



MANAGEMENT ANALYSIS & PLANNING, INC

The Case for Small High Schools in Sacramento City Unified School District and Their Fiscal Impact

Submitted to

**Jim Sweeney, Superintendent
Sacramento City Unified School District**

Prepared for MAP by

**William S. Furry
Gerald C. Hayward
James R. Smith**

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Sacramento City USD is on the threshold of a remarkable transformation of high school education. Simultaneously, it is establishing “small learning communities” within five large comprehensive high schools, it is reconstructing one comprehensive high school as a charter school containing independent “houses,” and it is creating eight new small high schools.

This paper focuses on the benefits and the fiscal implications of the new small high schools--outlining the research on small schools and examining the financial issues raised by small charter high schools. We conclude with nine Keys to Success for the small charter high school initiative.

Small High Schools in California

Small high schools are not rare in California. Of the 860 “comprehensive” high schools in California, 20% enroll fewer than 930 pupils and 10% have fewer than 510 pupils.¹ On the other hand, there are about 75 high schools in California with student bodies that exceed 3,000 teenagers. Sacramento City USD has four high schools with more than 2,000 pupils.

Many small high schools perform extremely well as measured by California’s Academic Performance Index. Sixty of 113 schools enrolling fewer than 600 pupils are in the top half of all high schools in the State in school performance; and twenty-four of these small high schools are in the top 10% when compared to schools having students with similar socio-economic backgrounds.

The truth is that despite a cumbersome legal structure (the Education Code), and a relatively low level of resources allocated to the public schools of California, it’s possible to have outstanding small high schools that produce top-notch graduates.

Research on Small High Schools – Discovering the Benefits

Why do we want small high schools? What does the best research have to say about student achievement and other outcomes in small high schools?² The research shows the following:

- **Student achievement.** For students of all ability levels in all kinds of settings, small schools have proven superior to large schools on most measures of school climate and student performance. On the remaining measures, small and large schools have performed equally well.

- **Student attitudes and behaviors.** Small schools are associated with positive attitudes toward school and with lower incidence of negative social behaviors such as truancy, classroom disruption, vandalism, aggressive behavior, theft, substance abuse, and gang participation.
- **Graduates.** Small schools have lower dropout rates and higher graduation rates than large schools. While the cost per pupil in small high schools is higher than in large schools, with fewer dropouts and more graduates, the cost per graduate in small high schools can be less than that cost in large schools. Research on New York City schools found the following:

“We find that size of the student body is an important factor in relation to costs and outputs and that small academic and articulated alternative high schools cost among the least per graduate of all New York City high schools. Though these smaller schools have somewhat higher costs per student, their much higher graduation rates and lower dropout rates produce among the lowest cost per graduate in the entire New York City system.”³

The balance in favor of small schools would be even greater if the long-term public outlays for dropouts were included in the analysis.

- **Attendance.** Small schools have higher attendance rates than larger schools, and attendance improves for students who transfer from large to smaller schools.
- **Alienation.** Small schools foster a sense of belonging and reduce student alienation. Smaller schools are better able to develop and sustain a common mission that binds staff and students together. Small schools allow teachers to know their students on an individual basis and to address their needs on a personal level.
- **Academic equity.** Small schools reduce the damaging effects of poverty on student achievement by promoting high standards and high expectations for all students. Smaller, focused schools require all students to experience a certain core curriculum, rather than tracking or differentiating and having lower expectations for certain populations of students.
- **Extracurricular participation.** Students in small schools participate in extracurricular activities to a greater extent and in wider variety.
- **Self-esteem.** Students’ perceptions of themselves are higher in small schools. They feel more connected to teachers and to each other.
- **College preparation.** Students from small high schools do as well or better on college-related variables such as entrance examinations, acceptance rates, attendance, grade point average, and completion.

Creating Successful Small Charter High Schools in Sacramento City USD

The Sacramento City Charter High School Initiative proposes the creation of eight small charter high schools with four schools opening their doors in September, 2003, two schools opening in September, 2004, and the last two schools starting operations in September, 2005. As can be seen in Table 1 below, enrollment will grow gradually through September, 2006, ultimately totaling 3,636 students.

