

EXECUTIVE OFFICE OF THE PRESIDENT



**INVESTING IN OUR FUTURE: RETURNING
TEACHERS TO THE CLASSROOM**

AUGUST 2012

This report was prepared jointly by the Council of Economic Advisors, the Domestic Policy Council, and the National Economic Council.

“So it should concern everyone that right now – all across America – tens of thousands of teachers are getting laid off...Think about what that means for our country. When there are fewer teachers in our schools, class sizes start climbing up. Our students start falling behind. And our economy takes a hit.”

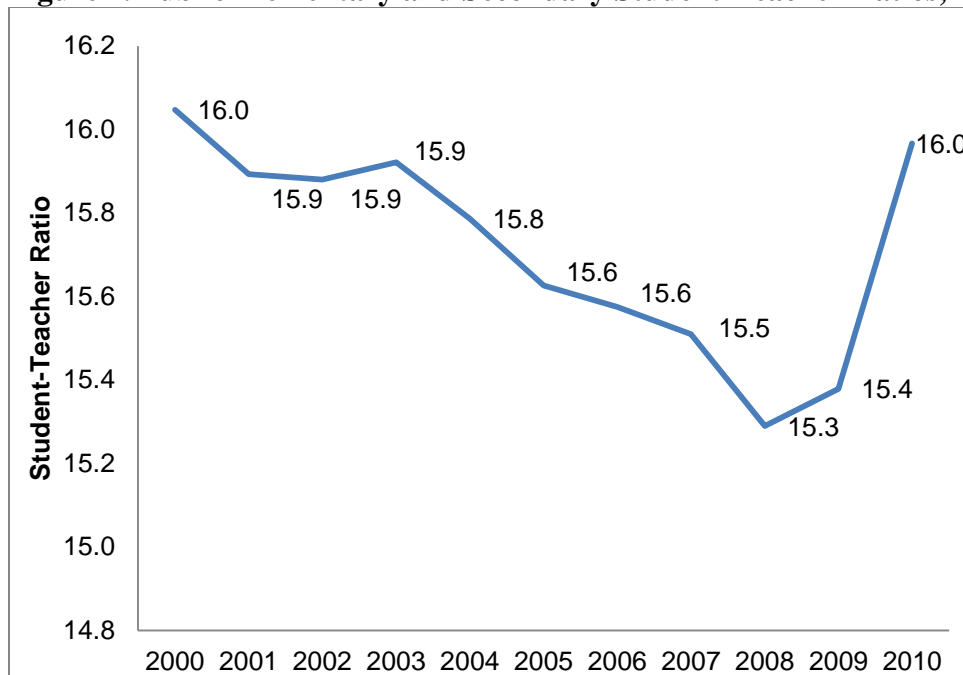
-President Barack Obama, June 9, 2012

When the President took office, the economy was in free fall, shrinking by nearly nine percent in the fourth quarter of 2008, and losing 800,000 jobs per month. The President took immediate and bold action and passed the Recovery Act to return the economy to growth in six months. Over the past 29 months our economy has added 4.5 million private-sector jobs. Yet since the official end of the recession in June 2009, we have lost more than 300,000 local education jobs – raising class sizes and threatening the education of our nation’s children. In just the last month alone, 7,000 local education jobs – teachers, school aides, and support staff serving our children – were lost. In addition to reducing the number of teachers on their payrolls, school districts have cut pre-kindergarten and kindergarten programs, shortened the school day or school year, and have cut back on other critical education programs. This is not the way to make sure that our students are prepared to take high-paying and high-demand jobs of the future or strengthen our nation’s competitiveness.

- **More than 300,000 education jobs have been lost since the end of the recession.** Since the end of the recession in June 2009, the economy lost over 300,000 local education jobs. The loss of education jobs stands in stark contrast to every other recovery in recent years, under Republican and Democratic Administrations.
- **The loss of teacher jobs can mean larger class sizes and difficult choices for schools.** The national student-teacher ratio increased by 4.6 percent from 2008 to 2010, rolling back all the gains made since 2000. Further layoffs in 2011 and 2012 mean that the student-teacher ratio will continue to increase as we enter the 2012-13 school year. From Florida to Ohio to California, districts have faced teacher shortages, have cut preschool and kindergarten programs, and have shortened the school week and school year.
- **The President’s plan would prevent teacher layoffs and invest in comprehensive reform and strengthening of public education.** The President’s plan would provide \$25 billion to prevent layoffs and support hundreds of thousands of teacher and other education jobs.
- **The House Republican Budget would slash education funding.** The budget passed by Republicans in Congress would cut non-defense discretionary spending by almost 20 percent. If cuts were distributed evenly, this budget would imply \$2.7 billion in cuts to basic Title I education grants, meaning that nearly 38,000 teachers and aides could lose their jobs as a result of cuts to Title I spending alone. Cuts would also be made to early childhood education and special education, significantly impairing schools’ ability to best serve their students.

A look at the available data shows that the nationwide student-teacher ratio increased by 4.6 percent from the fall of 2008 to the fall of 2010, from 15.3 to 16.0. As documented in Figure 1, this increase in the student-teacher ratio erased a decade of gains. Moreover, since the fall of 2010, the last date for which we have the student-teacher ratio data, local governments have cut about 150,000 additional education jobs – meaning that the student-teacher ratio has almost certainly increased further.

