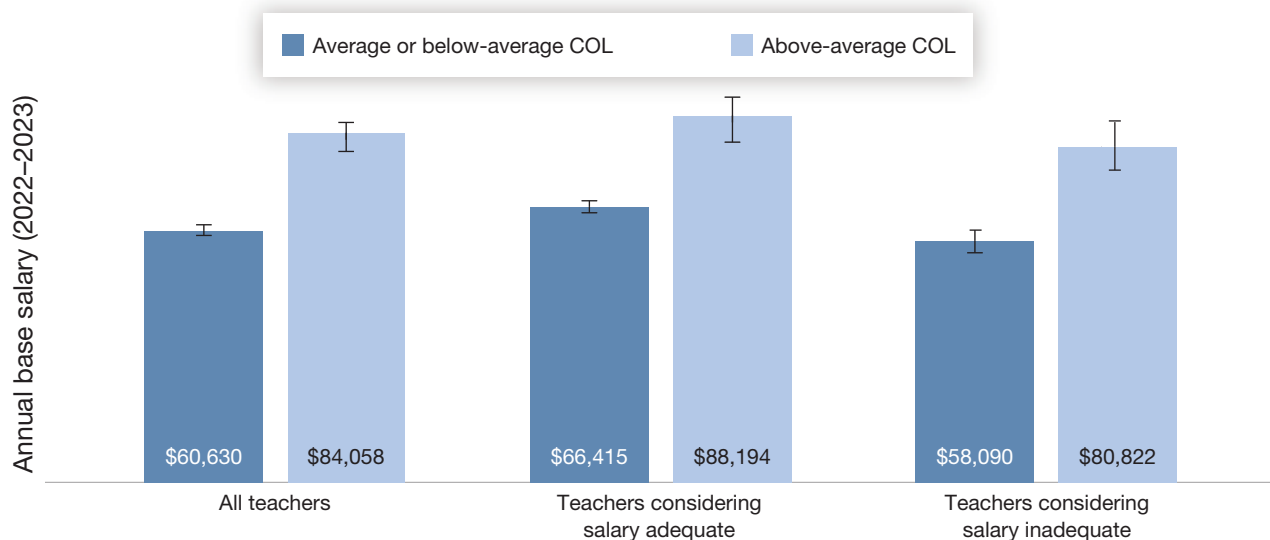
NOTE: The figure shows gaps between teachers' current base salaries (blue labels) and desired base salaries (green labels) among teachers indicating that their current base salaries were "completely inadequate" or "somewhat inadequate" given their role and work responsibilities, separately by groups based on the quartile of their current base salary (Quartile 1: less than \$53,000, Quartile 2: \$53,000 to less than \$63,000, Quartile 3: \$63,000 to less than \$80,000, Quartile 4: \$80,000 or more). Current base salaries are self-reported by teachers, who were asked, "During the current school year (2022–2023), what is your base teaching salary for the entire school year?" and were asked to omit any "additional compensation for extracurricular or additional activities." Among teachers indicating that this was "completely inadequate" or "somewhat inadequate," teachers were asked to self-report their desired salaries using the following item: "Assuming your role and responsibilities remain the same, how much would your base teaching salary have to be for you to consider it completely adequate?" *N* = 984.

of \$16,000. But, if this same teacher lived in an area with above-average cost of living, our model estimated that their desired salary would be \$92,000, an increase of \$32,000 over their current base salary of \$60,000.

Another factor that contributes to differences in teacher salaries is whether teachers reside in states that require collective bargaining. Teachers in states where bargaining is required reported higher base salaries (\$74,000) than teachers in states where collective bargaining is prohibited (\$56,000). Although the gap between teachers in states where bargaining is required and prohibited narrows considerably after adjusting salaries for cost of living—from a gap of \$18,000 to \$8,000—teachers in states where

FIGURE 5

Teachers' Average Base Salaries in Below- and Above-Average Cost-of-Living Areas



NOTE: The figure compares reported average base salaries among (1) all teachers, (2) teachers indicating that they found their base salaries “somewhat adequate” or “completely adequate,” and (3) teachers indicating that they found their base salaries “somewhat inadequate” or “completely inadequate,” separated by teachers living in areas with average or below-average COL or above-average COL, as determined by RPPs; see the “How this Analysis was Conducted” text box for further detail. To determine current base salaries, teachers were asked, “During the current school year (2022–2023), what is your base teaching salary for the entire school year?” and were asked to omit any “additional compensation for extracurricular or additional activities.” Teachers living in areas with average or below-average COL were those living in areas with RPPs less than or equal to 100, and those with above-average COL were living in areas with RPPs greater than 100. Error bars depict 95 percent confidence intervals for each estimate.  $N = 1,419$ . COL = cost of living.

bargaining is required still reported earning statistically significantly higher base salaries than teachers in other states. We discuss differences in teacher salary by race and ethnicity in further detail in the next section.

