



ERIP, such a strategy would have the effect of shifting resources from adults (retirees) to students.

We focus on grades 4 and 5 because we believe that harmonization of class sizes in elementary schools would yield important benefits to both teachers and students. We note, too, that the Superintendent has also explored the feasibility of *permanently* lowering the sizes of classes for these grades. While a permanent reduction in class size does not appear feasible at this time, a temporary reduction in class size may be both feasible and desirable. While modest reductions in class size typically yield modest academic payoffs, in the face of economic downturn, this strategy could bring about other key benefits including the following:

- (1) *Reduce the likelihood that low-seniority teachers will be laid off.* The District has invested considerable resources in teachers – both senior teachers as well as newer teachers. It would behoove the District to continue nurturing new teachers, including District-developed interns, and prepare them to meet the needs of LAUSD’s diverse students.
- (2) *Reduce the turnover of teachers by increasing the certainty of their employment and thereby enhance their confidence in the stability of a career with LAUSD.*<sup>1</sup>
- (3) *Reduce the tendency of some senior elementary teachers to opt for K-3 classroom assignments primarily because of the smaller sizes of K-3 classes.* Accordingly, senior teachers’ decisions might give more weight to their relative teaching strengths as well as students’ needs. Conceptually, this could help improve educational outcomes for students in schools where the strengths and weaknesses of teachers vary widely across grades and subjects.
- (4) *Help maintain an appropriate balance of experienced and beginning teachers.* Differences in the abilities of schools to attract and retain effective teachers have resulted in ostensible differences in the distribution of highly effective experienced teachers among LAUSD schools. On the other hand, ERIP, by encouraging experienced teachers to retire, could potentially offset this balance in many LAUSD schools – especially traditional hard-to-staff schools. Given the rising instability in the work environments in schools and classrooms, an adequate share of effective experienced teachers could help schools weather the coming storm by buttressing support to new teachers and thereby enhancing their ability to efficiently, expeditiously, and effectively educate students.
- (5) *Provide the District with time to identify teachers who are best at getting high academic results for children and taking steps to insure that these teachers are retained, nurtured, and used to benefit other teachers.* Currently the District does not have a system for systematically identifying teachers who get great academic results for LAUSD’s students.

---

<sup>1</sup> Because of fiscal exigencies created by some District policies (for example, retiree health benefits), the District already faces a competitive disadvantage in securing the best teachers for our schools. For example, a recent IAU report estimated that the District spends over \$400 per student on retiree benefits. The vast majority of other school districts do not incur this cost. Indeed, continuing rises in the cost of health care augur a worsening of our ability to compete for human resources with other districts or even LAUSD’s independent charter schools.

To assess the impact of a temporary class size reduction initiative, we made the following assumptions:

- (1) The net impact of the temporary class size reduction initiative should cost no more than \$50 million over the next five years. This is equivalent to the additional cost we projected the District would incur if it implemented ERIP for certificated employees.
- (2) Currently, the District enrolls about 98,000 students in grades 4 and 5. To simplify our illustration, we assume that this number will not change over the next five years.
- (3) The average class size norm for grades 4 and 5 is 29 students.
- (4) A key reason the size of classes could be reduced on a temporary basis is that teachers leave the district annually (retirement or resignation). Rather than refill these positions, the District would begin to increase the class size norm until it again reached its base year (2008-09) level.
- (5) Health benefits will increase by 3.5 percent per year
- (6) Salary and salary-related benefits will not increase during the next five years.

Table 1 shows the temporary reductions in class sizes we used for grades 4 and 5. In 2009-10, the average class size for grades 4 and 5 would be reduced from 29 to 25 (4 students). In 2010-11, the average class size is set at 26.5 students – 2.5 students lower than the 2008-09 norm. In 2011-12, the grade 4/5 class size norm increases to an average of 28 students – only one less than the 2008-09 level. Beginning 2012-13, the average class size for grades 4 and 5 returns to the original 2008-09 level.

