

# The Feasibility of Mandating School Breakfast in California's Severe Need Schools

---

**COSTS, CHALLENGES, AND RECOMMENDATIONS**

**Final Report Prepared for the Nutrition Services Division  
California Department of Education • January 2008**

Submitted by



William J. McCarthy, Ph.D.

Barbara Dietsch, RD, Ph.D.

Brian McReynolds

Gabriela S. Jones

## ***Acknowledgments***

We thank the California school food service directors and business managers who participated in this study. We cannot thank them by name because we assured them confidentiality, but without their diligent cooperation, this report would not have been possible.

We thank the various members of our advisory committee for their constructive comments on the design of the study and the analysis and reporting of results.

We thank consultants Carol Ann Hiort-Lorenzen, RD, and Philomena Aparicio. Their rapport with fellow food service directors was key to obtaining high-quality information about the costs and challenges associated with offering a School Breakfast Program in California public schools.

We thank Katy Davidson, Colleen Montoya, Jan Agee, and Scott Sargent for their editorial assistance.

## **Contents**

Executive summary.....	4
Introduction.....	11
Assembly Bill 569.....	12
Background – State and national situation.....	12
Recommendations.....	13
Preface to the recommendations.....	13
Plausible ranges of additional ongoing costs (Table 1).....	14
Plausible ranges of additional one-time costs (Table 2).....	15
Additional legislative considerations regarding the recommendations	16
Waiver criteria.....	16
Methods used in this study.....	17
Data sources .....	17
Sampling frame.....	17
Results .....	19
Descriptive statistics about sample before collecting interview data.....	19
Survey study sampling methodology .....	20
Cooperation rate and validity of findings.....	20
Telephone interview results.....	20
Number of schools by enrollment size (Table 5).....	21
Reasons why school did not provide the School Breakfast Program (SBP) (Table 7).....	23
Specific one-time start-up costs of providing the SBP (Table 11) .....	26
Estimates of specific recurring costs (Table 12).....	26
Weighted average cost of school breakfast meal, by school size.....	27
Interviews with schools that had recently adopted the SBP.....	29
Results of site visits at schools with no SBP.....	31
Plausible range of breakfast start-up costs (Table 17).....	34
Plausible range of state breakfast recurring costs (Table 18).....	35
Plausible range in potential unfunded mandate costs (Table 20).....	37
Case studies.....	37
Success stories.....	40
Summary and conclusions.....	41
Study limitations .....	42
End notes.....	45
List of appendixes.....	46
Definition of severe need schools.....	Appendix A
Federal school meal reimbursement rates.....	Appendix B
Recommended changes to law to implement mandatory SBP.....	Appendix C
Telephone interview questionnaire.....	Appendix D
Cost estimate form.....	Appendix E
Study methods.....	Appendix F
Case studies with detailed cost breakdown for school breakfasts.....	Appendix G
CDE administrative costs for mandatory severe need SBP.....	Appendix H
Glossary of terms used in this report.....	Appendix I

## ***Executive Summary***

For school children, breakfast may be the most important meal of the day. Research shows that students who regularly eat a nourishing breakfast perform better in school, perform better on tests, get along better in the classroom, are generally happier, and even reduce their risk of obesity. Eating a healthy breakfast daily is especially important for children from low-income families.

Consistent with national trends, California has been gradually increasing the proportion of students who are participating in the School Breakfast Program (SBP). Progress has slowed in California, however, compared to many other states. To accelerate progress, the California Legislature has recently taken steps to ensure greater access to the School Breakfast Program for students attending predominantly low-income schools.

This report, prepared by WestEd for the California Department of Education (CDE), is a follow-up to the summary report submitted to the California State Legislature regarding the requirements of Chapter 72 of the Statutes of 2006 (Assembly Bill 569/Garcia). Chapter 72 required the CDE to report to the State Legislature on the cost and feasibility of mandating that *all* of the state's severe need schools, kindergarten through twelfth grade (K-12), participate in the SBP. "Severe need" schools are those where 40% or more of their students participate in the National School Lunch Program (NSLP) and are eligible for free or reduced-price meals.

### **School Breakfast Program Participation – CDE Survey**

A CDE survey of school breakfast participation, conducted in November 2006, identified 570 K-12 schools meeting the federal definition of severe need that participated in the NSLP but did not participate in the SBP. These 570 schools represented 8.7% of the total 6,523 severe need schools included in the survey, which, in turn, represent all of the severe need schools in California that are not preschools, day centers or charter schools. These severe need schools comprise 69.1% of all California public schools.

When results were weighted by estimated average daily enrollment, the percentage of students in severe need schools whose schools did *not* participate in the SBP was 7.2%, reflecting the smaller size of the schools not participating in the SBP. A total of 82,250 students eligible for free and reduced-price lunches were enrolled in the 570 schools not participating in the SBP. Of those students, 51%, on average, participated in the NSLP (N = 41,949), and 35% of the NSLP participants could be expected to participate in the SBP (N= 14,682), if it was offered at their schools. In the year since the CDE survey was conducted, an additional 48 severe need schools received a state-funded school breakfast start-up grant, bringing the number of severe need schools known not to be currently offering the SBP down to 522 schools.

SBP non-participation varied considerably by region, with 24.0% of severe need schools in the Bay Area not participating, compared to only 3.5% of severe need schools in the Los Angeles region not participating. As expected, fewer severe need schools in

California's sparsely populated northern and eastern counties participated in the SBP compared to most other regions.

### **School Breakfast Start-Up Grants – CDE Data**

Severe need schools are eligible to apply for a one-time School Breakfast Start-Up Grant. The CDE intends to give their applications funding priority, if school breakfast start-up grant funds continue to be available. However, start-up grants are not a prerequisite to severe need schools adopting the SBP. Some schools can adopt the SBP without state start-up funding.

These start-up grants provide up to \$15,000 per school, depending on need. The CDE reports that the average grant award for breakfast start-up grants in 2007 was \$11,237 per school, including some schools that are not severe need schools. Of the 2007 grant requests, 48 severe need schools applied for and received a School Breakfast Start-up Grant.

Accordingly, to optimize adoption of the SBP, it would be desirable if additional start-up funding could increase by an estimated \$2.5 million to \$5.3 million. This maximum possible range excludes the 48 severe need schools that recently received a School Breakfast Start-up Grant and is based on the further assumption that 10% to 20% of the remaining 522 schools might apply for and obtain a waiver from the SBP requirement. Of the 418 to 470 severe need schools that most likely would be required to offer a school breakfast by the state mandate, it is possible that only 80% to 90% of them (or between 334 and 423) would apply for a School Breakfast Start-up Grant. This estimate also takes into account that the amount of funding needed per start-up grant will probably range from a low of \$10,400 to the maximum amount, or \$15,000 per site.

### **Study Methodology for WestEd Survey of Severe Need Schools Not Providing the SBP**

To determine the feasibility of mandating school breakfast in California's severe need schools, WestEd researchers randomly sampled 104 (18.2%) of the state's 570 severe need schools not offering breakfast, yielding 73 school districts in the sampling plan. Many of the findings are based on telephone interviews with food service directors and school business managers at 44 districts (representing 60 schools), for a cooperation rate of 70%. In 10 of these 44 districts, which were chosen to reflect 10 disparate regions of the state, additional information was obtained through site visits and follow-up phone calls. An additional 11 districts were identified with one or more severe need schools that recently began providing the SBP. Seven of 11 of these "breakfast-adopter" districts agreed to be interviewed, for a cooperation rate of 63.6%.

### **WestEd Survey Study Results: Costs to Providing Breakfast in School**

The severe need schools not offering breakfast reported a weighted average estimated total cost of providing a school breakfast meal per student of \$2.22 per breakfast meal, with larger schools reporting an average cost of \$1.61 per breakfast meal and smaller schools reporting an average of \$3.01 per breakfast meal.

WestEd school site visits confirmed the information provided above and yielded firmer estimates of the true costs of adopting and maintaining a school breakfast program.

Assuming a state meal subsidy of \$.2195\* per meal for free and reduced-price meals in severe need schools, the average annual cost to the state of providing a school breakfast to all schools not currently participating in the SBP would be \$478,000 for all 522 schools. However, more realistic cost estimates assume that between 10% and 20% of schools might apply for and obtain a waiver from the proposed school breakfast mandate. If granted, these waivers would result in the new school breakfast participants numbering between 9,684 and 10,895 students eligible for free and reduced-price breakfasts (instead of the maximum 12,105 students). The corresponding estimated additional recurring costs would then range between \$383,000 and \$430,000 respectively. These projected numbers are based on the assumption that 51% of eligible students would participate in the NSLP in these "no breakfast" schools and that 35% of these NSLP participants would participate in the SBP if it were offered.

There was little consensus among interviewees when asked to suggest what additional information or guidance would help to motivate districts to apply for a \$15,000 School Breakfast Start-Up Grant. Estimated school breakfast start-up costs did not vary much by the size of school enrollment and usually exceeded the \$15,000 currently available as a start-up grant. The median estimate was \$24,000. The biggest contributor to these average costs was equipment (\$11,237). Examples of equipment costs included production equipment; kitchen or cafeteria remodeling expenses; installation, plumbing or electrical changes; and refrigerated or dry storage.

### **Survey Study Results: Successes and Challenges**

More than nine out of ten severe need schools in California are already participating in the SBP. Data collection efforts have captured some of the successful strategies employed by these severe need schools in adopting and sustaining such participation. They include:

- Breakfast in the classroom
- Nutrition break breakfast
- Grab 'n Go breakfast
- Second Chance breakfast
- Breakfast on the bus

Some of the severe need schools that do not currently participate in the SBP reported significant challenges to adopting the program. The good news is that some of these challenges, such as anticipated low student participation in the SBP, can be overcome using existing resources, with additional technical assistance provided by the CDE. For those few schools that have challenges that make their participation in the SBP infeasible, waivers from compliance with the state SBP mandate would be appropriate.

---

\* Reflects an increase of \$0.063 added to the 2006-07 statutory state meal reimbursement rate.

The most commonly cited barriers to adopting the SBP were the following:

- Logistics of meshing the SBP with bus schedules and class schedules
- Anticipated lack of student participation
- Extra paper work required
- Cost of the additional district nutrition services staff needed

Adequate state and federal reimbursement of all school and district costs incurred by providing the SBP, while a significant concern, was not regarded as important a potential barrier as logistics and lack of anticipated student participation.

### **How to Make the SBP Feasible in Nearly All Severe Need Schools**

What is needed to make the SBP possible at severe need schools not currently providing the SBP? The most common answers were:

- Ensure that school breakfast reimbursement covers all costs.
- Help recruit appropriate staff at a reasonable cost.
- Successfully address staff resistance.
- Purchase needed equipment.
- Promote the SBP to parents and children.
- Cope successfully with bus and class scheduling conflicts.
- Obtain help with food transportation costs.

Interviews with the seven districts that had severe need schools that recently adopted the SBP yielded information consistent with the information provided by school districts that had severe need schools sites currently *not* participating in the SBP.

As desirable as mandating school breakfast for all severe need schools might seem, adopting a SBP could prove impractical at selected severe need schools. One of the clearest examples was a school for the physically handicapped, where per pupil meal costs were exorbitant because of the medically required unique nutrition needs of the students. Some very small, rural, geographically isolated severe need schools also reported that adopting an SBP was impractical, given their geographical isolation.

### **Range of Discretionary and Required Costs**

The following tables provide a summary of the range of discretionary state start-up and additional required state recurring costs that past experience and current cost estimates suggest would be helpful for optimizing SBP participation by severe need schools not currently providing the SBP. Also included as potential costs are estimated unfunded mandate costs. It is difficult to predict how many school districts would file a claim against the state's unfunded mandates fund for the difference between what it costs their school(s) to provide the SBP and what they receive in revenues, and the extent to which districts' claims would be accepted as mandated costs. The following table also includes a range of potential maximums in unfunded mandates-related costs. The actual claims for unfunded mandates-related costs are likely to be lower.

**Plausible ranges of additional required and discretionary ongoing costs to California, with listing of corresponding additional federal revenues to California\***

<b>Condition</b>	<b>Maximum Amount **</b>	<b>Minimum Amount ***</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 104 sites that will NOT be included, because of waivers
Number of severe need schools newly subject to SBP recurring costs	470 school sites newly subject to increased SBP recurring costs	418 school sites newly subject to increased SBP recurring costs
<b>Required additional state ongoing costs</b>		
Annual increased appropriation for recurring meal reimbursements †§	470 school sites - 10,895 free and reduced-price meals \$430,000	418 school sites - 9,684 free and reduced-price meals \$383,000
Increased California Dept. of Education staff costs ‡	\$390,000 for four Full-time Equivalent staff (two limited-term)	\$390,000 For four Full-time Equivalent Staff (two limited-term)
<b>Discretionary additional state ongoing costs</b>		
Annual increased appropriation to cover potential mandated cost claims ~	470 school sites - 10,895 free and reduced-price meals \$766,000 (ongoing)	418 school sites - 9,684 free and reduced-price meals \$681,000 (ongoing)
Range of total required & discretionary ongoing costs	between \$820,000 and \$1,586,000	between \$773,000 and \$1,453,000
<b>Corresponding additional federal revenues to California</b>		
Annual increased federal appropriation for recurring meal reimbursements <sup>∞</sup>	470 school sites - 10,895 free and reduced-price meals \$3,012,000	418 school sites - 9,684 free and reduced-price meals \$2,677,000

\* Note. Based on a total of 522 severe need school sites that currently do not offer the SBP. The totals are rounded to the nearest thousand and reflect required state recurring costs, including potential costs of covering unfunded mandates.

\*\* Assuming minimum (10%) number of waivers, \$15,000 maximum reimbursement, and maximum (90%) number of start-up grant applications.

\*\*\* Assuming maximum (20%) number of waivers, lower reimbursement (\$10,400), and minimum (80%) number of start-up grant applications.

† Assuming a California per meal reimbursement of \$0.2195 for free and reduced-price meals in 2007-2008.

§ Estimates for numbers of students affected were derived from CDE statistics for 2004-2005; results would be similar if 2005-06 statistics were used.

‡ See appendix H for a breakdown of these anticipated CDE administrative costs; includes two limited-term positions.

~ Figures represent maximum amounts if all severe need schools newly providing the SBP were to make a claim for reimbursement from the state's unfunded mandates fund and were to succeed in their petition.

∞ From Table 19. 2007-2008 federal school breakfast reimbursement levels for severe need schools are: \$1.61 (free), \$1.31 (reduced-price) and \$0.24 (paid).<sup>15</sup> Reimbursement for paid lunches is NOT included in this table.

<b>Plausible ranges of additional discretionary one-time costs to California*</b>		
	<b>Discretionary or potential additional one-time state costs</b>	
<b>Condition</b>	<b>Maximum Amount **</b>	<b>Minimum Amount ***</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 104 sites that will NOT be included, because of waivers
Number of severe need schools newly subject to SBP recurring costs	470 school sites newly subject to increased SBP recurring costs	418 school sites newly subject to increased SBP recurring costs
Estimated total cost of start-up grants	\$5.3 million (one-time) (423 x \$15,000 – \$1.017 million ‡)	\$2.5 million (one-time) (334 x \$10,400 - \$1.017 million ‡)
<p>* Note. Based on a total of 522 severe need school sites that currently do not offer the SBP. The totals are rounded to the nearest thousand and reflect discretionary state one-time costs.</p> <p>** Assuming minimum (10%) number of waivers, \$15,000 maximum reimbursement, and maximum (90%) number of start-up grant applications.</p> <p>*** Assuming maximum (20%) number of waivers, lower reimbursement (\$10,400), and minimum (80%) number of start-up grant applications.</p> <p>‡ \$1.017 million has already been appropriated for one-time start-up grants to selected schools adopting the SBP.</p>		

### **Study Limitations**

As with all survey research, there is imprecision in the estimates because of sampling error and non-participation by schools selected for interviews. A constraint on the cost estimates as representative figures was the fact that all cost estimates were derived from interviews with food service managers and district business services staff of districts that currently have one or more severe need schools that do not serve breakfast. No comparable cost information was solicited from staff of districts that provided the SBP at all of their severe need schools.

### **Recommendations**

This study yielded several recommendations.

The key recommendation is to support a state requirement that severe need schools provide breakfasts but with a provision to permit those schools with special circumstances (e.g., schools with a large number of students who need medically required, individualized nutrition needs) to request a waiver from the State Board of Education. Such a mandate, to work well, would benefit from increased state support to schools for school breakfasts.

Implementing and enforcing compliance with such a mandate would require additional CDE personnel to:

- Process waiver requests.
- Monitor compliance with the mandate.
- Provide the additional technical assistance necessary to help severe need schools successfully implement the SBP.

Increasing access to school breakfast is not enough. Many students attending schools that provide the SBP are still not eating breakfast. Schools should be encouraged to try a variety of proven strategies to increase student participation in the SBP.

