



\$CHOOLS IN CRISIS: MAKING ENDS MEET

K–12 Job Trends Amidst Stimulus Funds

Early Findings

Marguerite Roza, Chris Lozier, and Cristina Sepe

March 16, 2010

In February 2009, with some 600,000 education jobs threatened by the worst fiscal downturn in decades,¹ the American Recovery and Reinvestment Act (ARRA) allocated about \$100 billion to states. Topping the list of ARRA's goals was saving and creating jobs.² Since then, states have had to provide quarterly estimates of ARRA-funded jobs,³ and yet these reports stop far short of telling the whole story on whether the stimulus plan is meeting its job goals. Some have voiced methodological concerns,⁴ and many have acknowledged that identifying those jobs paid for by ARRA funds does not imply that the jobs were indeed saved or created.⁵

The larger question that has been left unanswered, however, is whether ARRA has indeed worked to stabilize education employment from what otherwise might have been heavy losses in the current fiscal environment. Or for some, a parallel question is whether ARRA has prompted states to grow their education workforce, thereby making them more vulnerable to a “funding cliff” with larger layoffs when ARRA ends. Answering these questions requires evidence of the greater trend in total K–12 jobs, not just the trends in ARRA-funded jobs.

Rather than waiting for standard employment reporting to be available later this year, this brief seeks early answers by first tracking what has been happening to total K–12 education jobs (not just ARRA-funded jobs). The analysis then uses a

¹ Text of speech by Secretary of Education, Arne Duncan, February 9, 2009, available at <http://www2.ed.gov/news/speeches/2009/02/02092009.html>.

² Recovery.gov, available at http://www.recovery.gov/About/Pages/The_Act.aspx.

³ U.S. Department of Education website, <http://www2.ed.gov/policy/gen/leg/recovery/spending/arra-program-summary2.pdf>.

⁴ *Recovery Act, Recipient Reported Jobs Data Provide Some Insight into Use of Recovery Act Funding, but Data Quality and Reporting Issues Need Attention*, Government Accountability Office, November 2009.

⁵ McGurn, W., “The Media Fall for Phony 'Jobs' Claims,” *Wall Street Journal*, June 10, 2009.

fiscal model to more reliably identify the number of jobs paid for with ARRA funds. Finally, the brief combines the data sets to answer the question of what role ARRA is playing in overall education employment.

Early trends suggest K-12 employment declining

In order to access employment numbers mid-school year (SY10), this analysis sought the most recent employment figures directly from the states. With reports on SY10 employment figures not yet available in most states, data collection relied on the most updated figures as supplied by state education department officials. Data collection between January and February 2010 surfaced employment data from 21 states. Comparisons with published SY09 employment figures were used to compute a percentage change in employment for each state.

As Figure 1 shows, in 13 of the 21 states, total K-12 employment declined from SY09 to SY10 (see Appendix for totals), whereas in 8 states, employment grew. Compiling findings across the 21 states indicates an average job decline of 1.4 percent from 2009 to 2010.