### **Black Teachers' Base Salaries Are About \$4,700 Less Than Non-Black Teachers; Differences Are Driven by Cost of Living and Teaching Experience**

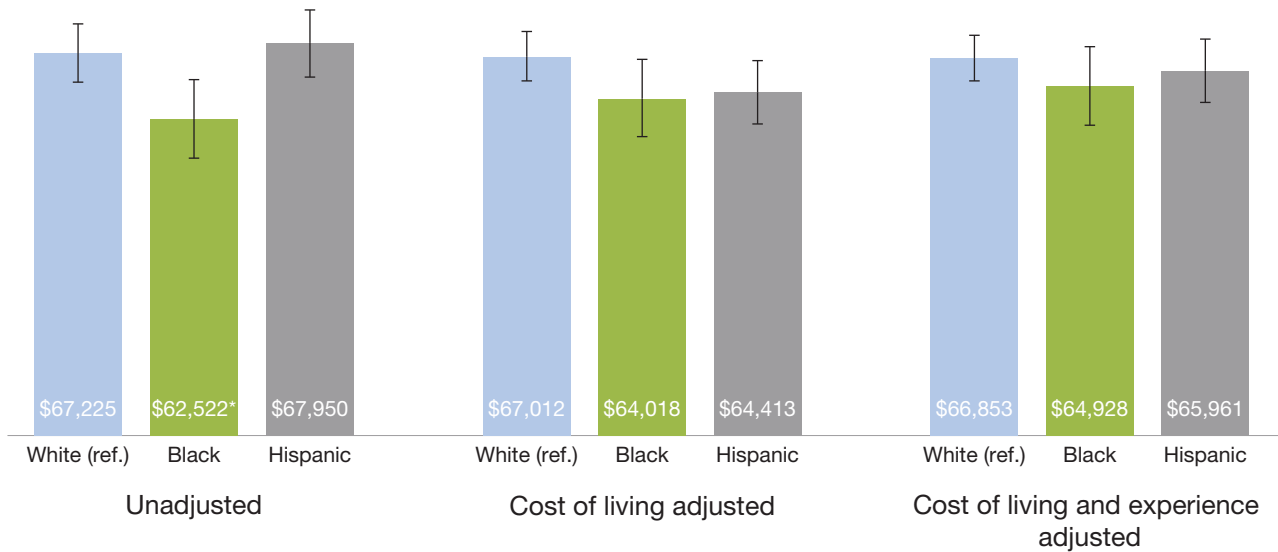
Nationwide, Black teachers reported average base salaries of about \$62,500, significantly lower than average salaries reported by White teachers and Hispanic teachers, as shown in Figure 6. When we look only at these reported averages, Black teachers' base salary is about \$4,700 less than non-Black teachers' base salary.

Differences in average cost of living are an important contributor to this gap because Black teachers are more likely to live in lower cost-of-living areas than teachers of other races and ethnicities. Only 13 percent of Black teachers taught in school districts where the cost of living was above the national average, compared with roughly 25 percent of White and Hispanic teachers. After accounting for differences in cost of living, Black teachers' base salaries are comparable with Hispanic teachers' (Figure 6). The salary gap between Black teachers and White teachers is about \$3,000 after this adjustment, a margin that is statistically significant only at the  $p < 0.10$  level ( $p = 0.07$ ).

Differences in years of teaching experience also explain some of the gap. White teachers have, on average, roughly an additional year of teaching experience than their Black and Hispanic peers. After adjusting for this difference, we estimate that Black teachers earn about \$2,000 less in base salary, on average, than White teachers, which is not statistically significant at conventional levels. This differ-

FIGURE 6

Raw and Cost-of-Living–Adjusted Base Salaries, by Teacher Race and Ethnicity



NOTE: This figure shows unadjusted, cost of living (COL)-adjusted, and COL- and experience-adjusted average base teaching salaries during the 2022–2023 year, separately by teacher race and ethnicity. COL-adjusted and COL- and experience-adjusted estimates are produced by controlling for RPPs and for RPPs and total years of teaching experience, respectively, and producing predictive margins by teacher race and ethnicity that hold RPPs and total years of experience constant across categories of teacher race and ethnicity. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group, which is indicated by (ref.). Error bars depict 95 percent confidence intervals for each estimate.  $N = 1,419$ .

ence in base salary is one possible reason that Black teachers are more likely than White teachers to take on additional duties at their school for extra pay.

### Low Salary and Long Work Hours Are Key Reasons Teachers Consider Leaving Their Jobs

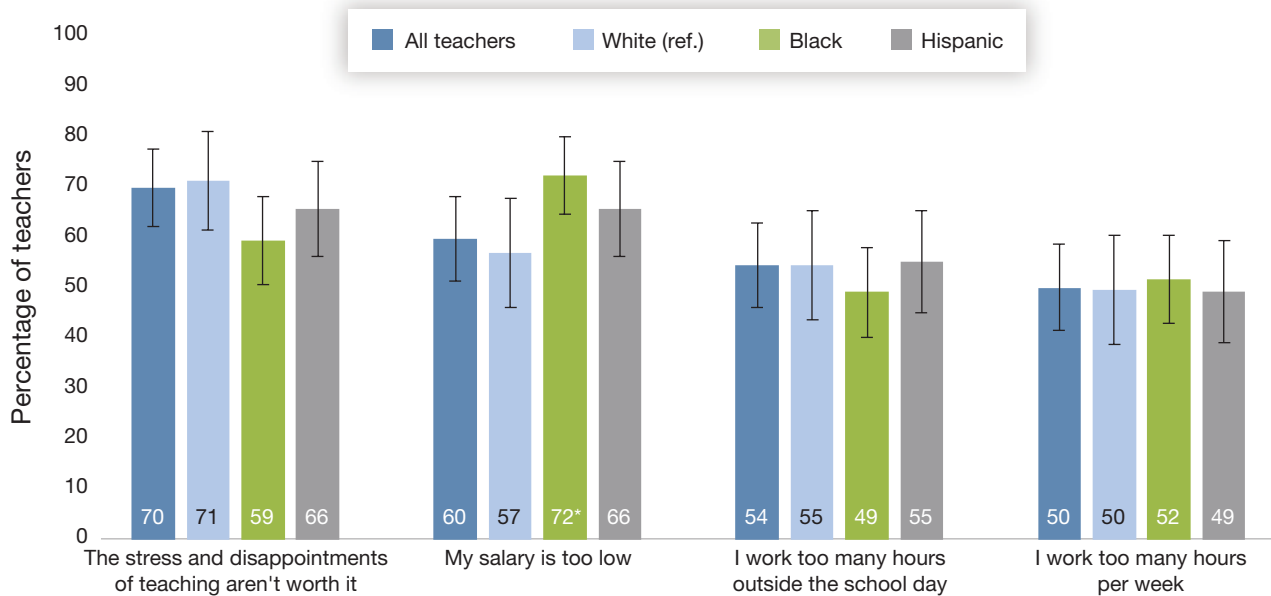
Low salary and long working hours were the top-ranked reasons why teachers said they were considering leaving their jobs (Figure 7). Low salary and working too many hours were also commonly reported top job-related stressors. The most common reason teachers said they were considering leaving was feeling that the stress and disappointments of teaching are not worth it—a result that is consistent with a 2020 survey of teachers who left the profession early in the pandemic (Diliberti, Schwartz, and Grant, 2021). This very broad reason for intending to leave teaching could, for some teachers, include dissatisfaction with their pay, hours worked, or other