Table 1**Small Charter High School Enrollment**

<u>School</u>	<u>Enrollment</u>				
	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>
New Technology	250	375	500	500	500
MET Sacramento	68	136	136	136	136
Genesis	250	500	500	500	500
America's Choice	250	500	500	500	500
Health Services Acad.	---	250	500	500	500
Unnamed HS	---	250	500	500	500
Unnamed HS	---	---	250	500	500
Unnamed HS	---	---	250	500	500
Total Enrollment	818	2,011	3,136	3,636	3,636

Start-Up Costs

Opening any new school involves substantial start-up costs. For example, the New Technology High School will require capital investment in computer equipment of about \$1 million.

- All start-up costs of the eight new charter high schools will be funded from non-district sources including foundations, community donations, and California State charter school start-up grants. The Bill and Melinda Gates Foundation has provided \$4 million to LEED Sacramento to develop the new schools and part of this grant will be used to cover start-up costs.

- A charter management organization (CMO), to be called the Sacramento Collaborative for Student Achievement, is being organized to assist the schools in obtaining funding for the start-up costs.

Operational Costs of the Schools

The operational costs (staff salaries and operating expenses) of the eight small charter high schools will be funded through California's statutory statewide system of charter school financial support, which includes:⁴

- A charter school block grant of approximately \$5,600 per pupil. (Composed of two parts—a general-purpose entitlement (about \$5400), and a categorical block grant (about \$200).
- Lottery funds (approximately \$125 per pupil)
- Economic impact aid. (approximately \$95 per pupil)
- Other state programs to which a charter school is eligible to apply for funding.
- Federal education funds.

With these funds, the eight charter schools will be self-supporting in their operational expenses, not requiring any on-going subsidy from the SCUSD.

Financial Issues Related to Charter High Schools

This section outlines and explains the primary fiscal consequences of creating a small charter high school in a unified school district in California. In following sections, the fiscal impact is analyzed under various assumptions about enrollment and the financial arrangements between the district and the schools.

Reduced costs per high school graduate The New York City study cited above (1998) found that the cost per graduate (\$49,554) in small high schools (fewer than 600 students) was almost identical with that cost (\$49,578) in large high schools (more than 2,000 students). But when student background variables are controlled, the small high schools actually cost \$2,632 per graduate less than the large high schools.

The reason for these similar costs per graduate, even though the small high schools spent \$1,400 more per pupil than the large high schools, is that at the end of four years, 64% of the four-year cohort in the small high schools graduated, while only 56% of the cohort in the large high schools graduated.

The estimated one-year dropout rate in Sacramento City USD is 7.2%⁵ That is, for every 100 students who enter the ninth grade, about seven pupils drop out each of the next four years. Given that the cost per pupil in the small high schools will be about \$1,000 higher than in the large high schools, if the charter high schools can reduce the annual dropout rate to 1.0%, the cost per graduate would be approximately the same in the large and small high schools in SCUSD.

Attendance. Most funds allocated to the public schools in California are distributed based on “average daily attendance,” rather than on enrollment. In short, the more kids are absent from school, the less money the school gets.

In the high schools of SCUSD, about 6% of the high school students are absent every day. In the first two months of the 2002-03 school year, about \$1.18 million in revenue was lost due to absences in high school. This translates to more than \$3.5 million for the entire school year.

It was pointed out above that the research shows there is better attendance in small high schools. If a charter high school with 500 pupils can reduce by half the number of days of student absence, the school can increase its revenue by about \$84,000. This substantial gain would only require increasing attendance from 94% to 97%.

Source of charter school enrollment. The fiscal impact of the charter high schools on SCUSD will depend greatly on where the students come from. Students can come from three sources: (1) Students who are currently enrolled in a SCUSD high school (or are in the eighth grade in a middle school) and reside within the SCUSD district; (2) students who reside in the SCUSD district and are not attending school (dropouts); and (3) students who reside outside of SCUSD. The three categories have significantly different financial impacts.