## **Conclusion**

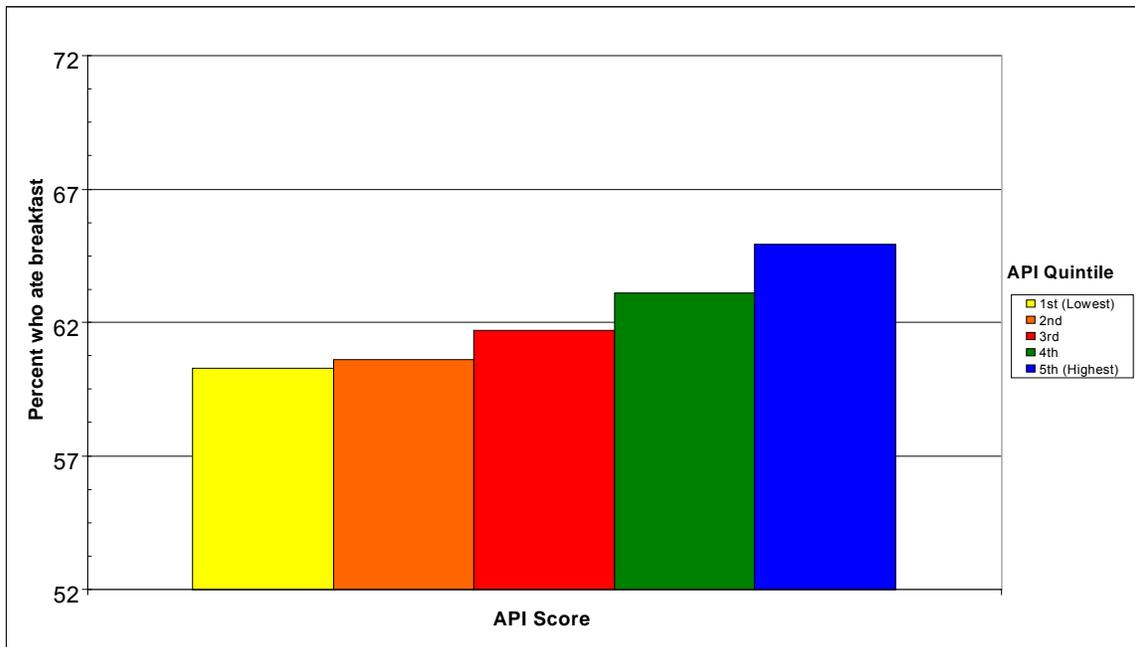
Successfully implementing the SBP in severe need schools that currently do not provide it would give students access to a nutritious, cost-effective breakfast, thus improving their capacity to learn and helping them to grow into healthy, productive adults.

## Introduction

For school children, breakfast may be the most important meal of the day.

Evidence-based research shows that students who regularly eat a nourishing breakfast perform better in school,<sup>1,5</sup> perform better on tests,<sup>6</sup> and reduce their risk of obesity.<sup>2</sup> Eating a healthy breakfast daily is especially important for children from low-income families.<sup>7</sup> A recent authoritative review of the literature has determined that a high degree of consensus has been reached with respect to the importance of students' eating breakfast for optimizing academic performance.<sup>8</sup> The authors of this review identified 22 empirical studies that examined the impact of skipping breakfast on cognitive or academic achievement outcomes. A variety of definitions were used to characterize breakfast consumers in the studies in this review, including consuming breakfast every day, every school day, on the dietary survey day, a minimum number of days per week, or usual or habitual consumption. Despite the variety of ways of measuring breakfast consumption, the pattern of findings was consistent. Among their conclusions was that breakfast-skipping increases with age, occurs more often among low-income students, and is consistently associated with lower academic performance as measured by letter grades and standardized tests compared to students who did not skip breakfast. One of the more often cited studies<sup>9</sup> yielded a graph specific to California that confirmed the observed benefit of breakfast on standardized test scores (see Figure 1 below).

**Figure 1: Breakfast Consumption and API Scores for California Schools**



Accordingly, the CDE and the Governor promote provision of the SBP in all California schools. This is especially important in schools where a high proportion of children come from low-income families.

### **Assembly Bill 569**

Chapter 72 of the Statutes of 2006 (Assembly Bill 569/Garcia) signed by the Governor on September 29, 2006, appropriated \$170,000 on an urgency basis for the CDE to contract for a study analyzing how many severe need schools do not now serve breakfast, what it would cost for all districts with such schools to do so, and the feasibility of requiring them to do so. It required the CDE to analyze the changes in law necessary to implement such a requirement. This report is a follow-up to the summary of fiscal impact information previously submitted to the Legislature in fulfillment of the requirements of Assembly Bill 569 (AB 569) to report back to the Legislature.

Federal law defines "severe need" schools as those where 40% or more of the lunches that were served two years earlier were provided for free or at a reduced-price. Federal law provides a modest additional financial incentive of \$0.26 per meal for breakfasts served in such schools. However, some schools that meet this "severe need" definition do not participate in the SBP, even though they participate in the NSLP. Until this study, the CDE did not have site-specific data regarding the number of schools falling into this category.

The purpose of this study was to determine the reasons why some districts do not provide breakfast at all of their severe need schools and to assess the fiscal impact of providing breakfast in schools falling into this category. This report also provides data assessing the level of funding that will be needed to cover the state-mandated costs should the Legislature vote to mandate that severe need schools offer the SBP.

### **Background - State and National Situation**

The percentage of severe need schools offering school lunch in the U.S. that are also offering school breakfast increased from 79.4 percent in 2003-2004 to 81.1 percent in 2004-2005.<sup>3</sup> In 2004-2005, California's percentage of severe need schools offering school lunch and school breakfast was reported to be 78.6%.<sup>3</sup> California therefore lags the nation slightly in the proportion of its severe need schools that provide both breakfast and lunch. California has also experienced less success than other states in getting students to participate in the SBP when it is offered at a school. Nonetheless, more of California's severe need schools now participate in the SBP than in 1993,<sup>10</sup> when 642 severe need schools did not participate in the SBP.

For the nation as a whole, 44% of students in severe need schools who participated in NSLP also participated in the SBP.<sup>3</sup> Using CDE data for the same year (2004-2005), the corresponding California percentage at breakfast was 35% of students who participated in the NSLP in 2004-2005 (or 18% of the average daily attendance).<sup>11</sup>

While the perceived costs of providing the school breakfast may discourage some school districts from participating in the SBP, the slightly higher federal reimbursement rate (currently, an additional \$0.26 per free or reduced-price meal) for severe need

schools (with 40% or more students eligible for free or reduced-price meals participating in the NSLP two years earlier) lessens the economic disincentive for these schools. Moreover, the highest combined federal and state meal reimbursement occurs for students eligible for free meals. It is worth noting that most students participating in California's 2004-2005 SBP were eligible for free meals (77.4%). Students eligible for reduced-price meals comprised only 11.3% of SBP participants; and students responsible for paying the full price of each meal comprised only 11.2% of SBP participants.<sup>3</sup>

It is noteworthy that the largest year-to-year increase in SBP participation occurred in New Jersey where legislation was enacted requiring public schools to offer school breakfast if at least 20 percent of the lunches served were provided for free or at a reduced-price.<sup>3</sup> The mandate was implemented in 2004-2005 in elementary schools and expanded to secondary schools in 2005-2006. New Jersey led the nation in the increase in the number of children in its school breakfast program – a 39.1% boost from 82,220 children in 2003-2004 to 114,387 children in 2004-2005.

New Jersey is just one of 25 states that had adopted some kind of mandate with respect to schools providing low-income students with a school breakfast by 2005.<sup>3</sup> Other states with school breakfast mandates included Arkansas, Connecticut, Florida, Georgia, Illinois, Indiana, Kansas, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Hampshire, New York, Ohio, Oregon, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, and West Virginia.

Most of these states required breakfast to be offered to a higher proportion of the state's school children than is envisaged in AB 92, California's most recent legislative proposal to mandate school breakfasts. California's proposal would cover only those schools where 40% or more of school lunch participants were eligible for free or reduced-price meals. For the majority of other states that have adopted a school mandate, the required minimum percent of school lunch participants eligible for free or reduced-price meals is 33% or more. Of 13 states identified by the Food Research and Action Center<sup>3</sup> as succeeding in getting 50% or more of their severe need students to participate in the SBP, eight (61.5%) achieved such success in part as a result of their state legislatures adopting school breakfast mandates.

## ***Recommendations***

### **Preface to the Recommendations**

The report recommendations would normally follow a description of the methods and study results. Policymakers are probably more interested in the recommendations emanating from the study, however, than in knowing all the details concerning the study methodology employed and the specific results that were obtained. Hence, this report describes the recommendations on the next four pages, with details about methods used, results obtained, and conclusions drawn following later in the report.

**Table 1. Plausible ranges of additional required and discretionary ongoing costs to California, with listing of corresponding additional federal revenues to California\*\***

<b>Condition</b>	<b>Maximum Amount **</b>	<b>Minimum Amount ***</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 104 sites that will NOT be included, because of waivers
Number of severe need schools newly subject to SBP recurring costs	470 school sites newly subject to increased SBP recurring costs	418 school sites newly subject to increased SBP recurring costs
<b>Required additional state ongoing costs</b>		
Annual increased appropriation for recurring meal reimbursements † §	470 school sites - 10,895 free and reduced-price meals \$430,000	418 school sites - 9,684 free and reduced-price meals \$383,000
Increased California Dept. of Education staff costs ‡	\$390,000 for four Full-time Equivalent staff (two limited-term)	\$390,000 For four Full-time Equivalent Staff (two limited-term)
<b>Discretionary additional state ongoing costs</b>		
Annual increased appropriation to cover potential mandated cost claims ~	470 school sites - 10,895 free and reduced-price meals \$766,000 (ongoing)	418 school sites - 9,684 free and reduced-price meals \$681,000 (ongoing)
Range of total required & discretionary ongoing costs	between \$820,000 and \$1,586,000	between \$773,000 and \$1,453,000
<b>Corresponding additional federal revenues to California</b>		
Annual increased federal appropriation for recurring meal reimbursements <sup>∞</sup>	470 school sites - 10,895 free and reduced-price meals \$3,012,000	418 school sites - 9,684 free and reduced-price meals \$2,677,000

\* Note. Based on a total of 522 severe need school sites that currently do not offer the SBP. The totals are rounded to the nearest thousand and reflect required state recurring costs, including potential costs of covering unfunded mandates.

\*\* Assuming minimum (10%) number of waivers, \$15,000 maximum reimbursement, and maximum (90%) number of start-up grant applications.

\*\*\* Assuming maximum (20%) number of waivers, lower reimbursement (\$10,400), and minimum (80%) number of start-up grant applications.

† Assuming a California per meal reimbursement of \$0.2195 for free and reduced-price meals in 2007-2008.

§ Estimates for numbers of students affected were derived from CDE statistics for 2004-2005; results would be similar if 2005-06 statistics were used.

‡ See appendix H for a breakdown of these anticipated CDE administrative costs; includes two limited-term positions

~ Figures represent maximum amounts if all severe need schools newly providing the SBP were to make a claim for reimbursement from the state's unfunded mandates fund and were to succeed in their petition.

∞ From Table 19. 2007-2008 federal school breakfast reimbursement levels for severe need schools are: \$1.61 (free), \$1.31 (reduced-price) and \$0.24 (paid).<sup>15</sup> Reimbursement for paid lunches is NOT included in this table.

**Table 2. Plausible ranges of additional discretionary one-time costs to California\***

Condition	Discretionary or potential additional one-time state costs	
	Maximum Amount **	Minimum Amount ***
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 104 sites that will NOT be included, because of waivers
Number of severe need schools newly subject to SBP recurring costs	470 school sites newly subject to increased SBP recurring costs	418 school sites newly subject to increased SBP recurring costs
Estimated total cost of start-up grants	\$5.3 million (one-time) (423 x \$15,000 – \$1.017 million ‡)	\$2.5 million (one-time) (334 x \$10,400 - \$1.017 million ‡)
<p>* Note. Based on a total of 522 severe need school sites that currently do not offer the SBP. The totals are rounded to the nearest thousand and reflect discretionary state one-time costs.</p> <p>** Assuming minimum (10%) number of waivers, \$15,000 maximum reimbursement, and maximum (90%) number of start-up grant applications.</p> <p>*** Assuming maximum (20%) number of waivers, lower reimbursement (\$10,400), and minimum (80%) number of start-up grant applications.</p> <p>‡ \$1.017 million has already been appropriated for one-time start-up grants to selected schools adopting the SBP</p>		

### Cost Estimates

Until a school breakfast mandate is actually undertaken, the actual increase in state costs of implementing such a mandate will be unknown. Reasonable estimates, however, are possible, based on current knowledge and explicit assumptions about student SBP participation and the percentage of severe need schools that would be eligible for a waiver. Assumptions about SBP participation are described on page 32 and details concerning the proposed waiver are given on page 16.

Table 1 is an aggregate of tables 17, 18 and 20, representing plausible maximum and minimum total expected additional state costs associated with mandating that all severe need schools provide the SBP, after subtracting expected federal reimbursements and payments by students eligible for reduced-price meals.

### Key Recommendations

The key recommendation would be support for a state mandate to school districts with severe need schools to provide breakfasts at all of these schools but with a provision to permit severe need schools with special circumstances to request a waiver of the state requirement from the State Board of Education (e.g., schools with a large number of students who need medically required, individualized nutrition needs). Such a mandate, to work well, would benefit from increased state support to schools for school breakfasts.

Implementing and enforcing compliance with such a mandate would require additional CDE personnel to:

- Process waiver requests.
- Monitor compliance with the mandate.

- Provide the additional technical assistance necessary to help severe need schools successfully implement the SBP.

Increasing student access to school breakfast is not enough. Many students attending schools that provide the SBP are still not eating breakfast. Schools should be encouraged to try a variety of proven strategies to increase student participation in the SBP. These strategies are listed below and described in more detail in Appendix I).

These include:

- Breakfast in the classroom
- Nutrition break breakfast
- Grab 'n Go breakfast
- Second Chance breakfast
- Breakfast on the bus

### **Need for Evaluation**

The consequences of establishing a school breakfast mandate need to be rigorously evaluated. It would be a mistake to limit the evaluation to just those schools that are newly adopting the SBP. Some schools in previous years have been dropping their SBP. Schools currently offering the SBP that were considering dropping their participation in the SBP may also need help in complying with the new mandate. The barriers to complying with the new breakfast mandate in severe need schools will need to be identified and addressed. The criteria for waivers will need to be revisited periodically, to ensure that the maximum number of schools can participate in the SBP.

### **Additional Legislative Considerations Regarding These Recommendations**

*California Education Code (EC Section 49550)* requires each school district or county superintendent of schools maintaining any kindergarten or any grades one through twelve, inclusive, to provide one nutritionally adequate free or reduced-price meal for each needy pupil during each school day, except as specified. Existing law permits a school district or county office of education to use funds made available through any applicable federal or state program or to use its own funds to provide the required meals.

To mandate a school breakfast, the law would need to specify that the breakfast must be a “meal” or a “nutritionally adequate breakfast,” which qualifies for reimbursement under the federal child nutrition program regulations, as defined in *EC* sections 49531 and 49553. Without incorporating this language into a new mandate, any size and type of breakfast may be served, and it raises the possibility that schools may serve unhealthy foods (e.g., donuts/pastries donated by local vendors; juice only; cereal only; toast), and they may choose not to participate in the federal SBP (especially in small districts where foods may be donated).

### **Waiver Criteria**

Severe need schools subject to the proposed mandate would be expected to comply, unless the State Board of Education waived compliance. To obtain a waiver, the local school governing board would have to declare that the operation of a breakfast

program at the severe need school was financially infeasible for the severe need school and the school district or county office of education even with a start-up or expansion grant. Specifically, school/district personnel would need to complete a waiver form, obtain school board approval for the request, and then submit it to the State Board of Education, for review. The CDE would need to offer technical assistance to most severe need schools seeking waivers, to see if challenges to participating in the SBP could be overcome. Among other resources, the CDE could use a “tool kit” designed to help schools adopt a SBP, prepared by the U.S. Department of Agriculture. Features of the tool kit include breakfast meal requirements, marketing strategies, alternative breakfast service, and more. This information can be accessed at: <http://www.fns.usda.gov/cnd/breakfast/toolkit/Default.htm>.

A new breakfast mandate should require schools to serve breakfast *in addition* to other meals currently being served at school. Given that it costs less to serve breakfast than lunch, some NSLP sponsors may consider dropping their lunch programs.

In general, a waiver would be granted only to severe need schools that could show that sponsoring a school breakfast would result in unavoidable and serious deficits. Because of uncertainties in estimating participation in the SBP if it were offered and because of uncertainties in the anticipated increased costs, a projected deficit of less than one month’s costs will be considered tolerable for the first year.

Appendix C was prepared by the CDE and summarizes its recommendations for changes to existing law if the school breakfast mandate were to be enacted, as required by AB 569.

## **Methods**

The methods employed in this study are summarized here and are described in more detail in Appendix F.