working conditions and is one possible reason this was the most common response.

Thirty-five percent of Black teachers said their low salary was a top job-related stressor, in comparison with 26 percent of White teachers. Seventy-two percent of Black teachers reported that their low salary was one of their most important reasons for thinking about leaving their jobs, in comparison with 57 percent of White teachers. Among Black teachers who were considering leaving their jobs, low salary was the *most common* reason for considering leaving. Long working hours were less salient for Black teachers. Even though Black teachers reported working more hours per week than White teachers, they were not significantly more likely than White teachers to select long working hours as a reason for leaving their jobs. Black teachers were equally likely as White teachers to rank long working hours as a top source of job-related stress. Ninety-eight percent of novice teachers said that their low salary was one of their top reasons for thinking about leaving their jobs, in comparison with 55 percent of veteran teachers with 21 or more years of experience.

FIGURE 7

Percentage of Teachers Who Said They Are Considering Leaving Their Job Who Selected Each Reason as One of Their Top Five Most Important Reasons for Thinking About Leaving Their Jobs



NOTE: This figure displays teachers' responses to the question, "How important are each of the following things to your thinking about leaving your current teaching job? Rank the top five most important things from most to least important." Teachers were presented with this question only if they responded "somewhat likely" or "very likely" in response to the question, "What is the likelihood that you will leave your job at your school by the end of the current school year (2022–2023)?" The percentages listed indicate the percentage of teachers who ranked each factor as one of their top five reasons for thinking about leaving their current teaching job. An asterisk (\*) indicates that percentages for that subgroup significantly differ at the  $p < 0.05$  level from the reference group, which is indicated by (ref.), both before and after controlling for various teacher-level and school-level characteristics. Error bars depict 95 percent confidence intervals for each estimate.  $N$  all teachers = 353.

There are several possible reasons for the salience of low salary among Black teachers. Black teachers reported relatively lower salaries in comparison with White teachers and were also more likely than White teachers to work more hours for extra pay. Black teachers tend to have more student debt than White teachers and may have more difficulty repaying their loans (Fiddiman, Campbell, and Partelow, 2019). Together, these conditions suggest that Black teachers may be experiencing more financial challenges than their White counterparts.

### Dissatisfaction with Hours Worked and Base Salary, Along with Poor Working Conditions, Drive Teachers' Intentions to Leave Through Negative Associations with Well-Being

It is difficult to parse which of the workplace factors we examined were most likely to drive poor well-being. We also cannot disentangle the causal direction of the relationships among dissatisfaction with workplace factors, poor well-being, and intentions to leave. For example, dissatisfaction with pay, hours worked, or working conditions could cause poor well-being, or vice versa. In this section, we lay out a series of hypotheses that could describe these relationships using our survey data. Future research could further test the validity of these hypotheses.