Figure 1: Majority of states with 2010 data show a reduction in K-12 jobs

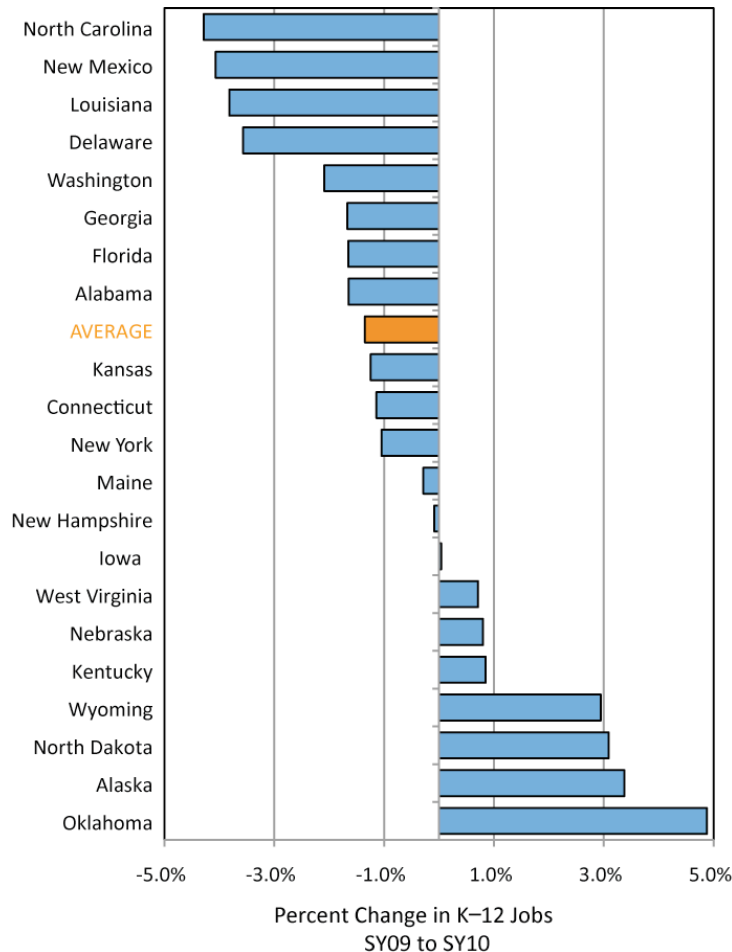
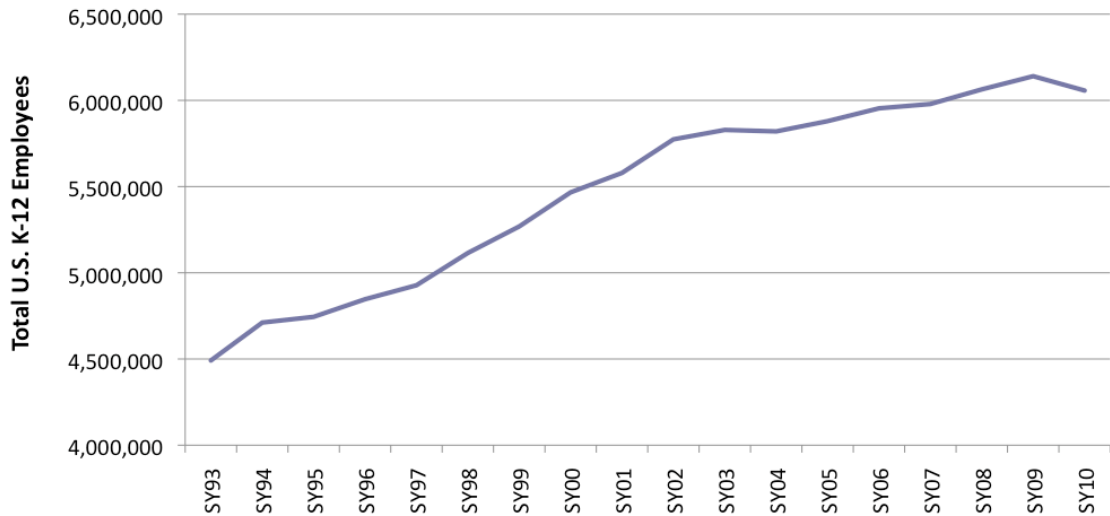


Figure 2 compares this drop with previous education employment trends as reported by the National Center for Education Statistics (NCES).⁶ Over a 15-year period, total jobs across all states grew by roughly 2 percent a year, with the only other drop being a slight decline of 0.1 percent from 2003 to 2004. By comparison, the more recent estimate of a 1.4 percent drop is an order of magnitude greater than what was experienced in 2004.

Figure 2: The K-12 workforce shrinks for only second time since 1993



A new fiscal model estimates 5.5 percent of K-12 jobs funded by ARRA

Early reports tallying jobs saved or created by ARRA were met with skepticism. The Government Accountability Office (GAO) expressed “a range of significant reporting and quality issues,”⁷ and the Office of Management and Budget (OMB) subsequently modified its reporting guidance to attempt to measure “jobs funded with Recovery Act dollars.”⁸

Notwithstanding this corrective action, any methodology for tracking and reporting ARRA-funded jobs still has its shortcomings. A key problem with the OMB reporting procedure stems from the fact that while most federal allocations

⁶ Source of total staff data from SY93 to SY08: National Center for Education Statistics Common Core of Data, available at <http://nces.ed.gov/ccd/index.asp>.