Figure 1. Public Elementary and Secondary Student-Teacher Ratios, 2000 to 2010



Source: Student-teacher ratios through 2009 come from NCES 2011, Table 69. The student-teacher ratio for 2010 comes from NCES 2012, Table 4.

Typical class sizes are larger than the student-teacher ratio because the student-teacher ratio includes teachers for students with disabilities and other special teachers that are excluded from class size counts. In the fall of 2007, the average class size was 20 students for elementary classes and 23.4 among secondary classes (NCES 2011, Table 72). The student-teacher ratio increased by 3.2 percent from 2007 to 2010; if this same increase applies to class sizes, the average class size would have increased to 20.6 for elementary students and 24.1 for high school students by the fall of 2010. Indeed, a survey by the American Association of School Administrators, a majority of school administrators reported that they had increased class sizes in the 2011-2012 school year, and a majority anticipate eliminating jobs in the upcoming school year as well.

Moreover, averages can mask large class size increases in some districts, particularly because some districts have faced much steeper cuts to their education budget than others. We know from reports and surveys that many of our school districts are increasing class sizes by substantial amounts and some are doing so in already

overcrowded districts. Parents know from common sense that laying off teachers, increasing class sizes, and cutting back on crucial programs hurts students. And a detailed look at the evidence – based on well-designed randomized experiments – confirms that larger class sizes have lasting negative effects: lowering high-school graduation rates, reducing the chance that students take college entrance exams like the ACT or SAT, and lowering the chance of college enrollment and completion.

If we want our country to be a magnet for middle-class jobs in the 21st century, we have to invest more in education, not less. Yet we are entering the school year with tens of thousands of fewer educators than we did last year. Had the Congress passed the *American Jobs Act* last year as the President urged them to do, these harsh effects could have been mitigated. The President's plan, reflected in his FY2013 budget, would invest \$25 billion to prevent teacher layoffs and provide states with the funds they need as they continue to face difficult budgetary environments. The funding proposed by President Obama would support hundreds of thousands of teacher jobs – allowing districts to rehire previously laid off teachers, retain those teachers who are making a positive difference in the classroom, and hire new teachers in needed areas like math, science, and special education.

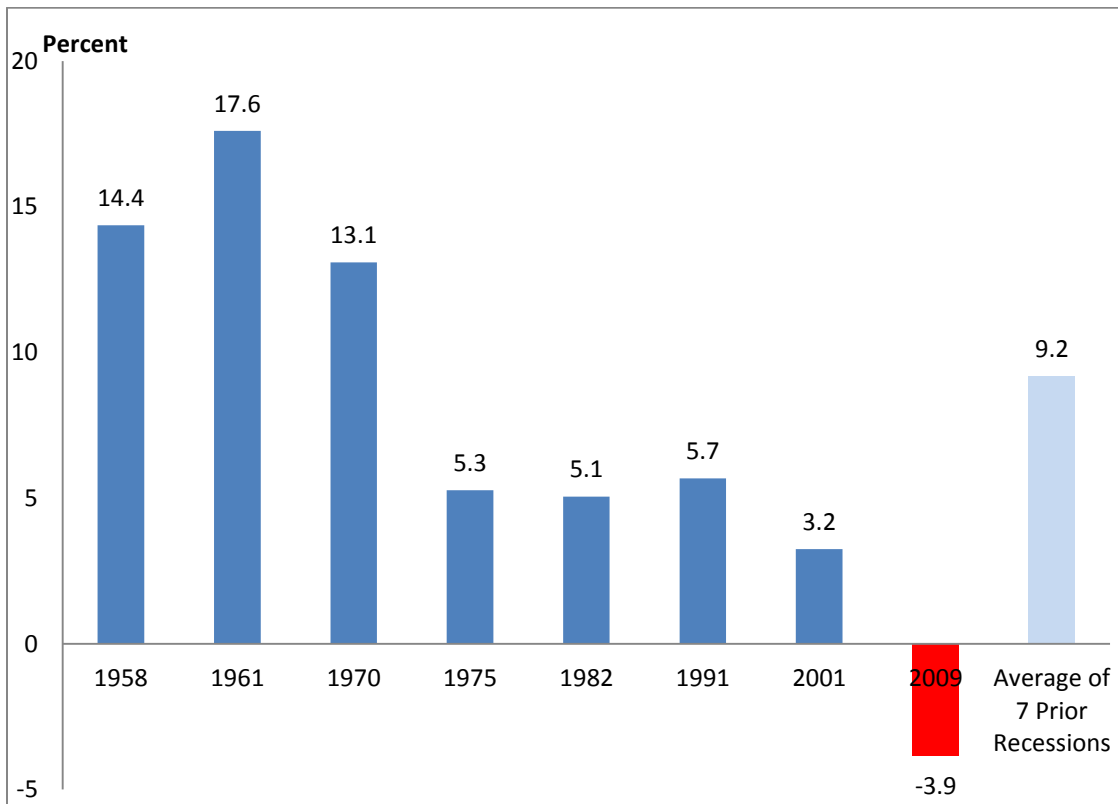
The President's plan stands in stark contrast to the plans outlined by Congressional Republicans. Most notably, the House budget passed by Republicans in Congress this spring would cut the portion of the budget that includes basic funding for education – such as Title I education grants for schools serving low-income students and Individuals with Disabilities Education Act (IDEA) funding serving special needs children – by almost 20 percent in 2014. Distributed evenly across budget areas, the House Republican budget cuts to Title I would eliminate funding for 38,000 teachers and aides, and cuts to IDEA grants could eliminate support for a further 27,000 special education teachers, aides, and other staff serving children with disabilities. Funding for the preschool programs Early Head Start and Head Start would also be cut. The Congressional Republican plan could result in 200,000 low-income children losing access to these early education programs.

