The Recession's Impact on Teacher Salaries

Executive Summary

How did teachers fare during the recent economic recession?

In 2011, after the unemployment rate doubled from 5 to 10 percent, the housing market crashed and the stock market took a nose dive, we took an early look at the impact of those economic contractions on teacher employment and found that, while there were isolated layoffs of significance (mostly in California), teachers had been relatively protected from job loss.[1]

But that doesn't mean that the recession didn't hurt teachers, particularly in the area of salary growth. This analysis examines scheduled teacher raises (for a description of these, see page 3 under "How teachers earn raises"). We looked at how these types of raises changed over four school years (2008-09 through 2011-12) in the nation's largest school districts.[2]

Here's what we found:

- On average, teachers continued to get raises post-recession, but the increases were one-third to one-half of what they were at the start of the recession.
- In 80 percent of the districts studied (33 out of 41), teachers had a total pay freeze or pay cut in at least one of the school years between 2008-09 and 2011-12.
- 95 percent of the districts (39 out of 41) froze or cut at least one component of scheduled teacher raises (step increases or annual adjustments) at some point over the four years.
- Of the forty-one districts in our sample, Chicago Public Schools had the highest average raise over the four years at 6.5 percent.

The variations among districts and across years are noteworthy. This paper includes detailed data on 41 districts between 2007-08 and 2011-12. (See Appendix A for a list of districts.)

1 Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey", http://data.bls.gov/timeseries/LNS14000000?data_tool=XGtable, February 2013.

2 We gathered data from the 50 largest districts in the U.S. Forty-one districts provided enough data to be included in the report. See Appendix A for a list of those districts.

Introduction

The recession that began in 2007 led to sustained, multi-year reductions in the revenue streams of school districts, along with many private and public entities.[3] School districts took a variety of actions to absorb these cuts, chiefly by increasing class size, reducing employee pay, eliminating or delaying instructional improvement initiatives, conducting layoffs of school employees, or closing schools.[4] While all of these savings methods impacted teachers, arguably, changes to teachers' pay impacted them the most. For the first time in recent memory, significant numbers of districts cut a component of pay, a sign of the severity of this particular recession.[5]

This report looks at the changes districts made to their salary schedules as well as the rules governing movement on salary schedules during the recession. We first found that, on average, teachers still experienced income growth, though small. Second, we found that most teachers in our sample also experienced pay cuts or freezes at some point during the recession. Freezing or introducing negative annual adjustments was the most common method used to garner savings. The precise cost-cutting methods used and their impact on teachers varied district by district and even, in some cases, teacher by teacher.

Below we summarize the overall trends we found and dig into the details of how districts reacted to the recession.

Scope of Study and Methodology

This report draws on data from the fifty largest U.S. public school districts in 2010-11.[6] Forty-one of the 50 districts responded to our data request with enough information to be included in the study (see Appendix A for a list of districts). For each of these 41 districts, we gathered salary schedules from 2007-08 to 2011-12 and determined whether the district implemented freezes to raises for additional experience or introduced "phantom steps" during these years (for more information on these and other methods for freezing or cutting salaries, see "Methods used for reducing or eliminating raises" on page 7). We then calculated the average annual adjustment to teacher salaries as well as the combined raise from annual adjustments and gaining years of experience.

In most districts, teachers also typically earn raises by earning advanced degrees, taking a course or earning educational units by engaging in some professional development. We restrict our lens in this paper to focus only on the impact of the recession on teachers who already had master's degrees (or the equivalent). We did not examine the recession's impact on raises for earning additional coursework or professional development credits.[7]

3 Center on Budget and Policy Priorities, "New School Year Brings More Cuts in State Funding for Schools", September 2012. http://www.cbpp.org/files/9-4-12sfp.pdf