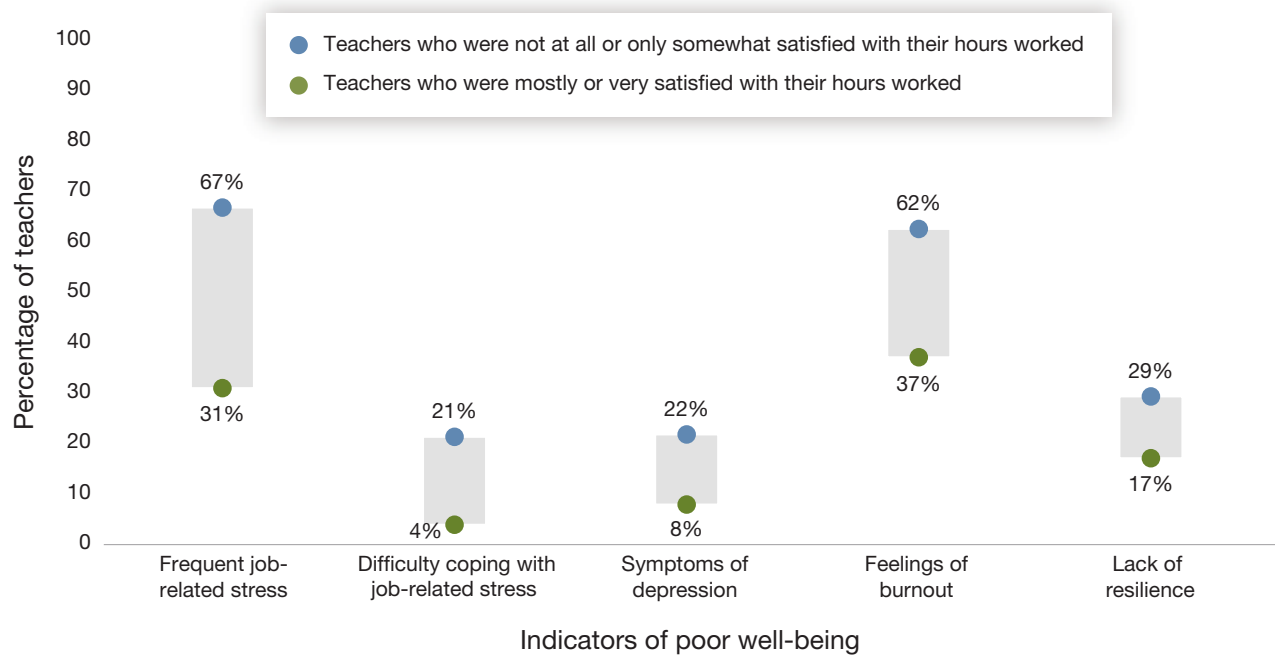
These analyses are exploratory and descriptive. One limitation of this analysis is that we measured teachers' perceptions of a small number of working conditions in addition to base pay and hours worked. Numerous other working conditions, such as class size or support from paraprofessionals or teaching assistants, could influence teachers' well-being and intentions to leave. Another limitation is that we did not measure factors outside of work—such as caregiving responsibilities or financial security—that could influence teachers' well-being.

We first examined which of the workplace factors we measured might contribute most to poor well-being. Teachers who were dissatisfied with their base salary, hours worked, administrator support, and mental health supports were more likely to experience frequent job-related stress, difficulty coping well with job-related stress, symptoms of depression, feelings of burnout, and a lack of resilience than teachers who were satisfied with these workplace

factors. However, dissatisfaction with hours worked appeared to be the largest contributor to frequent job-related stress, as shown in Figures 8 and 9. For example, 67 percent of teachers who were dissatisfied with the number of hours they worked per week reported experiencing frequent job-related stress, compared with 31 percent of teachers who were satisfied—a 36 percentage point difference.

Echoing our prior work (Steiner and Woo, 2021; Steiner et al., 2022), we found that teachers who said their workplace factors (i.e., salary, hours worked, mental health supports, and administrator support) were inadequate were more likely to consider leaving their jobs than teachers who said those factors were adequate. However, when we examined the relationship between teachers' perceptions of workplace factors and their intentions to leave their jobs while controlling for teachers' reported well-being, we found that only teachers' perceptions of their administrator support remained statistically significantly linked

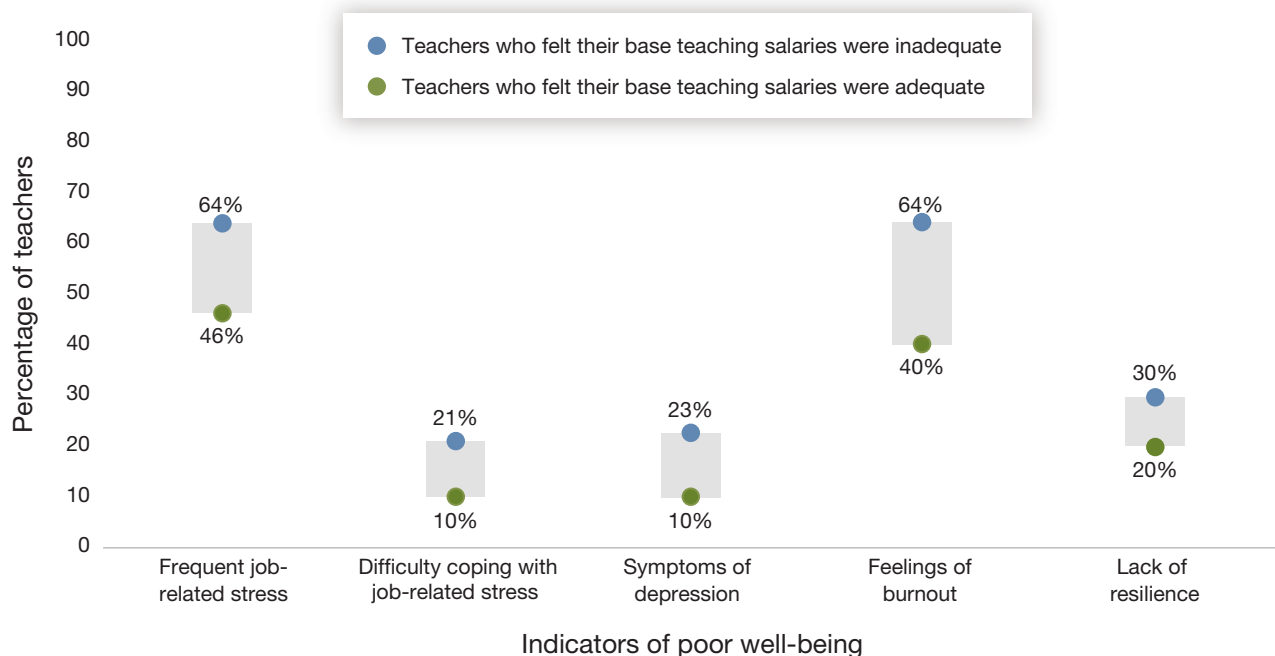
FIGURE 8  
Teachers' Reports of Well-Being, by Their Satisfaction with Hours Worked



