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spotlight

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LEARNING ABOUT TEACHER PAY

North Carolina already ranks 11th in compensation

S U M M A R Y: Governor Easley announced that North Carolina will raise its average teacher salary to the national average in three years. Adjusted for cost of living, pension contribution, and teacher experience, however, the state's average teacher salary ranks 11th in the nation and is about \$1,600 above the national average. There is no evidence to support the governor's contention that a higher average salary will aid in recruiting and retaining a high-quality teacher workforce or will make students more competitive in the global economy. A system of merit-based pay would provide an incentive for highly qualified individuals to enter and stay in the teaching profession.

n an effort to raise teachers' salaries "above the national average," Gov. Mike Easley announced that teachers in North Carolina will receive a \$600 raise for the 2005-2006 school year and a 5 percent raise over the next three years. According to the National Education Association, North Carolina's average teacher salary is \$43,313, or \$4,437 less than the national average of \$47,750. Easley will finance the raises using an \$85 million reserve fund included in this year's budget and will ask the General Assembly for an additional \$150 million a year for pay increases in upcoming years. If the legislature approves the governor's plan, North Carolina's average nominal salary will be approximately \$52,206 for the 2008-2009 school year, the projected national average for that year.

Yet, teachers in North Carolina do not need a pay raise to exceed the national average teacher salary. When adjusted for cost of living, pension contribution, and teacher experience, North Carolina ranks 11th in the nation in teacher salary and comes in at approximately \$1,600 more than the national average (Table 1). This places North Carolina in the top 25 percent of states in terms of teacher pay. This is partly attributable to North Carolina's relatively low cost of living, which in 2005 is about 95 percent of the national average. This means that a dollar in salary received by a teacher in North Carolina buys more than a dollar of teacher salary in states such as New York or Connecticut.

North Carolina's 2003-2004 adjusted teacher pay is also one of the highest in the South. Only Georgia and Kentucky have a higher adjusted teacher

salary, primarily because they are states with a lower cost of living than North Carolina. In addition, states in the region that compete with North Carolina for teachers rank significantly lower in adjusted average salary. Virginia ranks 29th, Maryland ranks 33rd, and Florida ranks 34th in the final ranking. The adjusted average salary for North Carolina teachers is over \$6,000 more than Virginia, over \$7,000 more than Maryland, and over \$8,000 more than Florida. Thus, North Carolina has one of the most attractive teacher salaries of any state in the region.

Making Sound Comparisons of Teacher Pay

Adjusting for cost-of-living differences is one way to make a more accurate comparison of teacher salaries from state to state. Obviously, a teacher's salary is relative to how much it costs for a teacher to live in a state. States with a high cost of living, such as Connecticut, California, and New York, often have a higher average pay because teachers in these states must pay more for living expenses such as food, housing, transportation, and utilities. One illustration of this is that the 2004 median value of a home in Nassau County, New York was \$420,903, while the median value of a home in Mecklenburg County was \$155,358.² Thus, any ranking of unadjusted teacher's salaries, whether starting wages or average salaries, yields little useful information.

Nevertheless, cost of living cannot be the only factor that is used in a state-by-state comparison. Why? Even salary figures adjusted for the cost of living do not account for the fact that teachers receive benefits as part of their compensation. Although no state-by-state information is available to compare health care, vacation, and other non-