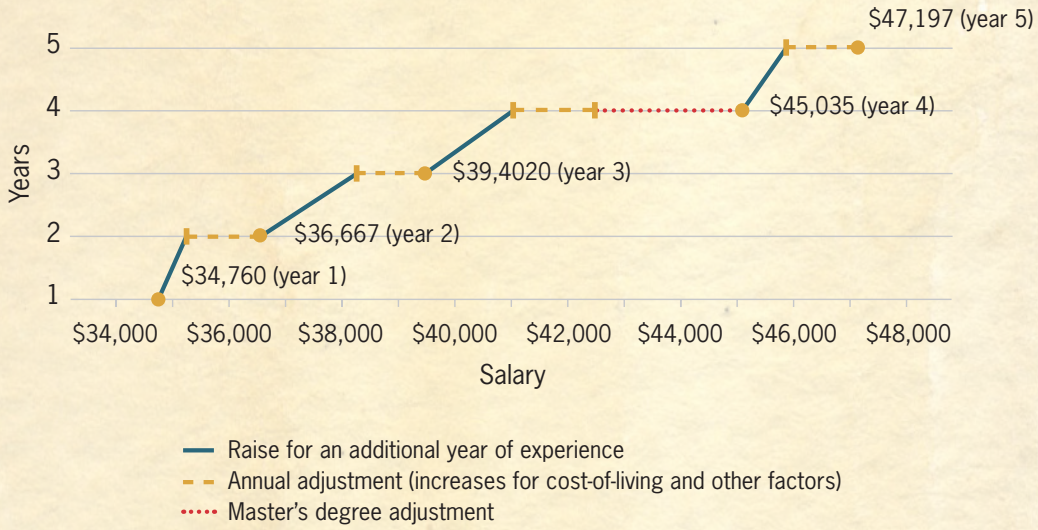
4 American Association of School Administrators, "Weathering the Storm: How the Economic Recession Continues to Impact School Districts," March, 2012.

5 According to data obtained by NCTQ, up to three districts in our sample issued negative annual adjustments each year between school years 2006-07 and 2008-09. Between 2009-10 and 2011-12, a minimum of twelve districts per year issued negative annual adjustments.

6 2010-11 is the most recent year for which the National Center for Education Statistics has districts' student enrollment data.

7 Increases for additional academic credits were not included in this analysis because they depend on an individual teacher's actions rather than a predictable pattern bargained by the district and union.

How teachers earn raises



Teachers earn raises via three different routes in a traditional pay scheme:

- **Annual adjustments** are changes in pay to account for variations in the cost of living (COLA) or market competitiveness. In addition to COLA raises, some adjustments are made because the teacher work day or work year may be extended. These changes are often expressed in percentage increases or decreases. Downward adjustments are rare.
- **Step increases** are increases in pay for accumulating an additional year of experience in the classroom.
- **Lane increases** are increases in pay when a teacher earns a certain number of course credits, advanced degrees or other educational units. These increases are a result of a movement from one "lane" (sometimes called a "column") of the salary schedule to another with a higher rate of pay.

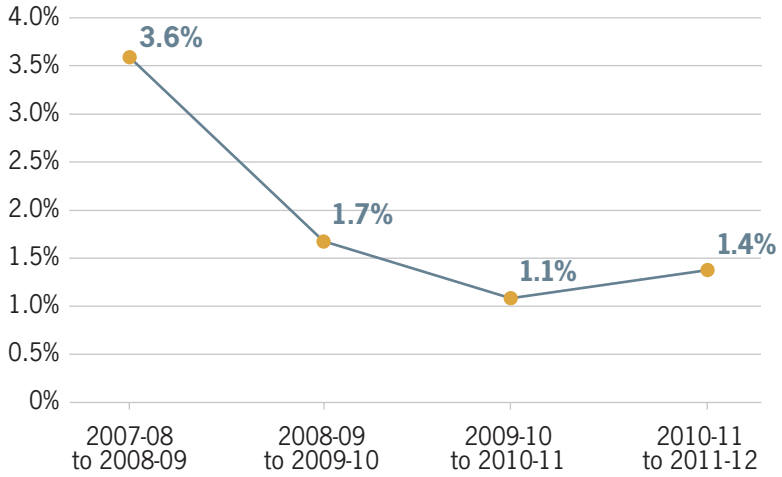
We examined the combined effect of district actions that impacted step raises or annual adjustments as well as the impact of each action independently. Lane increases were not included in this analysis because lane advancement depends on an individual teacher's actions, (a teacher chooses to take course credits or not) rather than a predictable pattern bargained by the district and union.