- Residents of SCUSD who currently attend high school in the district (hereafter referred to as “High School Students”). Under the school finance system in California, if a high school student in SCUSD were to transfer from a non-charter high school to a charter high school in the district, roughly \$1,000 earned by that pupil that currently supports central office and districtwide services would be lost by the district. In addition, because SCUSD is a unified district, the district also loses about \$630 per pupil (the difference between the higher charter school general-purpose entitlement and the SCUSD general purpose entitlement). In sum, the transfer of a pupil from a non-charter high school to a charter high school has a total fiscal impact on the district of a loss of roughly \$1,630 per pupil.
- Residents not attending high school (Dropouts). About 27% of the students entering ninth grade in SCUSD eventually drop out of school. Out of 4,000 students entering the ninth grade, about 1,080 drop out. Thus, there is a large pool of teenagers on the streets—about 2,700 at any one time-- who could be served by the eight new charter high schools. In addition, nineteen-year-olds who have dropped out could also be considered part of this pool.

The fiscal impact of dropouts who reside in SCUSD is a \$630 revenue loss for SCUSD. Because these students are not enrolled and therefore not contributing to the central office and districtwide costs, their enrollment in the charter school has no impact on existing revenue limit funding used by SCUSD to pay for districtwide services.

- Students who reside outside of SCUSD (Non-residents). Charter schools are permitted to enroll students from outside of the district in which the charter school is located. There would be no fiscal impact on SCUSD as a result of enrollment of a non-resident in a new small charter high school. The charter high school would receive the full block grant of about \$5,600 for each enrolled non-resident.

Moreover, the district can realize a “profit” if non-residents are enrolled in the charter schools by means of reimbursements for central office and special education services, supervision charges, and rental fees, as described below.

Buy-back of essential services. In the California school finance system, a charter high school in a unified school district produces a revenue loss for the district of approximately \$630 per pupil. This financial impact will be partially mitigated by arranging for the charter high schools to “buy-back” from the district essential administrative services.

The charter schools will have to provide for many functions already efficiently supplied by the central office. These activities and the estimated costs are:

<u>Function</u>	<u>Cost Per Pupil</u>
1. Accounting	\$23.40
2. Budget development including student attendance	24.07
3. Mail services	8.09
4. Personnel services	37.15
5. Employee compensation	32.18
6. Risk management	8.89
7. Property/Liability insurance	29.51
8. Purchasing/Warehousing	30.05
9. Maintenance of facilities and equipment	168.00
10. Police services	3.75
11. Instructional media	5.71
12. Pupil services/hearing office	12.99
Total	\$383.79

By cooperatively arranging with the district for the buy-back of some or all of these services, the charter schools will operate efficiently while helping the district to reduce the financial burden associated with charter high schools in unified school districts.

Statutory reimbursement for supervision. State law permits a sponsoring school district to charge a charter school the actual cost of supervision up to 1% of charter school revenue. If the sponsoring district provides rent-free facilities to the charter school, the charge for supervisory costs may be up to 3%.

- If the charter schools in SCUSD average total revenue of \$6,000 per pupil, then assuming that actual supervision costs are at the cap, the statutory reimbursement could range from \$60 to \$180 per pupil.
- If the district were to charge rent for facilities of \$3.33 per square foot, then for any school paying rent, the maximum supervision charge would be \$60 per pupil.
- Statutory standards⁶ and prototypical high school plans converge on about 90 to 100 square feet per pupil in a small high school. Thus rent per pupil would be approximately \$316 per pupil (95 x \$3.33).

Special Education. Charter schools are responsible for the education of disabled pupils who enroll in the school. Typically, charter schools continue to operate within the Special Education Local Plan that provided special education to the pupils prior to organization of the charter school. In SCUSD, continuation of current practice in this regard would obligate the charter schools to reimburse the district for the unfunded costs (that is, costs not funded by the State through special education grants) of educating disabled pupils. In SCUSD, this amount has been estimated at \$255 per pupil in enrollment (total enrollment, not just the number of disabled pupils enrolled).