The difference between the President's education budget proposals and those of Congressional Republicans highlights a choice between two fundamentally different visions for our country. Nowhere is this contrast more clear than with regard to the choice about investments in teachers and educators as we enter the upcoming school year.

I. THE LOSS OF TEACHER AND EDUCATION JOBS IN THE CURRENT RECOVERY IS UNPRECEDENTED

The recent recession has left the nation with a significant shortfall in teacher staffing compared to pre-recession staffing levels. This decline stands in sharp contrast to what has happened during every other post-war recession and recovery, under Democratic and Republican Presidents alike. While private payrolls added 172,000 jobs in July 2012, public sector employment, and in particular, local education jobs, have continued to decline. The economy lost 7,000 local education jobs in the last month, 77,100 in the past year, and 312,700 since the recession ended in June 2009. By comparison, private-sector businesses added 1.9 million jobs in the past year and 3.4 million jobs since June 2009.

Figure 2: Percentage Change in Government Local Education Jobs 37 Months After the End of a Recession



This decline in local government education employment is historically unprecedented. In every other recovery for which we have employment data—in 2001 under President George W. Bush, in the early 1990s under President Clinton, in the early 1980s under President Reagan, and going back to every recovery in the past half-century since the term of President Eisenhower—local public education was a source of job creation. As shown in Figure 2 above, the decline in local education employment since the most

recent recession ended in 2009 is unique among recoveries. In every other case, local education employment had registered substantial percentage increases by the comparable point in the recovery period, as contrasted with the substantial decrease in local government education employment registered in the current recovery period.

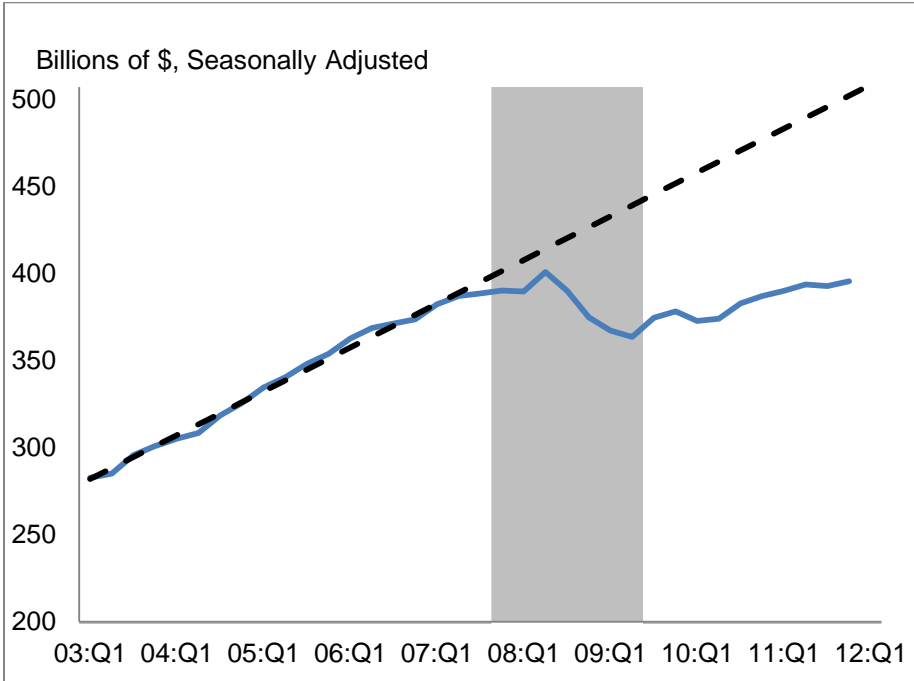
The implications of this unprecedented decline in local education jobs in the current recovery are stark: instead of moving into the upcoming school year with more educators to serve the growing number of students in our schools, we are digging ourselves a deeper and deeper hole. As teacher jobs are declining, student enrollment is projected to continue growing. In every other recent recession, even when the number of education jobs fell as the economy weakened, their number rebounded as the economy recovered rather than continuing to fall as has been the case over the past three years.

II. STATES CONTINUE TO FACE A DIFFICULT BUDGET ENVIRONMENT THAT COULD FORCE MORE LAYOFFS

The severe recession caused serious budget problems for many state and local governments. As shown in Figure 3, the revenue received by state and local governments from sources other than the Federal government rose consistently until 2008 and then fell a precipitous 9.6 percent between the middle of 2008 and the middle of 2009. State and local revenue did not return to its mid-2008 level (in nominal terms) until the second quarter of this year, and remains well below the projected level implied by its pre-recession trend. The large drop in revenue from non-federal sources forced states and localities to reduce expenditures, to seek increases in revenue from other sources, or both.

Indeed, as shown in Figure 4, despite twelve straight quarters of nationwide economic growth, these state fiscal problems persist. State budget shortfalls totaled over \$100 billion in every fiscal year from 2009 through 2012, and budget shortfalls are projected to continue into the future, as the legacy of the Great Recession weighs on sources of state income.