⁷ Government Accountability Office, November 2009.

⁸ Initial guidance: OMB Memorandum, M-09-21, *Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009* (June 22, 2009). Revised guidance: OMB Memorandum, M-10-08, *Updated Guidance on the American Recovery and Reinvestment Act – Data Quality, Non-Reporting Recipients, and Reporting of Job Estimates* (December 18, 2009).

require federal funds to be accounted for separately from state funds, such requirements do not apply to the State Fiscal Stabilization Fund (SFSF) portion of ARRA. As such, since SFSF monies cannot always be reliably tracked to the district level (where they are converted to jobs), identifying those jobs paid for with ARRA necessitates some judgment and guesswork.

To sidestep tracking and reporting challenges, this analysis instead applies a fiscal model to more reliably estimate the number of jobs funded by ARRA. Since salaries and benefits comprise such a large share of education expenditures, the model assumes a stable number of employees per adjusted expenditure dollar in each state.⁹ Using 2008 total employment and expenditure figures,¹⁰ the model computes total expenditures per employee,¹¹ adjusts the figures for 2010,¹² and then for each state applies the result to the reported ARRA expenditure for SY10.¹³

Applying the fiscal model, this analysis finds that 342,758 jobs are funded by ARRA in SY10, representing an estimated 5.5 percent of current K-12 jobs.¹⁴ While this total is quite close to the 326,123 funded jobs reported by states for the December 2009 quarter,¹⁵ significant differences in the results of these approaches can be seen at the state level (see Appendix). Indiana, for example, reported four times the number of ARRA-funded jobs indicated in the fiscal model. Wyoming and Mississippi, on the other hand, reported only a tiny fraction of the jobs indicated by the model.

Gauging the role ARRA has played in saving K-12 jobs

How successful has ARRA been at stabilizing education jobs? While we still cannot know what would have happened absent ARRA, it is clear that public education did not, as feared, lose 600,000 of its ranks. Figure 3 captures both the

⁹ Since SFSF funds in most states were used in basic state education formulas, the analysis assumes that those staff hired with ARRA funds reflect the typical mix of education staff.

¹⁰ 2008 total staff as reported by NCES CCD, Table 4, available at http://nces.ed.gov/pubs2010/2010309/tables/table_04.asp. 2008 expenditure data are computed from per pupil expenditure and total enrollment from *Rankings & Estimates: Ranking of the States 2009 and Estimates of School Statistics 2010*, National Education Association, December 2009.

¹¹ Not to be interpreted as compensation per employee.

¹² 2008 figures are adjusted by the average salary growth per state for each of the two years as reported by *Rankings & Estimates*, National Education Association, December 2009.

¹³ ARRA expenditure per state includes half of both the ARRA portions of IDEA and Title I in addition to that portion of SFSF planned for use in K-12 education as reported in *U.S. Department of Education American Recovery and Reinvestment Act Report: Summary of Programs and State-by-State Data*, November 2, 2009.