Overall Salary Trends

On average, teachers in the districts studied received a 3.6 percent raise going into the 2008-09 school year followed by significantly smaller raises over the next three years. This includes raises for earning an additional year of experience (step increases) and annual adjustments that account for factors like inflation.

Average annual teacher raise, 2007-08 to 2011-12

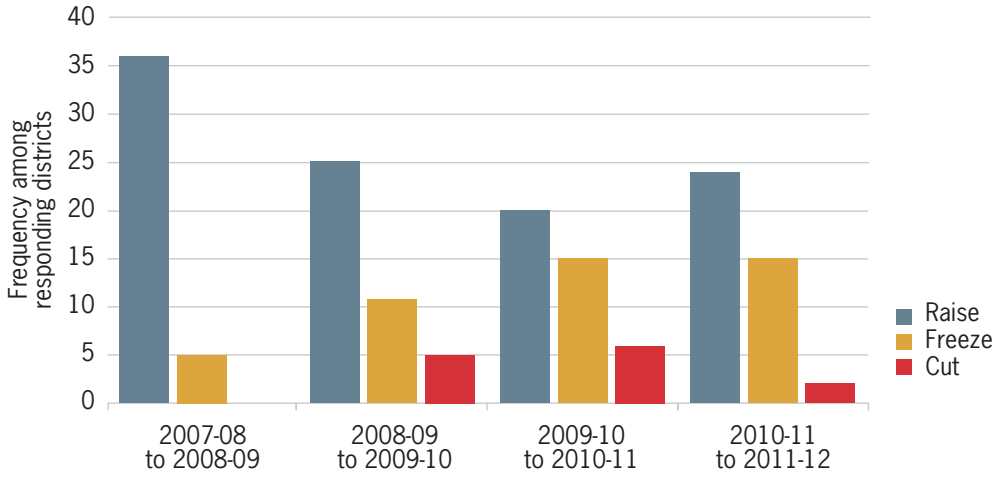
(Awarded for years of experience or annual adjustments)



Just as the recession was hitting, teachers in our sample were earning an average annual raise of 3.6 percent (accounting for years of experience and annual adjustments only). During and after the recession, raises were about one-third to one-half that.

A district-by-district look shows that pay cuts and freezes in pay were driving factors in decreased raises in many districts. Going into the 2008-09 school year, 88 percent of districts in our sample gave their teachers raises; by 2010-11 that rate fell to 49 percent. The vast majority of districts (80 percent) cut or froze teacher pay at least once during this four-year period.

Number of districts cutting, freezing, or raising pay during the recession



Between 2007-08 and 2008-09, 88 percent of the districts gave teachers raises; the remainder froze teacher pay. Between 2009-10 and 2010-11, only 49 percent of districts gave teachers raises, while 37 percent froze teacher pay and 15 percent cut pay.

The table on page 6 shows how much teacher salaries grew or shrunk, on average, each school year between 2008-09 and 2011-12 in each of the 41 districts.

Notable findings:

- Only two districts (Dekalb County, Georgia and Albuquerque) had a net *decrease* in pay over the four years
- No district had a pay cut or freeze every year
- Only eight districts had a positive increase each of the four years:

Fort Worth	Jefferson County, Kentucky
Memphis	Fresno
Milwaukee	Chicago
New York City	Baltimore City

Interestingly, given the strike that occurred in September 2012, Chicago reported the highest average raise (6.5 percent) over the four years. This was due to large annual adjustment increases (of 4 percent) and step increases that averaged around $2,200 for each additional year of experience for the three years between 2008-09 and 2010-11. In the 2011-12 school year the annual adjustment dropped to zero after the school board rejected the anticipated 4 percent annual adjustment.