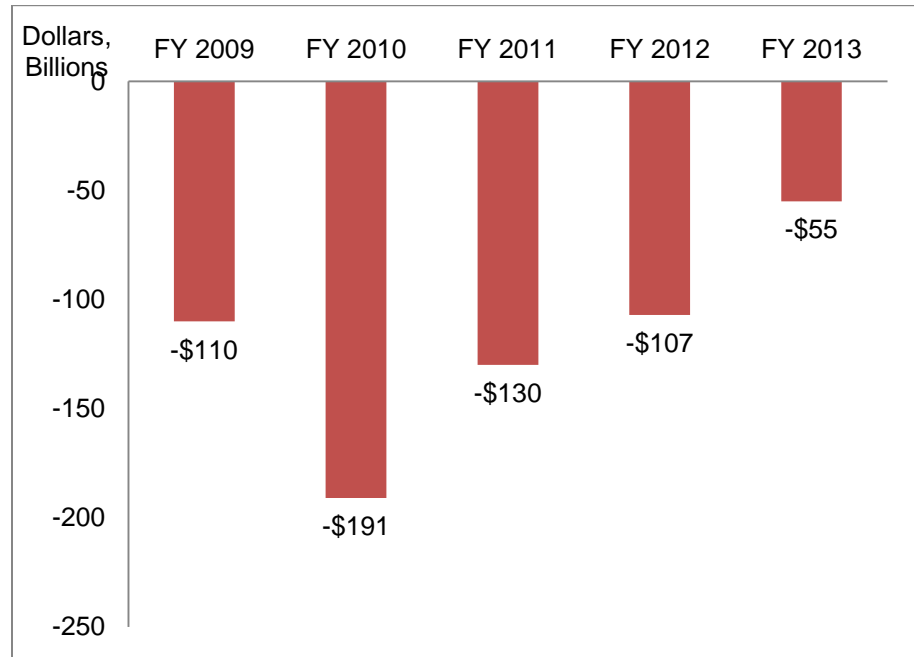
Figure 3: State and Local Government Revenue Less Federal Grants



Source: Bureau of Economic Analysis.

Note: The shaded area represents the recession. The dotted line represents pre-recession trend since 2003:Q1.

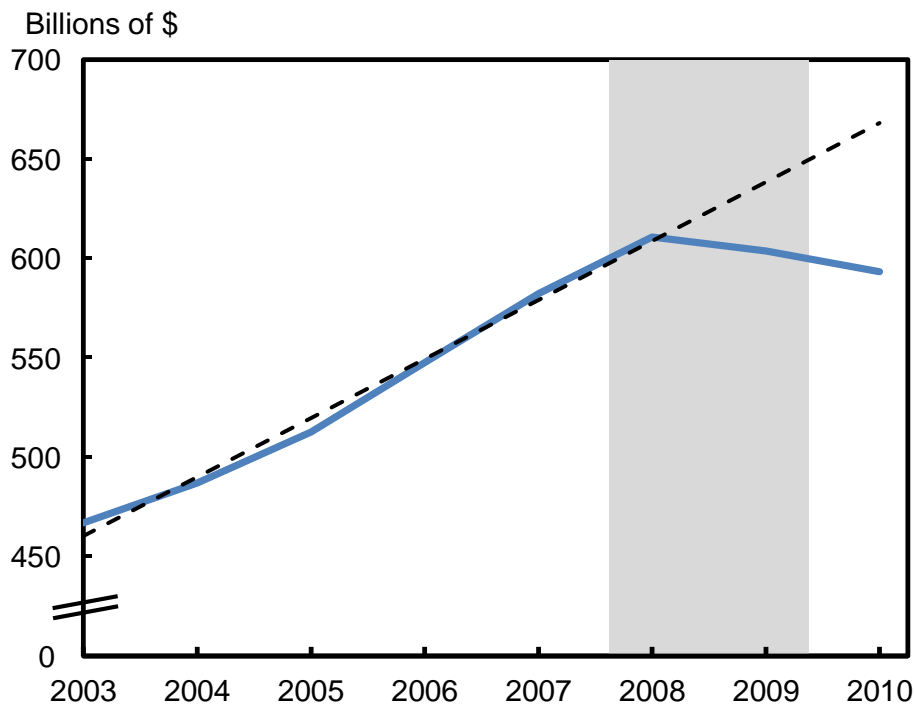
Figure 4: State Budget Shortfalls



Source: Oliff, Mai, and Palacios, 2012

Traditionally, the lion’s share of the costs of public elementary and secondary education in the United States have been borne by state and local governments, with the federal government accounting for a much smaller fraction of these costs. The exceptionally difficult fiscal situation faced by state and local governments in recent years has had a strongly adverse impact on spending for elementary and secondary education. As shown in Figure 5, nominal state and local elementary and secondary education spending fell in both 2009 and 2010. This is unprecedented – prior to 2009, nominal spending by state and local governments on elementary and secondary education had increased in every year since these data first began to be recorded in 1959, as public school enrollment has continued to grow every year since the mid-1980s.

Figure 5: State and Local Spending on Elementary and Secondary Education



Source: Bureau of Economic Analysis

Note: Shaded area represents recession. The dotted line represents the trend from 2003 to 2008.

As highlighted in the next section, state and local governments forced to cut education spending have faced difficult choices among increasing class sizes, shortening the length of the school week or school year, and cutting key programs.

III. TEACHER LAYOFFS FORCE DISTRICTS INTO DIFFICULT CHOICES, INCLUDING INCREASING CLASS SIZES AND CUTTING KEY PROGRAMS

Cuts to education budgets translate into reductions of our education workforce, which has the potential to be very costly in the long term. In districts across the country, underinvestment in education has led to overcrowded classrooms, shorter school days and years, and cuts to critical support to education programs for vulnerable students.