NOTE: This figure displays the percentage of teachers who experienced each indicator of poor well-being, by whether or not they were satisfied with their weekly hours worked. All comparisons between teachers who said they were mostly or very satisfied with their weekly hours worked and those who were not at all or only somewhat satisfied were significantly different at the  $p < 0.05$  level, both before and after controlling for various teacher-level and school-level characteristics.  $n$  teachers who were not at all or somewhat satisfied with their hours worked = 1,102;  $n$  teachers who were mostly or very satisfied with their hours worked = 312.

FIGURE 9

### Teachers’ Reports of Well-Being, by Their Satisfaction with Base Salary



NOTE: This figure displays the percentage of teachers who experienced each indicator of poor well-being, by whether or not they felt that their base salaries were adequate. All comparisons between teachers who found their base salary adequate and those who found them inadequate were significantly different at the  $p < 0.05$  level, both before and after controlling for various teacher-level and school-level characteristics.  $n$  teachers who felt that their base teaching salaries were inadequate = 936;  $n$  teachers who felt that their base teaching salaries were adequate = 434.

to their intentions to leave. Additionally, teachers who perceived that their administrator support was adequate were statistically significantly more likely to be satisfied with all the other workplace factors we asked about than teachers who said their administrator support was not adequate.

We interpret these results as evidence that teachers’ perceptions of administrator support may influence their perceptions of other workplace factors *and* their intentions to leave, even beyond its association with educator well-being. Thus, administrator support may be a key lever for improving job satisfaction and retention. This interpretation is broadly consistent with other research that finds that poor administrator support is a key driver of teacher turnover (Johnson, Berg, and Donaldson, 2005; Ladd, 2011).

We then examined the relationship between well-being and intentions to leave while controlling for teachers’ perceptions of the workplace factors we measured. We found that poor well-being is con-

nected to teachers’ intentions to leave, even after controlling for their perceptions of work hours, pay, and working conditions. Altogether, our results suggest that weekly hours worked, pay, and working conditions are connected to teachers’ well-being, well-being is connected to teachers’ intentions to leave, and workplace factors drive teachers’ intentions to leave through their association with well-being. Moreover, teachers’ perceptions of their administrator support were linked to teachers’ intentions to leave, even beyond the association with teachers’ well-being.

### Implications

Even though fewer teachers nationally experienced frequent job-related stress and more teachers felt resilient in 2023 than in 2022, the increase in teacher resignations—particularly among Black teachers—raises concerns that increasing numbers of teachers

are deciding that the benefits of teaching no longer outweigh the costs.

Our findings show that most teachers feel overworked. Teachers reported working more hours per week during the school year, on average, than all working adults. Twelve of the 53 hours per week teachers reported working during the school year were uncompensated—about one hour out of every four. Perhaps as a result, teachers were less satisfied with the hours they worked each week than working adults.

Most teachers feel underpaid. Only one-third of teachers said their base salary was adequate, compared with two-thirds of working adults. On average, teachers who said that their base salary was inadequate reported earning less—about \$11,000 less—than teachers who said their base salary was adequate. Unsurprisingly, teachers who felt their base salaries were inadequate desired higher pay—the average desired increase in base pay among these teachers was \$17,000, assuming their role and responsibilities remained the same. The amount of the pay increase teachers desired was largely driven by cost of living—teachers who live in higher cost-of-living areas desired higher salaries than teachers who live in lower cost-of-living areas.

Teachers' perceptions of their weekly hours worked and base pay were strongly related and confirm that the majority of teachers feel that their pay is not commensurate with the work they do (Johnson and Kardos, 2008; Liu et al., 2000). Dissatisfaction with weekly hours worked appears to be an especially strong driver of job-related stress—a finding that is consistent with prepandemic research (Agyapong et al., 2022).

Long working hours and low pay appear to be driving teachers to consider leaving their jobs. Low pay is a particularly salient reason for considering leaving cited by novice teachers, 98 percent of whom said that their low salary was a top reason they were thinking about leaving their jobs. Among teachers who were considering leaving their jobs, low pay was cited as a top reason for teachers at all levels of experience. In addition, teachers at all levels of experience and base pay desired a pay increase. Together, these findings imply that teacher pay increases should be implemented across the board, beginning with starting salaries and extending through the pay scale.

Our findings raise the concern that recent gains in racial and ethnic diversity in the teacher workforce could be erased. Black teachers, on average, reported working more hours per week, had slightly lower base salaries before accounting for cost of living and teaching experience, were less satisfied with their base salary, and were more likely to say that low pay is a top source of job-related stress than White teachers. Perhaps as a result, Black teachers were more likely to consider leaving their jobs than White teachers. Among Black teachers who were considering leaving their jobs, low pay was their top reason.