Combined Impact of Annual Adjustments and Step Increases 2008-09 to 2011-12

	District	State	Avg. Annual Raise: 2008-09 to 2011-12	07-08 to 08-09 Raise	08-09 to 09-10 Raise	09-10 to 10-11 Raise	10-11 to 11-12 Raise
Average			2.0%	3.6%	1.7%	1.1%	1.4%
1	Dekalb	GA	-1.7%	2.5%	-0.5%	-9.1%	0.5%
2	Albuquerque	NM	-0.1%	1.2%	0.0%	-1.7%	0.0%
3	Pinellas	FL	0.3%	0.0%	-0.6%	1.9%	-0.2%
4	Palm Beach	FL	0.5%	1.9%	0.0%	0.0%	0.0%
5	Brevard	FL	0.5%	0.0%	0.0%	1.5%	0.6%
6	Guilford	NC	0.7%	2.9%	0.0%	0.0%	0.0%
7	Charlotte-Mecklenburg	NC	0.8%	3.1%	0.0%	0.0%	0.0%
8	Wake	NC	0.8%	3.1%	0.1%	0.0%	0.0%
9	Broward	FL	0.9%	2.5%	1.0%	0.0%	0.0%
10	Gwinnett	GA	0.9%	3.8%	0.0%	-0.1%	0.0%
11	Hillsborough	FL	0.9%	1.9%	0.0%	1.9%	0.0%
12	Polk	FL	0.9%	0.0%	1.9%	0.0%	1.8%
13	Virginia Beach	VA	0.9%	3.3%	0.0%	0.0%	0.5%
14	Fulton	GA	1.1%	4.3%	0.0%	0.0%	0.1%
15	Miami-Dade	FL	1.2%	0.0%	3.7%	1.0%	0.0%
16	Lee	FL	1.4%	2.8%	-1.8%	2.8%	1.8%
17	Cobb	GA	1.4%	3.7%	-1.0%	1.5%	1.5%
18	Austin	TX	1.5%	0.0%	6.0%	-1.1%	1.0%
19	Prince George's	MD	1.5%	4.5%	1.5%	0.0%	0.0%
20	Anne Arundel	MD	1.6%	5.0%	0.0%	0.0%	1.2%
21	Prince William	VA	1.6%	4.7%	0.1%	0.0%	1.8%
22	Long Beach	CA	1.8%	1.8%	1.8%	-1.0%	4.6%
23	Duval	FL	2.0%	2.6%	2.6%	2.6%	0.0%
24	Dallas	TX	2.0%	2.3%	3.6%	2.1%	0.0%
25	Fairfax	VA	2.0%	4.4%	0.0%	0.0%	3.7%
26	Jefferson	CO	2.1%	5.4%	3.6%	2.6%	-3.0%
27	Houston	TX	2.2%	4.4%	2.9%	1.7%	0.0%
28	Cypress Fairbanks	TX	2.3%	1.0%	2.8%	5.3%	0.0%
29	Granite	UT	2.4%	4.8%	-0.2%	2.4%	2.4%
30	Fort Worth	TX	2.4%	4.5%	3.3%	1.9%	0.1%
31	Greenville	SC	2.5%	5.8%	1.9%	0.0%	2.1%
32	Los Angeles	CA	2.5%	3.0%	3.0%	-0.5%	4.6%
33	Montgomery	MD	2.6%	7.8%	2.7%	0.0%	0.0%
34	Clark	NV	3.0%	7.9%	2.6%	0.0%	1.4%
35	Memphis	TN	3.6%	2.0%	3.9%	3.9%	4.5%
36	New York City	NY	4.1%	8.0%	2.8%	2.8%	2.8%
37	Baltimore City	MD	4.4%	6.7%	2.6%	5.2%	3.2%
38	Jefferson	KY	4.5%	4.0%	3.0%	3.0%	8.2%
39	Milwaukee	WI	4.7%	6.0%	3.4%	3.4%	6.0%
40	Fresno	CA	4.9%	5.2%	5.2%	5.2%	4.1%
41	Chicago	IL	6.5%	7.9%	7.8%	7.6%	2.6%

How districts adjusted pay

Over the four years for which we gathered data, all but two districts used one of the following strategies to reduce raises: a step freeze, a negative or zero annual adjustment, a 'phantom step' or some combination of these.

Methods used for reducing or eliminating raises[8]

Step freezes occur when raises are not given for obtaining an additional year of experience. For example, a teacher currently on Step 5 of a salary schedule (because she has five years of teaching experience with the district) will not move to Step 6 the following year. A step freeze alone will not result in a total pay freeze or reduction unless there is also an annual adjustment cut or freeze.