Figure 1 above shows that, as a result of the Great Recession and subsequent reductions in educator employment, we have lost nearly a decade of improvements in the nationwide student-teacher ratio. After falling almost every year since 1992, the ratio increased from 15.3 in 2008 to 16.0 in 2010, an increase of 4.6 percent. Moreover, since the fall of 2010 (the most recent period for which student-teacher ratios are available), local governments have cut about 150,000 additional education jobs, meaning that the student-teacher ratio and class sizes have almost certainly increased further. Class sizes are larger than the student-teacher ratio because the student-teacher ratio includes teachers for students with disabilities and other special teachers that are excluded from class sizes. In the fall of 2007, the average class size was 20 students for elementary classes and 23.4 among secondary classes (NCES 2011, Table 72). Between the fall of 2007 and the fall of 2010 the student-teacher ratio increased by 3.2 percent. If class sizes increased by the same rate over that period, average class sizes in fall 2010 would be 20.6 for elementary students and 24.1 for high school students.

In addition to increasing class sizes, districts that are reducing the size of their teaching staff may deal with those losses by increasing the number of classes each teacher is assigned to teach, or decreasing summer or after-school learning opportunities for students. For example, districts that reduce teaching positions may reduce the number of early education slots or cut back on other programs in order to accommodate a smaller number of teachers.

A 2012 report by the American Association of School Administrators (AASA) highlights the tough choices facing many school districts (Ellerson 2012). The AASA surveyed its members and found that 68 percent of the responding school administrators eliminated jobs during the 2011-2012 school year. About 41 percent eliminated core subject classroom teachers and 44 percent eliminated teacher aides or assistants.

As a result of these cuts, many administrators have reported they had to compromise education quality:

- 54 percent increased class sizes
- 22 percent eliminated summer school programs
- 35 percent reduced non-academic programs such as after-school and weekend programs

Looking forward to the coming school year, 66 percent of administrators who responded to the survey anticipate eliminating jobs during the school year – forcing additional tough choices for districts around the country in balancing education jobs with myriad needs for their schools.

IV. IN THE COMING 2012-2013 SCHOOL YEAR, SCHOOLS CONTINUE TO FACE DIFFICULT CHOICES

A look at reports and news from school districts across the country shows just some of the difficult decisions states and school districts have been forced to make going into the upcoming school year:

- **Class sizes increase in North Carolina.** An August 12th report in the *Asheville Citizen-Times*, reports that funding for K-12 education over the past four years declined from \$8.19 billion to \$7.51 billion. “At the same time, the number of students statewide has grown by about 16,000. Projected enrollment at North Carolina schools this year is 1.5 million. Schools have felt the cuts in different ways....Class sizes have climbed. At Enka Middle in Buncombe County, for example, some class sizes will reach 31 students — even in core subjects such as math and English.”
- **Pittsburgh public schools lay off 280 teachers and education professionals.** A story in the *Pittsburgh Post-Gazette* on July 26th explained that going into the upcoming 2012-2013 school year, “In an effort to save money... the city school board approved a furlough list that includes 176 K-12 teachers and other professionals, 14 pre-K teachers, 59 paraprofessionals, 12 adjuncts, 10 other pre-K professionals and nine technical-clerical workers.”
- **Las Vegas Schools cuts positions and increase class sizes.** On August 10th, the *Las Vegas Review-Journal* reported that Clark County is increasing class sizes by three in the upcoming year – in classes that are already the most overcrowded in America. Although the district rehired 419 teachers who had been laid off, “Their former jobs - and 600 other teaching positions - no longer exist, which means

class-size increases and program cuts remain in effect. Instead, those laid off last school year will be filling jobs vacated by teachers who have retired or resigned... Clark County averaged 32 students per class last year, the highest student/teacher ratio in the country... This school year, the average class size will increase to 35 students at high schools, middle schools and grades four and five.”

- **California plans to cut funding for preschool.** On July 24th the *Lake County News* reported that the latest budget signed by the Governor included \$130 million in cuts to early childhood education, which will take effect on September 1. Throughout the state, preschool slots are being cut and full-day slots are becoming half-day slots.
- **Los Angeles shortens its school year by a full week.** On June 28th, the *LA Times* reported that going into the upcoming school year, “The Los Angeles Board of Education approved its final \$6-billion budget Thursday, bridging a multimillion-dollar shortfall in the state’s largest school district by shortening the school year and laying off about 3,000 employees.”
- **NYC elementary school students in classes of 30 or more tripled.** On March 26th, the *New York Times* reported on the results of an analysis of data from the NYC Department of Education, explaining that “the number of elementary school students in classes of 30 or more has tripled in the last three years because of teacher attrition and budget cuts to public schools....Using data from the city’s Department of Education, the report found that 31,079 students in first through fifth grade were now in large classes, compared with 9,756 in the 2008-9 school year.”
- **Sacramento schools lay off teachers and increase class sizes.** An August 11th story in the *Sacramento Bee* reported that in the upcoming year “Students returning to school in the Sacramento area should expect another year of large class sizes, fewer teachers and reduced resources...four consecutive years of state budget cuts have taken their toll and this year features more of the same...Nearly 650 teachers in Sacramento County received final termination notices in May, meaning most won't be returning to classrooms....The district's students can expect larger class sizes in kindergarten through third grade, fewer arts and music programs, and fewer assistant principals and librarians.”
- **Colorado school district increases class sizes.** A story in the August 12th *Broomfield Enterprise* reported that the Adams 12 district has to make \$12 million in budget cuts and plans to make half of those cuts through layoffs and compensation cuts in the upcoming year. Some high schools will have classes that average 32 to 34 students, up from an already-sizeable average of 30 students.