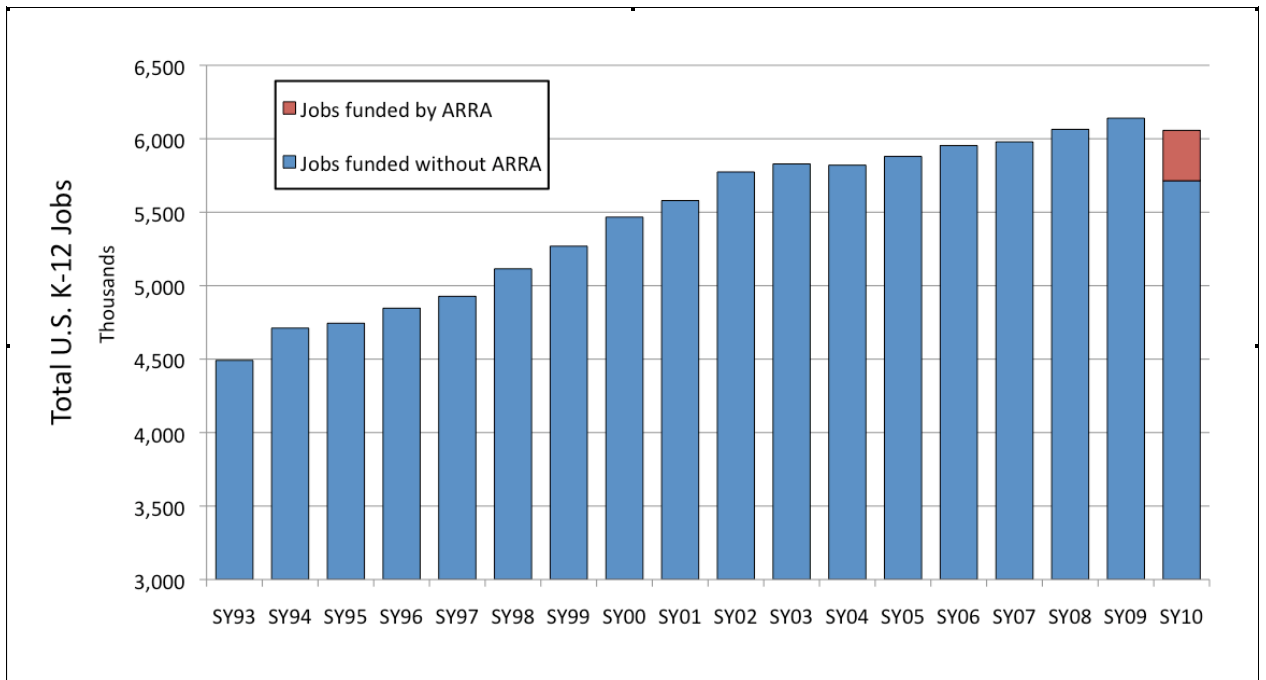
¹⁴ Relative to the 07-08 total staff of 6,215,635, as reported by NCES CCD, Table 4.

¹⁵ *U.S. Department of Education American Recovery and Reinvestment Act Report: Summary of Programs and State-by-State Data*, U.S. Department of Education, January 30, 2010, available at <http://www2.ed.gov/policy/gen/leg/recovery/spending/arra-program-summary2.pdf>.

trend in K-12 jobs and the role ARRA is playing in funding jobs. While data from the 21 states where current employment data are available suggests there has been a dip in employment of 1.4 percent, applying this figure to the total workforce suggests a loss to date of an estimated 87,019 positions nationwide¹⁶—far fewer than the 600,000 feared at risk.

As our analysis suggests, in funding over 342,000 jobs, or 5.5 percent of total employment, ARRA mitigated what might otherwise have been a much steeper job decline. The red box in Figure 3 represents those jobs paid for with ARRA funds.

Figure 3: ARRA-funded jobs appear to limit the decline in total K-12 jobs



On the question of whether ARRA has led states to create new jobs and thus increase their fiscal vulnerability going forward, the evidence overall suggests otherwise. While some states have increased total employment, most states did not grow their workforce, suggesting some progress toward shrinking their recurring fiscal obligations. A next step would be to map revenue projections with job trends to identify those states where percentage changes in jobs are out of step with percentage changes in projected revenue. Any looming funding cliff will be most challenging in those states adding staff while forecasting revenue gaps.

¹⁶ Estimated by applying the 1.4% dip to most recently reported total staff estimate (07-08) of 6,215,635.

Jobs data can be a window into what's ahead

While the employment data presented here do not indicate layoffs of the scale originally feared, they do suggest that public education is in the midst of its biggest employment decline in years.

This level of decline has implications for the system as a whole, such as fewer younger teachers (as few new hires were made this year), an aging workforce, and a spike in average salaries.¹⁷ In some locales, pension systems rely on a balance of younger teachers to stay afloat and without them may see bigger gaps in pension funds going forward. Some might also worry about this year's class of teacher candidates who did not find jobs, and the message that gets sent to future candidates about job opportunities in the field. Also relevant might be the effects of hiring freezes on reform efforts that hinge on bringing in new talent.