### **Data Sources**

The most important source of data for this report was a school site-level survey of 2006-2007 School Breakfast Participation conducted by staff of the Nutrition Services Division, CDE, in November, 2006. Other data sources included the 2005 Academic Performance Index (API) data, telephone interview data involving a random sample of severe need schools not currently offering the SBP, and site visit data from a subset of the schools that had been included in the telephone interview sample.

### **Sampling Frame**

The sampling frame consisted of the 570 severe need schools identified as not participating in the SBP in 2006-2007. California has demographically distinct regions influenced in part by geography and in part by historical migration patterns. In order to assure adequate representation of California’s diverse regions, the investigators stratified the random sampling of schools by 12 geographic regions. Seven of these regions were defined by the state’s seven most populous counties (Los Angeles, San Diego, Orange,

Santa Clara, San Bernardino, Riverside, Alameda). The remaining regions represented from five to 20 counties each. Regions 9 and 10 were distinctly less urban than other regions. The regions are described in more detail in Table 3, below.

<b>Table 3. Regional differences in percent of severe need schools that do not participate in the School Breakfast Program</b>				
<b>Region</b>	<b>Counties comprising California Regions</b>	<b># of severe need schools</b>	<b>% severe need schools with NO SBP</b>	<b>95% CI*</b>
1	Los Angeles	1463	3.4%	2.6% - 4.5%
2	San Diego	453	5.7%	3.9% - 8.3%
3	Orange	330	7.3%	4.9% - 10.6%
4	Santa Clara	242	11.2%	7.8% - 15.8%
5	San Bernardino	404	11.1%	8.4% - 14.6%
6	Riverside	323	4.0%	2.4% - 6.8%
7	Alameda	234	12.4%	8.8% - 17.3%
Bay Area 8	Contra Costa, San Francisco, San Mateo, Marin, Solano	460	24.1%	20.4% - 28.2%
Central Valley 9	Fresno, Imperial, Kern, Kings, Madera, Mariposa, Merced, Tulare	856	6.7%	5.2% - 8.5%
Northern & Eastern Counties 10	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Glenn, Humboldt, Inyo, Lake, Lassen, Mendocino, Modoc, Mono, Napa, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sutter, Sonoma, Tehama, Trinity, Tuolumne, Yuba	819	15.3%	13.0% - 17.9%
Sacramento Valley 11	Sacramento, San Joaquin, Stanislaus, Yolo	607	5.4%	3.9% - 7.6%
Central Coast 12	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura	416	8.2%	5.9% - 11.2%
Average:			8.7%	8.0% - 9.4%
*Note. 95% CI refers to the 95% Confidence Interval. To determine if the prevalence rate for one region is "significantly different" statistically from the prevalence rate for another, it is sufficient to show that the prevalence rate for one region does NOT fall within the confidence interval of the other.				

Non-participation in the SBP by severe need schools participating in the NSLP varied considerably by region, with 24.1% of severe need schools in the Bay Area not participating, compared to 3.4% of severe need schools in the Los Angeles region.

## **Results**

### **Statistical Methods Used**

The following results include a variety of statistical tests of hypotheses. Most of the analyses involved logistic regression with the effect of candidate predictors described in terms of an odds ratio and a t-test statistic. Some tests were chi square tests designed to test the overall similarity of two distributions. A few regression coefficients were evaluated as z-scores. To simplify the description of results below, only the statistic and the probability that the statistic could have been obtained by chance are provided.

### **Descriptive statistics about the sample prior to collecting interview data**

Enrollment size appeared to be positively related to SBP participation ( $z = 11.74$ ,  $p < .0001$ ). The average severe need school NOT serving breakfast had 376 students or about 30 percent fewer students compared to an average of 524 students at comparable severe need schools that did serve the school breakfast. Related to enrollment size, the grade composition of the severe need schools also appeared to be related to SBP participation ( $F = 6.72$ ,  $p < .0001$ ). Table 4 shows that SBP participation was greatest for stand-alone severe need elementary schools, less for severe need stand-alone middle and high schools and less still for severe need schools that included a range of grades, as is more typical in less populous areas.

School grade composition	% of severe need schools with NSLP but no participation in the SBP	95% CI*
Elementary	7.1%	6.3% - 8.0%
Middle school	8.1%	6.5% - 10.0%
High school	11.6%	9.9% - 13.6%
Elementary & Middle	11.5%	9.1% - 14.4%
Middle & High school	13.1%	9.1% - 18.6%
Elem & Middle & HS	13.9%	8.7% - 21.5%
Other	13.2%	7.2% - 22.8%
Average:	8.7%	8.1% - 9.4%

\*Note. 95% CI refers to the 95% Confidence Interval. To determine if the prevalence of severe need schools not serving the SBP within a school grade composition category is "significantly different" statistically from the prevalence observed in another category, it is sufficient to show that the prevalence rate for one category does NOT fall within the confidence interval of the other.

The strongest, most consistent determinant of participation by a severe need school in the SBP, however, was the socioeconomic status of the district in which the severe need school was located, at least as reflected by average parent education level ( $t(738) = -3.64$ ,  $p < .0001$ ). For our purposes here, the more appropriate measure of socioeconomic status would have been average household income, but school districts do not collect information on parents' household income. Parents with more formal education (e.g., at least some college) tend to earn more money than parents with less

formal education (e.g., high school graduate only, or less), so the school's average parent educational achievement could serve as a proxy for the average parent income. Surprisingly, the higher the average parent education in a district, the lower the probability that severe need schools in a district would participate in the SBP. This relationship held true overall even after controlling for the impact of enrollment size and was separately confirmed for analyses of districts within each of the following regions: Orange County ( $t(18) = -6.26, p < .0001$ ), Santa Clara County ( $t(23) = -2.64, p < .016$ ) and the Central Valley region ( $t(156) = -4.58, p < .0001$ ). The one exception to this pattern was Alameda County, where the higher the average parent education in a school district, the higher the probability that severe need schools in a district would participate in the SBP ( $t(14) = 3.61, p < .004$ ).

While the available data from the CDE on which schools provide the SBP tell us something about the demographic and geographic influences on school SBP participation, the data do not provide information about how state resources might be used to offset constraints related to these influences. To obtain more pertinent information about the challenges and obstacles perceived by school food service directors and school district business managers and to obtain suggestions about strategies for overcoming these challenges and obstacles, the Legislature directed the CDE to contract for a representative survey of severe need schools. The CDE, in turn, requested that such a study include phone interviews and site visits.

### **Survey Study Sampling Methodology**

The sampling frame consisted of all 570 severe need schools with county-district-school (CDS) codes that had been identified as not participating in the SBP. The resulting sampling plan included 104 schools in 73 districts.

### **Cooperation Rate and Validity of Findings**

The cooperation rate obtained from the schools that were contacted was 69.9%, which is high enough to assure representative findings generalizable to the California school population. Ten regions were represented in the final sample, with the number of schools ranging from three to six per region. The final sample successfully captured the diversity of schools in California's demographically and geographically distinctive regions.

### **Telephone Interview Results**

Telephone interviews were conducted with food service directors or business managers in 44 school districts, to discuss 60 randomly selected severe need school sites not currently serving breakfast according to the 2006-2007 school-specific CDE survey of schools' SBP status. Initially, the interviewers were two food service directors serving as consultants with WestEd staff listening in on these calls to learn how to conduct the interviews themselves. WestEd professional survey research personnel trained by the food service consultants conducted most of the interviews. An additional seven school districts were interviewed from the 11 districts (63.6%) that had recently adopted the SBP for at least one of their schools.

Although the interviews were district-specific, the following analyses took the school as the unit of analysis because answers varied more by type of school than by type of district. Analysis by school also made for greater ease of analysis.

The first question (see interview questionnaire in Appendix D) sought confirmation that the site in question was, in fact, NOT serving breakfast. In four instances, the answer was NO, the site in question WAS serving breakfast and had been serving breakfast continually at least since 2004. If these four schools (out of 60) were representative, then as many as 38 schools of the 570 in the sampling frame could be serving breakfast that are currently recorded by the CDE as not serving breakfast. That still leaves over 530 severe need schools in California that are not providing the SBP.

The second question concerned enrollment at the site. This question was asked in part because prior analysis of existing data had indicated that the size of the site was a consistent influence on SBP participation. The median size provided by the interviewee was 491 students, with four school sites reported to include fewer than 20 students but 33% of the respondents did not know the answer to the question about site enrollment size. The California Basic Educational Data System (CBEDS) data on enrollment for these same sites showed that the median size of the sites was 538 students, and the smallest number was 18 students (see Table 5). This underestimate in enrollment numbers by the site administrators may be more reflective of average daily attendance than of the maximum number of students enrolled. Some later analyses by enrollment number use the CBEDS data rather than the enrollment numbers given by the interviewees because there are fewer missing data with the CBEDS data. Where the CBEDS data were missing but interviewee estimates were available, then the interviewee estimates were used.

<b>Table 5. Number of schools by enrollment size *</b>		
<b>Number of students enrolled</b>	<b>Number of schools</b>	<b>Percent</b>
10+	5	8.3%
50+	5	8.3%
100+	17	28.3%
500+	27	45.0%
1000+	6	10.0%
Total	60	100.0%
* Note. Included 4 schools that turned out to be providing the SBP		

Interviewees were asked to estimate the average daily attendance (ADA) at the site. The average California ADA to enrollment ratio was 89.7 percent. The United States Department of Agriculture (USDA) estimated California's ADA to enrollment ratio for 2004-2005 to be 93.6 percent, confirming that interviewee estimates of average daily attendance were reliably accurate estimates.

When asked what their average daily lunch participation was at this site, the interviewees estimated the proportion of students who participate in the NLSP averaged 53.9% of daily attendance, which was close to the state average of 51%.<sup>11</sup> Only two-

thirds of interviewees could estimate the proportion of lunch participants eligible for free and reduced-price lunches. Their estimates were 47.5% free, 15.6% reduced-price, and 34.5% paid. This contrasts with 62.8% free, 12.5% reduced-price, and 24.7% paid for state schools as a whole in 2004-2005. <sup>11</sup>

The schools identified as not providing the SBP may be more reluctant to provide the SBP than the average school because their proportionately higher-than-average share of students ineligible for free meals ensures that they get less federal reimbursement for the average school breakfast meal compared to most other schools. Moreover, their students are less likely to want to eat the school breakfast even if the school provides it. Students who have to pay full or reduced-price for school meals typically participate less in either the NSLP or the SBP than students eligible for free meals. Severe need schools with a relatively high proportion of students who have to pay full or reduced-price for school meals therefore are more likely to have difficulty attracting sufficient student participation to cover their costs.

Indeed, using API data on the percent of student enrollment who were eligible for free meals, severe need schools not participating in the school breakfast had significantly fewer students eligible for free school meals (31.7%) than severe need schools that **did** participate in the SBP (53.0%) ( $z = 17.1, p < .0001$ ). When reduced-price meals were included in the analysis, the discrepancy between SBP non-participants and SBP participants remained (52.0% versus 67.8%) ( $z = 10.7, p < .0001$ ).

Table 6, below, describes the type of school that was the subject of the interview.

<b>Table 6. Percent of each type of school,* as described by interviewees</b>				
<b>Type of site</b>	<b>Number of schools in sample</b>	<b>Percent of schools in sample</b>	<b>Number of schools in state</b>	<b>Percent of schools in state</b>
Elementary	26	43.3%	5,556	59.3%
Middle	9	15.0%	1,254	13.4%
High school	2	3.3%	1,130	12.1%
Continuation/alternative	6	10.0%	761	8.1%
Severe handicap	1	1.7%	N.A.	N.A.
Spec.ed., Special program	2	3.3%	129	1.4%
Emotionally disturbed students	1	1.7%	N.A.	N.A.
Continuation part day (10:30 lunch)	1	1.7%	N.A.	N.A.
1 district-1 school	1	1.7%	N.A.	N.A.
Don't know	11	18.3%	N.A.	N.A.
Other (Community Day, etc)	N.A.	N.A.	674	7.2%
<b>Total</b>	<b>60</b>	<b>100.0%</b>	<b>9,375</b>	<b>100.0%</b>
N.A. = Not Applicable or Not Available				
Source for state figures: Public School Summary Statistics 2004-2005.				
* Note. Included 4 schools that turned out to be providing the SBP; these were excluded from subsequent analyses.				

When asked whether they had considered serving breakfast at the site under the SBP, 58.8% said “yes” and 41.1% said “no.” When this was examined as a function of

site enrollment size, there was no difference between large and small sites. Grade composition of the schools also did not seem to matter. In addition, type of school was not systematically associated with interviewee willingness to consider serving breakfast at the site.

For those 21 interviewees who said that they had NOT considered serving breakfast under the SBP, the following reasons were cited from a list of possible reasons (see Table 7). In contrast to reports from site visits (see below), none of these 21 interviewees cited resistance by the community or principals to the idea as an important obstacle. Their biggest concerns appeared to be the logistics of meshing the SBP with bus schedules and class schedules, and also with the anticipated lack of student participation. The cost of the additional district nutrition services staff needed was also a source of concern. Reimbursement, while a significant concern, was not as important as logistics, staff recruitment and student participation.

<b>Specific obstacle</b>	<b>Number of interviewees</b>	<b>Percent of interviewees</b>
Lack of equipment	9	42.9%
Lack of facilities	10	47.6%
Student bus schedule	7	33.3%
Class schedules	12	57.1%
Additional custodial services	7	33.3%
Lack of nutrition services staff	10	47.6%
Cost of additional nutrition services staff	11	52.4%
Resistance by community	0	0.0%
Resistance by principal	0	0.0%
Resistance by nutrition services staff	0	0.0%
Resistance by management	0	0.0%
Certificated labor agreements	4	19.0%
Classified labor agreements	3	14.3%
Student lack of participation (from stigma)	10	47.6%
Student lack of participation (from logistics)	14	66.7%
Inadequate reimbursement	7	33.3%
Other, please explain	6	28.6%

When asked whether, they would consider having their site participate in the SBP if \$15,000 in start-up funds were available, only three (14%) of the 21 who previously said “no,” (i.e., they had not considered implementing the SBP at their site) were now willing to consider adopting the SBP for their site. One additional interviewee (5%) said “maybe” she would consider adopting the SBP. In other words, 81% of the interviewees who previously said “no” continued to say “no” to adopting the SBP even if \$15,000 were provided at the outset to facilitate the adoption of the SBP.

When asked to explain their answer, those who continued to refuse to consider adopting the SBP cited the following reasons (listed in Table 8):

<b>Reason why \$15,000 won't stimulate adoption of the SBP</b>	<b>Number of interviewees identifying this reason</b>	<b>Percent of interviewees</b>
Anticipated lack of student participation	7	46.7%
Too much paper work	3	20.0%
Not cost-effective	2	13.3%
Grant does not cover costs	2	13.3%
Scheduling conflicts (bus, class)	1	6.7%
Facilities, new equipment needed	1	6.7%
Reimbursement does not cover cost	1	6.7%
Transportation	1	6.7%
Ineligibility for grant	1	6.7%

The most common phrase used by most of the interviewees was, "Money is not the issue." Money clearly does matter, but logistics, paperwork, and lack of student participation appeared to be more important reasons for schools not adopting the SBP.

<b>Specific additional information or guidance</b>	<b>Number of interviewees identifying this recommendation</b>	<b>Percent who identified this recommendation</b>
Provide clear information	8	14.8%
Advice about lack of student participation	7	13.0%
Advice on scheduling challenges (bus, classes)	7	13.0%
Advice on making it more cost effective	5	9.3%
Advice about facilities/equipment needs	5	9.3%
Advice about how to deal with staff resistance	3	5.6%
Advice on covering costs	3	5.6%
Advice about staffing	3	5.6%
Advice about transportation	3	5.6%
Advice on promoting breakfast	2	3.7%
All schools should serve breakfast	2	3.7%
Guidelines would be helpful	2	3.7%
Provide assistance with estimates	2	3.7%
Advice on how to get grant to cover all the costs	1	1.9%
Advice about low percent of eligible students	1	1.9%
Advice about school configuration	1	1.9%
Advice on exploring options	1	1.9%
None needed	1	1.9%

When asked to suggest additional information or guidance about what other effective incentives could be used to motivate them to apply for a \$15,000 School Breakfast Start-up Grant, the interviewees mostly asked for help addressing the challenges previously identified (see Table 9, above).

All but one of the interviewees said that they were aware of current federal and state per-meal reimbursement rates for the SBP. The one interviewee who was not aware of these rates was also one of the interviewees who had said that she had not considered adopting the SBP. When asked to explain, she just repeated that she was not aware of those rates. When asked if now that we had told her what the rates were, would they affect her decision about adopting the SBP for her site, she said “yes.”

Sixty-three percent of the interviewees reported having determined an estimate of the costs necessary to implement an SBP at their sites, but 37 percent admitted that they had not. For those who had not determined an estimate, there were 12 who responded to a question about what would be helpful in estimating those costs. Most said that money was not the issue. Instead the issues were finding the time that did not conflict with other activities and getting the students to participate in the SBP. Of 19 interviewees who answered the question whether they would use technical assistance in implementing a breakfast program if it were available, 68.4% said “yes,” and 31.6% said “no.”