Working conditions also affect teachers' satisfaction with their pay and hours worked, their well-being, and their intentions to leave their jobs. Consistent with other research, satisfaction with administrator support appears to be a key driver of satisfaction with hours worked and pay, as well as a key driver of positive well-being (Johnson, Berg, and Donaldson, 2005; Steiner et al., 2022). This implies that raising pay alone may not improve teacher well-being or retention. Improvements in working conditions are also required, and our research confirms that improving administrator support appears to be an important lever.

The interrelationships among pay, hours worked, and working conditions suggest that improving one workplace factor could improve teachers' perceptions of other factors. For example, increasing pay could help teachers feel more satisfied with the hours they work. Helping reduce the hours teachers work each week could improve their satisfaction with their pay. Improving administrator support might improve teachers' perceptions of their pay and work hours, which is consistent with prior research on how effec-

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Teachers at all levels of experience and base pay desired a pay increase.

tive principals can support teacher job satisfaction and create the conditions to help teachers manage their responsibilities and focus on their time on instruction (Grissom, Egalite, and Lindsay, 2021).

The amount of pay increase that could lead teachers to want to stay in their jobs is likely dependent on changes to hours worked and working conditions. Our results suggest that smaller increases in base salary could improve teachers' well-being and retention if other workplace factors are also addressed. Other research supports this idea. American workers in general value improvements in their working conditions in lieu of a salary increase and teachers value other benefits (e.g., subsidizing the costs of child care or additional school counselors) as much as a 10 percent salary increase (Maestas et al., 2017; Lovison and Mo, 2022). Larger increases in base pay might be necessary to improve well-being and job satisfaction if teachers cannot decrease the hours they work or if other working conditions are not also addressed.

Some district leaders and federal and state policymakers have already taken action to increase teacher pay in various ways. Some increases entail large percentage point increases across the salary scale that were negotiated in collaboration with teachers' unions (e.g., Los Angeles Unified School District and New York City Public Schools) (Blume, 2023; Aponte, 2023). Some state-level measures set minimum starting salaries (e.g., Massachusetts and Missouri) while others propose increases in base salary for all teachers (e.g., Texas), often in combination with an array of other changes to teacher pay (e.g., performance-based bonuses) (Aranda-Comer, 2023). At the federal level, the Pay Teachers Act proposes to raise minimum public school teacher salaries nationwide to \$60,000 (U.S. Senate, 2023b).

Thus, there are opportunities for federal and state policymakers and for district leaders to take action to increase teacher pay to improve retention, but the interplay between each of these actors is complex. Of course, any changes to teachers' hours worked or pay will require contractual adjustments and the involvement of teachers' associations or unions in states where collective bargaining is required or allowed.

Changes to teachers' hours worked or pay will also require additional funding from sustainable sources. This funding could come from increases in education funding at the federal, state, or local levels, or, if increases in funding are not possible, from reductions in spending on other aspects of education. The interrelationships among teachers' pay, work hours, and working conditions suggest that there are many possible paths to improving teachers' well-being and job satisfaction and to sustainably fund any changes. Thus, each locality will need to collaborate with relevant local stakeholders and consider what trade-offs may be necessary to develop policies and identify sustainable funding.

## Recommendations

Our findings imply two main recommendations that could inform the design of programs and policies to improve teacher well-being and retention.

### Increase Teacher Pay Alongside Efforts to Improve Working Conditions

Policymakers should clearly articulate their goal (or goals) for pay raises to improve teacher retention and should tailor policies accordingly. Educator labor markets are local, and policy goals are likely to vary by locality. For example, some localities might aim to retain novice teachers, others might need to retain experienced teachers, and still others might prioritize filling vacancies in high-need grades and subjects. Each of these goals will require a different approach to structuring pay increases and will have different implications for different groups of teachers.

State policymakers and local leaders have different levers that they can pull to increase teacher salaries. For example, state leaders can set minimum amounts for starting salaries and throughout the salary schedule. Local leaders—in collaboration with teachers' unions or associations, if in a state where collective bargaining is allowed or required—can increase starting salaries and salaries throughout the pay scale beyond the minimums set by states.

Because cost-of-living and working conditions drive teachers' desired salaries, policymakers

should consider the cost of living and set the size of pay increases relative to efforts to improve working conditions when setting salaries. Increases to base pay could be smaller when accompanied by improvements to working conditions but may need to be larger absent efforts to improve working conditions to meaningfully shift teachers' satisfaction with their pay. Any policies to increase pay should guard against changes that would require teachers to work more hours (e.g., by specifying that teachers will not be required to teach more classes).

Increasing base salaries is not the only way to increase teacher pay. The fact that about one out of every four hours that teachers work per week is uncompensated suggests that district leaders—in collaboration with collective bargaining units, where required or allowed—should expand opportunities for supplemental pay for additional school-related activities. Leaders should ensure that the amount of compensation and the opportunities are equitably distributed.

## Help Teachers Work Fewer Hours per Week

Efforts to reduce the number of hours that teachers work each week (about 53, on average) should focus on minimizing the number of uncontracted hours—particularly uncompensated hours—that teachers work each week. First, district leaders could dedicate more time during the day for teachers to perform the tasks they usually do outside of their contracted hours, such as preparation and grading. Reducing the number of different courses a teacher teaches or increasing planning time are two possible approaches (Gu et al., 2018). Hiring staff to take on teachers' administrative duties or assist with planning or dedicating time for peer collaboration and common planning during the school day could also help reduce uncontracted hours (Butt and Lance, 2005).

Second, district leaders could reduce the amount of time teachers spend providing social, emotional, and behavioral support to students outside of the classroom by increasing the numbers of school counselors, nurses, or psychologists. Third, districts should evaluate efforts to reduce teachers'

hours worked to understand how much time teachers spend on tasks that are core to their job responsibilities and which supports help teachers focus on those tasks.