Finally, an important by-product of this study is our finding that most states are not able to provide reliable mid-year jobs data, even though such figures provide key evidence of how the public education system in each state is responding to current conditions. In order to keep visibility on what's ahead, policymakers and analysts should seek more frequent jobs data and keep an eye on state-by-state trends. Looking forward, jobs data will continue to be an important part of the public education story during the recession and recovery efforts.

¹⁷ Salaries rise faster without as many new teachers entering at the lowest salary levels.

Appendix: State-by-state figures

STATE / JURISDICTION	TOTAL K-12 JOBS REPORTED BY STATE DEPARTMENTS OF EDUCATION ¹			ARRA-FUNDED JOBS	
	2008-09	2009-10	Percent Change	Estimated Using Fiscal Model	Dept of Ed Report First Qtr of FY10
United States ²	6,140,271	6,057,146	-1.4%	342,758	326,123
Alabama	96,313	94,725	-1.6%	2,777	5,851
Alaska	15,105	15,615	3.4%	363	260
Arizona				6,316	2,816
Arkansas				1,747	644
California				28,739	49,887
Colorado				3,629	3,886
Connecticut ³	52,486	51,888	-1.1%	4,015	3,959
Delaware	15,385	14,836	-3.6%	845	705
District of Columbia				340	661
Florida ⁴	328,953	323,523	-1.7%	15,735	23,884
Georgia	237,715	233,745	-1.7%	8,124	14,387
Hawaii				1,392	2,079
Idaho				2,831	4,048
Illinois				9,597	2,535
Indiana				3,040	12,044
Iowa	69,290	69,312	0.0%	4,692	6,171
Kansas	70,349	69,474	-1.2%	3,919	3,879
Kentucky ^{3,4}	50,991	51,424	0.8%	6,095	7,362
Louisiana	101,160	97,297	-3.8%	3,820	6,940
Maine ^{3,4}				2,223	318
Maryland				5,499	1,462
Massachusetts				3,521	3,186
Michigan				13,763	9,299
Minnesota				7,717	6,921
Mississippi				6,927	569
Missouri				10,813	11,444
Montana				877	1,577
Nebraska ³	30,052	30,293	0.8%	2,571	1,690
Nevada				1,450	1,998
New Hampshire	32,844	32,816	-0.1%	1,558	255
New Jersey				10,924	15,884
New Mexico	39,081	37,491	-4.1%	3,541	2,352
New York ⁵	265,666	262,884	-1.0%	26,587	26,005
North Carolina	191,127	182,939	-4.3%	16,521	18,979
North Dakota	17,227	17,759	3.1%	2,006	1,601
Ohio				11,264	11,785
Oklahoma	81,115	85,071	4.9%	5,060	4,879
Oregon				2,011	5,608
Pennsylvania				5,013	2,653
Rhode Island				613	194
South Carolina				1,788	4,917
South Dakota				942	588
Tennessee				6,576	3,739
Texas				57,985	18,531
Utah				3,743	1,948
Vermont				953	288
Virginia				11,560	5,065
Washington	103,774	101,607	-2.1%	5,527	5,424
West Virginia	38,229	38,501	0.7%	1,142	622
Wisconsin				3,734	4,332
Wyoming	15,827	16,293	2.9%	333	14

1 Figures shown only for states where both years' data was available.

2 Total U.S. K-12 job numbers were estimated by applying available state trend data to last available NCES figure.

3 Jobs data includes certified staff only.

4 Jobs data is in terms of employees, not FTE.

5 Total school staff is for professional personnel only. 2009-2010 figure used 2008-09 data for New York City.

The \$CHOOLS IN CRISIS: MAKING ENDS MEET series of Rapid Response briefs is designed to bring relevant fiscal analyses to policymakers amidst the current economic crisis. For more information, please visit www.crpe.org



Marguerite Roza is a senior scholar at the Center on Reinventing Public Education, and a research associate professor at the University of Washington College of Education.

Chris Lozier is an education finance consultant working with the Center on Reinventing Public Education.

Cristina Sepe is a research coordinator at the Center on Reinventing Public Education.

Funding for this work was provided by the Bill & Melinda Gates Foundation and the William and Flora Hewlett Foundation. We thank the foundations for their support, but acknowledge that the findings and conclusions contained here are those of the authors alone and do not necessarily reflect the opinions of the foundations.