An **annual adjustment freeze or cut** occurs when no raise (0% annual adjustment) is given for factors like inflation or market forces or, in the case of a cut, pay is decreased (a negative annual adjustment) for teachers across all levels of experience. In most cases, a freeze to the annual adjustment will not necessarily result in a total pay freeze or cut unless coupled with a step freeze.

A new step, sometimes called a "**phantom step**" can be added to the salary schedule and the original first step is repeated twice, essentially shifting salaries down a step, resulting in no increase in pay, even though a teacher moves up a step. Teachers still technically gain a step with each additional year of experience, but since the salaries have also shifted a step downward, the teachers are at the same salary as the year before. Districts sometimes use this approach so that pay can be reduced while still using the "step" to reflect a teacher's years of experience.

Step/Years Experience	School Year 2008-09	2009-10	
0	$41,000	$41,000	← Phantom step
1	$42,000	$41,000	
2	$43,000	$42,000	
3	$44,000	$43,000	
4	$45,000	$44,000	
5		$45,000	

The table on page 8 groups districts by the methods they used to adjust teacher pay over the four years. The groups also show whether those adjustments resulted in a total pay increase, or a total pay freeze or decrease.

8 Districts also shortened school years and used furlough days to reduce salaries or raises. However, we did not identify furloughs as a specific salary reduction method in this paper. We do know that ten districts in our sample—Los Angeles, Hawaii, Gwinnett (GA), Cobb (GA), Long Beach, Fulton (GA), Jefferson (CO), Fresno, Guilford (NC) and Virginia Beach—documented the use of furlough days at least once over the four years. Our calculations incorporated reduced salaries due to furloughs only when the reduced salaries were listed on the salary schedule.

Decreases and Increases

		2007-08 to 2008-09	2008-09 to 2009-10	2009-10 to 2010-11	2010-11 to 2011-12
Total salary cut or freeze	**Step freeze & annual adjustment cut or freeze**	Brevard (FL) Miami-Dade	Anne Arundel (MD Brevard (FL) Dekalb (GA) Gwinnett (GA) Hillsborough (FL) Palm Beach (FL)	Albuquerque Anne Arundel (MD) Broward (FL) Clark (NV) Dekalb (GA) Montgomery (MD) Palm Beach (FL) Polk (FL) Prince George's (MD) Prince William (VA)	Broward (FL) Duval (FL) Hillsborough (FL)* Jefferson (CO) Miami-Dade Montgomery (MD) Palm Beach (FL) Prince George's (MD)
	Addition of phantom steps	Austin Pinellas (FL) Polk (FL)	Albuquerque Charlotte-Mecklenburg (NC) Fairfax (VA) Fulton (GA) Guilford (NC) Lee (FL) Pinellas (FL) Virginia Beach	Charlotte-Mecklenburg (NC) Fairfax (VA) Fulton (GA) Greenville (SC) Guilford (NC) Gwinnett (GA) Virginia Beach Wake (NC)	Albuquerque Charlotte-Mecklenburg (NC) Cypress Fairbanks (TX) Dallas Guilford Gwinnett (GA) Houston Pinellas (FL) Wake (NC)
	Annual adjustment cut only		Cobb (GA) Granite (UT)	Austin Long Beach Los Angeles	
Total salary increase	**Step freeze only**	Albuquerque Anne Arundel (MD) Broward (FL) Dekalb (GA) Lee (FL) Palm Beach (FL)	Broward (FL) Prince George's (MD) Prince William (VA)	Brevard (FL) Fort Worth Miami-Dade	Anne Arundel (MD) Austin Dekalb (GA) Prince William (VA)
	Annual adjustment cut or freeze only	Cypress-Fairbanks (TX) Fresno Hillsborough (FL) Long Beach Los Angeles	Baltimore City Clark (NV) Duval (FL) Fresno Greenville (SC) Long Beach Los Angeles Milwaukee Montgomery (MD) New York City	Cobb (GA) Duval (FL) Fresno Granite (UT) Hillsborough (FL) Jefferson (CO) Milwaukee New York City	Brevard (FL) Chicago Clark (NV) Cobb (GA) Fresno Granite (UT) Lee (FL) New York City Polk (FL) Virginia Beach
	Addition of phantom steps		Wake (NC)		Fort Worth Fulton (GA)
	Annual adjustment increase, step increase	Baltimore City Charlotte-Mecklenburg Chicago Clark (NV) Cobb (GA) Dallas Duval (FL) Fairfax Fort Worth Fulton (GA) Granite (UT) Greenville (SC) Guilford (NC) Gwinnett (GA) Houston Jefferson (CO) Jefferson (KY) Memphis Milwaukee Montgomery New York City Prince George's (MD) Prince William (VA) Virginia Beach Wake (NC)	Austin Chicago Cypress-Fairbanks (TX) Dallas Fort Worth Houston Jefferson (CO) Jefferson (KY) Miami Memphis Polk (FL)	Baltimore City Chicago Cypress Fairbanks (TX) Dallas Houston Jefferson (KY) Lee (FL) Memphis Pinellas (FL)	Baltimore City Fairfax (VA) Greenville (SC) Jefferson (KY) Long Beach Los Angeles Memphis Milwaukee