- **Cincinnati public schools lay off teachers and cut other programs.** As described in an April report by *Education News*, “the Cincinnati Public Schools board of education has voted unanimously to cut 10 percent of its teaching staff to cover a \$43 million budget deficit. They are blaming the loss of the 237 teaching jobs on a reduction in state and federal funding.”
- **Indianapolis public schools make district-wide job cuts.** In May, the *Indianapolis Star* reported that going into the next school year, “the Indianapolis Public School Board on Tuesday approved the layoffs of 163 employees, including 94 teachers. The move was part of a plan announced last week to cut an additional \$27 million from next school year's budget.”
- **Georgia increases class sizes.** On August 5th, the *Atlanta Journal-Constitution* reported on class size increases and teacher layoffs in the Atlanta metropolitan area going into the upcoming school year. “Metro Atlanta school boards spent this summer cutting a couple thousand teachers, expanding class sizes and eliminating bus routes.”
- **Cleveland lays off teachers and cuts music, art, and gym classes:** In April, the *Cleveland Plain Dealer* reported that going into the upcoming school year, “the Cleveland school board voted ... to trim about a sixth of its teaching staff in the upcoming school year because of budget troubles and a falling number of students....The district will lay off more than 500 at the end of this school year...The district will also shorten its school day through eighth grade by 50 minutes next school year and cut the number of music, art, library and gym classes for those students as part of the shuffling of staff to handle the layoffs.”

V. TEACHER LAYOFFS AND EDUCATION BUDGET CUTS THREATEN STUDENT ACHIEVEMENT

We know from common sense that laying off teachers, increasing class sizes, eliminating critical programs, shortening the school week or shortening the school year all mean that our students receive less attention and fewer chances to achieve in their education. The best analyses from independent academic experts confirm the harmful effects of underinvesting in education.

Small class sizes can boost achievement, but budget cuts have reversed a decade of gains

Reducing class sizes is not a panacea for education reform and can be less important than improving teacher effectiveness (e.g Chetty et al 2011), but substantial evidence exists that smaller class sizes – especially in the early years – produce better outcomes for

students. Yet job losses for teachers from 2008 to 2010 erased a decade's worth of improvements in the student-teacher ratio.

Perhaps the most convincing scholarly research on class sizes comes from the Tennessee Student Teacher Achievement Ratio (STAR) project, which used random assignment to remove potentially confounding factors that complicate the interpretation of naturally-occurring variations in class size, most importantly the fact that differences in class size across schools tends to be correlated with family characteristics that themselves could be affecting student outcomes. The analysis compared "small" classes consisting of thirteen to seventeen students to "regular" classes of twenty-two to twenty-five students.

The research findings from Project STAR make clear that smaller class sizes in the early primary years not only produce short term gains in student achievement but also longer term gains. High school graduation rates increased for all students and those gains were particularly large among families qualifying for free lunch (Finn et al 2005). Students assigned to smaller classes were also more likely to take either the ACT or the SAT, and this effect was larger among black students (Krueger and Whitmore 2001). Smaller class sizes in the early years also raised the likelihood that students will attend and graduate from college. Students assigned to small classes were also more likely to study STEM subjects (Dynarski et al, 2011).

Studies of the effects of class size on student outcomes in non-experimental settings are less clear cut because it is impossible to control for all of the extraneous variables that are associated with class-size and student outcomes. Still, these studies also tend to find that student outcomes are improved when students are assigned to smaller classes.

Research by Dee and West (2008) focuses on the non-cognitive impacts of smaller class sizes in eighth grade. These impacts are important as recent research has linked interventions that do not necessarily raise long-term academic achievement to higher earnings. Dee and West find that smaller class sizes in eighth grade lead to a higher level of engagement and that this is especially true in urban schools. Similarly, using data from the UK, Dustmann and coauthors (2003) find that student-teacher ratios in the school attended at age 16 are related to the decision to stay in high school.

Some literature reviews have failed to find positive effects of smaller class sizes (e.g. Hanushek 1997, but other studies that have examined the same literature have concluded that smaller class sizes have beneficial effects that are "large enough to be of practical importance" (Hedges, Laine, and Greenwald 1994).

Early education yields large returns, but states are cutting back

As the stories from districts make clear, some states are making cuts to preschool and kindergarten programs that undermine the quality, intensity, and effectiveness of these programs. According to a 2011 report by the National Institute for Early Education Research, overall state pre-k spending declined in the 2010-2011 school year, the second year for which spending has declined. This has resulted in a reduced number of preschool slots available to children in twelve states, including one state that eliminated its preschool education program altogether. Spending per child for preschool education also declined during this period. Of 39 states that offer preschool programs, 26 of them cut back on spending per child in the 2010-2011 school year. In some states, the declines in 2010-2011 have been compounded by cuts in 2011-2012, and further cuts loom for 2012-2013 (NIEER 2011). Decreased spending per child undermines program quality and program effectiveness; for example, making it harder for states to monitor program quality, offer programs with small class sizes, and retain qualified teachers.