Most (90.7%) of the interviewees said that they would be able to estimate the projected non-recurring start-up costs that would be necessary to participate in the SBP at their site. Not all interviewees were ready with specific figures at the time of the call, however. Some had to fax the figures after the call. As noted below when discussing the site visit information, the fiscal information obtained by telephone interview was sometimes incomplete. Telephone interview fiscal estimates are therefore likely to be underestimates of actual costs.

Table 10 describes the estimates of median total start-up costs of implementing the SBP. There appears to be no relationship between each school’s size and the average estimated one-time start-up cost per breakfast, in contrast to the situation for recurring costs (see Table 12).

<b>Size category of school</b>	<b>Median start-up cost per school*</b>	<b>Number of schools</b>
small = 12 to 499	\$10,270	25
medium = 500 to 999	\$10,210	26
large >= 1000	\$37,200	5
Total	\$10,305	56

Table 11 illustrates the estimates for specific categories of anticipated start-up costs, gives the range and the median, and provides the number of interviewees who informed that estimate. The costs are given regardless of site enrollment because analyses of variance contrasts did not show that enrollment size was a significant factor in predicting start-up costs.

<b>Specific categories of potential non-recurring start-up costs*</b>	<b>Number of interviewees who responded</b>	<b>Median</b>	<b>Average per school</b>	<b>Maximum</b>
Equipment (transport costs, production equipment kitchen or cafeteria remodeling, installation, plumbing, electrical charges, refrigerated or dry storage)	42	\$5,000	\$11,237	\$100,000
Point of sale / computers	37	0	\$1,057	\$5,000
Office furniture	33	0	\$158	\$1,000
Publicity and outreach	40	\$200	\$428	\$2,500
Other – unspecified	33	0	\$6,882	\$55,000

\*Note. Additional nutrition services staff, additional training of nutrition services staff, increased fringe benefits, increased need for custodial staff, need for supervision at breakfast, additional management/labor negotiation, grant writing and direct costs, such as the cost of food prepared by a central kitchen, are considered to be “recurring” costs, not start-up costs, and are therefore not included here.

Ninety-two (92.5%) percent of those responding to the question of whether they could estimate the probable recurring (ongoing) costs of participating in the SBP said that they could; 4.5% said that they could not. Some of the ones who said that they could provide estimates nonetheless could not give them at the time of the interview but had to fax them over later. Table 12 describes the median, arithmetic average, and maximum estimates for specific foreseeable costs, as well as the number of respondents who informed each estimate. Analyses of variance showed that for most of these categories, the size of enrollment at the site did not appreciably affect the given estimates. Table 12 shows estimates of specific recurring costs of providing the SBP.

<b>Specific categories of potential recurring costs</b>	<b>Number of interviewees who responded</b>	<b>Median</b>	<b>Average per school</b>	<b>Maximum</b>
Additional nutrition services labor	43	\$6,750	\$9,903	\$32,900
Increase in fringe benefits	42	\$1,810	\$3,096	\$15,129
Meal components (milk, meat/meat alternate, fruit/vegetable, bread/cereal, and disposables, etc.)	42	\$5,130	\$10,808	\$101,574
Repair and/or replacement of equipment	35	\$500	\$1,353	\$10,000
Additional custodial services labor	29	\$20	\$2,113	\$20,000
Administrative costs	36	0	\$1,473	\$15,000
Direct costs (e.g., central kitchen costs)	29	\$20	\$7,339	\$91,575
Indirect costs	39	\$932	\$2,997	\$21,000
Point of sales maintenance	33	0	\$366	\$1,680
Community outreach	37	\$250	\$338	\$2,000
Any other items (e.g., increased transportation costs)	31	0	\$553	\$9,000
Total per school	56	\$14,140	\$25,507	\$188,644

Estimates for recurring per-meal costs of providing the SBP are described in Table 13. These figures assume that breakfast is provided on 180 school days and that school breakfast participation is 35% of average daily lunch participation (ADP).<sup>11</sup> California law requires that schools provide 180 days of instruction to public school students each year. California law also requires that public schools provide at least one meal to needy students every day of instruction. The 35% participation number is based on published estimates for all California schools, not just severe need schools.<sup>11</sup> In contrast to the situation for start-up costs, here we see a clear linear trend towards decreasing per pupil school breakfast meal costs with increasing size of school enrollment ( $t = 2.12, p < .01$ ).

<b>Table 13. Weighted average cost of school breakfast meal, categorized by enrollment size of school</b>		
<b>Size category of school</b>	<b>Average cost per breakfast meal*</b>	<b>Number of ADP students represented</b>
Small (7 to 499)	\$3.06	1154
Medium (500 to 999)	\$2.53	4328
Large (1000+)	\$1.61	3834
Total	\$2.22	9316
*Note. Weighted fiscal data, based on 37 schools, after dropping 16 cases with missing fiscal data. Data weighted by the average number of students participating in the schools' National School Lunch Program (ADP).		

Interviewees were generally confident about their estimates. Only 4% expressed a lack of confidence in these estimates; a quarter (24%) said that they were “somewhat” confident; 72 percent said that they were “very” confident. They based their confidence primarily on their years of experience as food service directors/business managers tracking food service costs.

Almost all of the interviewees cited special circumstances that explained why their site did not participate in the SBP. These special circumstances are described in Table 14, below. CDE start-up grants might have addressed some of these barriers but interviewees either said that they did not know of these grants, that their schools were ineligible, or that too much paper work was required to apply for these grants.

<b>Table 14. Special circumstances cited by interviewees to explain why their site did not participate in the SBP</b>		
<b>Specific circumstances explaining why site does not have SBP</b>	<b>Number of times that specific circumstances were mentioned</b>	<b>Percent of interviewees</b>
Anticipated lack of student participation	18	33.3%
Facilities/equipment needs	16	29.6%
Staffing	12	22.2%
Scheduling challenges (bus, classes)	8	14.8%
Transportation	5	9.3%
Reimbursement does not cover costs	4	7.4%
School configuration	4	7.4%
Staff resistance	3	5.6%
Rural area transportation	3	5.6%
Low percent of eligible students	2	3.7%
Fast food restaurants competing	1	1.9%

A possible impediment to finding ways to implement a SBP at a particular site could be the lack of awareness among the food service directors and school district business managers about the variety of proven alternative strategies that have been used successfully at other sites. Interviewees were queried about a list of alternative strategies to gauge their familiarity with some of these alternatives. Table 15 illustrates that most of the interviewees were aware of one or more of the alternatives to the standard cafeteria breakfast for implementing the SBP at a site. Only 5.8 percent said that they were unaware of any of these alternatives.

<b>Table 15. Awareness of school breakfast options</b>		
<b>School breakfast options</b>	<b>Number of interviewees who said that they were aware of this option</b>	<b>Percent of interviewees</b>
Breakfast in the classroom	49	92.5%
Nutrition break breakfast	47	88.7%
Grab 'n Go breakfast	46	86.8%
Second Chance breakfast	38	71.7%
Breakfast on the bus	36	67.9%
None of the above	3	5.8%

At the end of the interview the school food service directors (or other school administrators) were given the opportunity to share their advice about what they hoped would come out of this study. Nearly all (92.5%) availed themselves of this opportunity, thereby illustrating how much they cared about the issue. Table 16 illustrates some of the issues that mattered to them with respect to potential state support for SBPs. No single issue dominated their concerns. Most of the issues that they raised on their own had been addressed earlier in the interview.

<b>Table 16. Issues raised spontaneously by interviewees at the end of the interview</b>		
<b>Issues of concern to interviewees</b>	<b>Number of interviewees who mentioned this issue</b>	<b>Percent of interviewees</b>
Need reimbursement that covers costs	11	22%
Need help with finding the right staff at an acceptable cost	11	22%
Need to address staff resistance	8	16%
Need to improve student participation	7	14%
Facilities/equipment needs	6	12%
Need to promote the SBP	4	8%
Need help with scheduling challenges (bus, classes)	4	8%
Need more support for school district and community	4	8%
Need help with transportation	4	8%
Need more support from the state	3	6%
Would like to see other programs that are cost effective	2	4%
Would like to see how to handle low percent of students eligible for free and reduced-price meals	2	4%
Need promotions that work	1	2%
Need to address rural transportation needs	1	2%
Need to address rising food prices	1	2%
All schools should serve breakfast	1	2%
Need exemptions for special circumstances	1	2%

**Results of interviews with food service directors and school district business managers in districts with one or more severe need schools that adopted the SBP**

Eleven districts, each with one or more severe need schools, adopted the SBP in 2005-2006. Of these eleven, seven were successfully contacted. One district reported that none of its severe need schools were participating in the SBP, contrary to what the CDE was reporting, and was therefore dropped from the analysis. The remaining six districts included four from Region 10, the "Northern and Eastern counties" region; one district from the Bay Area, and one from Orange County.

Three of the four "Northern and Eastern counties" districts recently adopting the SBP were single-school districts, in which the school enrollment did not exceed 150 students. The fourth district in this region had nine severe need schools, with enrollments varying from less than ten students in the school to slightly over 350, with an average size of 140.

By contrast, the Bay Area school district in the "recently adopted breakfast" category was a high school district with five traditional high schools, ranging in size from slightly over 200 to slightly less than 1600, with an average enrollment size of over 1000.

The Orange County school district in the "recently adopted breakfast" category was a high school district with 42 non-adult schools, ranging in size from less than 100 to over 2800, with an average of nearly 950.

The ADA was relatively high for these "recent school breakfast adopters," averaging more than 95% of total enrollment, and averaging over 97% for the Region 10 school districts. The numbers given were ADA figures for the whole district rather than site-specific numbers, because the school districts were identified from school district-level data, not site-specific data. The average free and reduced-price lunch participation for these "recent school breakfast adopters" was 69% of the ADA and varied from 32% to 98.3%. The average of 69% free and reduced-price lunch participation compared favorably to the average of 52% free and reduced-price lunch participation observed for severe need schools not participating in the SBP and is approximately the same as the 67.8% free and reduced-price lunch participation observed for severe need schools already participating in the SBP.

What mattered the most to them in their decision to adopt the SBP were school bus schedules and additional custodial help. Over two thirds said that these issues were important. Cost or availability of additional nutrition services staff was an issue for one third to one half of them. One third cited student participation and adequate reimbursement as issues. All other issues were cited by one third or less, including lack of equipment, lack of facilities, and conflicting class schedules. No one mentioned labor agreements or resistance by the principal as issues.

The potential availability of \$15,000 in start-up funds did not seem to make a difference to these interviewees. Some said that they would not be eligible if they applied; why they felt this way was not clear. Others said that the hassle of filling out the forms was more aggravating than doing without the money. When asked what help or guidance they could use in applying for such grants, the interviewees said that they preferred explanations that were self-explanatory. Some expressed the wish for clearer guidelines concerning eligibility for such funds.<sup>†</sup>

All but one of the interviewees said she was aware of the total school breakfast reimbursement rate for students eligible for free or reduced-price lunches. The one who was not aware was surprised at how high the reimbursement rate was. Another interviewee said that these rates did not apply because her sites were not eligible for severe need status. Uncertainty about how severe need was actually defined was a common problem for many interviewees.

Two thirds of interviewees said that the 2006-2007 state/federal reimbursement rate of \$1.72 for each free breakfast (\$1.55 federal + \$0.1563 state and \$1.42 for each reduced-price breakfast [\$1.25 + \$0.1563 state]) would affect their decision to continue participating in the SBP. The remaining interviewees said that it would make no difference.

---

<sup>†</sup> Note. CDE's Nutrition Services Division offered a well-received workshop at a recent statewide conference on how to apply for a school breakfast start-up grant. The number of such applications received this year increased dramatically as a result.

The interviewees reported median estimated start-up costs necessary to adopt the SBP of \$5,000, with estimates ranging from \$0 to \$23,000. The latter estimate came from a school district in the Bay Area, where the severe need schools are larger and costs are generally higher than elsewhere in the state. Because of the small sample and heterogeneity of districts, there was little point in reporting the categorical costs that contributed to the overall start-up costs other than to say that the bulk of the estimated costs were associated with the purchase of needed equipment (median cost of \$600) and the cost of additional nutrition services staff or training (median cost of \$2,500).

Whether they were unable or unwilling, all of the small districts among the “recent SBP adopters” failed to provide useful estimates of the recurring costs of having one or more of their sites participate in the SBP. The investigators obtained estimates only from the two large, urban districts among the “recent SBP adopters.” The investigators did not know which school site(s) qualified the school district to be a “recent school breakfast adopter.” It is therefore not clear what site(s) the interviewees had in mind when providing their site-specific estimates. Using 35% of their reported “Average Daily Participation,” assuming that breakfast participation was 35% of that at lunch, and assuming that meals were served on 180 days, the average cost of breakfast was estimated to be \$2.29 per meal in Orange County and \$3.18 per meal in the Bay Area. Those interviewees reporting estimates were “very confident” about the accuracy of these estimates and based this confidence on years of food service experience and tracking the actual costs of providing the SBP in some of their schools.

With respect to knowing alternative options for serving the school breakfast, only one of the interviewees said that she had heard of none of the alternatives. All but one of them had heard of “breakfast in the classroom” and the “nutrition break breakfast.” Half or more had heard of all the other options.

When asked to share other end-of-interview comments, all but one of the interviewees shared their opinions. One interviewee from a rural district was emphatic that providing a school breakfast in a rural setting was simply more expensive per meal than at larger, more urban districts. One of the urban districts complained about bureaucracy and red tape, suggesting that some of the extra costs would be taken care simply by eliminating the red tape. The other urban district volunteered the opinion that the most desirable foods - fresh fruits and vegetables - were too expensive to serve given current reimbursement rates.

### **Results of site visits with food service directors and school district business managers with one or more schools that do not provide the SBP**

Consistent with its contract, WestEd arranged for and completed ten site visits. All site visits were conducted by the two experienced food service directors, Carol Ann Hiort-Lorenzen, RD, and Philomena Aparicio. WestEd staff accompanied these consultants on a couple of their site visits. The sites that were visited were a subset of the sites that had been randomly selected for inclusion in this study. Typically a phone interview preceded the site visit. The site visit could therefore serve as a validation of the information that was transmitted earlier during the phone interview. Another purpose of the site visit was

to permit the investigators a concrete appreciation for some of the special circumstances that might limit the ability of some sites to sponsor the SBP. The information conveyed over the phone in response to a structured questionnaire does not do justice to the myriad of influences that constrain administrative decision-making on site in California's diverse regions. By insisting on a site visit of a school in each of ten regions, the WestEd contractors assured the study broad exposure to the unique constraints that might characterize, for example, a rural inland school district in ways very different from the constraints faced by site administrators in a major urban area.

Face-to-face encounters with the same food service directors/business managers who had provided information over the phone permitted in-depth review of the information provided earlier, as well as validation of cost estimates by examining food service records. In most of these encounters, the cost figures provided earlier needed to be increased or supplemented slightly. The aggregate costs obtained from the site visits are therefore probably more reasonable estimates of the true costs of the site participating in the SBP than were the estimated costs obtained by phone. These differences were small, however. Hence, the telephone survey data yielded as good an estimate of the "real costs" as could be expected with self-reported data. Confidence intervals around the average estimates provide a range of reasonable values for expected school breakfast costs in severe need schools that did not sponsor the SBP in 2006-2007 and should allow policy-level judgments to be made they are if limited to these schools.

While cost figures may have varied slightly between those obtained exclusively through telephone interviews and those obtained through a combination of telephone interview and site visit, the qualitative information obtained from both sources was largely identical, providing reassurance that the differences in cost estimates were not likely to be caused by misrepresentation or inadvertent bias when the data collection occurred over the phone. One issue that was raised more saliently during the site visits than during the telephone interviews was the issue of declining school district enrollment because of the siphoning off of students by newly formed charter schools. Several site visits elicited vivid examples of schools being closed and school nutrition service projections being altered by the increased presence of competing charter schools. To be sure, some charter schools choose to obtain meal service from the district food service department but other charter schools have elected to obtain meal service from an outside vendor.

### **Using these results to estimate the additional costs of a school breakfast mandate**

A total of 75,351 students eligible for free or reduced-price meals were enrolled in the 522 severe need schools not participating in the SBP. Of these, 67,816 students could be expected to be part of the state's ADA statistics.<sup>11</sup> Of those students attending school, 51%, on average, participate in the NSLP (N=34,586). California's experience indicates that about 35% of all those eligible for free and reduced-price lunches could be expected to participate in the SBP (N=12,105), if offered. Assuming a California state subsidy of \$.2195 per meal for free and reduced-price meals in severe need schools, the average annual per school cost to the state of providing a school breakfast at all severe need schools not currently participating in the SBP would be \$478,000 for all 522 severe need schools. The projected cost estimates given in the following tables are lower, however, because these estimates are based on the assumption that between 10% and

20% of schools might apply for and obtain a waiver. Therefore, between about 9,684 and 10,895 enrolled students eligible for free or reduced-price lunches would participate in the SBP instead of the maximum 12,105 students.