* Hillsborough County, Florida froze steps in 2011-2012, but then gave each teacher a one-time payment of $750.

Annual adjustment increases in the chart reflect positive annual adjustments when averaged over all steps. There were several districts—including Dallas; Duval County, Florida; Memphis; Miami-Dade; Houston; and Greenville, South Carolina—that issued a mix of positive and zero annual adjustments, depending on a teacher's level of experience. In all cases these mixed annual adjustments resulted, on average, in an overall positive annual adjustment.

Likewise, in districts with phantom steps that still had overall salary growth, most teachers saw salary freezes but some saw an increase, resulting in an average overall positive salary increase. Wake County, North Carolina, for example, added a phantom step to its 2009-10 salary schedule but then gave teachers on every fifth step a salary increase, resulting in small overall salary growth.

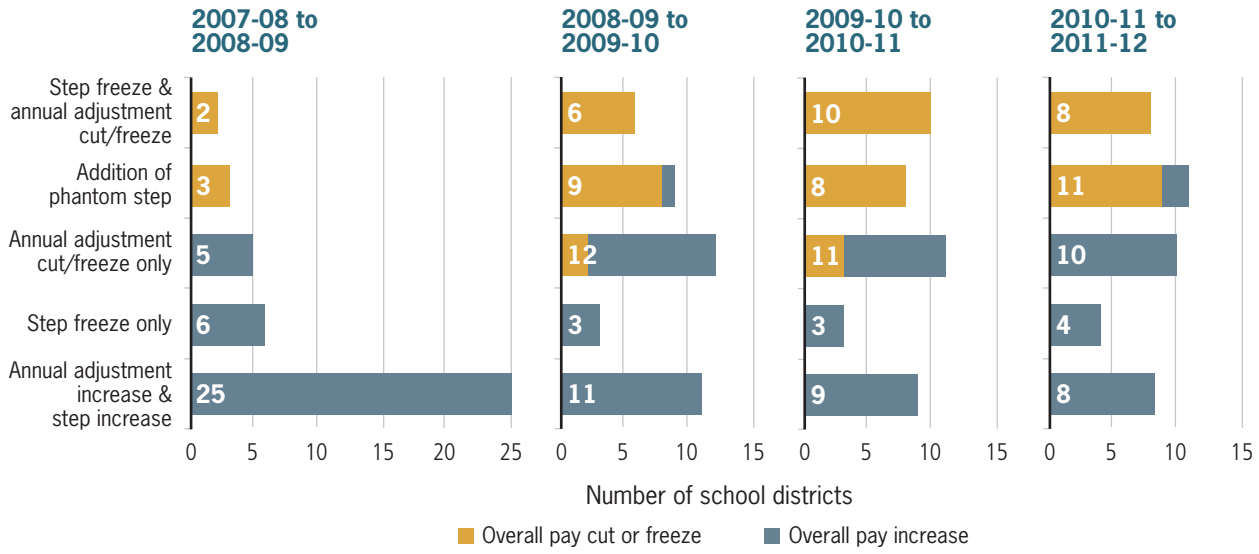
Adjustment trends

Cutting or freezing annual adjustments was the most popular method of reducing raises. From 2008-09 through 2011-12, districts used the following methods to reduce raises at least once:

- 73 percent (30 of 41) cut or froze annual adjustments
- 46 percent (19 of 41) froze movement for years of experience (step freeze)
- 41 percent (17 of 41) introduced a phantom step

Below is a year-by-year breakdown of the types of adjustments districts made to salaries. The yellow bars represent overall salary decreases or freezes and the blue bars show total salary growth. Bars with mixed colors indicate that some districts using that particular salary adjustment method experienced salary freezes or reductions, while others still had positive growth.