Losses and Profits From Small Charter High schools.

The financial factors outlined above are pulled together in this section. First, the potential reimbursements from the charter schools can be summarized as follows:

	<u>\$ Per Pupil</u>		
Maximum buy-back of services		\$383.79	
Supervision charge range	\$60	to	\$180
Rental charge range	\$316	to	\$0
Special Education		\$255.00	
Total	\$1014.79	to	\$818.79

It is unlikely that the charter schools will buy back all of the central services listed above because, first, the small schools will be able to carry out some of these functions themselves or find lower cost providers or, second, the Charter Management Organization will provide the services for free or at lower cost. As will be discussed next, if the district and the charter schools can reach an agreement by which the schools pay the district approximately \$630 per pupil (or

more), then the financial impact on the district of the charter schools will be greatly reduced, possibly be reduced to zero, and conceivably produce a “profit.”

As outlined above, three types of students enrolled in the charter high schools will have different fiscal impacts:

	<u>Revenue Loss Per Pupil</u>
Residents who attend high school in the district (high school students)	\$1,630
Residents who are not in school (dropouts)	\$630
Non-residents	\$0

If the district were to charge the charter schools \$630 per pupil, then the “loss” figures would change to “profit and loss” figures, as follows:

	<u>“Profit” or Loss</u>
Residents who attend high school in the district	\$1,000 loss per pupil
Residents who are not in school (dropouts)	\$0
Non-residents	\$630 profit per pupil

Thus, the fiscal impact on the district will depend on the mix of students in the charter schools among residents who transferred from another high school, resident dropouts, and non-residents.

Figure 1 displays the relationships between enrollment and profit and loss. In this graph:

- Each line represents an assumption about the number of non-residents who are enrolled in a small charter high school with a total enrollment of 500; the levels are 0, 25, 50, 100, 200, 300, 400, and 500.
- The horizontal axis is the number of students who transferred from another high school in the district who are enrolled in the charter school.
- Subtract the total number of non-residents and resident high school students from 500 and you will determine the number of dropouts in the school. For example, if there were 50 non-residents and 250 high school students, the number of dropouts would be 200.
- It should be noted, as indicated above, that dropouts produce no profit or loss; they are breakeven students.

The graph shows:

- The right mix of high school students, dropouts, and non-residents will result in zero cost or even a “profit” for the district.
- For example, a school with 100 non-residents, 60 high schools students, and 340 dropouts would break even.

- A school with 400 non-residents and 100 high school students would earn a “profit” for the district of \$150,000.

Other Factors Affecting the Financial Impact of the Charter High Schools

Workload reduction in districtwide services. The transfer of students from district-run high schools to charter schools will result in a reduced workload for central office administrative and support services which currently cost about \$47.4 million. Since the district will still have nearly 50,000 pupils after the transfer of students to the eight new charter schools, many of these functions will experience little or no reduction in workload. The functions listed below with an asterisk (*) seem most likely to experience a slightly reduced workload after the creation of the charter schools

<u>Functions</u>	<u>Budget (\$ millions)</u>
<u>Central Administrative Services</u>	
Information Technology Services	3.5*
Risk Management and Benefit Services	2.0
Budget and Financial Services	1.9
Purchasing and Delivery Services	1.7*
Personnel and Employee Services	1.6
School Board and Superintendent	1.6
Central Utilities and Miscellaneous Services	1.5
Legal Services	1.3
Employee Compensation Services	1.2
Administrative and Business Services	0.6
Communications	0.5
Employee Relations	0.5
Internal Audits	0.3
<u>Buildings and Grounds</u>	
Districtwide Maintenance	9.6*
Central Office Custodial Services	2.7
Operations Support	1.8
Police Services	0.2
<u>Instructional Support Services</u>	
Associate Superintendents	2.2
Special Education	2.0
Standards and Curriculum	1.7*
Multilingual and Gate	1.6

Open Enrollment/Voluntary Integration	1.0
Staff Development and Education Technology	1.0*
Consolidated Programs	0.9
Alternative/Continuing/School-to-Work	0.9*
Research and Evaluation	0.8
Library Services	0.4

Community and Student Support Services

Student Support Services (SARB, etc)	1.7*
Assistant Superintendent	0.8

Total \$47.4

Any savings in these activities, realized perhaps through attrition, will reduce the financial impact on the SCUSD from the establishment of the eight new high schools.