Severe need schools would be eligible to apply for a one-time breakfast start-up grant, and the CDE indicates that their applications would be given funding priority. These grants are currently funded for up to \$15,000 for each school. The CDE reports that the average grant award for breakfast start-up grants in 2007 was \$11,237 per school, including some schools that were not severe need schools. Of the 2007 grant requests, 48 severe need schools applied for and received a School Breakfast Start-up Grant.

Accordingly, to optimize adoption of the SBP, it would be desirable if additional start-up funding could increase by a range of approximately \$2.5 million to \$5.3 million. This maximum possible range excludes the 48 severe need schools that recently received a School Breakfast Start-up Grant and is based on the assumption that 10% to 20% of the severe need schools might apply for and obtain a waiver from the SBP requirement. Of the 418 to 470 severe need schools most likely to be required to offer breakfast, it is possible that only 80% to 90% of them (or between 334 and 423) would apply for a School Breakfast Start-up Grant. This estimate also takes into account that the amount of start-up funding needed per grant may range from \$10,400 to \$15,000 available per site.

The tables that follow (Tables 17-20) describe the expected start-up costs, increased state recurring costs, and increased federal reimbursement associated with implementation of a school breakfast mandate for severe need schools. The increase in state recurring costs (estimated at between \$383,000 and \$430,000 per year, assuming a per meal state reimbursement rate of \$0.2195) would be accompanied by a corresponding increase in federal school breakfast reimbursement of between \$2,677,000 and \$3,012,000 per year at 2007-2008 reimbursement rates.

**Table 17: Plausible maximum and minimum breakfast start-up costs based on a total of 522 severe need school sites that currently do not offer the SBP**

<b>Condition</b>	<b>Maximum amount*</b>	<b>Minimum amount**</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 104 sites that will NOT be included, because of waivers
Percent of severe need schools newly subject to SBP recurring costs	<b>470</b> school sites newly subject to increased SBP recurring costs	<b>418</b> school sites newly subject to increased SBP recurring costs
Number potentially requesting breakfast start-up grants	90% of 470, or <b>423</b> school sites	80% of 418, or <b>334</b> school sites
Estimated cost per site	<b>\$15,000</b>	<b>\$10,400</b>
Estimated total cost of start-up grants	<b>\$6.3 million</b> (423 x \$15,000)	<b>\$3.5 million</b> (334 x \$10,400)
2006-2007 appropriation for start-up grants	<b>\$1.017 million</b>	<b>\$1.017 million</b>
Potential total additional funding needed for total start-up grants	<b>\$5.3 million</b>	<b>\$2.5 million</b>
* Assuming maximum reimbursement, minimum number of waivers, and maximum number of applications		
** Assuming lower reimbursement, maximum number of waivers, and minimum number of applications		

<b>Table 18: Plausible maximum and minimum increases in state meal reimbursement costs *</b>		
	<b>Maximum Increase in State Recurring Costs Assuming Minimum Number of Waivers</b>	<b>Minimum Increase in State Recurring Costs Assuming Maximum Number of Waivers</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 104 sites that will NOT be included, because of waivers
Percent of severe need schools newly subject to SBP recurring costs	90% of 522, or <b>470</b> school sites newly subject to increased SBP recurring costs	80% of 522, or <b>418</b> school sites newly subject to increased SBP recurring costs
Annual increased appropriation for recurring meal reimbursements*	<b>470</b> school sites - 10,895 students eligible for free and reduced-price meals \$430,000 ‡	<b>418</b> school sites - 9,684 students eligible for free and reduced-price meals \$383,000 ‡
*Note. Assuming a California per meal reimbursement of \$0.2195 for free and reduced-price meals in 2007-2008.		
‡ Rounded to nearest thousand		

<b>Table 19: Plausible maximum and minimum increases in federal school breakfast reimbursement, assuming 2007- 2008 federal reimbursement levels *</b>		
	<b>Maximum Increase in Federal Recurring Costs Assuming Minimum Number of Waivers</b>	<b>Minimum Increase in Federal Recurring Costs Assuming Maximum Number of Waivers</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 114 sites that will NOT be included, because of waivers
Percent of severe need schools newly subject to SBP recurring costs	90% of 522, or <b>470</b> school sites newly subject to increased SBP recurring costs	80% of 522, or <b>418</b> school sites newly subject to increased SBP recurring costs
Annual increased appropriation for recurring meal reimbursements**	<b>470</b> school sites - 10,895 students eligible for free and reduced-price meals \$3,012,000 ‡	<b>418</b> school sites - 9,684 students eligible for free and reduced-price meals \$2,677,000 ‡
*Note. 2007-2008 federal school breakfast reimbursement levels for severe need schools are: \$1.61 (free), \$1.31 (reduced-price) and \$0.24 (paid). <sup>15</sup> Reimbursement for paid lunches is NOT included in this table.		
**Note. According to telephone interviews, schools with no SBP had following average student meal composition: 47.5% free, 15.6% reduced-price, and 34.5% paid.		
‡ Rounded to nearest thousand		

The state of California has a constitutional obligation to fully reimburse school districts and county offices of education for all new programs or higher levels of service imposed upon them by the state. Some school districts may interpret this new school breakfast mandate as an unfunded mandate, eligible for state compensation from its unfunded mandates fund.

The average cost to serve a breakfast meal was \$2.22 according to the responses from interviewees, but the combined state and federal reimbursements and payments for reduced-price meals totaled only \$1.83 per breakfast at severe need schools. There may therefore be an ongoing financial shortfall at some sites when a breakfast program is added. Some districts might cover such shortfalls by surpluses from the lunch program and other food service operations. For those districts without local means to cover the breakfast-induced deficit, the school breakfast mandate might be considered to be a "state-mandated local cost." A state appropriation might have to be provided to reimburse districts and county offices of education for proven shortfalls resulting from a breakfast mandate. A range of estimates of the potential amount that might be owed by the state is shown in Table 1, under the heading "Discretionary additional state ongoing costs," in the row labeled "Annual increased appropriation to cover mandated cost claims."

It is difficult to predict how many school districts would file a claim against the state's unfunded mandates fund for the difference between what it costs their school(s) to provide the SBP and what they receive in revenues. Table 20 summarizes a range of the state's maximum possible costs for covering mandated cost claims, which were estimated as the difference between 2007-2008 school meal reimbursements and 2006-2007 school meal costs (not adjusted for inflation). If the average 2006-2007 breakfast meal cost is \$2.22, then the maximum expected increased total breakfast meal costs to be incurred if a school breakfast mandate were to be enacted would range from \$3,870,000 (20% waiver) to \$4,354,000 (10% waiver). After subtracting expected state and federal breakfast meal reimbursements (summarized in tables 18 and 19), as well as the \$0.30 payment that students eligible for reduced-price meals have to pay per meal, the amount remaining would be the maximum mandated cost claims that would need to be covered annually by the state's unfunded mandates fund. These costs would range from \$681,000 (20% waiver) to \$766,100 (10% waiver). Actual claims filed with the state's unfunded mandates fund are likely to be less than the amounts projected here.

<b>Table 20: Plausible maximum and minimum increases in state costs to cover mandated cost claims</b>		
	<b>Maximum Increase in State Unfunded Mandate Costs Assuming Minimum Number of Waivers</b>	<b>Minimum Increase in State Unfunded Mandate Costs Assuming Maximum Number of Waivers</b>
Percent of severe need schools potentially obtaining waivers	10 % of 522, or 52 sites that will NOT be included, because of waivers	20% of 522, or 110 sites that will NOT be included, because of waivers
Percent of severe need schools newly subject to SBP recurring costs	90% of 522, or <b>470</b> school sites newly subject to increased SBP recurring costs	80% of 522, or <b>418</b> school sites newly subject to increased SBP recurring costs
Annual increased appropriation to cover mandated cost claims *	<b>470</b> school sites - 10,895 students eligible for free and reduced-price meals \$766,000 ‡	<b>418</b> school sites - 9,684 students eligible for free and reduced-price meals \$681,000 ‡
*Note. Figures were estimated using the sum of 2006-2007 required average recurring costs, discretionary one-time and mandated claims costs and subtracting expected 2007-2008 state and federal reimbursements as well as \$0.30 per meal paid by students eligible for reduced-price meals.		
‡ Rounded to nearest thousand		

## **Case Studies**

To illustrate some of the differences between large, urban school districts and small, rural school districts, we describe two district case studies below in general terms and more specifically in Appendix G. To preserve their anonymity we will refer to them as “Urban #1” school district and “Rural #1” school district.

### **Urban #1 school district**

Urban #1 has a current enrollment of over 30,000 students with 42 elementary schools, seven middle schools, six high schools, two continuation high schools, and one alternative education school. About 17,000 students (54.9%) of the students enrolled currently participate daily in the NSLP.

Nearly 6,000 students (37.7%) of the 15,901 students enrolled in 35 of the sites currently participate daily in the SBP. Twenty-seven of these sites are designated as severe need schools.

A central food production kitchen opened in 2001. This central kitchen provides the food that is delivered to satellite kitchens at 42 elementary, 13 secondary, two continuation, and one alternative education school. The elementary students are offered

pre-packaged meals and salad bars. The secondary school students are offered self-serve food lines, traditional cafeteria lines, snack bars, and mobile food carts.

***Issues:***

This urban district is currently experiencing a declining enrollment. Its student population declined by more than 1000 (3.3%) in the 2006-2007 school year, which was partly due to charter schools gaining momentum in the area. There are four charter schools currently operating within the district's boundaries that are not currently contracting with the school district for meals. The district could easily provide contracted meals to the charter schools if the charter schools wished it to.

According to the interviewee, the district superintendent is on record as saying, "The Board of Directors, the Administration, and the Cabinet are in full support of providing breakfast to students as long as Nutrition Services remains self-supporting."

Some of the challenges to the implementation of SBP in the schools are the following:

- To break even at the secondary level, 125 students must participate in each school's breakfast program. Of the eight secondary schools only two serve an average of more than 125 per day and are therefore the only schools breaking even.
- The cost of custodial services has increased, because of the need to clean the cafeteria a second time each day. The district is currently negotiating with the union regarding the overtime charge.
- Teachers are assigned additional supervision duties for breakfast.
- Some principals do not want to implement the breakfast program.
- Parent outreach is needed to let them know that school breakfast is available if their students come to school early enough to participate.

One of the district's middle schools currently does not provide the SBP because the school is undergoing reconstruction, which limits cooking and refrigeration facilities, with the result that all foods are pre-packaged. These conditions adversely affect student participation. Under current conditions the estimated cost of a breakfast meal is \$2.29 and therefore more than could be recouped from the maximum combined \$1.83 reimbursement available from federal and state sources for students eligible for free school meals.

One of the district's elementary schools (K-5) has an enrollment of 304 students with an ADA of 297 students. An average of 150 students participate daily in the NSLP. The director stated that "There is low participation by students in the NSLP at this site due to the open competitive food sales, and because it is a neighborhood walking school." The per breakfast meal cost of adopting the SBP was estimated to be \$2.21 per meal, largely because of low student participation. The District Nutrition Services Director projected that the expected participation in the SBP would be less than 50% of the lunch participation for an average of 75 students served daily.

## **“Rural #1” School District**

Rural #1 has a current enrollment of about 4,800 students with seven elementary schools, two junior high schools, two high schools, one continuation high school, and one community court high school. Currently 1,800 students (37.6%) participate daily in the NSLP.

Five hundred and sixty-seven students are enrolled at the three school sites that currently participate in the SBP. They have an ADP rate of 76 students, which is 14% of the 535 ADA. These sites are designated as severe need schools.

There are four central or cooking kitchens that serve all 13 schools.

### ***Issues:***

Parents in this rural community are generally supportive of the school lunch program but are less supportive of the SBP. Many feel that it is the parents' responsibility to feed their children breakfast at home.

Many students are bused to school. Buses arrive at 7:30 a.m. and 7:35 a.m. with the first bell ringing at 7:40 a.m. Classes begin at 7:50 a.m. Because the buses arrive so close to the start of classes, it is a challenge to serve breakfast to students in the cafeteria and to provide them with enough time to eat before class.

It has been very difficult to hire a staff person for just one hour per day to serve the school breakfast. When such a person is hired, that person will typically transfer out whenever another position with more hours is available. In one instance a school office clerk was hired and paid for 1.75 hours daily for a total salary plus fringes. This cost \$34 per day to feed an average of 25 students daily. The cost per meal for the labor just to serve each breakfast meal was \$1.36.

This district has a severe need elementary school that has an enrollment of 283 (264 ADA). The daily student participation in the NSLP is currently 177, which is 62.5% of the ADA. This elementary school is a satellite school; therefore, food and supplies would need to be sent to the school the day prior to service and prepared on site. The Food Services Director projected that the expected participation in the SBP would be less than 25% of the lunch participation, which meant an average of 37 school breakfast meals served daily. She estimated the average per breakfast meal cost for this school to be approximately \$2.79.

Small, rural school districts tend to have more limited material and personnel resources than larger, urban school districts. Food service directors and school district business managers in the larger, more urban school districts appeared to have more discretion with respect to engaging in deficit-spending to support school participation in the SBP than food service directors and school district business managers in the smaller, more rural school districts. Larger districts could offset small losses in SBPs with some of the revenues accruing from the typical lunch period. Small, rural school districts were also less able to cope with the paperwork requirements of applying for a grant.

## ***Other Potential Benefits of School Breakfast and Success Stories***

### **Correlates of providing the SBP and eating breakfast on school days**

To examine other potential benefits of getting California students to eat breakfast before classes, the California Healthy Kids Survey (CHKS) data were linked to the California list of severe need schools. California public school districts are obligated to administer the California Healthy Kids Survey every two years to their seventh, ninth, and eleventh grade students. The CHKS includes questions about daily breakfast consumption, tobacco use, recent feelings of depression, and weight status. In the present analysis, CDE survey data from 2,400 severe need schools were successfully linked to the CHKS data. The number of students in these schools who completed the CHKS between 1998 and 2006 was 1,614,770.

The impact of school SBP participation was evaluated, in tandem with evaluating the impact of students' self-reported breakfast consumption on the day that they completed the CHKS questionnaire. The student reports of breakfast-skipping were consistently associated with undesirable outcomes, including greater risk of obesity, greater risk of depression, greater risk of tobacco use, and lower average letter grades achieved the previous year (all  $p < .0001$ ). The school participation in the SBP was negligibly related to student reported letter grades or student depression but was significantly related to increased risk of obesity ( $p < .0001$ ) and increased risk of tobacco use ( $p < .0001$ ).

### **Success stories**

Despite the challenges reviewed above, the vast majority of severe need schools in California do offer students the opportunity to participate in the SBP. Some of this success has been achieved by food service directors and site administrators and staff willing to be flexible with respect to the time period when the school breakfast is offered and with respect to the location where the school breakfast is offered. Some severe need schools have reported 300% increases in school breakfast participation when teachers and administrators are willing to have students eat their school breakfast in their first class of the day instead of the cafeteria. The Hawthorne School District even beat those impressive statistics when it began offering breakfast in the classroom: participation increased from 2,000 students when breakfast was limited to the cafeteria to 7,000 students when breakfast was offered in each student's classroom. Other strategies that have helped schools increase school breakfast participation include having students eat their breakfast on the bus or extending breakfast to include the mid-morning school nutrition period. Although there have been isolated reports of parent opposition to such flexibility, the information obtained by this study did not indicate that community opposition is the reason that school sites are not exploring alternatives to the traditional time period and traditional venue for offering the school breakfast. Until these alternatives have been thoroughly explored, there is reason to suspect that many of the severe need school sites not currently participating in the SBP could do so without threatening the solvency of the district school nutrition services.

The Elk Grove Unified School District recently reported that steps to increase school participation in the SBP in the school district have not only boosted student test scores but were obtained at no additional net cost to the district.<sup>12</sup> This was true even after the district decided to hire additional staff to monitor students participating in the school breakfast daily to avoid requiring school administrators to come to school earlier every day, to monitor the students who came to campus a half-hour earlier each day in order to participate in the SBP. The additional revenues from the increased student school meal participation covered these additional costs.

### ***Summary and Conclusions***

In summary, there is consensus that students who eat breakfast perform better in school than students who do not. Students who regularly eat a nourishing breakfast perform better on tests, get along better in the classroom, are generally happier, and even reduce their risk of obesity or using tobacco. Obesity and tobacco addiction are increasingly recognized as costly to society.<sup>13, 14</sup> Ensuring that all students in severe need schools have the option to eat breakfast at school can only help these schools improve their students' capacity to learn. If the state were to mandate that all severe need schools offering the NSLP also offered the SBP, school sites that to this date have not yet explored the many alternatives to the traditional time period and traditional venue for offering the SBP might be induced to explore these alternatives. The successes experienced by other severe need schools that have adopted such alternatives as the second chance breakfast, breakfast in the classroom, breakfast on the bus, and "Grab-n-Go" breakfast suggest that many severe need school sites not currently participating in the SBP could be induced to offer it without jeopardizing the solvency of the district nutrition services in the process. National data showing average school breakfast participation as 43% of NSLP participation suggest that California's 35% of NSLP participation can be improved.