## Limitations

Our findings are subject to several limitations. First, survey responses consist of self-reported information. Although it 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 or hours worked. We intentionally used the same survey questions for hours worked and base salary as those used on the NTPS so we could compare our results. Although our results for hours worked and contract hours were consistent with the 2020–2021 NTPS results, some researchers contend that self-reports of hours worked, on average, are overestimates. One study found that teachers may be particularly likely to overestimate their hours worked because of the seasonal nature of their work; the estimated magnitude of teachers' overestimations ranged from 2 to 6 hours per week (West, 2014). Nevertheless, the numbers of both uncontracted and uncompensated hours that we observe in our data are large enough that, even if teachers are overestimating their hours worked by 2 to 6 hours per week, our findings still hold.

Second, the strength of the relationships between well-being and working conditions and between well-being and intentions to leave likely varies depending on when the question is asked. An individual's experience of their well-being is not static and can alter weekly or even daily (Podsakoff et al., 2019). The SoT is administered during the same time frame each year (January and early February), so despite possible variations in well-being over the course of the year, we are gathering teacher reports of their well-being at a similar point for each school year.

Third, because of limited space on the survey, we were not able to ask about many working conditions that could be related to teacher well-being. For example, prior research has demonstrated that social and emotional learning supports for students are associated with improved teacher well-being (Steiner

## How This Analysis Was Conducted

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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 and professional experience) and school level (e.g., school size, level, and locale). The 2023 SoT survey purposefully oversampled African American or Black teachers and Hispanic or Latinx 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 Woo, 2023).

This report examines teachers' perceptions of five workplace factors—weekly hours worked, base salary, administrator support, mental health and well-being supports, and relationships with other teachers at their school. To analyze weekly hours worked, we relied on the reports of teachers in the SoT and working adults in the ALP. We excluded respondents' reports of their hours worked if they exceeded 126 hours per week, which we deemed a reasonable maximum. This resulted in the exclusion of two responses in the ALP.

We defined teachers' workplace factors as adequate or described teachers as satisfied with their working conditions if they responded "somewhat adequate" or "completely adequate" or "mostly satisfied" or "very satisfied" to the questions below. We defined teachers' workplace factors as inadequate or described teachers as dissatisfied with their working conditions if they responded "completely inadequate" or "somewhat inadequate" or "not at all satisfied" or "somewhat satisfied" to the following questions:

- How adequate do you consider your base teaching salary to be given your role and work responsibilities?
- How satisfied are you with the total hours you work per week? Think about the hours you work during the school day, before and after school, and on the weekends.
- How adequate are the well-being and mental health supports available to you through your employer, health insurance, or professional association this school year?
- How adequate is the support you receive from your school administrators this school year (2022–2023)?

- How adequate are your relationships with teachers at your school this school year (2022–2023)?

The five measures of teacher well-being used in this report and previously fielded in the 2021 SoT and 2022 SoT are constructed as follows:

1. The *frequent job-related stress* metric measures the percentage of respondents who indicated "often" or "always" to the statement, "Since the beginning of the 2022–2023 school year, how often has your work been stressful?"
2. The *difficulty coping with job-related stress* metric measures the percentage of respondents who, on a 1–5 scale ranging from 1 = Not well at all to 5 = Very well, indicated responses of 1 or 2 to the statement "How well are you coping with the stress of your job right now?"
3. The *symptoms of depression* metric measures the percentage of respondents with a score of 3 or above on the Patient Health Questionnaire-2. These scores are determined by asking respondents to use a scale of 0 = not at all, 1 = several days, 2 = more than half the days, and 3 = nearly every day to report their frequency of the following events: (1) little interest or pleasure in doing things and (2) feeling down, depressed, or hopeless. We calculate a score for each respondent by summing their values across both items, resulting in a minimum score of 0 (i.e., a respondent selecting "not at all" for both items) to a maximum score of 6 (i.e., a respondent selecting "nearly every day" for both items) (Kroenke, Spitzer, and Williams, 2003).
4. The *burnout* metric measures the percentage of teachers who "somewhat agree" or "strongly agree" to at least two of the following four statements: (1) "The stress and disappointments involved in [my job] aren't really worth it," (2) "I don't seem to have as much enthusiasm now as I did when I began [my job]," (3) "I look forward to [my job] in the future," and (4) "I am glad I selected [my job] as a career." Items 3 and 4 were reverse coded to match the directionality of items 1 and 2.
5. The *resilience* metric measures the percentage of respondents who indicated that they "agree" or "strongly agree" to both of the following statements: "I tend to bounce back quickly after hard

times” and “It does not take me long to recover from a stressful event” (Smith et al., 2008).

To compare responses for teachers in schools with different demographic profiles, we matched teachers’ responses to school-level data from the 2020–2021 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 and school characteristics we explored were teacher race and ethnicity, teacher gender, teachers’ years of experience, the school percentage of enrollment of students eligible for free or reduced-price lunch (FRPL), the school percentage enrollment of White students, school locale, and school grade band. We do not report exhaustively on all subgroup estimates on all survey items. We do not report the results for teachers of other races because this group consists of teachers of many different racial and ethnic backgrounds, and it is difficult to draw generalizable conclusions from a group that represents such a variety of backgrounds and experiences.