Table 1. Adjusted Teacher Compensation By State

Ostata al Danala	Caa.	Average Salary, 2003-043	Pension Match, 2004 ⁴	Average Years of	Cost of Living Index, 2005 ⁶	Final Administration	Adjusted Rank .
Original Rank	State Georgia	\$45.848	9.2% 14.0% 6.5%	Experience, 2002 ⁵	0.904	Final Adjusted Salary \$61,149 \$61,089	Aujusiea Kalik 1
6	Illinois	\$45,848 \$53,820	14.0%	15.7	0.953	\$61,089	2
Š	Michigan	\$54,474 \$47,791 \$39,831 \$38,976 \$40,476 \$51,136	6.5%	15.5	1 006	CEE 132	3
14	Ohio	\$47,791	14.0% 14.8% 11.7% 6.0% 11.8%	15.3 13.7 12.9 13.3	0.967 0.921 0.935 0.894	\$53,430 \$54,868 \$53,978 \$53,782 \$53,765 \$53,404	
14 34	Kentucky	\$39,831	14.8%	13.7	0.921	\$53,978	<u>4</u> 5
38 30	Utah	\$38,976	11.7%	12.9	0.935	\$53,782	6
30	Texas	\$40,476	6.0%	13.3	0.894	\$53,765	7
10	Alaska	\$51,136	11.8%	12.4	1.286	\$53,404	8
11	Delaware	\$51,122 \$47,829 \$43,211 \$56,444 \$45,791 \$39,226	1.4% 12.7% 4.8% 11.5% 16.0%	14.2	1 024	\$53,118	9
13 23	Oregon	\$47,829	12.7%	14.5 13.6	1.053 0.954	\$52,616	10
23	North Carolina	\$ <u>4</u> 3,211	4.8%	13.6	0.954	Ş <u>52,006</u>	11
16	California	\$56, <u>444</u>	11.5%	13. <u>5</u>	1.363 0.937 0.869 0.916	<u> </u>	12
16	Indiana	\$45,791	16.0%	16.7	0.937	\$50,561	13
37	Arkansas	\$39,226	12.0% 10.5%	14.9 13.6	0.869	\$50,556	1 <u>4</u> 15
44	Missouri	330.Z4/	10.5%	13.6	0.916	\$53,404 \$52,616 \$52,006 \$50,953 \$50,561 \$50,556	15
	US Average	\$46,597	8.2%	14.9	1.000		
26 31	Arizona	\$42,324 \$40,318 \$38,282	5.7% 3.4% 6.6%	13.1	1.015 0.894 0.910	\$50,416 \$50,131 \$49,630 \$49,477 \$49,355 \$49,260 \$48,854 \$48,578 \$48,578 \$48,564 \$47,672	16 17
31	Tennessee	\$40,318	3.4%	14.0	0.894	\$49,630	17
43	Alabama	\$38,282	6.6%	13.5	0.910	\$49,4//	18
21 28 22 32	Colorado _I	\$43,318 \$41,162 \$43,211 \$40,111 \$54,809 \$35,061	9.3% 7.6%	14.7 14.2	0.972 0.943	\$49,355	19 20 21
28	South Carolina	\$41,162	7.6%	14.2	0.943	\$49,260	20
22	Neyada	\$43,211 \$40,111	9.8%	12.8 14.6	1.130	\$48,834 \$40,570	21
4	ldaho Rhode Island	\$40,111	9.8% 14.8%	15.4	0.925 1.254	348,3/8	22 23
49	Oklahoma	\$34,609	11.8%	13.4	0.881	340,304 \$47,472	23
47	Louisiana	\$35,001 \$37,123 \$45,010 \$38,469 \$38,622 \$43,936 \$52,640	13.1%	13.7	0.001	\$44,072 \$46,785 \$46,432 \$45,983 \$45,943 \$45,910 \$44,719 \$44,518 \$43,862	24 25 26 27 28
46 19	Minnesota	\$45,010	5.0%	13.9 15.1	0.962 1.001	\$46,783	26
41	New Mexico	\$38,460	8.7%	12.5	1.001	\$46,300	27
39	Kansas	\$38,422	4.8%	14.3	0.917	\$45,983	28
20	Virginia	\$43,936	4.8% 3.8% 1.2%	14.3 16.6	1.073 0.917 1.034	\$45,943	29 30
20 9	Pennsylvania	\$52,640	1.2%	16.6	1 041	\$45,910	30
35	Virginia Pennsylvania Nebraska	\$39,635 \$56,516 \$50,303	7.3% 9.3%	15.8	0.897 1.274	\$44.719	31 32 33
1	Connecticut	\$56,516	9.3%	15.8 16.2	1.274	\$44,584	32
12	Maryland Florida	\$50,303	9.4%	14.6	1.261	\$44,518	33
29	Florida	\$40,598	6.2%	14.5	1.010	\$43,862	3.4
29 27 47	Wisconsin	\$41,687	3.8% 9.8%	15.5	0.954 0.905	\$43,602	35
47	Mississippi	\$36,217	9.8%	15.1	0.905	\$43,339	36
3	Mississippi New York Washington	\$55, <u>181</u>	4.5% 1.3%	15.5 15.1 15.6	1.299	\$43,602 \$43,602 \$43,339 \$42,399 \$42,147	35 36 37 38
18	Washington	\$45,437	1.3%	15.0	1.085	\$42,147	38
N/A 45	District of Columbia	\$62,909	7.7% 7.6%	17.6	1.414	\$40,546	39 40
45	Montana	\$37,184	7.6%	15.4	1.007	\$40,144 \$40,546 \$38,435 \$38,226 \$38,125 \$37,948	40
24 36	Vermont	\$43,009	4.7% 5.7% 15.0%	15.3 15.9 19.4	1.147	\$38,226	41 42 43
36	Wyoming West Virginia	\$39,53/	5./% 15.0%	15.9	1.027	\$38,125	42
40 50	South Dakota	338,490	15.0%	19.4	0.896 0.936	337,748 \$27,002	43 44
30	South Dakota	333,230	0.0% 4.0%	14.8	0.930	337,893	44
8 42	Massachusetts	\$33,2/4 \$39,301	6.0% 5.8%	17.2 17.0	1.305 0.953	\$37,748 \$37,893 \$37,486 \$37,329 \$37,102	45 46
42	lowa North Dakota	\$35,301 \$35,411	4.1%	16.2	0.933	\$37,329 \$37,102	40
48	New Jersey	\$40,598 \$41,687 \$36,217 \$55,181 \$45,437 \$62,909 \$37,184 \$43,009 \$39,537 \$38,496 \$33,236 \$53,274 \$38,381 \$35,411 \$53,663	0.0%	16.2	1.344	\$37,102	48
17	New Jersey Hawaii	\$45,456	11.5%	13.7	1.578	\$36,72 <u>4</u> \$34,929	49
33	Maine	\$39,864	19.3%	16.9	N/A	QU-4,727	7/
25			4.0%	15.8			
25	New Hampshire	\$42,689	4.0%	13.8	N/A		