Start-up resources, in general, did not exceed the \$15,000 maximum size start-up grant currently available to encourage adoption of the SBP. Recurring costs, on the other hand, varied considerably in the direction of lower per-meal costs for larger severe need schools and higher per meal costs for districts with higher costs of living (using average parent education as a proxy for the cost of living).

For most of the sample of schools included in this study of severe need schools not participating in the SBP in 2004-2005, the cost estimates of participation in the SBP appear to exceed reimbursement amounts. For most of the severe need schools that had recently adopted the SBP and that were willing to be interviewed by the WestEd contractors, which admittedly was a small number (N = 6), per meal costs were also greater than reimbursement income. For some severe need schools, the amount of the shortfall was relatively small. If increases in operating costs were kept lower than increases in reimbursement rates, then some schools could now afford to offer the SBP. In past years, such deficits could be amortized across other severe need schools and offset by higher revenues at lunch or from a la carte sales. For many severe need schools, the present shortfall could be eliminated by increasing student participation in the SBP, which could be achieved by trying out alternatives to the traditional SBP and by improved marketing. For a few remaining others, however, the amount of the shortfall

was too significant (e.g., more than \$5.00 per breakfast meal) to tolerate even if all school breakfast alternatives were explored, with technical assistance from the Nutrition Services Division of the CDE and with generous start-up grants.

It became clear that, desirable as mandating school breakfast for all severe need schools might seem, it could prove impractical at selected severe need schools. One of the clearest examples was a school for the physically handicapped, where per pupil costs were exorbitant (i.e., > \$10 per meal) because of the medically required unique nutrition needs of different students. Other examples were very small, rural, geographically isolated severe need schools. The logistics of hiring appropriate part-time staff, let alone the practicality of the school paying for the higher costs of transporting food, worked against such schools adopting the SBP.

Therefore, there is a need for a “waiver” mechanism to permit severe need school sites that obviously have no practical way of participating in the SBP without threatening the solvency of the school nutrition services, to opt out of the mandate. Only a small proportion of severe need schools currently not participating in the SBP would be eligible for a waiver, however, and only after providing evidence that none of the school breakfast alternatives that other severe school sites had found to be successful would work for them.

### **Study limitations**

The Legislature’s original charge was interpreted as determining the range of anticipated costs of complying with the school breakfast mandate that severe need schools currently not offering the SBP are likely to face. The original study design therefore included interviews with staff at only schools not currently offering the SBP.

Midway through the study it was determined that it would be important to document the fiscal and logistical characteristics of severe need schools that were successfully sustaining a school breakfast program. More specifically, the new question was: What is the per meal cost for California severe need schools that **do** currently offer the school breakfast?

There was the suspicion that, much like what happens with insurance coverage, adverse selection had relegated those severe need schools not yet “covered” to a higher-risk, higher-cost category. As a partial corrective the WestEd contractors returned to the large school districts that had already received site visits, to ask for additional information about the per meal costs of selected severe need schools in the district that did currently offer breakfast.

The optimal design for including this second study aim would have been a randomized case control design, with controls drawn at random from all severe need schools currently offering the SBP. There was neither time nor resources to conduct a separate random sample of the 6,037 severe need schools that currently participate in the SBP. For expedience, the investigation of severe need schools that currently participate in the SBP was limited to the 40% of severe need schools that could be found in districts known already to have one or more severe need schools **not** participating in

the SBP. The 60% of schools that were excluded from the study probably differed systematically from the 40% of schools that were included. Instead, “control” schools offering the SBP were drawn only from the districts already included in the sample because the district included at least one severe need school that did not offer the SBP. The control schools were therefore not representative of all severe need schools offering the SBP. The contrasts were nonetheless illuminating, yielding qualitative information about successful strategies used by severe need schools to adopt and sustain the SBP.

Interestingly, the per meal costs of most of these additional severe need schools also exceeded reimbursement levels, suggesting that factors other than the ability of a school site to break even on its breakfast participation determined whether the school site participated in the SBP or not.

As with all survey research, there is imprecision in the estimates. Some imprecision can be attributed to imperfect memory on the part of the interviewees, some to data entry errors, and some to interviewees wanting their district to look good.

The sample size and cooperation rate obtained in this study were sufficient to permit reasonably good estimates, approximately as precise as estimates reported in a well-received prior report on California school breakfasts.<sup>10</sup> Stakeholders knowledgeable about today's school food service costs and who represent areas where non-participation is relatively high have generally reported agreement with the range of cost estimates reported in this study and have also generally agreed with the more qualitative findings.

### **Limitation of measures available for analysis**

Data on the average cost of labor for the schools included in this study were not available. In place of cost of labor, the investigators used each school's average parent education as a proxy for average parent income, which in turn typically reflects a school district's cost of labor. Results indicated that variations in average parent education were significantly (inversely) related to school participation in the SBP.

In terms of size and access to the food and personnel resources needed to run a SBP, there should be little difference between the Los Angeles region (3% non-participation) and the Bay Area region (24% non-participation). Nonetheless, Census data indicate that household incomes are higher in the Bay Area than in the Los Angeles area, suggesting that school personnel costs would also be higher in the Bay Area than in the Los Angeles area. The results of this proxy analysis suggest that higher labor costs might help explain why the Bay Area region experienced the highest severe school breakfast **non**-participation, with 24% non-participation in the SBP.

Neither federal nor state reimbursements recognize the higher personnel costs in higher-cost regions of California relative to lower-cost regions. Federal reimbursement rates for school meals are higher for severe need schools located in Hawaii and Alaska in recognition of the generally higher costs of food in those remote states, so there is some precedent for reimbursing severe need schools differently depending on their local cost of living but so far this differential reimbursement policy has been limited to these two states. A delegation from the California School Nutrition Association and CDE met with federal

legislators in spring, 2007, to press for higher school meal reimbursement levels for high cost regions such as the Bay Area. Only time will tell whether federal school meal reimbursement policies will change in response to these legislative educational efforts.

How much higher the school meal reimbursement should be in high-cost regions of the state will be difficult to estimate from the district-level data currently available to the CDE. In part, this is because district-level data generally aggregate a la carte income and meal reimbursement income, and in part because such data cannot distinguish between large districts that keep their overall school breakfast costs low by selectively sponsoring the SBP only at schools that will make money, versus large districts that sponsor the SBP in more schools but keep their school breakfast costs low by reducing the quality (and cost) of the food they serve (e.g., muffins in lieu of hot cereal).

In summary, this study provides useful first-pass estimates of the costs of mandating the SBP and documents a range of strategies that could help schools adopt and sustain the SBP. Replication and extension of this study to include a true case control design would increase confidence in the results and improve the generalizability of the conclusions.

## **Postscript**

Many food service directors endorse the concept of the universally free school breakfast, where, regardless of student eligibility for free, or reduced-price breakfasts, all students are permitted to participate in the SBP without paying. One of the attractions of the universally free school breakfast is that it eliminates the need for point of sale monitoring of which students participated in the SBP, which can save on labor and computer costs. Illinois and North Carolina are among the states experimenting with sponsoring universally free school breakfasts in severe need schools with high percentages of students eligible for free meals. The District of Columbia has adopted a universally free school breakfast for all of its students.<sup>3</sup> Even for districts with many students eligible for free school lunches, however, there can still be low student participation in the SBP if the SBP is offered at times and in places that are inconvenient to students. As we have seen in analyses of the California Healthy Kids Survey data, students who skip breakfast are at higher risk of a variety of undesirable outcomes regardless of their school's participation in the SBP, including lower letter grades, increased risk of obesity, depression, and tobacco use.

The bottom line is that the goal of maximizing the accessibility of the SBP is a shared responsibility, requiring the cooperation of many stakeholders, including school administrators, teachers, bus transportation staff, school facilities staff, families, and the students themselves. Without the cooperation of different stakeholders to ensure access by nearly all students to school breakfast, the potential to improve students' capacity to learn and reduce their risk of costly health conditions will be diminished.

## End Notes

1. Pollitt E, Mathews R. Breakfast and cognition: an integrative summary. *American Journal Of Clinical Nutrition*. Apr 1998;67(4):804S-813S.
2. Niemeier HM, Raynor HA, Lloyd-Richardson EE, Rogers ML, Wing RR. Fast food consumption and breakfast skipping: Predictors of weight gain from adolescence to adulthood in a nationally representative sample. *Journal Of Adolescent Health*. Dec 2006;39(6):842-849.
3. Food Research and Action Center (FRAC). School Breakfast Scorecard: 2005. [www.frac.org/pdf/2005\\_SBP.pdf](http://www.frac.org/pdf/2005_SBP.pdf). Accessed April 16, 2007.
4. Food Research and Action Center (FRAC). School Breakfast Scorecard: 2006. [www.frac.org/pdf/2006\\_SBP.pdf](http://www.frac.org/pdf/2006_SBP.pdf). Accessed October 6, 2007.
5. Murphy JM, Pagano ME, Nachmani J, Sperling P, Kane S, Kleinman RE. The relationship of school breakfast to psychosocial and academic functioning - Cross-sectional and longitudinal observations in an inner-city school sample. *Archives Of Pediatrics & Adolescent Medicine*. Sep 1998;152(9):899-907.
6. Lopez-Sobaler AM, Ortega RM, Quintas ME, Navia B, Requejo AM. Relationship between habitual breakfast and intellectual performance (logical reasoning) in well-nourished schoolchildren of Madrid (Spain). *European Journal Of Clinical Nutrition*. Sep 2003;57:S49-S53.
7. Delva J, Johnston LD, O'Malley PM. The epidemiology of overweight and related lifestyle behaviors. *American Journal Of Preventive Medicine*. Oct 2007;33(4):S178-S186.
8. Rampersaud GC, Pereira MA, Girard BL, Adams J, Metz J. Review - Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal Of The American Dietetic Association*. May 2005;105(5):743-760.
9. Hanson TL, Austin GA. *Student health risks, resilience, and the Academic Performance Index in California (California Healthy Kids Survey Factsheet 1)*. Los Alamitos, CA.: WestEd.; 2002.
10. True L. *The Bottom Line: California School Breakfast Affordability Study*. San Francisco: California Food Policy Advocates.; 1993:46 pp.
11. California Department of Education (CDE). 2004-05 County Profile for California SNP - Food Programs (PDF). Data on meal participation in the School Nutrition Programs (SNP) for fiscal year 2004-2005. Available at: <http://www.cde.ca.gov/ds/sh/sn/documents/coproschool0405.pdf>. Accessed December 15, 2007.

12. Ladd S. Breakfast "Scores" High on Closing the Achievement Gap: Research Findings and Practical Applications. Paper presented at: Closing the Achievement Gap.; November 14, 2007, 2007; Sacramento, California.
13. Single E, Robson L, Xie XD, Rehm J. The economic costs of alcohol, tobacco and illicit drugs in Canada, 1992. *Addiction*. Jul 1998;93(7):991-1006.
14. Wolf AM, Colditz GA. Current estimates of the economic cost of obesity in the United States. *Obesity Research*. Mar 1998;6(2):97-106.
15. U.S. Department of Agriculture (USDA). National School Lunch, Special Milk, and School Breakfast Programs, National Average / Payments / Maximum Reimbursement Rates. *Federal Register*. 2007;27(131):37508-37511.
16. U. S. Department of Agriculture (USDA). Provision 2 Guidance. National School Lunch and Breakfast Programs. 2002.  
<http://www.fns.usda.gov/cnd/Governance/prov-1-2-3/Prov2Guidance.pdf>. Accessed May 20, 2007.
17. McCarthy WJ, Dietsch B, Hanson TL, Zheng CH, Aboelata, M. *Evaluation of the In-School Tobacco Use Prevention Education Program 2001-2002*. Sacramento, California: Tobacco Control Section, California Department of Health Services. 2004, 191 pp. Accessible at:  
<http://www.dhs.ca.gov/tobacco/documents/pubs/SchoolsReport.pdf>.

## **Appendixes**

- Appendix A. Federal definition of severe need schools
- Appendix B. Federal / state school meal reimbursement rates for 2006-2007
- Appendix C. CDE's changes to existing law needed to implement mandatory SBP
- Appendix D. Survey instrument used both by telephone and in face-to-face interviews
- Appendix E. Master form for compiling school breakfast costs for severe need schools
- Appendix F. Methods used in this study.
- Appendix G. Case studies with detailed cost breakdown for school breakfasts
- Appendix H. CDE's administrative costs for mandatory severe need SBP
- Appendix I. Glossary of selected terms used in this report

## **Appendix A. Federal definition of severe need schools**

As used in this chapter, the term "severe need school" has the meaning defined in 7 CFR Part 220.2 and 7 CFR Part 220.9(e).

*[Severe need schools are schools where:] "... 40 percent or more of the lunches served to students at the school in the second preceding school year were served free or at a reduced-price." [7 CFR Part 220.9(e)].*

Translation: "Severe need schools" in 2006-2007 were those schools that in 2004-2005 had 40 percent or more of its lunches SERVED to students free or at a reduced-price.

Note. This definition can be confusing. There were a few instances where a school had fewer than 10 percent of its enrolled students who were eligible for free or reduced-price lunches but where the school could nonetheless be designated a "severe need school" because over 40 percent of the lunches SERVED at that school were to those few students who were eligible for free or reduced-price lunches. Some food service directors were therefore under the misimpression that some of their "severe need schools" were not eligible for the increased federal reimbursement available to severe need schools.

**Appendix B. Federal / state school meal reimbursement rates for 2006-2007**

***School Nutrition Programs (SNP)***

**Federal and State Reimbursement Rates for  
July 1, 2007, through June 30, 2008**

Adapted from Management Bulletin

**Federal School Breakfast Program**

	<b>Free</b>	<b>Reduced-Price</b>	<b>Paid</b>
<b>Basic Breakfast</b>	\$1.35	\$1.05	\$0.24
<b>Especially Needy Breakfast</b>	\$1.61	\$1.31	\$0.24

**Note:** Especially Needy Breakfast is for approved sites that served 40% or more free and reduced-price lunches in 2005-2006.

The California per-meal reimbursement for meals served to students eligible for free and reduced-price meals is an additional \$.2195 per meal for the 2007-2008 school year. The combined federal and state breakfast meal reimbursement is summarized below.

<b>Combined federal and state meal reimbursement rates for school breakfast</b>			
	<b>Free</b>	<b>Reduced-Price</b>	<b>Paid</b>
<b>Basic Breakfast</b>	\$1.5695	\$1.2695	\$0.24
<b>Especially Needy Breakfast</b>	\$1.8295	\$1.5295	\$0.24

**Note:** Especially Needy Breakfast is for approved sites that served 40% or more free and reduced-price lunches in 2005-2006.

## **Appendix C: California Department of Education's changes to existing law needed to implement a program to require that breakfast be offered in severe need schools**

To the extent that funding is provided to the schools and the department for this purpose, the CDE recommends that the following changes in existing law be undertaken if the Legislature intends to require that breakfast be offered in severe need schools:

### Mandate

- Notwithstanding Section 47610, add a new section to the Education Code requiring that each public and charter school site meeting the federal definition of severe need offer breakfast.
- Clarify that the breakfast must be offered in addition to the lunch meal.
- Establish the requirement to take effect no earlier than two years after enactment of the bill, in order to give school districts, charter schools, and county offices of education time to prepare, and time for the CDE to provide technical assistance.
- Place the new section within Article 11 (Meals for Needy Pupils) of Chapter 9 (Pupil and Personnel Health) of Part 27 (Pupils) within Title 2 (Elementary and Secondary Education) of the Education Code.

### Start-Up Grants

- Add a provision to existing Education Code Section 49950.3 (which governs start-up and expansion grants for breakfast and summer food service) to require that highest priority for start-up grants be given to severe need school sites that are required to comply with the new breakfast mandate.
- Require that the CDE provide a report to the Legislature each year on the amount of funds needed to provide start-up grants to severe need schools required to establish a breakfast program.

### Waiver Authority

- Provide authority for the State Board of Education (SBE) to grant a waiver of the requirement to offer breakfast for school sites where adding breakfast would create a significant financial loss to the district or county office of education.
- Define “significant financial loss” for purposes of a waiver. The CDE recommends that significant financial loss be deemed to occur when either: 1) a district or county office of education’s food service food service is already operating at a net loss and operation of a breakfast program would increase this net loss; or 2) a district or county office of education that is not currently operating at a net loss can demonstrate that operating a breakfast program would result in expenses that exceed by more than one-third the expected breakfast revenue for that site.
- Require that the district’s significant financial loss be documented in a format to be provided by the CDE.

- Require that prior to recommending to the SBE that a waiver be granted, the CDE shall provide technical assistance to the school district or county office of education to assist districts in overcoming the barriers they may be experiencing (to the extent adequate funding is provided).
- Require that waiver requests be submitted well in advance of the school year for which they are requested, in order to give the CDE time to provide technical assistance and to evaluate the district's financial analysis prior to making a recommendation to the SBE. The CDE recommends that the submission deadline be set at February 1 in the year prior to the year in which the waiver is applicable.