Enrollment growth. Growth in the total enrollment of SCUSD would provide an infusion of discretionary funds that would help the transition to charter high schools. Each additional pupil generates roughly \$1000 in discretionary income (after taking into account the need for additional teachers, books, and so forth).

If SCUSD were to grow at the rate projected in a recent study (about 0.5% per year, or 260 to 300 pupils), after five years about \$1.3 million in discretionary funds will have cumulated.

Unfortunately, the district has experienced a 2.5% enrollment decline from 2000 to 2002. This may be only a temporary setback, but the enrollment forecast should be carefully reanalyzed.

Additional revenue from the State. The current state fiscal situation is, of course, dismal; but over the next four to five years--the implementation period for the charter high schools--it is likely that the economy will rebound, resulting in increased funding for the public schools. These additional funds will help offset any net cost to the district resulting from the charter high schools.

Foundation and Community Support. Grants and donations from foundations and community sources would help to mitigate any resource shortfall.

Summary of Fiscal Impact of Small Charter High Schools

Tables 2 and 3 illustrate the possible fiscal impact of the eight new charter schools.

Enrollment in the new small charter high schools will be phased as shown in Table 1 above.

In this example, it is assumed that 20% of the students are non-residents, 40% are dropouts, and 40% transfer from the existing high schools.⁷ It is also assumed that reimbursements for services total \$630 per pupil. Other assumptions are shown in Table 2.

Table 2

Year 1 (2003-2004)

Charter school enrollment: 818 (approximately 1.6% of district enrollment)

SCUSD Revenue Surplus (Deficit)	
High School Students (327 students x \$1,000)	(\$327,000)
Dropouts (327 students x 0)	0
Non-resident students (164 x \$630)	\$103,320
Total Surplus (Deficit)	(\$224,000)

Additional Offset Sources:

Reimbursements above \$630	
(Up to \$385 per pupil) Potential Savings (385 x 818)	\$314,930
Workload reduction in districtwide services:	
--one certificated position (average teacher salary with benefits)	\$69,700
--non-salary savings (1.6% of \$20,000,000)	\$320,000
District enrollment growth	none
Additional State funding	none
Foundation and community grants and donations	\$50,000
Total Potential Offsets	\$754,000
Potential Surplus (Deficit)	\$530,000

Table 3

Years 2 Through 4

	<u>2004-05</u>	<u>2005-06</u>	<u>2006-07</u>
Enrollment (% of district)	2,011(3.9%)	3,136(6.1%)	3,636(7.1%)
SCUSD Revenue Surplus (Deficit)			
High School Students	(\$804,000)	(\$1,254,000)	(\$1,454,000)
Dropouts	0	0	0
Non-resident students	\$253,890	\$395,640	\$458,640
Total Surplus (Deficit)	(\$550,110)	(\$858,360)	(\$995,360)
<u>Additional Offset Sources:</u>			
Reimbursements above \$630	\$774,235	\$1,207,380	\$1,399,860
Workload reduction			
--certificated positions	\$174,250	\$264,860	\$306,680
	(2.5 positions)	(3.8)	(4.4)
--non-salary savings	\$780,000	\$1,220,000	\$1,420,000
	(3.9%)	(6.1%)	(7.1%)
District enrollment growth	none	none	none
Additional State funding (2.0% per year)	\$6,200,000	\$6,300,000	\$6,400,000
Foundations and community	\$50,000	\$50,000	\$50,000
Total Potential Offsets	\$7,978,485	\$9,042,240	\$9,576,540
Potential Surplus (Deficit)	\$7,428,375	\$8,183,880	\$8,581,180

CONSEQUENCES FOR THE LARGE COMPREHENSIVE HIGH SCHOOLS

If eight new charter high schools were created with all (but one) ultimately enrolling 500 pupils, as many as 3,636 students would be transferring from the five large high schools in SCUSD. However, the actual number of students departing the five schools will be less to the extent that dropouts and non-residents are enrolled in the schools.