These cuts come despite evidence that early education delivers long-term benefits for children. According to a review of the literature on childhood interventions, the lifetime impact on earnings from an intensive preschool program amount to over \$60,000 per child, at a cost of only \$15,700 per child (Duncan, Ludwig, and Magnuson 2010). Another recent paper focused specifically on Head Start found that the effects of Head Start on test scores were about 80 percent as large as the gains from the most intensive programs even though Head Start spends less per child. The test score increases achieved by Head Start closed one-third of the gap between children with median family incomes and children in the bottom quartile of family income and although there was some fadeout of these gains, Head Start participation had positive long-term effects, including on the likelihood that students graduate high school (Deming 2009).

Some state and school districts have shifted from full-day to half-day preschool and kindergarten programs as a cost saving measure. Only ten states and the District of Columbia require school districts to provide full day kindergarten (CDF 2012). Research has documented better outcomes for children that participate in full day pre-kindergarten and kindergarten programs, particularly for children from low-income families. For example, the results from a randomized trial comparing the effects of full-day public preschool to half-day preschool on children's literacy and mathematics learning found that children who attended an extended-day, extended-year preschool program achieved higher test scores compared to peers who attended half-day programs (Robin, Frede, and Barnett 2006).

Research shows summer learning loss is a major drain for low-income students, but districts are shortening the school year

In an effort to reduce funding shortfalls, some school districts have resorted to shortening the school year, with students disengaging from learning opportunities during a longer summer.

Research finds that during the school year, lower income children's skills improve at close to the same rate as those of their more advantaged peers, but over the summer months middle- and upper-income children's skills continue to improve, while lower income children's skills fall behind (Alexander, Entwisle and Olson 2007; see Cooper et al 1996 for a survey of the literature).

The research by Alexander, Entwisle, and Olson (2007) finds that a full two thirds of the test score gap between kids from families with high socioeconomic status and those with low socioeconomic status (SES) in Baltimore public schools was accounted for by differences in summer learning. The other third was due to differences that already existed at the start of first grade. None of it was due to differences in gains during the school year. In fact, low-SES students gained more during the school year than high-SES students but summer learning losses more than offset those gains. Given that 9th grade test scores are linked to the rigor of high school curriculum, the chance of graduating from high school, and the ability to get into and persist in college, these summer learning losses in elementary school have a lasting impact on students outcomes. Accordingly, reducing the length of the school year and cutting summer enrichment programs will increase disparities further.

In addition to shortening the school year, more and more school districts are shortening the school week. In October 2011, the *Washington Post* reported the results of a nationwide survey of school districts, and found that "at least 292 school districts nationwide have a four-day week... more than double the 120 estimated two years ago... Growing economic pressures have forced districts small and large across the country to consider the practice." This report bears out the aforementioned survey data from the American Association of School Administrators, which found that an increasing percentage of administrators are considering four day school weeks next year. While the evidence of the impact of four day weeks on student achievement is unclear, working families will face the burden of finding care for children on days when they are not in school.

VI. THE PRESIDENT’S PLAN WOULD PREVENT TEACHER LAYOFFS WHILE THE HOUSE REPUBLICAN BUDGET MEANS MORE CUTS

In September, the President put forward a bold plan to create jobs – the American Jobs Act. The purpose of the American Jobs Act is simple: put more people back to work and put more money in the pockets of working Americans. Independent forecasters estimated that the plan, if passed in full, would add 1.3 to 1.9 million jobs to the economy this year, and boost growth by up to two percent. And the President put forward the plan as part of an overall strategy to boost growth while identifying \$4 trillion in balanced deficit reduction to bring our debt down as a share of our economy. While Congress acted on some pieces of the President’s plan—including the payroll tax cut providing \$1,000 to working families this year—it left far too many jobs on the table. One of the central components of the American Jobs Act, which the President re-proposed in his 2013 budget, is funding to prevent and reverse teacher layoffs, and to provide support for the re-hiring and hiring of educators. This proposal remains stalled in Congress.

Specifically, the President’s plan will invest \$25 billion to support state and local efforts to retain, rehire, and hire early childhood, elementary, and secondary educators. If enacted, these teacher stabilization funds would help prevent layoffs and support the hiring or re-hiring of hundreds of thousands of educators, including teachers, guidance counselors, classroom assistants, afterschool personnel, tutors, and literacy and math coaches. These funds will ensure that schools are able to keep teachers in the classroom, preserve or extend the regular school day and school year, and maintain important afterschool activities as states and local governments continue to face difficult budget environments.

The President’s plan stands in stark contrast to the plans of Congressional Republicans—most notably the Budget passed by House Republicans this year. The plan they put forward would cut non-defense discretionary spending, the portion of the budget that includes basic funding for education—such as Title I education grants and IDEA funding—by almost 20 percent in 2014.

Title 1 provides federal funding to schools with high percentages of low-incomes students, and IDEA funding helps schools teach children with learning disorders, speech impairments, and other disabilities. Distributed evenly across budget areas, the House Republican budget cuts to Title I would eliminate funding for 38,000 teachers and aides and cuts to IDEA grants could eliminate support for a further 27,000 special education teachers, aides, and other staff serving children with disabilities.

Cuts in this budget proposal would also affect Early Head Start and Head Start, which together serve over a million children. The Congressional Republican plan could result in 200,000 low-income children losing access to early education.

In addition, other elements of the Republican budget plans would further threaten state and local education spending. Specifically, the House Budget Resolution cut Medicaid, growing to a one-third cut in the final year of the budget window. This, in conjunction with cuts to other grant programs for state and local governments, would put more pressure on their budgets and potentially further crowd out education funding.