We used the percentage of students enrolled in FRPL as a proxy for student poverty levels and characterized schools with greater than 50 percent student enrollment in FRPL as “low income.” We determined whether a school served mostly students of color based on data showing the percentage of students enrolled at that school who were White. We used the Common Core of Data’s school-level classifications to group teachers into three grade bands based on its report of the grades the school served (i.e., elementary [kindergarten to grade 5], middle [grades 6 to 8], and high [grades 9 to 12]).

All estimates presented in this report are sample-wide or subgroup-specific estimates that are unadjusted for statistical controls. We used linear regression models to test whether estimates for a particular subgroup differed at the  $p < 0.05$  level from estimates for the reference subgroup in that category without the use of any statistical controls. Subgroup estimates that remained statistically significantly different from reference group estimates after controlling for an array of school- and teacher-level characteristics (e.g., teacher race and ethnicity, gender, and experience and school poverty level, student racial and ethnic composition, urbanicity, and grade level) are denoted with an asterisk (\*) throughout this report. 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 the National Education Association to construct our categories of state-level collective bargaining. The National Education Association provided information indicating the states where collective bargaining is required if teachers choose to vote for union representation (Alaska, California, Connecticut, Delaware, the District of Columbia, 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, 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 analyzed teacher salary data alongside RPPs calculated by the Bureau of Economic Analysis to account for differences in cost of living across the nation (Gascon and Sun, 2018). The RPP is a price index of goods and services constructed through price and expenditure survey data collected through the Consumer Price Index and American Community Survey. RPPs are expressed as a percentage relative to the U.S. average consumer; an RPP of 120 indicates that prices in that area are 20 percent higher than the U.S. average. Separate RPPs are provided for the metropolitan and nonmetropolitan portions for all 50 states and the District of Columbia.

We matched RPPs to school districts by first using school district Geographic Relationship files provided by the Education Demographic and Geographic Estimates (EDGE) program at NCES to identify what portion of each school district was based in a core-based statistical area (CBSA). All school districts located in a CBSA are assigned the metropolitan portion RPP for their state whereas school districts not located in a CBSA are assigned the nonmetropolitan portion RPP for their state. In instances in which a school district fell inside and outside of a CBSA, we assigned a weighted average of the metropolitan and nonmetropolitan portion RPPs in the state. We weighted this average by the proportion of the district’s land area, as measured in the EDGE data, located in a CBSA.

et al., 2023), but we did not ask about it in this survey. Thus, the strength of the relationships between well-being and various working conditions we observed could have changed if we had asked about a different set of working conditions.

Fourth, our survey questions about teachers' perceptions of the adequacy or their satisfaction with various workplace factors were broad, and it is likely that teachers' reasons for considering various factors adequate or satisfactory vary. We present these broad data on teachers' perceptions of adequacy or satisfaction to understand how teachers' perceptions compare with each other, how they vary across teacher subgroups, and how they relate to outcomes like teacher well-being and intentions to leave. Although we asked teachers why they considered each of the workplace factors adequate or inadequate, we did not present these results in this report for brevity; the results are available in our technical report (Doan, Steiner, and Woo, 2023.) There are also specific aspects of hours worked and pay we were not able to ask about. Although we asked about teachers' total working hours, contracted hours, and hours worked for additional pay, we do not know what teachers were doing during those hours or during their uncompensated time. We also did not ask about teachers' total salaries, retirement accounts, pensions, or health insurance. These are potential areas for future research.

Fifth, because of the nature of sampling, teachers' responses represent individual perspectives rather than the perspectives of all teachers in a school or district. Finally, it is possible that numerous other factors unmeasured by this survey, such as holding another job in addition to teaching, marital status, family size, or number of employed adults in the household, could have contributed to the differences across educator subgroups that we observe. Thus, our findings should be strictly interpreted as descriptive characterizations of educators' responses. They are not intended to suggest causality.

## Notes

<sup>1</sup> We do not report the results for teachers of other races because this group consists of teachers of many different racial and ethnic backgrounds, and it is difficult to draw generalizable conclusions from a group that represents such a variety of backgrounds and experiences.

<sup>2</sup> Advanced degrees and total years of teaching experience, which are often key drivers of where teachers fall on salary schedules, were associated with teachers' base salaries. Nationwide, teachers holding a masters' degree or above reported earning \$13,000 more than their peers, and each year of additional teaching experience was reportedly worth an additional \$800 in base salary. We did not find evidence that teachers of different grade bands (e.g., elementary, middle, or high school) or subject areas (e.g., math, English language arts, or science) reported earning significantly different base salaries.

<sup>3</sup> We used regional price parities (RPPs), calculated by the U.S. Bureau of Economic Analysis, as a standard measure of cost of living (Cover, 2016). RPPs express the cost of a collection of goods and services wherein an RPP of 100 is the U.S. consumer average. Thus, an RPP of 110 indicates that these goods and services cost 10 percent more for consumers in that area than for the U.S. average consumer.



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## About This Report

In this report, we draw on surveys of teachers from the American Teacher Panel (ATP) to assess teachers' perceptions of key workplace factors—such as base salary, total weekly hours worked, and administrator support—and we investigate how those perceptions relate to teachers' well-being and intentions to leave their jobs. The ATP is a nationally representative sample of more than 25,000 teachers across the United States and 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. If you are interested in using AEP data for your own surveys or analysis or in reading publications related to the AEP, please email [aep@rand.org](mailto:aep@rand.org) or visit [www.rand.org/aep](http://www.rand.org/aep).

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