#### Budget Act

- Ensure that funding is appropriated in the annual Budget Act for meal reimbursement and CDE's costs for administering the mandated requirement.

**Appendix D. Survey questionnaire used both by telephone and in face-to-face interviews**

**INTERVIEW QUESTIONS FOR SEVERE NEED SCHOOL SITES THAT DO NOT CURRENTLY SERVE BREAKFAST**

The California Department of Education, at the request of the California State Legislature is conducting a study to analyze how many “severe need” schools do not now serve breakfast, what it would cost for all districts with such schools to do so, and the feasibility of requiring them to do so. It requires the department to analyze the changes in law necessary to implement such a requirement.

Research has shown that consuming a nourishing breakfast improves children’s learning and behavior in school. It is a goal of the Department to see that all children receive a nutritious breakfast. This is especially important in schools where a high proportion of children come from low-income families.

It is our understanding that one or more of your school sites **DOES NOT** currently serve breakfast, and that it is considered a severe need school.

***Definition of “Severe Need” or “Especially Needy” is: Federal Law defines schools where 40 percent or more of the lunches served under the National School Lunch Program (NSLP) at the site are provided free or at a reduced-price.***

**QUESTIONS:**

1. It is my understanding that [name of specific school(s) ] School does not serve school breakfast under the National School Breakfast Program (NSBP) at this time. Is my understanding correct?

Yes\_\_\_\_\_ or No\_\_\_\_\_

2. Have you considered serving breakfast under the NSBP?

Yes\_\_\_\_\_ or No\_\_\_\_\_

3. What were some of the considerations that determined the outcome of your decision regarding participation in the breakfast program under the NSBP?  
(Please check all that apply)

- a. \_\_\_\_\_ Lack of Equipment
- b. \_\_\_\_\_ Lack of Facilities
- c. \_\_\_\_\_ Student Bus Schedule
- d. \_\_\_\_\_ Class Schedules
- e. \_\_\_\_\_ Additional Custodial Services
- f. \_\_\_\_\_ Lack of Nutrition Services Staff
- g. \_\_\_\_\_ Cost of additional Nutrition Services Staff
- h. \_\_\_\_\_ Resistance by Community
- i. \_\_\_\_\_ Resistance by Principal
- j. \_\_\_\_\_ Resistance by Nutrition Services Staff
- k. \_\_\_\_\_ Resistance by Management
- l. \_\_\_\_\_ Class Schedules
- m. \_\_\_\_\_ Certificated Labor Agreements
- n. \_\_\_\_\_ Classified Labor Agreements
- o. \_\_\_\_\_ Student Lack of Participation (because of stigma)
- p. \_\_\_\_\_ Student Lack of Participation (because of logistics)
- q. \_\_\_\_\_ Inadequate Reimbursement
- r. \_\_\_\_\_ Other, Please Explain

4. Would you consider having this (these) school sites participate in the School Breakfast Program if you were able to receive a \$15,000 per site Breakfast Start-up Grant to purchase equipment and supplies, staff training, and for outreach and promotions?

Yes \_\_\_\_\_ or No \_\_\_\_\_

If no, please explain: \_\_\_\_\_

5. What is your average daily attendance (ADA) for this (these) site(s)?

---

6. What type of site is this? (e.g., K-5, 6-8, 10-12, K-8, continuation HS, etc.)

---

7. What additional information and/or guidance would be helpful to provide you with the incentive to apply for a \$15,000 Breakfast Start-up Grant?

Please explain: \_\_\_\_\_

8. Were you aware that there is an Especially Needy Breakfast Program Federal reimbursement rate of \$1.56 for each Free Breakfast served; \$1.26 for each Reduced-Price Breakfast Served; and \$0.25 for each Paid Breakfast Served? There is currently an additional State Reimbursement of \$ 0.1625 for each Free and Reduced-Price Breakfast served.

Yes \_\_\_\_\_ or No \_\_\_\_\_

If no, please explain: \_\_\_\_\_

9. Would the 2006-2007 Reimbursement Rate of \$1.7163 for each free breakfast served and \$1.4163 for each reduced-price breakfast served affect your decision to participate in the National School Breakfast Program (NSBP)?

Yes \_\_\_\_\_ or No \_\_\_\_\_

10. Have you determined an estimate of the costs necessary to implement a National School Breakfast Program at your school?

Yes \_\_\_\_\_ or No \_\_\_\_\_

If not, what assistance would be helpful in estimating those costs?

Please describe: \_\_\_\_\_

11. Would you utilize this assistance in implementing a breakfast program?

Yes \_\_\_\_\_ or No \_\_\_\_\_

Please describe: \_\_\_\_\_

12. Would you be able to estimate the projected **non-recurring** start-up costs that would be necessary to participate in the National School Breakfast Program at your school?

Yes \_\_\_\_\_ or No \_\_\_\_\_

13. If possible, please estimate **non-recurring** start-up costs:

- a) \$ \_\_\_\_\_ Equipment (transport costs; production equipment; kitchen or cafeteria remodeling expense, installation, plumbing or electrical changes; indoor or outdoor tables, and chairs; and refrigerated or dry storage)
- b) \$ \_\_\_\_\_ Additional Nutritional Services Staff and/or Training
- c) \$ \_\_\_\_\_ Fringe Benefits
- d) \$ \_\_\_\_\_ Custodial Staff
- e) \$ \_\_\_\_\_ Supervision at Breakfast
- f) \$ \_\_\_\_\_ Point of sales/Computers
- g) \$ \_\_\_\_\_ Office Furniture
  
- h) \$ \_\_\_\_\_ Publicity and Outreach
- i) \$ \_\_\_\_\_ Direct Costs
- j) \$ \_\_\_\_\_ Indirect Costs
- k) \$ \_\_\_\_\_ Additional Management Labor/Grant Writing
- l) \$ \_\_\_\_\_ Other: \_\_\_\_\_

14. Would you be able to estimate the probable **recurring** (ongoing) costs that would be necessary for participation in the National School Breakfast Program at your school(s)?

Yes \_\_\_\_\_ or No \_\_\_\_\_

15. If possible, please provide us with any information that would be helpful to you in your estimating the program budget for the site.

Please estimate cost:

- a) \$ \_\_\_\_\_ Additional Nutrition Services Labor
- b) \$ \_\_\_\_\_ Increase in Fringe Benefits
- c) \$ \_\_\_\_\_ Meal Components (milk, meat/meat alternate, fruit/vegetable, bread/cereal, and disposables, etc.)
- d) \$ \_\_\_\_\_ Repair and/or Replacement of Equipment
- e) \$ \_\_\_\_\_ Additional Custodial Services Labor
- f) \$ \_\_\_\_\_ Administrative Costs
- g) \$ \_\_\_\_\_ Direct Costs
- h) \$ \_\_\_\_\_ Indirect Costs
- i) \$ \_\_\_\_\_ Point of Sales Maintenance
- j) \$ \_\_\_\_\_ Community Outreach
- k) \$ \_\_\_\_\_ Any Other items

16. What do you base your estimates on? (e.g., experience with comparable school, general experience with food service expenses, etc.)

---

17. How confident are you about these estimates?

- a. Very confident
- b. Somewhat confident
- c. Not at all confident

18. Does this (these) site(s) have any special circumstances that might explain why it (they) does not (do not) offer school breakfast?

---

19. Are you aware of these school breakfast options?: (Please circle all that apply):

- a. Breakfast on the bus
- b. Grab 'n Go breakfast
- c. Breakfast in the classroom
- d. Second Chance breakfast
- e. Nutrition break breakfast
- f. None of the above

20. Please share any other comments that you think would be helpful to others that you would like to come out of this important study:

---

---

---

---

Thank you for your time and for participating in this important survey.

Interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

**Appendix E. Master form for compiling school breakfast costs for severe need schools**

\_\_\_\_\_ **School District Breakfast Meal Costs**  
**April 2007**

**Estimated Daily Costs for Severe Need BREAKFAST meals now being served at:**  
\_\_\_\_\_ **Elementary/Middle/High/other School**

The Total Federal and State Daily Income received to serve \_\_\_\_\_ **students** at the  
2006-2007 rate

Especially Needy Breakfast reimbursement rate of \$1.7163 = \$ \_\_\_\_\_ **daily income**

Central Kitchen Labor	\$	
School Site Labor- cashier, server, aide	\$	
School Site Fringe Benefits	\$	
Food Costs	\$	
Supplies/Disposables Costs	\$	
Replacement/ Repairs	\$	
Nutrition Service Office/Mgmt Overheads	\$	
Direct Costs - Utilities/Disposal	\$	
Point of Sale /Maint	\$	
Community Outreach	\$	
Custodial Labor	\$	
Custodial Fringe Benefits	\$	
Estimated Loss of Food/Supplies	\$	
Utilities	\$	
Transport Costs	\$	
Other	\$	
Sub-Total	\$	
Indirect Costs – 0.00%	\$	
Total Daily Cost	\$	for _____ <b>students per day</b>
Less Total Daily Reimbursement Income	\$	
Breakfast Balance (Short Fall)	\$	<b>\$0.0000 or (\$ _____ ) per breakfast per day</b>

**Data:** \_\_\_\_\_ **School: Grades** \_\_\_\_\_ **Enrollment** \_\_\_\_\_

( Please fill out page 2 ! )

Average Daily Attendance \_\_\_\_\_

Average Daily Participation \_\_\_\_\_

Breakfast #	%	Lunch #	%
Free _____	_____	Free _____	_____
Reduced _____	_____	Reduced _____	_____
Paid _____	_____	Paid _____	_____
Total meals _____	100%	Total meals _____	100%
Time of Service	Breakfast: Lunch:	From: _____ To: _____ From: _____ To: _____	

Type of Service

Comments:

\*\*\*\*\*

## **Appendix F. Study methods**

### ***Methods Used in This Study***

#### **Data Sources**

The most important source of data for this report was a school site-level survey conducted by staff of the Nutrition Services Division, CDE. Other data sources included the 2005 API data (CDE, API Data files), telephone interview data involving a random sample of severe need schools not currently offering the SBP, and site visit data from a subset of the telephone interview random sample.

#### **One-time school site-level survey**

The Nutrition Services Division of CDE collected fax-back survey data in November, 2006 using the latest data available, namely 2004-05 meal participation data, to identify severe need schools offering the National School Lunch Program (NSLP) and the SBP. Two data files were prepared, using the data from this survey. One file was named: "Pub.Sch.Districts(2004-5) with 40 Percent or More Free & Reduced.xls" that included listings for 7,545 severe need schools. A related file, entitled, "Pub.Sch.Districts(2004-5) - 40 Percent or More Free Reduced NOT Serving Breakfast.xls," included 744 severe need school sites identified as serving the NSLP but not the SBP. These two files permitted comparisons between California severe need schools that offered the SBP and those that did not.

Merging these two files required a common identifier. For many CDE files of school-related data, there is usually an identifier known as a "CDS" code, a 16-digit code number that uniquely identifies all bona fide public schools in California. While there were no CDS codes in the files resulting from the 2004-2005 school-specific survey, these codes were added after the fact by using a California Basic Educational Data System(CBEDS) file containing information about county, district and school that could be used to merge CDS codes.

After merging the CBEDS file with the 2004-2005 survey files, there were many sites that either had no CDS code or had a CDS code of "00-00000-0000000." Inspection of a random sample of these no-CDS-code sites indicated that they were preschools, daycare centers and other sites not conventionally known as schools. Some preschools had CDS codes but most did not. All no-breakfast sites with no CDS codes or with "00-00000-0000000" CDS codes were therefore dropped, resulting in a file of 617 severe need schools that had been identified as not participating in the SBP even though they participated in the NSLP.

Inspection of the CDS codes revealed that some sites shared CDS codes with other sites with similar names. In most of these instances, it was determined that annexes of schools received the same CDS code as the parent school. The annexes were dropped from the file, resulting in a total of 580 severe need schools. Another pass of the data eliminated ten remaining preschools and charter schools that had CDS codes for a total of 570 severe need schools identified as not participating in the SBP. Similar

dropping of preschools, daycare centers, charter schools and duplicate CDS codes in the parent file resulted in a total of 6,523 sites. The 570 of these 6,523 that did not participate in the SBP represented 8.7% of the total.

### **Academic Performance Index (API) data**

Annually, the CDE posts school-level information about the performance of its students on the latest California Standards Tests, as well as related information that permits comparisons between different schools on how well their students are learning from standards-based instruction in core subjects such as math and language arts. For this report, an important piece of information in the API data is the average level of formal educational attainment achieved by the parents of the children attending the school. Formal educational attainment is often used by social science researchers as a marker of socioeconomic status (Krieger et al., 1997).

### **California Healthy Kids Survey**

School districts are required to administer biennially the California Healthy Kids Survey (CHKS) to a representative sample of 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> graders. The CHKS is an omnibus health survey, designed to elicit information about a variety of health-related lifestyle practices, including alcohol use, tobacco use, exercise patterns and food choices. A question about recent experience with depression was also included. The nutrition-related questions included a query about whether the student had eaten breakfast on the day when the questionnaire was completed. The response options were simply, “yes, I had breakfast today” or “no, I did not have breakfast today.” The data used were collected between 1998 and 2006.

### **Telephone interviews with food service directors and district business managers**

A random sample of schools not participating in the SBP were selected for telephone interviews. Telephone interviews were conducted with food service directors or business managers, to discuss randomly-selected severe need school sites identified as not currently serving breakfast according to the 2004-2005 school-specific CDE survey (data collected in 2006). Initially the interviewers were two former food service directors serving as consultants, with WestEd staff listening in order to learn how to conduct the interviews themselves. WestEd professional survey research personnel trained by the food service consultants conducted most of the subsequent interviews. The survey instrument, titled “Interview Question for Severe Need School Sites that do not Currently Serve Breakfast,” is included in the appendix. A copy of this instrument was faxed or emailed to listed contacts at the districts where the randomly sampled schools were located prior to the interview. The telephone interview included 12 questions and was intended to take approximately 20 minutes. A committee of stakeholders approved the content. Stakeholder organizations represented included the California School Nutrition Association, the California School Boards Association, California Food Policy Advocates, selected food service directors, as well as CDE Nutrition Services staff. The content was designed to elicit information about challenges and barriers to adopting the SBP as well as specific information about expected costs of adopting and sustaining a SBP.

## **Site visits with food service directors and district business managers**

Of the 12 regions included in this study, a site visit was made to one school district in each of 10 regions, to ensure a geographically broad coverage of California school districts. The school districts selected for a site visit were a subset of those districts participating in the telephone interview. The intent of the site visits was to corroborate the information provided over the phone and to determine if there were other important influences on school breakfast participation that were missed by relying exclusively on information obtained by telephone interview. A supplementary form entitled, "Estimated Daily Costs for Severe Need Breakfast meals now being served at [Name of school]" was used to collect cost information. Consultants with years of experience as former food service directors, sometimes accompanied by WestEd research staff, conducted all site visits.

## **Sampling frame**

The sampling frame consisted of the 570 severe need schools identified as not participating in the SBP in 2006-2007. California has demographically distinct regions influenced in part by geography and in part by historical migration patterns. In order to assure adequate representation of California's diverse regions, the investigators stratified the random sampling of schools by geographic region. The investigators adopted the regional distinctions obtained empirically by investigators at the California Department of Health Services and used in statewide health surveillance research.<sup>17</sup> Seven of these regions are defined by the state's seven most populous counties (Los Angeles, San Diego, Orange, Santa Clara, San Bernardino, Riverside, Alameda). The remaining regions represented from five to twenty counties each. Regions 9 and 10 were distinctly less urban than other regions. The regions are described in more detail in Table 3 of the full report.

## **Survey study sampling methodology**

The sampling frame consisted of all 570 severe need schools with CDS codes that had been identified as not participating in the SBP. A computer-generated set of random numbers (sample procedure in STATA version 9) was used to rank order all severe need schools not serving breakfast, within each region. To maximize statistical power but still complete the interviews in one month the investigators and stakeholders agreed to include six severe need schools within each region, or 72 schools. By chance, however, many regions had two or more schools that belonged to the same district. In order to assure independence of observations, enough additional schools were included in the sampling plan so that it would be possible to interview six different districts within each region. This yielded a sampling plan of 102 schools within 72 school districts.

After the sampling plan was adopted, it was determined that charter schools would not be included in the interviews. Charter schools, because of their autonomous management nature, are less likely to be subject to a school breakfast mandate. Most charter schools are relatively new and have therefore little institutional memory, thereby reducing the value of the interview information that was possible. The sampling plan was therefore reduced by five districts whose randomly selected schools happened to be

charter schools, no more than one per region, except for Region 10, which had two charter schools, each representing a different district. Two additional schools whose random ordering in the sampling frame immediately followed the schools needing replacement were therefore added to Region 10. These two schools happened to be from the same district, however, so Region 10 still ended up with five districts to be interviewed instead of the six that were originally planned for. The resulting sampling plan therefore included 73 districts and 104 schools, of which five districts (six schools) were considered ineligible because of their charter status. Other reasons for ineligibility are listed in Table 1 of Appendix F.