**Table 1**  
Change in Average Class Size for Grades 4 and 5  
(Relative to base year 2008-09)

Year	Class size	Change from 2008-09
2008-09	29	NA
2009-10	25	-4
2010-11	26.5	-2.5
2011-12	28	-1
2012-13	29	0
2013-14	29	0

Table 2 shows how implementation of the class size norms in Table 1 would affect the number of teachers teaching grades 4 and 5. The reduction of the grade 4/5 class size norm by four students would increase the number of grade 4/5 teachers by 541; we view these as “avoided layoffs.” When the grade 4/5 class size norm goes to 26.5 students in 2010-11, the number of teachers needed is 3,698 – 222 teachers lower than the 2009-10 level. We assume that retirees make up half these 222 teachers and resignations make up

the other half.<sup>2</sup> Thereby, the 541 teachers whose jobs were spared because of the temporary class size reduction initiative would remain on the District’s payroll. Note that in cases where resignations and retirements are for teachers in grades K-3, other things being equal, these K-3 positions would be refilled using teachers from grades 4 and 5.

The next year (2011-12), the class size norm for grades 4 and 5 goes to 28 students – an increase of 1.5 students. Now only 3,500 teachers are needed, 121 less than the teacher load in the base year. Layoffs are avoided if an additional 198 teachers retire or resign. We assume that 99 of these teachers retire and 99 resign, which is viable given historical teacher exit patterns. Beginning the 2012-13 school year, the grade 4/5 class size norm would return to its base year level (29 students). As a result, the number of teachers needed returns to 3,379. If at least 121 elementary teachers retire or resign, then no layoffs would be needed. From that point forward, the cumulative effect of the temporary class size reduction initiative would be the avoidance of layoffs of 541 low-seniority teachers, the non-replacement of 270.5 retiring elementary teachers, and non-replacement of 270.5 elementary teachers who resign between 2009-10 and 2012-13.

**Table 2: Assumptions Regarding Number of Teachers who Retire or Resign**

Year	Enrollment	Grades 4 and 5			# of Affected Teachers: Cumulative for all elementary grades (K-5)		
		Class size Norm	# of Teachers	Change in # of Teachers from Base Year: 2008-09	Avoided Layoffs	Retire	Resign
2008-09	98,000	29	3,379		NA	NA	NA
2009-10	98,000	25	3,920	541	541		
2010-11	98,000	26.5	3,698	319	541	-111	-111
2011-12	98,000	28	3,500	121	541	-210	-210
2012-13	98,000	29	3,379	-	541	-270.5	-270.5
2013-14	98,000	29	3,379	-	541	-270.5	-270.5

Table 3 shows the projected cumulative impact of the temporary class size reduction initiative on the District’s budget through 2013-14 (corresponds to the last year in our analysis of the cost impact of ERIP). To develop these projections, we had to set the cost per teacher for three types of teachers affected by the initiative: teachers who otherwise would have been laid off, retirees, and resignations. Assumptions regarding the average cost per teacher for “avoided layoffs” and retirees are the same as the

<sup>2</sup> Given that in recent years about 350 elementary teachers have resigned annually, this assumption seems quite reasonable. To the extent that resignations are lower than 222, they could be covered by retirees. This would have a modest effect on implementation costs.

assumptions used in our ERIP analysis. We assumed that the cost of teachers who resigned would be the average of the other two. (See the appendix for details.)

Given these assumptions, the cost in the first year of implementation (2009-10) is projected at \$36 million. After that, the annual cost falls precipitously to \$19 million in 2010-11, and to \$3 million in 2011-12. Beginning 2012-13, the temporary class size reduction initiative would produce a projected net savings of \$7 million. This is because the District's expense on compensation (salaries and benefits) for the avoided layoffs is somewhat lower than the cost savings the District accrues through teachers who resign or retire. In 2013-14 the net savings would amount to \$6 million. Over the five-year period through 2013-14, the net cost of the temporary class size reduction initiative sums to \$45 million.

**Table 3: Projected Cost of Temporary Class Size Reduction Initiative**

Year	# of Affected Teachers: Cumulative			Average Cost per teacher			Total Budget Cost (\$millions)			Net Impact on Budget
	Avoided Layoffs	Retire	Resign	Avoided Layoffs	Resign	Retire	Avoided Layoffs	Resign	Retire	
2008-09	NA	NA	NA	\$66,300	\$79,100	\$79,800	NA	NA	NA	NA
2009-10	541	NA	NA	\$66,700	\$79,500	\$79,800	\$36	\$0	\$0	\$36
2010-11	541	-111	-111	\$67,200	\$79,900	\$79,800	\$36	(\$9)	(\$9)	\$19
2011-12	541	-210	-210	\$67,600	\$80,400	\$79,800	\$37	(\$17)	(\$17)	\$3
2012-13	541	-	-270.5	\$68,100	\$80,800	\$79,800	\$37	(\$22)	(\$22)	(\$7)
2013-14	541	-	-270.5	\$68,600	\$81,300	\$79,800	\$37	(\$22)	(\$22)	(\$6)
<b>TOTAL</b>										<b>\$45</b>