VII. CONCLUSION

The unprecedented decline in education jobs and teachers that we have seen over the course of the recession and that continue today will have long-term consequences for not only those that have lost their jobs but for kids in classrooms across the country. Districts have cut funding for education in a number of ways that evidence suggests will have long-term costs. They have laid off teachers or failed to replace retiring teachers, leading to class size increases. They have reduced funding for preschool programs, cutting back on teachers there and on the number of slots available for children, or converting full-day programs to half-day programs. School districts have also made education cuts by reducing the length of the school year or the school week. There is evidence that all of these actions can reduce student achievement and lower long-term outcomes such as graduation rates and college attendance.

These cuts are contrary to President Obama's vision for the Nation's education system. The President has called for increased investments in education, including funding that helps get more high-quality teachers into the classroom and greater investments in federal preschool programs. The President's proposal to prevent teacher layoffs remains stalled in Congress and Congressional Republicans have put forward more cuts to education in their recent budget proposal.

The visions of the President and Congressional Republicans on education present a choice with important consequences for families, children, and communities. Continuing along the path of reduced investments in education can also have negative consequences for the economy. One of the essential elements of an economy built to last is an education system that equips children with the skills they need to take high-paying jobs of the future. Meeting those demands of the future requires prioritizing investments today.

References

- Alexander, Karl L, Doris R. Entwisle and Linda Steffel Olson. 2007. "Lasting consequences of the summer learning gap." *American Sociological Review* 72 (April): 167-180
- Chetty, Raj, John N. Friedman, Nathaniel Hilger, Emmanuel Saez, Diane Whitmore Schanzenbach, and Danny Yagan. 2011. "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project Star." *The Quarterly Journal of Economics* 126 (4): 1593-1660.
- CDF 2012. "The Facts about Full-Day Kindergarten." Children's Defense Fund. January 2012.
- Cooper, Harris, Barbara Nye, Kelly Charlton, James Lindsay, and Scott Greathouse. 1996. "The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review." *Review of Educational Research* 66(3): 227–268.
- Dee, Thomas and Martin West. 2008. "The Non-Cognitive Returns to Class Size," NBER Working Paper 139994. http://www.nber.org/papers/w13994.pdf?new_window=1
- Deming, David. 2009. "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start" *American Economic Journal: Applied Economics* 2009, 1(3): 111–134
<http://www.aeaweb.org/articles.php?doi=10.1257/app.1.3.111>
- Duncan, Greg J., Jens Ludwig, Katherine A. Magnuson. "Targeting Investments in Children: Fighting Poverty When Resources are Limited." In *Child Development*, ed. Phillip B. Levine and David J. Zimmerman, Chicago, IL: University of Chicago Press
http://www.nber.org/chapters/c11722.pdf?new_window=1
- Dustman, Christian, Najma Rajah, and Arthur van Soest. 2003. "Class Size, Education, and Wages." *The Economic Journal* 113 (485): F49-F120.
- Dynarski, Susan, Joshua M. Hyman, and Diane Whitmore Schanzenbach. 2011. "Experimental Evidence on the Effect of Childhood Investments on Postsecondary Attainment and Degree Completion." NBER Working Paper No. 17533
- Ellerson, Noelle M. 2012. "Weathering the Storm: How the Economic Recession Continues to Impact School Districts." American Association of School Administrators.
- Finn, Jeremy D, Jayne Boyde-Zaharias, and Susan B. Gerber. 2005. "Small Classes in the Early Grades, Academic Achievement, and Graduating from High School." *Journal of Educational Psychology* 97 (2): 214-223. <http://www.apa.org/pubs/journals/releases/edu-972214.pdf>

Hanushek, Eric A. 1997. "Assessing the Effects of School Resources on Student Performance: An Update." *Educational Evaluation and Policy Analysis* 19 (2): 141-64.

Hedges, Larry V., Richard D. Laine, and Rob Greenwald. 1994. "Does Money matter? A Meta-Analysis of the Studies of the Effects of Differential School Inputs on Student Outcomes." *Education Researcher* 23 (April): 5-14

Krueger, Alan B and Diane M. Whitmore. "The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR." *The Economic Journal* 111 (468): 1-28
<http://www.jstor.org/stable/pdfplus/2667840.pdf?acceptTC=true>

NCES 2011. *Digest of Education Statistics*. National Center for Education Statistics.
<http://nces.ed.gov/programs/digest/d11/>

NCES 2012. "Public Elementary and Secondary School Student Enrollment and Staff Counts From the Common Core of Data: School Year 2010–11." National Center for Education Statistics. 2012-327. <http://nces.ed.gov/pubs2012/snf201011/index.asp>

NIEER 2012. "The State of Preschool 2011." National Institute for Early Education Research. <http://nieer.org/sites/nieer/files/2011yearbook.pdf>

Oliff, Phil, Chris Mai, and Vincent Palacios. 2012. "Recession and Recovery: States Continue to Feel Recession's Impact. Center on Budget and Policy Priorities. Updated June 27, 2012 <http://www.cbpp.org/cms/index.cfm?fa=view&id=711>

Robin, Kenneth B., Ellen C. Frede, & W. Steven Barnett. 2006 "Is More Better? The Effects of Full-Day vs Half-Day Preschool on Early School Achievement." NIEER Working Paper. <http://nieer.org/resources/research/IsMoreBetter.pdf>