<b>Table 1 of Appendix F. Final decision with respect to including randomly sampled districts in conducting telephone interviews</b>	
<b>Criteria for resolving status of interview</b>	<b>Number of districts</b>
District interviews completed	44
Ineligibles:	
Adult school	1
School closed	1
Districts w. charter schools	5
Never returned contact	4
Refusal to provide information	3
Not enough time to complete	15
Total districts in sampling plan	73

### **Cooperation rate**

Cooperation rates were calculated using the basic CASRO-recommended (Council of American Survey Research Organizations) method for telephone surveys. Using this framework, the typical cooperation rate is the ratio of the number of districts that were successfully surveyed to the total of all eligible districts in the sample.

The time allotted for obtaining the telephone interviews turned out to be the biggest obstacle to achieving full cooperation. Table 1 of Appendix F describes the final decision with respect to including randomly sampled school districts of the planned interviews.

The cooperation rate obtained in this study was calculated as follows:

$$\text{District cooperation rate} = \frac{\text{Number of completed school district interviews} + \text{ineligibles}}{\text{Number of completed district surveys} + \text{ineligibles} + \text{non-responses}} \times 100$$

Applying this formula yielded a cooperation rate of 69.9%, which is high enough to assure representative findings.

**Validity of findings**

All regions were represented in the final sample, with the number of schools ranging from three to six per region. The average number of schools per region was five. The only region with only three schools in the final sample was Santa Clara County, which is demographically similar to other Bay Area urban regions. The final sample was therefore successful in capturing the diversity of schools in California's demographically and geographically distinguishable regions. Results should therefore be generalizable to all of California.

## **Appendix G. Case studies of an urban and a rural district with one or more severe need schools that did not provide the SBP, with detailed estimated costs of providing the SBP at those schools.**

### **Case Studies**

To illustrate some of the differences between large, urban school districts and small, rural school districts, we describe two district case studies below: school district “Urban #1” and school district “Rural #1.”

#### **Urban #1 School District:**

Urban #1 has a current enrollment of over 30,000 students with 42 elementary schools, seven middle schools, six high schools, two continuation high schools, and one alternative education school. About 17,000 students (54.9%) of the students enrolled currently participate daily in the National School Lunch Program (NSLP).

Nearly 6,000 students (37.7%) of the 15,901 students enrolled in 35 of the sites currently participate daily in the SBP. Twenty-seven of these sites are designated as severe need schools. The experience of providing the SBP to some of the severe need schools informed the estimated costs of providing the SBP to the severe need schools not currently providing the SBP.

A Central Food Production Kitchen opened in 2001. This central kitchen provides the food that is delivered to satellite kitchens at 42 elementary, 13 secondary, two continuation schools, and one alternative education school. The elementary students are offered pre-packaged meals, offer vs. served, and salad bars. The secondary school students are offered self-serve food lines, traditional cafeteria lines, snack bars, and mobile food carts.

#### **Issues:**

The district is currently experiencing a declining enrollment. The student population declined more than 1000 (3.3%) in the 2006-2007 SY. This is partly due to charter schools gaining momentum in the area. There are four charter schools currently operating within the district’s boundaries. These schools are not currently contracting with the school district for meals. The district could easily provide contracted meals to the charter schools.

According to the interviewee, the district superintendent is on record as saying, “The Board of Directors, Administration, and Cabinet are in full support of providing breakfast to students as long as the nutrition services remains self-supporting”.

Some of the challenges to the implementation of SBP in the schools are:

- To break even at the secondary level, 125 students must participate in each school’s breakfast program. Of the eight secondary schools only two serve an average of more than 125 per day and are therefore the only schools breaking even.

- The cost of custodial services has increased, because of the need to clean the cafeteria a second time each day. They are currently negotiating with the union regarding the overtime charge.
- Teachers are assigned additional supervision duties for breakfast.
- Some principals do not want to implement the breakfast program.
- Parent outreach is needed to let them know that breakfast is available, and that the students need to come to school early enough to participate.

**Urban #1 Middle school:**

Urban #1 Middle School has an enrollment of 737 (727 ADA) and is considered to be a severe need school. The average daily participation (ADP) in the National School Lunch Program is currently 280, which is 38 percent of the average daily attendance (ADA). School breakfast costs were estimated for 125 students, which seemed like a reasonable target for a middle school of this size.

“The school is currently under reconstruction so they have limited cooking and refrigeration facilities and everything must be brought in prepackaged.” This has affected the level of student participation.

**COST CALCULATIONS TO SERVE BREAKFAST:**

The Federal and State income received to serve **125 students** at the 2006-2007 Especially Needy Breakfast reimbursement rate of \$1.7163 = **\$214.54**

• 1.0 hours School Site Labor	\$ 15.86
• 1.0 hours School Site Manager	26.50
• 1.5 hours Central Kitchen	45.00
• Fringe Increase	17.62
• Food cost for 125 meals @ \$0.75/meal	93.75
• Supplies for 125 meals @ \$0.0675/meal	6.95
• NS Office Staff and overhead 30%	<u>61.70</u>
	Sub-Total \$247.53
• Indirect Costs – 5.6%	14.97
• Direct Costs – 5%	<u>4.11</u>
	Total Cost \$286.46 or \$2.29 per breakfast meal

Daily breakfast shortfall (\$71.92) or **\$0.0575/Meal**  
**Annual estimated shortfall = \$1293.75**

**Urban #1 Elementary school:**

Urban #1 Elementary is a K-5 school, which currently has an enrollment of 304 students with an ADA of 297 students. An average of 150 students participate daily in the NSLP. The director stated that “There is low participation by students in the NSLP at this site due to the open competitive food sales, and because it is a neighborhood walking school.” School breakfast costs were estimated for 100 students, which seemed like a reasonable target for an elementary school of this size.

## COST CALCULATIONS TO SERVE BREAKFAST:

The Federal and State income received to serve 100 students at the 2006-2007 Especially Needy Breakfast reimbursement rate of \$1.7163 = **\$171.63**

• 1.0 hours School Site Labor	\$ 15.86	
• 1.5 hours Central Kitchen	45.00	
• Fringe Increase	12.28	
• Food cost for 100 meals @ \$0.75/meal	75.00	
• Supplies for 100 meals @ \$0.0675/meal	10.00	
• NS Office Staff and overhead 30%	<u>47.44</u>	
	Sub-Total	\$205.58
• Indirect Costs – 5.6%	11.51	
• Direct Costs - 2%	<u>4.11</u>	
	Total Cost	\$221.20 or \$2.21 per breakfast meal

Daily breakfast shortfall (\$49.57) or **\$0.0496/Meal**  
**Total annual shortfall = \$892.80**

The District nutrition services Director projected that the expected participation in the SBP would be less than 50% of the lunch participation for an average of 75 students served daily.

## START-UP COSTS:

### Urban #1 Middle school: \$2,750

- a) \$ 2,500 Equipment (hot/cold transport equipment, one-site refrigerator electrical, installation, data line)
- b) \$ 50 Additional Nutritional Services Training
- c) \$ 0 Point of Sales/Computer
- d) \$ 100 Publicity and Outreach
- e) \$ 100 Additional Management/Grant Writing

### Urban #1 Elementary school: \$22,320

- a) \$ 18,382 Equipment (hot/cold transport equipment, one-site refrigerator electrical, installation, data line)
- b) \$ 200 Additional Nutritional Services Training
- c) \$ 2,500 Point of Sales/Computer
- d) \$ 100 Publicity and Outreach
- e) \$ 100 Additional Management/Grant Writing

### **Quotes from the director of food services:**

- “To get teacher support we have to convince them of the importance of breakfast and its relationship to student learning outcomes.”
- “To market the school breakfast, we must sell them on the program.”
- “To get parent support we send them a survey to determine the interest in the school breakfast program and let them know that their children would need to come to school early enough to participate.”
- “To gain breakfast participation we have implemented the ‘Grab and Go Breakfast,’ ‘Breakfast in the Classroom,’ ‘Second Chance Breakfast,’ ‘Recess Break Breakfast,’ and also used our ‘Mobile Kitchen’ as a promotional and very successful marketing ploy.”

### **“Rural #1” School District:**

Rural #1 has a current enrollment of about 4,800 students with seven elementary schools, two junior high schools, two high schools, one continuation high school, and one community court high school. One thousand, eight hundred students (37.6%) currently participate daily in the NSLP.

Five hundred and sixty-seven students are enrolled at the three school sites that currently participate in the SBP. They have an average daily participation (ADP) rate of 76 students, which is 14% of the 535 average daily attendance (ADA). These sites are designated as severe need schools.

There are four central or cooking kitchens that serve all 13 schools.

### **Issues:**

Parents in this rural community are generally supportive of the school lunch program; however, many feel that it is the parents’ responsibility to feed the children breakfast at home.

Many students are bused to school. Buses arrive at 7:30 a.m. and 7:35 a.m., with the first bell ringing at 7:40. Classes begin at 7:50. Because the buses arrive so close to the start of classes, it is a challenge to serve breakfast to students and to provide them with enough time to eat before class.

It has been very difficult to hire a staff person for one hour per day to serve the school breakfast. When such a person is hired, that person will transfer out whenever another position with more hours is available. In one instance a school office clerk was hired and paid for 1.75 hours daily for a total salary plus fringes. This cost \$34 per day to feed an average of 25 students daily. The cost per meal for the labor to serve was \$1.36.

**Rural #1 Elementary school:**

Rural #1 School is a K-6 school and has an enrollment of 283 (264 ADA) and is considered a severe need school. The ADP in the lunch program is currently 177, which is 62.5 percent of the ADA. School breakfast costs were estimated for 50 students, which seemed like a reasonable target for an elementary school of this size.

Rural #1 is a satellite school; therefore, food and supplies would need to be sent to the school the day prior to service and prepared on site.

Seventy-nine (44.6%) students received lunch free or at a reduced-price.

**COST CALCULATIONS TO SERVE BREAKFAST:**

The Federal and State income received to serve 50 students at the especially 2006-2007 Especially Needy Breakfast reimbursement rate of \$1.7163 = **\$85.52**

• Additional School Site Labor	\$ 68.00
• Food cost for 50	50.00
• Supplies for 50 meals	5.00
• NS Office Staff /Overhead	5.50
• Indirect Costs	<u>11.00</u>
Total Cost	\$ 139.50 or \$2.79 per breakfast meal

Daily breakfast shortfall (\$53.98) or **\$1.08/Meal**  
**Annual total shortfall = \$9720**

The Director projected that the expected participation in the SBP would be less than 25% of the lunch participation, which meant an average of 37 school breakfasts served daily.

**START-UP COSTS:**

**Rural #1 Elementary school: \$8,500**

- a) \$ 8,500 Equipment (Cook/Warmer, Oven, Electrical, Installation)
- b) \$ 0 Additional Nutritional Services Training
- c) \$ 0 Point of Sales/Computer
- d) \$ 0 Publicity and Outreach
- e) \$ 0 Additional Management/Grant Writing

## Appendix H. California Department of Education administrative costs for mandatory severe need breakfast

California Department of Education  
Nutrition Services Division

School Nutrition Programs Unit  
December 19, 2007

### California Department of Education Administrative Costs for Mandatory Severe Need Breakfast

If a requirement that all “severe need” schools provide breakfast is adopted by the Legislature, the CDE will incur costs to administer the requirement. The CDE will require additional staff to accomplish the following new or expanded functions:

<b>Time Period</b>	<b>Staff Needed</b>	<b>Function</b>	<b>Cost (2007 – 08)</b>
<b>3-year Limited-term</b>	<b>0.5</b> Associate Governmental Program Analyst	Analyze breakfast waiver requests	\$ 53,013
	<b>1.0</b> Associate Governmental Program Analyst	Process additional applications for breakfast <b>and</b> additional start-up grants	\$106,026
<b>Permanent</b>	<b>1.0</b> Associate Governmental Program Analyst	Provide technical assistance to minimize number of waivers; assist districts to maximize breakfast participation	\$106,026
	<b>0.5</b> Associate Governmental Program Analyst	Monitor compliance and analyze data to track success of the program	\$ 53,013
	<b>1.0</b> Office Technician	Provide support for professional staff	\$ 69,011
<b>Total</b>	<b>1.5 3-year LT AGPAs; 1.5 Permanent AGPAs; 1.0 OT</b>		<b>\$387,089.00</b>

The CDE estimates that 1.5 three-year limited-term and 1.5 permanent professional positions at the Associate Governmental Program Analyst level, and 1.0 support position at the Office Technician level, would be necessary to accomplish these functions. At 2007-08 salary levels, the approximate cost for these staff would be \$390,000.

## Appendix I. Glossary of terms used in this report

**ADA** – Average daily attendance

**ADP** – Average daily participation in the National School Lunch Program

**“Breakfast in the classroom”** - All children are offered a breakfast, usually at no charge, at their desk at the start of the school day. Meals are usually delivered on carts. Milk and orange juice come in coolers; hot items come in insulated bags, along with a choice of other breakfast items. Schools decide the menu, and choices include fruit in child-friendly sizes, cereal, muffins, bagels, breakfast pizza, yogurt, and breakfast sandwiches. This program works best in school districts operating under Provision 2 or 3 that permits all students to participate in the SBP regardless of ability to pay.

While the students are eating, the teacher takes roll, delivers daily announcements, uses the breakfast items as the focus for a short nutrition education lesson, or reads a poem or story. Or the students are free to complete their homework, work on exercises, or chat with each other. Everyone helps with a quick clean up, the trash goes outside the classroom door, and the untouched food is returned to the cafeteria. For more information about “breakfast in the classroom,” see: <http://www.breakfastfirst.org/Bfastinclass.htm> or <http://www.fns.usda.gov/cnd/breakfast/toolkit/theres.pdf>.

**“Breakfast on the bus”** – A variant of “Grab ‘n Go” breakfast (defined below), this requires that the district food service take bins with bagged breakfasts to the bus depot before bus routes begin in the morning. Breakfast is then handed to each student as she/he boards the bus. Students need to be trained to throw the resulting trash away before leaving the bus. This program works best in school districts operating under Provision 2 or 3 that permits all students to participate in the SBP regardless of ability to pay. For more information about “breakfast on the bus,” see: <http://www.fns.usda.gov/cnd/breakfast/toolkit/theres.pdf>.

**CDE** – California Department of Education

**“Grab ‘n Go” breakfast** - Grab ‘n Go is a reimbursable breakfast, typically served in a bag from carts stationed at school entrances and other places that students rush by on their way to first period. The Grab ‘n Go meal is a bagged meal that meets the standards for USDA reimbursement, including three food components. Each bag is individually wrapped in advance by cafeteria staff and is easy to consume and mess-free. Items have to be cold, and the choices resemble those for classroom breakfast – fresh fruit or fruit juice, cold cereal and milk, bagels, breakfast sandwiches, and other healthy “fast” food. Students can consume the meal in the hall before school, quietly at their desks, or on a break during the morning. For more information about “Grab ‘n Go” breakfast, see: <http://www.breakfastfirst.org/2ndChance.html> or <http://www.fns.usda.gov/cnd/breakfast/toolkit/theres.pdf>.

## **NSLP – National School Lunch Program**

**“Nutrition break breakfast”** – Synonymous with “second chance breakfast.” See “second chance breakfast,” below.

**Provision 2** - • This provision in federal law reduces application burdens and simplifies meal counting and claiming procedures for getting federal reimbursements for the costs of providing school breakfast to students eligible for free and reduced-price meals. It allows schools to establish claiming percentages and to serve all meals at no charge for a four-year period.

- Schools must serve meals to all participating children at no charge for a period of four years. During the first year, or base year, the school makes eligibility determinations and takes meal counts by type. During the next three years, the school makes no new eligibility determinations and counts only the total number of reimbursable meals served each day. Reimbursement during these years is determined by applying the percentages of free, reduced-price, and paid meals served during the base year to the total meal count for the claiming month. The base year is included as part of the four years.

- At the end of each four-year period, the state agency may approve four-year extensions if the income level of the school’s population remains stable compared to the base year.

- Schools electing this alternative must pay the difference between federal reimbursement and the cost of providing all meals at no charge. The money to pay for this difference must be from sources other than federal funds.

For more information about Provision 2 see:

<http://www.fns.usda.gov/cnd/Governance/prov-1-2-3/Prov2Guidance.pdf>.

## **SBP – National School Breakfast Program**

**“Second Chance Breakfast”** - When bus schedules do not leave enough time for riders to eat before the bell or when students are late to school, “second chance breakfast” ensures those kids have a healthy meal available at morning recess. Many schools combine this with the “Grab ‘n Go” breakfast defined above. “Second chance breakfast” is a second breakfast service during morning recess or snack break, usually sometime between 9:00 a.m. and 10:00 a.m. The conventional breakfast service in the cafeteria before school starts is maintained, and meals are kept available for later in the morning. Use of student identifiers, either punched in or by means of a swipe card, ensures that each student eats only one school breakfast, either before school or during “second chance breakfast.” For more information about “second chance breakfast,” see: <http://www.breakfastfirst.org/GrabnGo.html>.

## **USDA – United States Department of Agriculture**