[Potentially, the severity of the District's fiscal woes could warrant deep reductions in ongoing school expenditures. To the extent such reductions involved class size increases, these increases could be made across the board. For example, if the District were to increase elementary classes by 2 students in 2009-10, then the class sizes for grades K-3 would go from 20 to 22, while the size of the classes for grades 4 and 5 would go from 25 (29 - 4) to 27.]

While the temporary class size reduction initiative would cost the District an estimated \$45 million over the next five years, \$55 million would be needed in the first two years (2009-10 and 2010-11). To that end, we feel federal stimulus dollars could be used for

this purpose. Indeed, the temporary class size reduction initiative's avoidance of over 500 layoffs accords well with the federal stimulus package's objective of creating jobs.<sup>3</sup>

The District could consider a similar strategy for critical shortage fields at the secondary level. For example, rather than layoff math teachers as a result of the bumping that occurs because of force reductions, the District might consider the feasibility of retaining all math teachers (current and those bumped back into teaching). As math teachers retire or resign, the sizes of these classes would be gradually increased back toward their 2008-09 levels. If warranted, in a subsequent informative we could develop estimates of the programmatic and fiscal impact of using federal stimulus dollars to temporarily reduce the class size for Algebra 1, widely viewed as a gateway to the college-prep (A-G) curriculum.

### ***Beyond Numbers: Improving the Quality of Teachers***

Earlier we noted that one of the benefits of a strategy such as the temporary class size reduction initiative would be to provide the District with time to identify teachers who are best at getting high academic results for children and taking steps to insure that these teachers are retained, nurtured, and used to benefit other teachers. Currently the District does not employ a systematic approach for identifying teachers who get great academic results for LAUSD's students. Logically, if access to this kind of information were available, the District would be able to target its efforts at securing and retaining teachers who get great results for students. The IAU has developed several reports on this subject. In a subsequent analysis, we will return to the issue of how the District might practicably and profitably identify, obtain, nurture, and retain teachers who are best at getting results for LAUSD's students.<sup>4</sup>

---

<sup>3</sup> See the appendix for information on potential dollars available to LAUSD through the federal stimulus package (American Recovery and Reinvestment Act).

<sup>4</sup> Also see Laura Goe and Leslie M. Stickler, *Teaching Quality and Student Achievement: Making the Most of Recent Research*, National Comprehensive Center for Teacher Quality, March 2008.

# Appendix

- A. Teacher compensation data
- B. Federal Stimulus Resources for LAUSD

## A. Assumptions Regarding Teacher Compensation

LAUSD Board of Education -- Independent Analysis Unit  
**IMPACT OF TEMPORARY REDUCTION IN CLASS SIZE**