How salary adjustment methods changed during the recession



Districts used various methods to reduce raises and cut or freeze pay. The most popular method—used by nearly 75 percent of districts at least once between 2008-09 and 2011-12—was freezing or using negative annual adjustments.

It's possible that freezing or issuing negative annual adjustments was more palatable politically than taking away raises for years of experience (i.e., instituting a step freeze), since annual adjustments are meant to account for factors in flux like market forces and cost-of-living.

Disparate impacts on teachers

While districts used different methods to meet overall financial savings targets, the approaches had disparate impacts on teachers depending on their levels of experience.

Positive changes made using a percentage of a salary, by definition, have a greater impact on higher earners. A 5 percent change in someone's salary who is earning $75,000 is more significant than a 5 percent change in someone's salary who is earning $50,000.

Freezing raises for experience can have more of an impact on novice teachers because most districts tend to increase pay more frequently in the earlier years of the salary schedule.

Below are two of many examples of the different impacts changes can have on teachers depending on how long they have been working:

A negative annual adjustment leads to pay increases and pay cuts

In 2009-10, Cobb County, Georgia instituted an across-the-board annual adjustment of *negative* 2.5 percent. However, they did not freeze teacher's step *increases*. The result? For some teachers, the net effect was a pay increase of up to 1.9 percent. For more teachers, the net effect meant up to 2.5 percent decline in pay; the negative annual adjustment outweighed any step increase.

Cuts that vary widely with years of experience

In 2010-11, Albuquerque froze all raises for years of experience. They also froze or cut pay by issuing negative annual adjustments ranging from 0 to 9 percent, depending on teachers' years of experience. Teachers on the first five salary steps (those with the least experience) were the most fortunate; they simply had pay freezes. Most other teachers received annual adjustments between negative 1 and negative 5 percent, resulting in pay cuts up to $2,400. Hardest hit were teachers on the thirty-ninth step of the salary schedule. They had a *negative* 9 percent annual adjustment, which translated to a pay cut of $6,500.

How these findings compare to other professions

Clearly, teachers were not the only professionals who experienced a slow-down in salary growth during the recession. According to data from the Bureau of Labor Statistics, teachers' raise reductions were on par with almost all of the comparable professions we examined.[9] Architects, accountants, and mechanical engineers were harder hit than teachers, but not significantly so. It is interesting to note that in all of these professions, salaries did continue to grow.

Changes in median salaries

	May 2007 to May 2008	May 2010 to May 2011
Architects	4.0%	1.1%
Accountants	4.2%	1.9%
Mechanical engineers	3.6%	1.4%
Registered nurses	4.1%	1.9%
Elementary teachers	**4.2%**	**2.3%**
Guidance counselors	3.2%	1.4%
Secondary teachers	**3.6%**	**2.0%**
Computer programmers	2.3%	1.8%
Reporters	0.5%	1.0%
Social workers	0.9%	4.7%

Data source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Employment Statistics. http://www.bls.gov/oes/oes_dl.htm

Comparable professions showed a reduction in raises during the recession. Teachers' raise reductions were on par with many other professions.

Conclusion

There's no doubt that the recession had a measurable impact on teacher salaries. While the methods districts chose varied, nearly every district in our sample slowed the pace of teacher salary growth in response to the economic downturn. Even with the slower pace of raises, small increases in pay occurred in most districts over the time period. As districts begin to invest more in teacher pay, we expect the grip of traditional step-and-column salary schedules to loosen, making room for strengthened connections between teacher effectiveness and teacher pay.

9 The BLS data is a reflection of actual salaries for all professions in the table, including teachers. The teacher salary data presented in this paper comes from salary schedules rather than individual teacher salaries.