wage factors, data on employer contributions to teacher pension programs for 2004 are available.⁷

The source and conditions of employer pension contributions vary according to the regulations of each state. For example, states may mandate that a school district, the state, or both a district and state contribute to a pension program. In some states, teachers have the option of enrolling in a state retirement system or one reserved exclusively for public school employees. Teacher pension programs often give public school employees more flexibility and have a higher employer contribution rate than retirement programs for other state employees.

Moreover, teacher experience is a necessary factor to include in any comparison of teacher salaries. Teachers are paid on a scale that increases their salary for each additional year worked. States with a more experienced teacher workforce will have a higher average salary, which will skew the comparison with states that have less-experienced teachers. By adjusting for this factor, the experience or inexperience of the workforce will not distort comparisons of average teacher salaries for each state, leading to a much more accurate salary comparison at a given level of seniority.

It should be emphasized that 2003-2004 teacher salary estimates offered by the National Education Association and the American Federation of Teachers do not take into account factors such as pension contributions and teacher experience that more accurately represent how much teachers make in North Carolina and across the country. In fact, the most recent salary study conducted by the American Federation of Teachers does not adjust salaries for cost of living for state-by-state comparisons. For these reasons, government officials should not rely on salary rankings produced by teacher's unions to make informed policy decisions.

Why Increase Teacher Pay?

With a recent decline in performance on the NAEP (National Assessment of Education Progress) tests and no improvement on North Carolina's End-Of-Grade ABC tests for the last three years, there is no evidence that teachers merit a pay raise. With the exception of performance bonuses for schools meeting or exceeding growth projections, the state does not have a system of teacher pay based on merit. Instead, teachers are paid according to years of service, degree(s) earned, and other credentials such as National Board Certification or graduate degrees. School districts often add a supplement to the state pay scale, and teachers may earn additional pay by coaching a sports team or chairing a department.

Accordingly, Easley's reasons for increasing teacher pay are not based on student performance. Instead, the governor and legislative leaders argue that teacher pay increases are required to compete in the global economy and to recruit and retain high quality teachers.⁹ Although these are laudable goals, there is no evidence that having teacher salaries that further exceed the national average will accomplish them.