ASSUMPTIONS	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
<b>RETIREEES: ANNUAL COST BEFORE RETIREMENT</b>						
Average Salary (assume no increase over next 5 years)	\$72,000	\$72,000	\$72,000	\$72,000	\$72,000	\$72,000
Health benefits (assume 3.5% increase per year)	\$12,000	\$12,420	\$12,855	\$13,305	\$13,770	\$14,252
Other (salary related) benefits (assume no increase over next 5 years)	\$7,819	\$7,819	\$7,819	\$7,819	\$7,819	\$7,819
<b>SUBTOTAL</b>	<b>\$91,819</b>					
<b>RETIREEES: ANNUAL COST UPON RETIREMENT</b>						
Retiree Health Benefits (assume 3.5% increase per year)	\$12,000	\$12,420	\$12,855	\$13,305	\$13,770	\$14,252
<b>NET COST OF RETIREEES</b>	<b>\$79,819</b>	<b>\$79,819</b>	<b>\$79,819</b>	<b>\$79,819</b>	<b>\$79,819</b>	<b>\$79,819</b>
<b>Net Cost of Retirees (rounded to nearest \$100)</b>	<b>\$79,800</b>	<b>\$79,800</b>	<b>\$79,800</b>	<b>\$79,800</b>	<b>\$79,800</b>	<b>\$79,800</b>
<b>ANNUAL COST OF PROSPECTIVE RIF TEACHERS</b>						
Average Salary	\$49,000	\$49,000	\$49,000	\$49,000	\$49,000	\$49,000
Health benefits	\$12,000	\$12,420	\$12,855	\$13,305	\$13,770	\$14,252
Other (salary related) benefits	\$5,322	\$5,322	\$5,322	\$5,322	\$5,322	\$5,322
<b>NET COST OF PROSPECTIVE RIF TEACHERS</b>	<b>\$66,322</b>	<b>\$66,742</b>	<b>\$67,176</b>	<b>\$67,626</b>	<b>\$68,092</b>	<b>\$68,574</b>
<b>NET COST OF PROSPECTIVE RIF TEACHERS (rounded to nearest \$100)</b>	<b>\$66,300</b>	<b>\$66,700</b>	<b>\$67,200</b>	<b>\$67,600</b>	<b>\$68,100</b>	<b>\$68,600</b>
<b>RESIGNATIONS (Assume average of cost of reductions in force --RIFs--and retirees)</b>						
Average Salary	\$60,500	\$60,500	\$60,500	\$60,500	\$60,500	\$60,500
Health benefits	\$12,000	\$12,420	\$12,855	\$13,305	\$13,770	\$14,252
Other (salary related) benefits	\$6,570	\$6,570	\$6,570	\$6,570	\$6,570	\$6,570
<b>NET COST OF RESIGNATIONS</b>	<b>\$79,070</b>	<b>\$79,490</b>	<b>\$79,925</b>	<b>\$80,375</b>	<b>\$80,841</b>	<b>\$81,323</b>
<b>NET COST OF RESIGNATIONS (rounded to nearest \$100)</b>	<b>\$79,100</b>	<b>\$79,500</b>	<b>\$79,900</b>	<b>\$80,400</b>	<b>\$80,800</b>	<b>\$81,300</b>

## **B. Federal Stimulus Resources for LAUSD**

<b>Major K-12 Programs covered in the American Recovery and Reinvestment Act (ARRA)</b>	<b>2009-10</b>	<b>2010-11</b>	<b>Total</b>
<b>Total Federal Dollars (in millions)</b>			
State Fiscal Stabilization Fund	\$53,600.0	\$0.0	\$53,600.0
Title I (includes School Improvement Grants)	\$6,500.0	\$6,500.0	\$13,000.0
IDEA Parts B and C	\$6,100.0	\$6,100.0	\$12,200.0
Education Technology	\$325.0	\$325.0	\$650.0
<b>TOTAL</b>	<b>\$66,525.0</b>	<b>\$12,925.0</b>	<b>\$79,450.0</b>
<b>Estimated California Dollars (in millions)</b>			
State Fiscal Stabilization Fund	\$4,875.5	\$0.0	\$4,875.5
Title I (includes School Improvement Grants)	\$733.35	\$733.4	\$1,466.7
IDEA Parts B and C	\$660.6	\$660.6	\$1,321.1
Education Technology	\$35.4	\$35.4	\$70.8
<b>TOTAL</b>	<b>\$6,304.8</b>	<b>\$1,429.3</b>	<b>\$7,734.1</b>
<b>Estimated LAUSD Dollars (in millions)</b>			
State Fiscal Stabilization Fund	\$386.9	\$0.0	\$386.9
Title I (includes School Improvement Grants)	\$180.5	\$180.5	\$361.0
IDEA Parts B and C	\$84.2	\$84.2	\$168.4
Education Technology	\$4.9	\$4.9	\$9.7
<b>TOTAL</b>	<b>\$656.5</b>	<b>\$269.6</b>	<b>\$926.0</b>

Developed by Rima Zobayan, IAU, March 6, 2009

Source: Federal totals and LAUSD estimates are from Santiago Jackson's informative, "Update on Federal Stimulus Package" (February 23, 2009).

California estimates are from the California Department of Education's "Comparison PreK-12 Education Estimates" (March 5, 2009): <http://www.cde.ca.gov/fg/aa/ar/com.asp>