Appendix A: Data Collection and Methodology Details

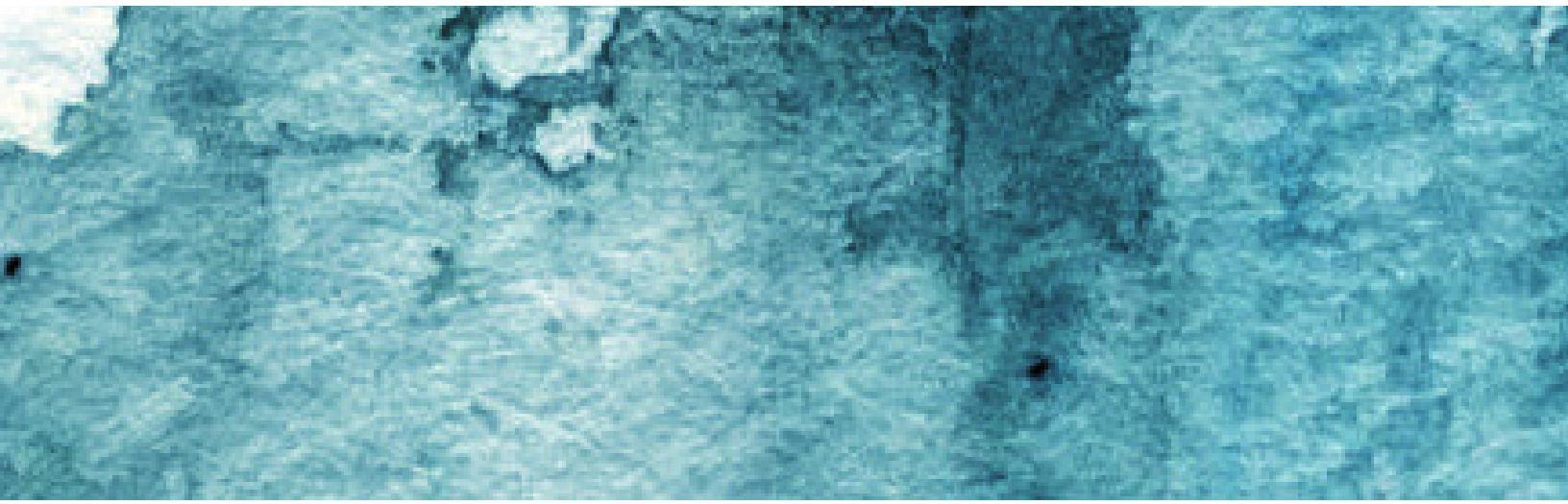
The research for this paper began with a sample of the 50 largest public school districts in the United States as of 2010-11. Salary schedules from the 2007-2008 through 2011-2012 school years were collected from each of these districts. NCTQ then reached out to these districts via email and phone in order to determine movement of individual teachers on the salary schedules from year to year.

We received complete data from 41 districts. These districts comprised the sample on which we based this paper's findings. The 41 districts are:

- Albuquerque
- Anne Arundel County (MD)
- Austin
- Baltimore City
- Brevard County (FL)
- Broward County (FL)
- Charlotte-Mecklenburg (NC)
- Chicago
- Clark County (NV)
- Cobb County (GA)
- Cypress-Fairbanks (TX)
- Dallas
- Dekalb County (GA)
- Duval County (FL)
- Fairfax County (VA)
- Fort Worth
- Fresno
- Fulton County (GA)
- Granite (UT)
- Greenville (SC)
- Guilford County (NC)
- Gwinnett County (GA)
- Hillsborough County (FL)
- Houston
- Jefferson County (CO)
- Jefferson County (KY)
- Lee County (FL)
- Long Beach
- Los Angeles
- Memphis
- Miami-Dade
- Milwaukee
- Montgomery County (MD)
- New York City
- Palm Beach County (FL)
- Pinellas County (FL)
- Polk County (FL)
- Prince George's County (MD)
- Prince William County (VA)
- Virginia Beach
- Wake County (NC)

Of the 50 largest districts, nine did not provide enough information to be included in the report:

- Baltimore County
- Detroit
- Denver
- Hawaii
- Metropolitan Nashville
- Northside (TX)
- Orange County (FL)
- Philadelphia
- San Diego



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