Facing economic competition from abroad, schools in the United States must improve students' reading and writing skills, foreign language acquisition, and math and science education. Yet, there is no evidence that higher average teacher pay leads to better student performance in international comparisons. According to the Organisation for Economic Cooperation and Development (OECD), Switzerland and the United States are two of the countries with the highest average teachers' salaries at the secondary level. Despite high salaries, the United States has some of the lowest scores on international assessments of any OECD member nation. Student performance on the PISA (Programme for International Student Assessment) mathematics test placed the United States tied for 21st place with Poland, Hungary, and Spain. Student performance on the PISA problem-solving test placed the United States tied for 23rd place with Spain, Portugal, and Italy. 10

There is also no evidence that higher average salaries will aid in recruiting and retaining a high-quality teacher workforce. In a recent study of teacher quality among schools in Texas, a group of prominent researchers found that schools with higher average salaries did not attract higher-quality teachers than schools with lower average salaries did. Instead, some schools are able to choose new hires from a deeper applicant pool, increasing the chances that they will hire a high-quality teacher. With regard to teacher retention, the 2005 *Condition of Education* special report "Mobility in the Teacher Workforce" showed that teachers were most likely to leave their school because of

concerns about planning time (60 percent), workload (51 percent), and class size (50 percent). The results were nearly identical for highly qualified teachers. In both cases, fewer than half of the teachers that left their school were dissatisfied with their salary. Thus, if you want to solve the teacher shortage problem by improving recruitment and retention, average salary increases are not the place to start.

Getting Our Money's Worth

Across-the-board raises unrelated to performance serve to reward both good teachers and mediocre ones, thus doing little to help students learn. In a state that must hire thousands of teachers every year, North Carolina would be well served by expanding its pool of applicants beyond graduates of teacher education programs and out-of-state applicants that meet state certification requirements. A system of merit-based pay, along with streamlined certification requirements, would provide generous incentives for highly qualified individuals to enter and stay in the teaching profession.

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Notes

- 1. The provision is contained in Section 2.2.(j) of the enacted budget for 2005.
- 2. U.S. Census Bureau, "2004 Median Value (Dollars) For All Owner-Occupied Housing Units," 2004 American Community Survey, http://factfinder.census.gov/servlet/DatasetMainPageServlet? program=ACS& lang=en& ts=.
- 3. American Federation of Teachers. Survey and Analysis of Teacher Salary Trends, 2004, October 2005, p. 24.
- 4. National Education Association. *Characteristics of Large Public Education Pension Plans*, 2004, pp. 52 57. For Massachusetts, the following was used: Retired Educators Association of Massachusetts (REAM), "A look at Pensions, Taxes and Re-employment: Section E, Table 3," 2003, http://www.ream1951.org/retirementplan.htm#introduction.
- 5. American Federation of Teachers. Survey and Analysis of Teacher Salary Trends, 2002, 2003, p. 15. AFT did not include state-by-state teacher experience figures in its 2004 teacher salary study. The 1999-2000 Schools and Staffing Survey (SASS), conducted by the National Center for Education Statistics, is still the standard source for information on teacher experience. The 2002 AFT teacher salary study supplemented SASS data using its annual survey of state departments of education.
- 6. Missouri Economic Research and Information Center, "Cost of Living: 2nd Quarter 2005," http://www.ded.mo.gov/researchandplanning/indicators/cost of living/index.stm. The composite index number is used here, which is a composite of grocery, health care, housing, transportation, utilities, and miscellaneous cost indexes by state. A composite index number was not available for Maine and New Hampshire.
- 7. Christina Stoddard's recent study "Adjusting Teacher Salaries for the Cost of Living: The Effect on Salary Comparisons and Policy Conclusions" (July, 2003) makes a good case for including area amenities and opportunities, and other "hedonic" adjustment suggested by Jay Chambers and others may do well to account for non-pecuniary factors like working conditions and amenities. Nevertheless, such measures are best for school, district, and county level analyses because teachers are more attuned to amenities and working conditions on a local, not state, level. For a good discussion of related issues, see William J. Fowler Jr. and David H. Monk, A Primer For Making Cost Adjustments in Education, National Center for Education Statistics, 2001, http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001323.
- 8. Op.cit. at note 3, pp. 21-30.
- 9. Office of the Governor, "Gov. Easley Announces Plan To Raise Teacher Salaries," October 25, 2005, http://www.governor.state.nc.us/News-FullStory.asp?id=2538.
- 10. Organisation for Economic Co-operation and Development, Education at a Glance 2005 Briefing Note, http://www.oecd.org/document/34/0,2340,en-2649-201185-35289570-1-1-1,00.html#Tables.
- 11. Eric A. Hanushek, John F. Kain, Daniel M. O'Brien, and Steven G. Rivkin, "The Market for Teacher Quality" NBER Working Paper No. 11154, February 2005, http://www.nber.org/papers/w11154.
- 12. U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 2005*, NCES 2005-094, Washington, DC: U.S. Government Printing Office.