Reducing the enrollment at the five large high schools will have several important beneficial consequences:

- It will ease or eliminate the overcrowding problem that exists at the high schools. Currently,

Burbank	300 students over capacity
McClatchy	380 students over capacity
Johnson	400 students over capacity
Kennedy	At capacity
Sacramento	Under capacity

- Space will be freed up to give some breathing room to the “small learning communities” that are being created at each of the high schools.
- McClatchy, Kennedy, Burbank, and Johnson, which currently enroll from 2,100 to 2,500 students, will become smaller, more easily managed, schools.

Conclusion and Keys to the Success of the Small Charter High School Initiative

In this short paper, we have not been able to consider other important consequences of the reorganization of high school education in SCUSD such as the impact on teachers in the large high schools who are displaced (however, it is expected that many will transfer to the charter schools) and the impact on school sports.

In the final analysis, however, like other large urban school districts, SCUSD is fundamentally struggling to produce proficiency in basic skills in its high school students. **Measured against California standards for English language skills, 76% of ninth-graders and 72% of eleventh-graders in the district failed to demonstrate proficiency in 2002.** There is no reason to expect that continuation of the current way of doing business in high school education will result in improvement.

This paper has shown that the financial impact of eight new charter high schools can be mitigated if certain steps are taken. These steps are the keys to success of the small high school initiative. They are summarized in Table 4.

Table 4

Keys to Success of the Small Charter High School Initiative

- **Phase in the enrollment in the charter schools over a three to five year period.**
- **Work closely with the big high schools to identify and recruit dropouts to enroll in the charter schools.**

- **Recruit students who live outside the district to enroll in the charter schools.**
- **The district, the charter schools, and the charter management organization (The Sacramento Collaborative for Student Achievement) must cooperate to arrange the buy-back of services that benefits both the district and the schools.**
- **The charter schools must agree to remain in the SCUSD Special Education Local Plan.**
- **Foundation and community financial support must be obtained.**
- **SCUSD must make appropriate central office service reductions to reflect reduced enrollment in the non-charter high schools.**
- **The charter schools must work to maintain a high level of attendance and use the additional revenue to support the partnership with the district.**
- **The district must implement the “small learning communities” in the large high schools to reduce the dropout rate and thereby grow the enrollment and the enrollment-based revenues.**

¹ There are in addition more than 500 continuation high schools, alternative schools, and special education schools which typically enroll fewer than 300 pupils.

²This summary of research was prepared by the American Institute of Research. Some of the major reports on small school research are: Cotton, K. (1996, December). *Affective and Social Benefits of Small-Scale Schooling*. ERIC Digest, Clearinghouse on Rural Education and Small Schools; Klonsky, M. (1995). *Small schools: The numbers tell a story. A review of the research and current experiences*. Chicago, IL: Illinois University; Raywid, M. (1999). *Current Literature on Small Schools*. *Eric Digest*: 4.

³ Stiefel, L., et. al, *The Effects of Size of Student Body on School Costs and Performance in New York City High Schools*, Institute for Education and Social Policy, New York University, April, 1998.

⁴ California Education Code, Part 26.8, Sections 47600 to 47664.

⁵ Source: California Basic Education Data System. In the latest available data, the estimated four-year rate for SCUSD was 26.8%; for the county of Sacramento, 20.6%; and for the State as a whole, 11.0%.

⁶ Education Code Section 17046.

⁷ Students who enter a charter high school from the eighth grade, who are residents attended eighth grade in SCUSD, have the same financial impact as ninth grade students who transfer from an existing high school.